

science, and who laid some of the foundation-stones of modern geology.

The introductory portion of Buffon's voluminous *Natural History* was devoted to a Theory of the Earth. Though written in 1744, it was not published until 1749. The author had meditated long and deeply on the meaning of the fossil shells found so abundantly among the rocks of the earth's crust, and had recognised that, as they demonstrate the condition of the globe not to have been always what it is now, any true theory of the earth must trace the history of the planet back to a time before the present condition was established. Like Descartes and Leibnitz, he saw that this history must be intimately linked with that of the solar system, of which it formed a part. He thought that the various planets were originally portions of the mass of the sun, from which they were detached by the shock of a comet, whereby the impulse of rotation and of revolution in the same general plane was communicated to them. In composition, therefore, they are similar to their parent sun, only differing from that body in temperature. He inferred that at first they were intensely hot and self-luminous, but gradually became dark as they cooled, the central sun still remaining in a state of incandescence.

Though the hypothesis of a cometary shock is not now entertained, it is impossible to refuse our admiration to the sagacity of a man who tried to solve the problem of planetary evolution by the application of the laws of mechanics. The geological portion of his theory, however, was loaded with several crude con-