INTRODUCTION.

ALL the notions concerning the sea among ancient peoples were vague and elementary; the few facts known with reference to the phenomena of the ocean were limited to maritime nations like the Phœnicians. Among the learned men of antiquity two doctrines may be said to have prevailed with reference to the distribution of land and water. What may be called the Homeric School—to which Eratosthenes [1] and Strabo [2] belonged—held that the three continents of the old world formed a single island surrounded by the ocean. On the other hand, what may be called the Ptolemaic School regarded the Atlantic and Indian Oceans as enclosed seas like the Mediterranean, and maintained that the east and west points of the known world approached each other so closely that, sailing west from Spain, a ship might easily reach the eastern extremity. Thanks to the influence of Ptolemy,[3] this mistaken notion was perpetuated, and led about fourteen centuries after his time to the discovery of America by Columbus.

The ancients cannot be said to have had any definite conceptions of the deep sea. Experienced mariners, like the Phœnicians and Carthagenians, must necessarily have possessed some knowledge of the depths of the waters with which they were familiar, but this knowledge, whatever its extent, has been wholly lost. In the writings of Aristotle [4] we meet with the first bathymetrical data. He states that the Black Sea has whirlpools so deep that the lead has never reached the bottom; that the Black Sea is deeper than the Sea of Azov, that the Ægean is deeper than the Black Sea, and that the Tyrrhenian and Sardinian Seas are deeper than all the others.[5]

Polybius,[6] in estimating the time it would take for the Sea of Azov and Black Sea to be filled up by the alluvium brought down by the rivers flowing into them, states that the greater part of the Sea of Azov is only 5 to 7 fathoms in depth. Similar depths are shown on modern hydrographic charts.[7]

Posidonius [8] states that the sea about Sardinia had been sounded to a depth of 1000 fathoms—the greatest depth that had ever been attained.[9] This is the first record of a deep-sea sounding, and it would have been interesting had the writer given some information as to the methods employed by the ancients in these bathymetrical measure-

[1] 276–196 B.C. [2] Born about 60 B.C. [3] Lived about the middle of the second century A.D.
[4] 384–322 B.C. [5] Arist., Meteor., 114, § 29. [6] 204–122 B.C. [7] Polyb., iv. 39–42.
[8] Born about 135 B.C. [9] Posidon. ap. Strab., i. 3, § 9, p. 54; see E. H. Bunbury, History of Ancient Geography, vol. ii. p. 98, London, 1883.