These data may be reduced if required to Charlottetown time by multiplying the hourly variation by the constant 4.208 and adding or subtracting the product according as the data are increasing or decreasing. Example: To find how much is the Sun slow of clock at Charlottetown, Aug. 9.


From the Sun's apparent Semi-diameter which is given for each day of the year, may be found the Sun's horizontal Parallax, (which equal to the earth's apparent Semi-diameter as seen from the Sun's distance) by dividing the Semidiameter by 107.44 which is the ratio of the Sun's actual diameter to that of the earth. Thus on July rst when the Sun is at his greatest distance, Semi-diameter $15^{\prime} 4^{\prime \prime \prime}=$ $\frac{9.4}{90.4}=8.805$ horizontal Parallax on December 3rst, the Sun being in perigee $1618.2=978.2 \frac{985.2}{\mathrm{im} . \mathrm{A}}=9.106$.

To find the Sun's Parallax in altitude, multiply the horizontal Parallax as found above by the cosine of the altitude.

Example:-What correction for Parallax is to be applied when Sun's altitude is $20^{\circ} 30^{\prime} 30^{\prime \prime}$ on the $31^{1 \text { st }}$ December.

$$
\begin{array}{lc}
\text { Sun's horizontal Parallax December 3rst, } & 9.106 \\
\text { Cosine of Altitude } 20^{\circ} 20^{\prime} & 30^{\prime \prime} \\
& \frac{9.9336}{56196} \\
& \frac{8.4294}{} \\
\text { Sun's Parallax in altitude } & 8.5286796
\end{array}=8^{\prime \prime} \cdot 53
$$

To find the day's length subtract the time of sunrise from 12 hours and add the time of sunset. Thus for February 11th, Sun rises,

Sun sets,

$$
\begin{aligned}
& 12 \\
& \frac{7.14!}{4 \cdot 46} \\
& \frac{5.16}{10.2}
\end{aligned}
$$

It is only when the Equation of time equals o that when Sun changes from fast to slow or the reverse that the forenoon hours equal the afternoon. Then the days length

