

system, which, on the ground of mathematical and astronomical facts, was put forward in 1755 by our critical philosopher Kant,²² and was later more thoroughly established by the celebrated mathematicians, Laplace and Herschel. This *mechanical cosmogony*, or theory of the development of the universe, is now almost universally acknowledged; it has not been replaced by a better one, and mathematicians, astronomers, and geologists have continually, by various arguments, strengthened its position.

Kant's cosmogony maintains that *the whole universe, inconceivable ages ago, consisted of a gaseous chaos*. All the substances which are found at present separated on the earth, and other bodies of the universe, in different conditions of density—in the solid, semi-fluid, liquid, and elastic fluid or gaseous states of aggregation—originally constituted together one single homogeneous mass, equally filling up the space of the universe, which, in consequence of an extremely high degree of temperature, was in an exceedingly thin gaseous or nebulous state. The millions of bodies in the universe which at present form the different solar systems did not then exist. They originated only in consequence of a universal rotatory movement, or rotation, during which a number of masses acquired greater density than the remaining gaseous mass, and then acted upon the latter as central points of attraction. Thus arose a separation of the chaotic primary nebula, or gaseous universe, into a number of rotating nebulous spheres, which became more and more condensed. Our solar system was such a gigantic gaseous or nebulous ball, all the particles of which revolved round a common central point, the solar nucleus. The nebulous ball itself, like all the rest, in consequence of its