

Our retrospect of the growth of an intelligent appreciation of the geological phenomena so well developed in this long inhabited region need not take us further back than the time of Aristotle, the true Father of Natural History, (B.C. 384-322) who besides his own original contributions to science, supplies valuable references to writings of his predecessors which have not come down to us. His treatises furnish an admirable exposition of the state of natural knowledge in his time. When he wrote, the geocentric view of the universe was still publicly accepted without question. But he had firmly grasped certain truths regarding our globe, which, though taught long before by some of his predecessors, were not yet generally admitted. Thus he recognized that the planet possesses a spherical form, which is the most perfect of all, and he pointed in proof to the round shadow cast by the earth upon the moon during a lunar eclipse. He showed also by the difference in the aspect of the stellar heavens, as we move but a little way from north to south or south to north, that the mass of our globe must be relatively small. "The size of the earth is nothing," he says, "absolutely nothing, compared with the whole heavens. The mass of the sun must be far greater than that of our globe, and the distances of the fixed stars from us is much greater than that of the sun."¹ Accepting the common belief that the world consisted of four elements, he looked on these as arranged according to their relative densities. "The water is spread as an envelope round the earth; in the same way, above

¹ *Meteorics*, I. viii. 6; xiv. 18.