

1883.]

RELIABLE ALMANAC.



EXPLANATIONS

AND

PRINCIPAL ARTICLES & CALENDAR.

All the calculations are reduced to the nearest minute of Charlottetown mean time, with the exception of the Data for Solar observations for Time and Latitude, namely:— Equation of Time ("Sun fast or slow of clock") and Sun's Declination both of which are given for the instant of Mean Noon at Greenwich.

The Declination for Greenwich apparent Noon when required can be obtained by multiplying the hourly variation by the Equation of Time, reduced to the decimal of an hour and applying the result as directed below.

DECLINATION	INCREASING	DECLINATION	DECREASING.
Sun slow of clock Add	Sun fast of clock Subtract	Sun slow of clock Subtract	Sun fast of clock Add

Example.—To find the Sun's Declination at Apparent Noon on January 26, 1883.

Equation of Time $12^{\circ}46.34''$.2123
Hourly variation of Declination			37.87
			14861
Declination at Mean Noon	$18^{\circ}43'18.9''$	Decreasing	16984
Sun slow of clock Subtract,	8.0		14861
Declination at App Noon	$18^{\circ}43'10.9''$		6369
			3.039801

From the Sun's apparent Semi-diameter which is given for each day may be found the Sun's horizontal Parallax, on dividing the Semi-diameter by 107.44 (the ratio of the sun's actual diameter to that of the earth.) Thus on July 1st, (Sun in apogee) $\frac{15m. 46s. - 946}{107.44} = 8.''805$. On December 31st, Sun in perigee $\frac{16m. 18.5s. - 978.2}{107.44} = 9.''106$. To find the Sun's Parallax in altitude multiply the above results by the cosine of the altitude. Example: To find Sun's Parallax at 35° on December 31st, $9.''106 \times .8192 = 7.''46$. To find the days