

This zone of vapour might in some cases retain its form, as we see it in Saturn's ring; but more usually the ring of vapour would break into several masses, and these would generally coalesce into one mass, which would revolve about the sun. Such portions of the solar atmosphere, abandoned successively at different distances, would form "planets in the state of vapour." These planets, it appears from mechanical considerations, would have each its rotatory motion, and as the cooling of the vapour still went on, would each produce a planet, which might have satellites and rings, formed from the planet in the same manner as the planets were formed from the atmosphere of the sun.

It may easily be conceived that all the primary motions of a system so produced would be nearly circular, nearly in the plane of the original equator of the solar rotation, and in the direction of that rotation. Reasons are offered also to show that the motions of the satellites thus produced and the motions of rotation of the planets must be in the same direction. And thus it is held that the hypothesis accounts for the most remarkable circumstances in the structure of the solar system: namely, the motions of the planets in the same direction, and almost in the same plane; the motions of the satellites in the same direction as those of the planets; the motions of rotation of these different bodies still in the same direction as the other motions, and in planes not much different; the small eccentricity of the orbits of the planets, upon which condition, along with some of the preceding ones, the stability of the system depends; and the position of the source of light and heat in the centre of the system.

It is not necessary for the purpose, nor suitable to the plan of the present treatise, to examine, on physical grounds, the probability of the above hypothesis. It is proposed by its author, with great diffidence, as a conjecture only. We might, therefore, very reasonably put off all discussion of the bearings of this