centre, and those on pp. 6, 7, 8, for a station in Lat. 45°, and Long. 4h. 46m. W. The corrections for *latitude* to be applied to the times of *setting* given in p.p. 6, 7, 8, of the Calendar, in order to find the times at which the Moon sets at other stations, may be found approximately from Lat. 42° to Lat. 48°, by multiplying the numbers in the adjoining column by the number of degrees by which the Latitude exceeds 45°. If the Latitude be less than 45°, the signs of the corrections must be changed. The corrections for Latitude 49½ and 50° will be more near to the truth, if the multipliers (which according to the preceding rule would be 4 and 5) be taken as 4½ and 5½.

The corrections for Latitude to be applied to the times of *rising* are the same as those used for setting, but with the *signs changed.*

In strictness, two corrections for longitude are required,—one due to the motion of the Moon in Right Ascension during the interval that elapses between her rising (or setting) at stations in different longitudes; and the other due to the change in the Moon's declination during the same interval. The average value of the first of these corrections is about two minutes to be added for each hour or for each fifteen degrees of longitude west of the central meridian, 4h. 46m.; the corrections being subtracted when the place is to the east of the central meridian.

The correction for change of declination may be disregarded.

The last column in each month on p.p. 6, 7, 8, shews the time to which a watch should be set when the sun is due south, or when the shadow falls on the noon mark of a sun dial.

The times of the rising and setting of the sun and moon on p.p. 6, 7, 8, without modification, will serve with sufficient exactness for Halifax, Montreal and Ottawa; and by the rules given above they may be adapted to all other stations. On p.p. 9, 10, 11, 12, 13, 14, special tables are also given, shewing the local civil times at which the sun and moon rise and set at Toronto and Fort Garry, two extreme stations as regards latitude.

THE PLANETS.

VENUS.—Venus is a morning star till February 23, when she reaches superior conjunction with the sun; after which she passes to the east of the sun and becomes an evening star. On Dec., 8, there is a transit of Venus over the sun's disc, after which she passes to the west of the sun and becomes a morning star.

The following are the dates at which she reaches certain remarkable points in her course.

Jan. 30, conj. with Saturn, Venus 0° 30′ S. of Saturn; Feb., 7, in Aphelion; Feb., 23, Superior conj. with Sun; May 3 conj. with Mars, Venus 0° 12′ S. of Mars; May 30, in perihelion; Aug. 12, conj. with Jupiter, Venus 0° 58′ S. of Jupiter; Sept. 19, in aphelion; Sept. 28, greatest elongation 46° 34′ E. from Sun; Nov. 3, at greatest brilliancy; Nov. 18, stationary; Dec. 8, transit over disc of Sun; Dec. 28 stationary.

MARS.—May 3, conj. with Venus; Mars 0° 12′ N. from Venus; July 5, conj. with Sun; Oct. 25, aphelion; Dec. 15, conj. with Jupiter, Mars 0° 3′ N. of Jupiter.

JUPITER.—Jan. 16, stationary; March 17, opposition to Sun; May 19, stationary; June 13, quadrature; Aug. 12, conj. with Venus, Jupiter 0° 58′ N. of Venus; Oct. 5, conj. with Sun; Oct. 24, aphelion; Dec. 15, conj. with Mars, Jupiter, 0° 3′ S. of Mars.

SATURN.—Jan. 30, conj. with Venus, Saturn 0° 30′ N. from Venus; May 4, in quadrature; May 24, stationary; Aug. 3, in opposition to Sun; Oct. 11, stationary; Oct. 31, quadrature.

URANUS.—Jan. 28, opposition to Sun; April 13, stationary; April 26, quadrature; Aug. 3, conj. with Sun; Nov. 7 quadrature; Nov. 20, stationary.

The following table gives the local civil times at which the four principal planets pass the Meridian of 4h. 46m. west longitude, on the first day of each month, together with the days on which their conjunctions with the moon occur. These times will serve very nearly for other meridians. For brevity A.M. is denoted by (a) and P.M. by (p.)

MONTHS.	VENUS.		MARS.		JUPITER.		SATURN.	
	On Mer. H. M.	*Conj.* (	*On Mer.* H. M.	*conj.* (	*On Mer.* H. M.	*conj.* (	*On Mer.* H. M.	*conj.* (
January	11 9 a.	17	3 27 p.	21	5 24 a.	8	1 34 p.	18
February	11 54 a.	16	2 53 p.	18	3 22 a.	4	11 47 a.	14
March	0 21 p.	18	2 20 p.	19	1 23 a.	4, 30	10 10 a.	14
April	0 40 p.	17	1 43 p.	17	11 7 p.	27	8 20 a.	11
May	1 5 p.	17	1 12 p.	16	8 55 p.	24	6 29 a.	8
June	1 46 p.	15	0 39 p.	14	6 52 p.	20	4 29 a.	4
July	2 22 p.	16	0 9 p.	12	5 3 p.	18	2 27 a.	1, 29
August	2 39 p.	15	11 33 a.	10	3 17 p.	15	0 21 a.	25
September	2 43 p.	14	10 52 a.	8	1 37 p.	11	10 2 p.	21
October	2 45 p.	14	10 6 a.	7	0 2 p.	9	7 59 p.	18
November	2 30 p.	11	9 16 a.	4	10 25 a.	6	5 58 p.	15
December	0 41 p.	8	8 25 a.	3	10 49 a.	4, 31	4 8 p.	12

ECLIPSES.

In the year 1874 there will be two eclipses of the Sun, and two of the Moon, and a transit of Venus over the Sun's disc.

I. A total eclipse of the Sun, April 15-16, 1874, invisible in Canada.

This eclipse is visible as a partial one in South Africa and the S. E. part of South America. The line of central eclipse passes about 300 miles north of the Cape of Good Hope.

II. A partial Eclipse of the Moon, May 1, 1874, invisible in Canada. Magnitude 0.826 (Moon's diameter=1.)