TREMAINE & METCALF'S.

RELIABLE ALMANAC.

1881.7

EXPLANATIONS # PRINCIPAL ARTICLES

On the left hand page are given the Day of the Month. Day of the Week, Time of Sun rise and Sunset, to the nearest minute, local mean time; the Equation of Time ("Sun fast or slow of Clock,") for the instant of Apparent Noon at Greenwich, together with the hourly variation of the same.

The Sun's Declination is given for Greenwich Mean Noon with the hourly variations. If the declination at Apparent Noon (Greenwich Time) is required, it can be readily found by multiplying the hourly variation by the equation of time reduced to the decimal of an hour and applying the result to the declination at Mean Noon, as follows:

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

EXAMPLES.

Find the Sun's Declination at Greenwich Apparent Noon on January 15th and April 4th.

January 15, hourly variation	a = 28.09	April 4, hourly var	iatio	n, 57.06
Equation, 9m. 48.42s. =	.16345	h. Equation, 5	2.56.9	3 = .04915h
Declination decreasing { Sun Slow,	$ \begin{array}{r} 14045 \\ 11236 \\ 8427 \\ 44944 \\ \end{array} $	Declination increas Sun Slow,	ing,	28530 5706 51354 22824
Subtract,	4.5913105	Add,	5 51	2.8044990
Declina'n Mean Noon, 21 2	41.0 D	eclina'n Mean Noon,		25.7
Apparent Noon, 21 2	36.4 A	pparent Noon,		28.5

To find the days length—Subtract the time of sunrise from 12 hours and add the time of sunset, or multiply the time of sunset by 2, previously adding the equation if Sun is fast; subtracting, if slow:

20th May, Sunrise	12h 00m 4 26	or Sunset	7	26		
	7 84	Equation, Sun Fast,		3	42	add
Sunset	7 26		7	29	42 2	
Days Length,	15 00		14	59	24	

ROBERTSON & CAMERON, North Side Queen Square.