

The Aralo-Caspian basin is bounded by the Caspian on the west, the plateaus of Persia and Afghanistan on the south, and the Pamirs on the east, stretching to the Thian-Shan and the Tarbagati on the north-east, to Siberia on the north, and merging on the north-west into the steppes which lie between the Ural and the Caspian. On one side the mountains rise to heights of from 20,000 to 23,000 feet, while on the other side the surface sinks to the Caspian, about 86 feet below the level of the sea.

The fluctuations of level in the Caspian Sea during historic times, and its relation to the Sea of Aral and the Amu Daria (Oxus of the ancients, and Jihun of the Arabs), have caused much discussion among modern writers.¹ Strabo, the Greek geographer, quotes Aristobulus, the geographer of Alexander the Great, as saying that in the fourth century before Christ the traffic from India came down the Oxus River to the Caspian, into which sea the river flowed. A little later, about 300 B.C., Patrocles, the admiral of Seleucus, made a survey of the southern coast of the Caspian, and reported that the Oxus and Jaxartes (Syr Daria) Rivers both entered that sea, the mouth of the one being 240 miles from that of the other. Under present conditions the Oxus and Jaxartes could not possibly enter the Caspian Sea by separate mouths, but were the level of the Caspian very much higher than it is now, that sea would almost coalesce with the Sea of Aral, and conditions would then agree with the description of Patrocles. Physiographic evidence which seems to show that this was at one time the case is given by the abandoned shore-lines that border the Caspian at various heights up to 600 feet above the present water-level. These indicate by their weak development that the sea did not stand at any one level for a long time. Istakhri, who visited the region about 920 A.D., said that the Aral received the Oxus, the Jaxartes, and several other rivers. Edrisi (A.D. 1154) speaks of the Aral as a "well-known lake," and confirms most of what Istakhri says. He also shows in his map the Jihun flowing into the Aral Sea.² Professor Wocikoff³ shows that a rise of the River Amu Daria of only 4 metres (13 feet) above the level of 1901 would cause an overflow of part of its waters by the Usboi to the Caspian, one effect of which would be that the Sea of Aral would become a fresh-water lake. Historical evidence goes to show that from the thirteenth to the end of the

¹ Humboldt, *Asie centrale*, Paris, 1843; Rawlinson, "Note on the Oxus River," *Proc. Roy. Geogr. Soc.*, vol. xi. p. 114, 1866-67; Brückner, *Klimaschwankungen seit 1700*, Wien, 1890.

² Aitoff's reduction of the maps of Edrisi's Geography in Schrader's *Historical Atlas*, Carte 24, Paris, 1896.

³ *Op. cit.*, p. 84.