

the Peak of Demavend, which is 14,000 feet above the sea.

On the Arabian side of the Red Sea, volcanic phenomena appear at Aden, Medina, Mount Sinai, and other points; the island of Zibbel Teir is said to contain an active volcano. Volcanic phenomena are mentioned at the mouth of the Persian Gulf, in the island of Ormus, and at some distance inland north of Kerman.

Beyond the limits of the Mediterranean and Caspian volcanic regions just described, Humboldt has added to the previous reasons for admitting the existence of some volcanic action in the midst of the Altai Mountains (lat.  $42^{\circ}$  to  $46^{\circ}$  N., long. E.  $80^{\circ}$  to  $87^{\circ}$ ). These volcanos, which are 400 leagues from the Caspian Sea, are nevertheless situated among some considerable lakes, so as to invalidate in no degree the generality of the inference drawn from the consideration of European volcanic districts.

On the eastern border of Asia is an immense sigmoidal band of intense volcanic activity, which constitutes one of the most remarkable physical features of the globe. Commencing with Barren Island, in the Bay of Bengal, the line passes south-eastward through Sumatra, where Marsden describes four existing volcanos, one of which is 12,000 feet high. Through Java the line passes nearly east and west, amidst thirty-eight large volcanic mountains, conical in figure, and rising separately from a plain to 5000, 11,000 and even 12,000 feet above the sea. In 1772 one of the largest *fell in*, so that an extent of ground 15 miles long and 6 broad, with 40 villages, and 2957 persons, were destroyed.

From Java the volcanic line continues eastward through Sumbawa, known from the formidable eruption recorded by sir Stamford Raffles, and Flores, and Timor, where the burning peak sunk in 1637, and is changed to a lake. Between Timor and Ceram, also, in one of the Banda Isles, in the northern part of Celebes, the volcanic action is manifested among the Molucca Isles. Ternate, Tidore, and Sangir, continue the line in a