

branches of philosophy in their successful progress, have been wisely copied; they have begun at the foundations of the temple of truth; they have collected an inconceivable number of individual facts; they have combined these into correct, though incomplete, generalizations; and have called on zoology and botany, on chemistry and mechanics, to furnish the interpretation.

Geology has thus been placed, by the energy and prudence of its living advocates, in the circle of inductive science; no more to be dissociated from the other parts of knowledge; advancing with them, and often leading them forward, by the proposal of new and remarkable problems, to the solution of which all the collected resources of modern science are sometimes scarcely equal. In this career the Geological Society of London has proceeded, without faltering, for thirty years, and the reward of their labours is in the just and candid acknowledgment of one most competent to pronounce, that "Geology, in the magnitude and sublimity of the objects of which it treats, undoubtedly ranks, in the scale of the sciences, next to astronomy." \*

If the object of this treatise were to produce merely the entertaining parts of geological discussion, it might be very proper to introduce a notice of the many fanciful and absurd systems of cosmogony and philosophy, falsely called "theories of the earth." Perhaps, notwithstanding the discredit which such mistaken attempts have brought upon philosophy generally, rather than geology in particular, some useful result might be derived from a dispassionate survey of them. For if Woodward, Whiston, and Burnet, — Buffon, De Luc, and Werner, have failed in the great attempt to unveil the natural history of the earth, it was not so much because of any inferiority of intellect, want of patient research, or deficiency of information, that their "theories" have fallen into oblivion; but because the

\* Sir John Herschel, in his *Discourse on the Study of Natural Philosophy*, p. 287.