

ECLIPSES.

In times of ignorance men were alarmed at all celestial phenomena, the recurrence of which takes place at periods too remote to be readily calculated, and which accordingly appear to be guided by no fixed laws; whilst more important and obvious appearances excite no surprise because they are frequent, and because they occur at well known periods: thus the changes of the moon are observed without alarm, while the less obvious occurrence of an eclipse has scattered dismay over an army or a nation. An incidental and considerable assistance has been derived to chronology from this superstitious feeling. Eclipses were thought to be connected, in some secret manner, with the destinies of nations, and their occurrence has been carefully recorded, when near the time of some great battle, or other political event, of whose epoch we should otherwise remain in ignorance. Astronomical science shows how to determine with the greatest exactness the hour of any given eclipse; and we are thus enabled to fix with precision the date of any event which may have been thus accompanied, to confirm the statement of an historian, or to correct his errors. But as the computation of eclipses is attended with considerable difficulty, a few only of the readers of history are able to carry on these researches for themselves. On this account catalogues of eclipses have been calculated by astronomers for many thousand years, by a reference to which any chronological point connected with these phenomena may be at once determined.

Eclipses take place every half year, and at each period there may be one, two, or three eclipses; if only one, it must be an eclipse of the sun; if two, there will be one of each luminary; and if three, there will be two of the sun, with one of the moon between them. Eclipses of the Sun are caused by the interposition of the body of the moon between our eyes and the Sun, and eclipses of the moon by a real deprivation of light from the moon, occasioned by the shadow of the earth.

There will be five eclipses this year, two of the Sun, and three of the Moon, as follows, viz—

I. The first will be of the Moon, on Saturday, January 6th, partial and visible:—

Beginning.....	2h. 28m.)	
Ecliptic 8.....	3 31	} parent, or solar time in the morning.
Middle.....	3 39	
End.....	4 49	

Digits eclipsed 5° 43' on the Moon's north limb, in the southern section of the earth's shadow.

II. The second will be of the Sun, on Monday, Jan'y 20th, at about 5½ o'clock P. M. invisible in this Province, as well by reason of the Moon's south latitude, as from the time it happens; but in the Southern Frozen Ocean, in Lat. 61° 42' 30" south, and Long. 143° 58' 30" east of London, it will be visible,