

This declination is a *maximum*, by which the Moon can run north or south farther than the sun can. Longitude of Moon's Ascending Node, Jan. 1, is $30^{\circ} 11' 1''$, and December 31, it will be $10^{\circ} 51' 4''$. Apparent Obliquity of Ecliptic July 9, is $23^{\circ} 27' 36.11''$.

Distance of Sun, July 2nd, 96702364 miles. Its mean distance March 31, and Oct. 3rd is 96103500 miles. The Sun will be north of the equator this tropical year 180 days 11 h. 4 m., and south of it 178 d. 18 h. 47 m., shewing a difference of 7 d. 16 h. 17 m., caused by the slower motion of the earth when in or near the aphelion.

Mercury will be brightest, and visible in the west soon after sunset, about January 29, May 23, and Sept. 19. Also in the east just before sunrise about March 18, July 10, and November 6th. The first and last dates quite unfavourable.

N. B.—The constellation Places is the *first* sign in the zodiac. Aries was first *once*, but is now 30° east of the equinox. In consequence of not knowing this, some think the Almanac was wrong.

TABLE,

Shewing the Illuminated Portion of the Discs of Venus and Mars.

The numbers given in this table represent the sizes of the illuminated portion of the Discs—the apparent diameters of the planets being considered at *unity*.

1856.	Venus.	Mars.	1856.	Venus.	Mars.
January 15.	0 .056	0 .907	July 15.	1 .000	0 .870
February 14.	0 .759	0 .935	August 15.	0 .992	0 .872
March 15.	0 .838	0 .985	September 15.	0 .964	0 .884
April 15.	0 .903	0 .991	October 15.	0 .922	0 .900
May 15.	0 .952	0 .933	November 15.	0 .864	0 .919
June 15.	0 .986	0 .886	December 15.	0 .792	0 .938

Star Table.

To ascertain when any star found in the following table will be on the meridian, *add* the numbers opposite in the left-hand column of figures to the preceding meridian transit of the north star found in the calendar pages. For the *Rising* of a star, *subtract* the number opposite in the right-hand column of figures from its meridian passage. For the *Setting* of a Star, *add* the same number to its meridian passage. Those marked (.....) revolve in a circle of perpetual apparition, and do not rise or set north of the latitude of Toronto (Lat. $43^{\circ} 39' 35''$ N.) for which latitude the semi-diurnal arcs are calculated and corrected. The civil day begins at the preceding midnight, and consequently 24 hours after midnight, or 12 hours from noon, is *morning* of the succeeding day; and 24 to 36 hours from noon, is *evening* of the next day. This table is arranged in the order of culmination.

Stars.	Constellation	In Me R & S	Stars.	Constellation	In Me R & S	Stars.	Constellation	In Me R & S
		h. m. h. m.	*Pointers		h. m. h. m.			h. m. h. m.
Almaach	Andromeda	0 48 9 50	Procyon	Canis Minor	6 24 6 20	Beta	Ursa Minor	13 43
Alpha	Aries	0 52 7 23	Pollux	Gemini	6 29 8 3	Zubenelg	Libra	14 1 5 25
Mira	The Whale	1 56 4 40	Aenubens	Cancer	6 51 2 31	Alphacca	N. Crown	14 20 7 56
Menkar	The Whale	1 48 6 13	Nos	The Ship	7 43 6 48	Antares	Scorpio	15 12 4 8
Algol	Perseus	1 52 9 30	Alphard	Hydra	8 13 5 28	Alpha	Hercules	15 59 6 56
Algenib	Perseus	2 7	Regulus	Leo	8 53 6 48	Alpha	Ophiuchus	16 19 6 48
Aleyono	7 Stars	2 32 7 38	{ Merak }	Big Dipper	9 45	Vega	Lyra	17 23 9 18
Aldebaran	Taurus	3 21 7 3	{ Dubhe }	Big Dipper	9 47	Beta	Lyra	17 30 8 33
Capella	Auriga	3 59 11 16	Danebola	Leo	10 34 7 0	Altair	Aquila	18 34 6 31
Rigel	Orion	4 1 5 27	Phad.	Big Dipper	10 38	Deneb	Cygnus	19 27 10 43
El Nath	Taurus	4 10 8 3	Algorab	The Crow	11 14 4 57	Fomalhaut	S Fish	21 40 5 43
Bellatrix	Orion	4 10 6 23	Alhoth	Big Dipper	11 39	Scheat	Pegasus	21 47 7 57
Mintaka	Orion	4 18 5 58	Spica	Virgo	12 9 5 19	Markab	Pegasus	21 48 6 53
Phaet	The Dove	4 28 3 18	Mizar	Big Dipper	12 10	Vr. Equinox	Pisces	22 50 5 59
Petalgueno	Orion	4 40 6 27	Benetnasch	Big Dipper	12 54	Algenib	Pegasus	22 56 6 56
Sirius	Canis Minor	5 32 4 54	Arcturus	Bootes	13 1 7 20	Schedir	Cassiopeia	23 22
Castor	Gemini	6 18 8 27	Mirac	Bootes	13 30 7 59	Mirach	Andromeda	23 51 8 45

Explanation of the Articles in the Calendar.

These Pages are calculated for Toronto, and for a point midway between Montreal and Quebec, which point is about on the latitude of Three Rivers and Fredericton. They will serve very accurately for every *City and Town in the British Provinces and North America*.

THE SUN'S RISING AND SETTING, is given in mean time; and for Toronto, it is corrected for a mean horizontal refraction of 36 min. 6.86 sec., of arc, and is also suited to the *upper limb*. Its declination is for mean noon.

THE MOON'S RISING is given from Full to Change, and the Setting from Change to Full.

MOON'S PLACE.—The symbols and numbers in this column indicate the Moon's place in the signs or Constellations of the Zodiac, to the nearest degree of longitude, at 7 o'clock P. M. Toronto Time. Pisces being regarded the *first* of the signs.

MOON'S AGE.—This column shows to the nearest tenth of a day, the Moon's Age at noon, Toronto.

MOON SOUTH.—This column shows the time the Moon is "south," or in the meridian of Toronto, and is nearly the same for all parts of the Provinces.

TWILIGHT.—This table shows at intervals of six days, the times of beginning of Twilight in the morning, and of the end at evening—the sun, at the computed instants, being 8 degrees below the horizon.

THE MOON'S PHASES.—This table shows the time for two meridians, when the Moon passes the geocentric longitudes of 0 dg., 90 dg., 180 dg., and 270 dg., from the Sun.

THE COLUMN OF "POLE STAR IN MERIDIAN," shows for every day in the year, the exact time when the North Star makes its transit over the upper meridian of longitude, 5 h. 8 m. 12 s. west of Greenwich, and is sufficiently exact for ordinary use in all of the British Provinces.

The time of the Lower TRANSIT for any given day may be found by adding 11 h. 58 m. 2.045 s. to the time of the preceding Upper Transit. This column is designed to facilitate the computation of the Rising, Setting, and Meridian Passage of the brightest Fixed Stars, by using the numbers opposite the same in the Star Table. It will also be found of some service to surveyors and astronomers. When great exactness is required, the meridian passage of the Pole Star, for several places, may be obtained by applying the following corrections to the times expressed in the calendar