

## EXPLANATION OF THE ARTICLES CALENDAR

—AND—

### ASTRONOMICAL NOTES FOR THE YEAR 1890.

On the left hand page of each month are given all the requisite data for Solar observations of Time and Latitude—namely, the Equation of Time (Sun slow or fast of clock), being the difference between Apparent (solar) and Mean (uniform clock) Time, which is given for the instant of Apparent Noon, and the Sun's Declination of Mean Noon, both Greenwich time; also the Sun's apparent semi-diameter to the nearest tenth of a second of arc for every day throughout the year. All the other particulars are calculated to the nearest minute of Local Mean Time for Charlottetown, Longitude  $63^{\circ} 7' 23''$  W. = 4 hours, 12 minutes, 29.4 seconds.

NOTE.—Half the day's length before and after 12 o'clock, noon, gives the apparent or Sun-dial time of sunrise and sunset; the mean clock time is found by adding or subtracting the equation according to whether Sun is Slow or Fast.

The Sun's Declination at Greenwich Apparent Noon, if required, can be obtained from that at Mean Noon by multiplying the hourly variation of Declination by the equation of Time for the same day, reduced to the decimal of an hour, and applying the result according to the conditions here given.

Silver Trimbles, assorted Patterns, at WELLS'S.

For Nervous Headache use Hawker's Nerve Tonic.

DECLINATION INCREASING.

DECLINATION DECREASING.

| Sun slow of clock | Sun fast of clock | Sun slow of clock | Sun fast of clock |
|-------------------|-------------------|-------------------|-------------------|
| Add               | Subtract          | Subtract          | Add               |

*Example of process.—Required the Sun's Declination at Apparent Noon, Greenwich time, November 11th, 1890.*

$$\begin{array}{r} \text{Equation of Time, Nov. 11th,} = 15 \frac{51.06''}{60} \\ \underline{15.851} \end{array}$$

$$\begin{array}{r} \text{Sun Fast} \quad \quad \quad .2612 \\ \quad \quad \quad \quad \quad \quad 41.30 \\ \quad \quad \quad \quad \quad \quad \cdot 78360 \\ \quad \quad \quad \quad \quad \quad 2612 \\ \quad \quad \quad \quad \quad \quad \underline{10448} \end{array}$$

$$\text{Declination Increasing, Sun Fast, Subtract} \quad \underline{10.787560}$$

$$\text{Greenwich Mean Noon} \quad 17^{\circ} 30' 57''$$

$$\text{Sun's Declination, Nov. 11th, Apparent Noon} \quad 17^{\circ} 29' 54.9''$$