

From the Sun's Apparent Semi-diameter, which is given to the nearest tenth of a second for each day of the year, may be found the Sun's Horizontal Parallax (which equals the apparent semi-diameter of the Earth, as it would be seen from the distance of the Sun) by dividing by the constant quantity, 107.44, which is the proportion the Sun's actual diameter bears to that of the earth. Thus, for July 1st, when the Sun is at its greatest distance, the apparent semi-diameter is  $15' 46'' = 946''$ , this divided by 107.44 gives 8.805 for the Sun's Horizontal Parallax at that time. So also on the 31st December the Sun is in Perigee, with the apparent semi-diameter of  $16' 18.3'' = 978.3''$  gives  $\frac{978.30}{107.44} = 9.1055$  for Sun's Horizontal Parallax.

The Parallax in altitude may be obtained by multiplying the Horizontal Parallax thus found by the cosine of the altitude.

On the right hand page of each month are given the Phases of the Moon, its Rising, Southing and Setting, and the time of High Water at Charlottetown, and also the bearing of the Moon at the time of full and change, the Perigee and Apogee, and the time of crossing the Equinoctial and reaching its greatest North and South Declination.

It being generally found that these Lunar Equinoctials are marked by atmospheric disturbances, the greater the more nearly their times agree with those of the Moon's changes and Perigee. \* \* or \* \* \* are added where two or three of these influences concur within the space of 48 hours.

#### ECLIPSES.

There will be four Eclipses during the year 1887, two of the Sun and two of the Moon, of which only one will be visible at Charlottetown.

I. A Partial Eclipse of the Moon, February 7th, Greenwich Mean Time of Opposition, 22h. 40m. 26.6 sec., visible at Charlottetown, commencing Feb. 8th, 3h. 50 m., a. m., ending 8h. 19m. 13 sec., about 20 minutes after the moon sets. The first contact with the Earth's shadow will be  $52^\circ$  from the north point of the Moon's limb towards the east; the last contact will be  $27^\circ$  towards the west, a little less than the northern half of the Moon's diameter eclipsed.