

small recompense for the absence of solid philosophy. Hypotheses, which reject the consideration of final causes, and along with it the doctrine of the permanence of species, are not of modern origin, although they have found advocates down to the present day. Of these systems, the most prevalent in antiquity were the mechanical or atomistic, in which not merely vital, but even mental phenomena were explained, solely from a consideration of the mechanical properties of matter, as figure, magnitude, and motion. Such were the notions of Democritus and Epicurus, which have obtained more popularity from the poetry of Lucretius than from the logic of more systematic writers. The atomism of the Democritic school could only have arisen at a period when mathematics and mechanics constituted the entire stock of positive knowledge, and when chemistry was unknown, and existence of electro-magnetic force unsuspected. No one at the present day would attempt to account for chemical phenomena, much less for vital actions, on purely mechanical principles; and the vibrations and vibratiuncles of Hartley may be regarded as the last vestige of this mode of philosophising in mental science.

Another mode of accounting for the origin of organised beings equally well known, but less popular in ancient times, was the dynamical,