

From the Sun's Semi-diameter which is given for each day throughout the year, may be found the Sun's Horizontal Parallax (which is the earth's apparent Semi-diameter as seen from the Sun's distance) by dividing by 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 his greatest distance we have Semi-diameter  $15' 46'' = \frac{990}{107.44} = 8.805$  Horizontal Parallax, so also on December 31st the Sun being in perigee with Semi-diameter  $16.18.2 = \frac{978.2}{107.44} = 9.106$  Sun's Horizontal Parallax.

The Parallax in altitude is obtained from the Horizontal Parallax by multiplying by the cosine of the altitude.

Example:—Sun's apparent altitude being  $20' 30' 30''$  what correction for Parallax must be applied on the 31st December.

$$\begin{array}{r}
 \text{Sun's Horizontal Parallax December 31st,} = 9.106 \\
 \text{Altitude } 20' 30' 30'' \text{ Cosine} = .9377 \\
 \hline
 63742 \\
 54636 \\
 27318 \\
 81954 \\
 \hline
 8.5895902 \\
 \hline
 \begin{array}{r}
 20' 30' 30'' \\
 20 30 38.5
 \end{array}
 \end{array}$$

On the Right Hand Page of each month are the changes of the Moon, its Rising, Southing and Setting, with the time of High Water at Charlottetown. The bearing of the Moon at time of change, the times of Perigee and Apogee, of crossing the Equinoctial and reaching its greatest North and South Declination, are given for the purpose of assisting and verifying forecasts of weather. It being generally found that the Lunar Equinoctials are marked by atmospheric disturbances, the greater the more nearly their times agree with the moon's changes or Perigee.  $\times \times$  or  $\times \times \times$  are added to note where two or three of these influences concur within the space of 48 hours.

### ECLIPSES.

During the year there will be four Eclipses, two of the Sun and two of the Moon.

I. An Annular Eclipse of the Sun on March 16th. Greenwich mean time of conjunction 6h. 14m. 23.7 sec.