

flames with such violent explosions as even to produce a slight shock.

In a furious eruption of *Ætna* in 1669, which began the 11th of March, the summit of the mountains sunk considerably;* which proves the fire of this volcano comes rather from the top than from the bottom of the mountain. Borelli is of the same opinion, and says, "That the fire of volcanos does not proceed from the centre, nor from the foot of the mountain, but that it issues from the summit, and flames kindle but at a small depth."†

Mount Vesuvius in its eruptions, has thrown out great quantities of boiling water. Mr. Ray, who thinks that the volcanic fire proceeds from a great depth, says, that it is the water of the sea which communicates by subterraneous passages with the foot of the mountain; he gives, as a proof of it, the dryness of the summit of Vesuvius, and the agitation of the sea at the time of these eruptions, which sometimes retreats from the coasts, and leaves the Bay of Naples almost dry. But, if these facts are true, they do not prove, in a solid manner, that the volcanic fire proceeds from a great depth; for the water
which

* See Trans. Phil. Abridged, Vol. II. page 387.

† Borelli, De incendiis Montis Etnae.