

EXPLANATION OF THE CALENDAR PAGES.—At the head of the respective pages for each month are given the ordinary tables of the changes and quadratures of the Moon. These tables, together with the first 3 vertical columns, it is presumed require no explanation. The 4th and 5th columns show the mean times of the rising and setting of the Sun. The quantities are only set down to the nearest minute, the uncertainty of the observed times of the rising or setting of heavenly bodies on land, caused by the varying amount of horizontal refraction and the general liability to the intervention of terrestrial objects in such observations, renders a closer approximation unnecessary for ordinary practical purposes. In the sixth column, marked "souths," are given the times which should be shown by a well regulated clock or watch when the Sun is on the meridian. The seventh column contains the mean times of the rising or setting of the Moon. The quantities are only set down to the nearest minute, for the reasons mentioned above in respect to the Sun.

SOLAR AND LUNAR ECLIPSES AND TRANSIT OF MERCURY.

In the year 1848 there will be 4 Eclipses of the Sun, 2 of the Moon, and a Transit of Mercury.

I.—A Partial Eclipse of the Sun, March 5th, visible at Montreal as follows:—

	H. M.	
Begins	7 40	} Mean time
Greatest Phase	8 21	
Ends	9 1	} Morning
Duration of visibility, 1 hour 21 minutes. Magnitude of the Eclipse (Sun's diameter =) 0.26 on the southern limb.		

II.—A Total Eclipse of the Moon, March 19th, invisible at Montreal.

Conjunction in Right Ascension	4 23	} Mean time
Moon rises at time of last contact with dark shadow	6 12	
Magnitude of the Eclipse (Moon's diameter =) 1.661 on the northern limb.		} Evening.

III.—A Partial Eclipse of the Sun, April 3d, invisible at Montreal. The mean time of conjunction in Right Ascension will be at 3 hours 15 minutes in the evening. This Eclipse will be seen only from the Southern Ocean.

IV.—A Partial Eclipse of the Sun, August 28th, invisible at Montreal. Conjunction in Right Ascension at 3 hours 14 minutes mean time in the evening. The visibility of this Eclipse will be confined to a small part of the Great Southern Ocean.

V.—A Total Eclipse of the Moon, September 12th and 13th, visible at Montreal as follows:

First contact with the Dark Shadow	11 37.0	} Mean time in the evening of the 12th.
First total immersion in the Shadow	0 25.3	
Middle of the Eclipse	1 24.7	} Mean time in the morning of the 13th.
Last total immersion in the Shadow	2 14.1	
Last contact with the Shadow	3 12.4	

Duration of visibility 3 hours 35 minutes 24 seconds. Magnitude of the Eclipse (Moon's diameter =) 1.702 on the southern limb.

VI.—A Partial Eclipse of the Sun, September 27th, invisible at Montreal. Mean time of conjunction in Right Ascension, 3 hours 38 minutes in the morning. This Eclipse will be chiefly visible from the northern parts of Europe and Asia.

VII.—A Transit of Mercury, November 9th. The geocentric appearance of this Transit will be as follows:

	H. M.	
First contact of Limbs	6 7.4	} Mean time
Least distance of centres 2' 45" 4	8 49.8	
Last contact of Limbs	11 32.0	} at Montreal.
Angle from North Pole		

Of first contact 75° towards the West.
Of last contact 125° towards the East.
The Ingress will be visible from the greater portion of Europe, and Asia, and the whole of Africa, and South America. The Egress from the western extremity of Europe, the greater part of Africa, and North America, and the whole of South America.

EXPLANATION OF ASTRONOMICAL SYMBOLS AND ABBREVIATIONS.

☉ The Sun,	♄ Saturn,	° Degrees,	} Of Arc.	♋ Cancer, The Crab,
☾ The Moon,	☿ In Conjunction,	' Minutes,		} Of Time.
☿ Mercury,	☽ In Quadrature,	" Seconds,		
♀ Venus,	♁ In Opposition,	d. Days, h. Hours,		♎ Libra, The Balance,
♁ The Earth,	♊ Ascending Node,	m. Minutes,		♏ Scorpio, The Scorpion,
♂ Mars,	♋ Descending Node,	s. Seconds,		♐ Sagittarius, The Archer,
♃ Jupiter,	N North, S. South,	γ Aries, The Ram,		♑ Capricornus, The Goat,
♅ Herschel, or	E. East,	♉ Taurus, The Bull,		♒ Aquaries, The Waterman,
♁ The Georgian,	W. West,	♊ Gemini, The Twins,		♓ Pisces, The Fishes.

COMMENCEMENT OF THE SEASONS. D. H. M.

Vernal Equinox,	(Spring begins)	March 20 6 25 Morning.
Summer Solstice,	(Summer begins)	June 21 3 21 "
Autumnal Equinox,	(Autumn begins)	Sept. 22 5 25 Evening.
Winter Solstice,	(Winter begins)	Dec., 21 11 6 Morning.