

What we have just said on the cause of the rotatory motion and formation of the satellites, will acquire more probability, if we consider all the circumstances of the phenomena. The planets which turn the swiftest on their axis, are those which have satellites. The earth turns quicker than Mars in the relation of about 24 to 15; the earth has a satellite, but Mars has none. Jupiter, whose rapidity round its axis is five to six hundred times greater than that of the earth, has four satellites; and there is a great appearance that Saturn, which has five, and a ring, turns still more quickly than Jupiter.

It may even be conjectured with some foundation, that the ring of Saturn is parallel to the equator of that planet, so that the plane of the equator of the ring, and that of Saturn, are nearly the same; for, supposing, according to the preceding theory, that the obliquity of the stroke by which Saturn has been set in motion was very great, the velocity around the axis will, at first, have been in proportion as the centrifugal force exceeds that of gravity; and there will be detached from its equator and neighbouring parts, a considerable quantity of
VOL. I. O matter,