

MARINUS OF TYRE. concerning the ocean must be pointed out. Marinus of Tyre¹ rejected the opinion of his immediate predecessors, and maintained that the habitable world was not surrounded by the waters of the ocean. He held that the continental masses were united to other similar masses still unknown, and that the Atlantic and Indian Oceans were separated from each other. Nor does he appear to have admitted the existence of a sea to the east of Asia; he attributed to that continent an indefinite extension towards the east. It is difficult to conjecture the reasons which induced Marinus to abandon the wiser and more correct views of Eratosthenes on these fundamental points of geography.

PTOLEMY. Ptolemy² adopted the views of Marinus, and his great authority gave them a scientific stamp. Ptolemy was an astronomer, and treated physical geography as of secondary importance. In commencing his first book³ he described geography as being essentially the art of tracing the map of the world in the literal sense assigned by etymology to the word geography.⁴ (See Plate IV.).

**PTOLEMY'S VIEWS
ON THE MORPHO-
LOGY OF THE
OCEANS.**

The greater part of Ptolemy's works is taken up by the tables containing the materials which served him in the construction of his maps. In projection he was far in advance of his predecessors, and first used the words latitude and longitude as purely technical terms. Following Marinus, he rejected the hypothesis of an ocean extending to the east of the Asiatic continent; he regarded that great land-mass as stretching indefinitely towards the north and east. Africa was likewise extended without any settled limitation towards the south. Eratosthenes, Hipparchus, and even Strabo, did not know that the east coast of Africa turned suddenly to the south-west beyond Cape Aromata;⁵ they believed that the shores of the regions which produced myrrh and incense extended as far as India. Ptolemy adopted this notion, although the merchants of Aden had informed him of the true position of the coasts as far south as Zanzibar. He united the point where the land appeared to him to trend towards the east, by unknown lands, to the Chinese coasts. The Indian Ocean thus formed a great enclosed sea. This *Southern Ethiopia* remained on maps down to the time of the second voyage of James Cook.⁶ As we have just seen, Ptolemy's conception of the morphology of the ocean differed from that held by many of his predecessors. With Ptolemy disappeared the great geographers of antiquity.

**CONTINENTAL AND
OCEANIC THEORIES
OF THE DISTRIBUTION
OF LAND AND
WATER.**

Two principal views prevailed among the ancients regarding the distribution of land and water. The school that may be called Homeric—to which Eratosthenes and Strabo belonged—considered the three continents of the Old World as forming a single island surrounded by the ocean. On the other hand, the adherents of what may be called the Ptolemaic school—to which Hipparchus and Marinus of Tyre belonged—did not admit

¹ Flourished probably about 120 A.D.

² Flourished about the middle of the second century A.D.

³ Ptolemy, i. sec. 1.

⁴ "Ptolemæo geographia est ars delineandi tabulas geographicas." See Wildberg, cited by Bunbury, *op. cit.*, vol. ii. p. 548.

⁵ Cape Guardafui.

⁶ 1772 to 1775 A.D. (see Peschel, *Geschichte der Erdkunde*, p. 61, Leipzig, 1877).