

On considering these facts we are naturally led to compare the smaller and newer islands in the centre of the gulf to the modern cone of Vesuvius, surrounded by the older semicircular escarpment of Somma, or to liken them to the Peak of Teneriffe before described, as surrounded by its "fosse and bastion." This idea will appear to be still more fully confirmed when we study the soundings taken during the late hydrographical survey. Thera, which constitutes alone more than two-thirds of the outer circuit, presents everywhere towards the gulf, high and steep precipices composed of rocks of volcanic origin. In all places near the base of its cliffs, a depth of from 800 to 1000 feet of water was found, and Lieut. Leycester informs us\* that if the gulf, which is six miles in diameter, could be drained, a bowl-shaped cavity would appear with walls 2449 feet high in some places, and even on the south-west side, where it is lowest, no where less than 1200 feet high; while the Kaimenis would be seen to form in the centre a huge mountain five and a half miles in circumference at its base, with three principal summits (the Old, the New, and the Little Burnt Islands) rising severally to the heights of 1251, 1629, and 1158 feet above the bottom of the abyss. The rim of the great caldron thus exposed would be observed to be in all parts perfect and unbroken, except at one point where there is a deep and long chasm or channel, known by mariners as "the northern entrance" (B, fig. 47.) between Thera and Therasia, and called by Lieut. Leycester "the door into the crater." It is no less than 1170 feet deep, and constitutes, as will appear by the soundings (see map), a remarkable feature in the bed of the sea. There is no corresponding channel passing out from the gulf into the Mediterranean at any other point in the circuit between the outer islands, the greatest depth there ranging from 7 to 66 feet.

We may conceive, therefore, if at some former time the whole mass of Santorin stood at a higher level by 1200 feet, that this single ravine or narrow valley now forming "the northern entrance," was the passage by which the sea entered a circular bay and swept out in the form of mud and pebbles, the materials derived by denudation from wasting cliffs. In this manner the original crater may have been slowly widened and deepened, after which the whole archipelago may have been partially submerged to its present depth.

That such oscillations of level may in the course of ages have taken place, will be the more readily admitted when we state that part of Thera has actually sunk down in modern times, as, for example, during the great earthquake before alluded to, which happened in 1650. The subsidence alluded to is proved not only by tradition, but by the fact that a road which formerly led between two places on the east coast of Thera is now twelve fathoms under water.

MM. Bablaye and Virlet mention †, that the waves are constantly undermining and encroaching on the cliffs of Therasia and Aspronisi, and shoals or submarine ledges, were found during the late

\* See a paper read to the Geographical Society in 1849.

† Bull. de la Soc. Géol. de France, tome iii.