

rising or setting; but in June and December it will cause a difference of about *four* minutes, which should not be neglected when accuracy is desired. For example—suppose that at a place one degree *north* of Halifax, and not much elevated above the sea, the Sun's *upper limb* on the 20th of June should be observed to rise out of the Ocean, by a clock, at 4h. 12m.; what is the error of the clock, and at what time by the clock must a meridian or noon mark, be drawn on that day—the Sun being slow *one* minute? By the Almanack it appears that the Sun's upper limb rises at Halifax on the 20th June at 4h. 14m. and consequently, at the place in question, at 4h. 10m. The clock therefore is *two* minutes fast of *mean* and *three* minutes fast of apparent time, and consequently the meridian mark must be drawn at *three* minutes after 12. Had the place in question been one degree *south* of Halifax, the clock would be *six* minutes slow of mean, and *five* slow of apparent time, and the meridian mark must be drawn at *five* minutes *before* 12. At Halifax the clock would be *two* minutes slow of mean, and *one* minute slow of apparent time, and the meridian mark must be drawn at *one* minute *before* 12.

EXPLANATION OF TERMS.

APHELION, is that part of a planet's orbit furthest from the sun.
APOGEE. the moon is said to be in Apogee when furthest from the Earth.

DECLINATION, is the distance of a heavenly body from the equinoxial line.

ECLIPTIC, is the plane of the Earth's orbit extended to the starry sphere; or the annual path which the sun apparently describes among the stars.

ELONGATION of a planet, is its distance from the Sun, as seen from the Earth.

EQUINOXIAL, or **EQUINOXIAL LINE**, is an imaginary line, or circle of the heavens corresponding with the Equator of the Earth.

EQUINOX. (See Right Ascension.)

NODES are those points in the orbits of the moon or planets which intersect the plane of the ecliptic.

PERIHELION is that part of a planets orbit nearest the Sun.

PERIGEE. The moon is said to be in perigee when nearest the Earth.

RIGHT ASCENSION is the distance, eastward, reckoned on the equinoxial from the first point of Aries; and is generally estimated in time: fifteen degrees of the arc being equal to one minute of time, and so on. The Zero point, or first of Aries, is called the Equinox.