Duration - - - - - - - - - 1h. 44m.

A very small portion only of the Sun's Northern limb will be obscured. This Eclipse will be total and central in the northern part of British America, Davis Straits, Greenland, Iceland, Norway and Russia.

VENUS will be the *Morning* Star until Octr. 11. After which she will be the *Evening* Star to the end of the year.

MARS will be the *Morning* Star during the year.

JUPITER will be the *Morning* Star until April 9, then the *Evening* Star until Octr. 22, thence the *Morning* Star to the close of the year.

SATURN will be the *Evening* Star until April 15, then the *Morning* Star until Octr. 22, after which the *Evening* Star.

EXPLANATION OF THE CALENDAR PAGES.

LEFT HAND PAGE.

Column.

1 & 2.—Contain the days of the month and of the week.

3 & 4.—The rising and setting in *mean time* of the highest point, or of the *upper limb* of the Sun, corrected for refraction.

5.—Days length in hours and minutes.

6.—The Equation of Time (or quantity by which the Sun is *slow* or *fast* of the clock) at noon, *apparent time* (not mean) at Greenwich. The interval of time between the Sun being on the Meridian or Southing, on one day and his being on the Meridian or Southing on the next day, is not always the same; and therefore, solar days are not equal in duration; about one-half are a little more, and about one-half are a little less than 24 hours. A clock regulated by the Sun, or the Sun-dial, would need frequent adjustment; to avoid this, an imaginary sun is supposed to move, so that the interval of time between its consecutive passages over the meridian is always the same, viz., 24 hours; such a time represents a mean solar day, and it is the average of all the apparent solar days in a year. The difference of time between the imaginary Sun and the true Sun passing the Meridian, is called the "Equation of Time," the amount of which at noon on every day is inserted in this column. There are only 4 days in the year when apparent and meantime are the same, or the Equation of time is nothing. In this year these days are April 16, June 16, Sept. 1, and Decr. 25.

By the assistance of the numbers in this column, a clock can be set by a Sun-dial as follows;—When *fast* is placed above the number opposite to the day, then the clock ought to be set fast on the time shown by the Sun-dial—and when *slow* is above the number, the clock ought to be set so much slower. Example:—When the Sun shows noon on the Sun-dial on June 1, and July 1, what are the