

opinion cannot, in sound reason, affect at all the view which we have been endeavouring to illustrate;—the view of the universe as the work of a wise and good Creator. Let it be supposed that the point to which this hypothesis leads us, is the ultimate point of physical science: that the farthest glimpse we can obtain of the material universe by our natural faculties, shows it to us occupied by a boundless abyss of luminous matter: still we ask, how space came to be thus occupied, how matter came to be thus luminous? If we establish by physical proofs, that the first fact which can be traced in the history of the world, is that “there was light;” we shall still be led, even by our natural reason, to suppose that before this could occur, “God said, let there be light.”

CHAPTER VIII.

The Existence of a Resisting Medium in the Solar System.

THE question of a *plenum* and a *vacuum* was formerly much debated among those who speculated concerning the constitution of the universe; that is, they disputed whether the celestial and terrestrial spaces are absolutely full, each portion being occupied by some matter or other; or whether there are, between and among the material parts of the world, empty spaces free from all matter, however rare. This question was often treated by means of abstract conceptions and *à priori* reasonings; and was sometimes considered as one in which the result of the struggle between rival systems of philosophy, the Cartesian and Newtonian for instance, was involved. It was conceived by some that the Newtonian doctrine of the motions of the heavenly bodies, according to mechanical laws, required that the space in which