

ferred by the researches of science, not from the domain of our knowledge to that of our ignorance, but merely from the region of facts to that of laws. We hold that, in this form, final causes in the atmosphere are still to be conceived to obtain, no less than in an earlier state of meteorological knowledge; and that Newton was right, when he believed that he had established their reality in the solar system, not expelled them from it.

But our more peculiar business at present is to observe that Laplace himself, in describing the arrangements by which the stability of the solar system is secured, uses language which shows how irresistibly these arrangements suggest an adaptation to its preservation as an *end*. If in his expressions we were to substitute the Deity for the abstraction "nature" which he employs, his reflection would coincide with that which the most religious philosopher would entertain. "It seems that 'God' has ordered every thing in the heavens to ensure the duration of the planetary system, by *views* similar to those which He appears to us so admirably to follow upon the earth, for the preservation of animals and the perpetuity of species.* This consideration alone would explain the disposition of the system, if it were not the business of the geometer to go further." It may be possible for the geometer to go further; but he must be strangely blinded by his peculiar pursuits, if, when he has discovered the mode in which these views are answered, he supposes himself to have obtained a proof that there are no views at all. It would be as if the savage, who had marvelled at the steady working of the steam engine, should cease to consider it a work of art, as soon as the self-re-

* Il semble que la nature ait tout disposé dans le ciel, pour assurer la durée du système planétaire, par des vues semblables à celles qu'elle nous paraît suivre si admirablement sur la terre, pour la conservation des individus et la perpétuité des espèces.
—*Syst. du Monde*, p. 442.