

From the Sun's Semi-diameter may be found the Sun's horizontal Parallax (which equals the earth's apparent Diameter as seen from the distance of the Sun) by dividing by the constant quantity 107.44, which is the proportion that the Sun's actual diameter bear to that of the earth, taken as unity. Thus for July 1st, when the Sun is in its furthest from the earth we have the Apparent Semi-diameter 15'46" which give  $\frac{15'46".1}{107.44} = \frac{94'.6}{107.44} = 8".805$  the Sun's Horizontal Parallax at that tide. In like manner on the 31st December when the Sun is in perigee we find the Horizontal Parallax to be 9.106.

The Parallax in altitude may be obtained from the Horizontal Parallax thus found by the natural cosine of the observed altitude.

On the Right Page of each month are the changes of the Moon its Rising, Southing and Setting, and the time of High Water at Charlottetown. The bearing of the Moon at the time of change, the Perigee and Apogee, the time of its crossing the Equinoctial and of reaching its greatest North and South Declination.

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

#### ECLIPSES.

During the year 1886 there will be two Eclipses, both of the Sun, but neither of them visible at Charlottetown.

I. An Annular Eclipse of the Sun, Greenwich Mean Time of conjunction, March 5th, 10h. 8m. 57.2 sec., the centre of the Moon's Shadow passing from near the eastern extremity of New Guinea across the Pacific Ocean and Mexico to near Yucatar.

II. A total Eclipse of the Sun August 28-29, Greenwich Mean time of conjunction in Right Ascension August 29th 0h. 52m. 34.8 sec., the centre of the Shadow passing from the coast of Venezuela across the Atlantic, South Africa and South Madagascar.