

drostatics, I am of opinion with Leibnitz, necessarily supposes that the earth and planets have been in a state of fluidity, caused by fire, and that the internal part of the earth must be a vitrifiable matter, of which sand, granite, &c. are the fragments and scoria.

It may therefore be thought, with some probability, that the planets appertained to the sun, that they were separated by a single stroke, which gave to them a motion of impulsion, and that their position at different distances from the sun proceeds only from their different densities. It now only remains to complete this theory, to explain the diurnal motion of the planets, and the formation of the satellites ; but this, far from adding difficulties to my hypothesis, seems, on the contrary, to confirm it.

For the diurnal motion, or rotation, depends solely on the obliquity of the stroke, and an oblique impulse therefore on the surface of a body will necessarily give it a rotative motion ; this motion will be equal and always the same, if the body which receives it be homogeneous ; and it will be unequal if the body be composed of heterogeneous parts, or of different densities ; hence we may conclude that in all the planets the matter is homogeneous, since their
diurnal