

be distinguished by the doubtful light they throw around them. Others have been supposed to consist of phosphorescent matter, which either extends itself over the heavens, or is condensed around some star or dense matter. Sir William Herschel has delineated a very beautiful nebulous appearance in Orion, which he observed with his large telescope. Huygens, speaking of the same nebulosity, says, "that its appearance had the same effect upon an observer as that which might be supposed to proceed from raising a curtain that hid from the observer an ocean of light, the waves of which were irregularly illuminated."

To the question, what is the ultimate designation of these nebulæ, we can only answer by conjectures. Sir William Herschel thought he could trace a regular series of changes from a simple distribution of nebulous matter to that of a nebulous star, and some astronomers believe that a condensation of this matter is constantly going on, and that new worlds are daily in the process of formation. This is a splendid idea, and if the mind could at all adequately grasp it, would give an overwhelming conception of omnipotent skill; but there are some who have no higher ambition than to exclude God from his works, and to invest with his dignity and sovereignty that indefinable thing they are pleased to designate chance. It is not to be doubted that the great mind of Laplace was tainted with this unaccountable and unphilosophical desire; but, however this might be, he has availed himself of the discoveries that were made by Sir William Herschel for the invention of an hypothesis by which to account for the formation of the planets, and the sun itself, from a nebulous luminosity, which he is pleased to designate the primitive cause. Laplace imagines a time when the sun, having a revolution on its axis, was surrounded by an atmosphere, which, on account of the excessive heat of the luminary itself, was so dilated that it extended beyond the orbits of the planets, the planets themselves having no existence. But in proportion as the temperature of the sun decreased, or, in other words, the solar atmosphere was condensed, the rotation increased, and the centrifugal force of the most distant portion of the atmosphere overcoming the centripetal force, that is, the attraction of the sun, a ring of vaporous matter was separated, which, breaking into pieces, united together, and, forming an independent mass, began to revolve around the source of