

lake. 3. Many lakes in the south of Italy are supposed to have been thus formed. 4. A volcano occupying the same spot as the present Vesuvius, is supposed thus to have been destroyed in 1779, and its remains to constitute the circular ridge, called Somma, which is several miles in diameter.

#### VOLCANOES IN HAWAII.

In Hawaii, one of the Sandwich Islands, are the most remarkable volcanoes, perhaps, in the whole world. There are three of them; the first, Mauna Kea, in the northern part of Hawaii, 13,950 feet high, now extinct; the second, Mauna Loa, in the southern part of the island, 13,760 feet high; the third Kilauea, upon a table land at the base of Mauna Loa, 3,970 feet high. Kilauea is the most interesting, as it is constantly active. In approaching the crater it is necessary to descend two steep terraces, each from 100 to 200 feet high, and extending entirely around the volcano. The outer one is 20, and the inner one 15 miles in circumference; and they obviously form the margin of vast craters, formerly existing. Arrived at the margin of the present crater, the observer has before him a crescent shaped gulf 1,500 feet deep, at whose bottom, which is from five to seven miles in circumference, the top being from eight to ten miles, is a vast lake of lava, in some places molten, in others covered with a crust; while in numerous places (some have noticed as many as fifty at once), are small cones with smoke and lava issuing out of them from time to time. Sometimes, and especially at night, such masses of lava are forced up, that a lake of liquid fire, not less than two miles in circumference, is seen dashing up its angry billows, and forming one of the grandest and most thrilling objects that the imagination can conceive. Fig. 117 is a view of this volcano taken by Rev. Mr. Ellis, an English missionary.

Eruptions from Kilauea are repeated every few years. There was a powerful eruption in May and June 1840. For several years the great gulf had been gradually filling up, until it was not more than 900 feet deep, and this molten mass was raging like the ocean when lashed into fury by a tempest. At length the lava found a subterranean passage, and flowed eight miles under ground, when it reached the surface, and sweeping forest, hamlet, plantation, and everything before it, rolled down with resistless energy to the sea, a distance of thirty-two miles, where leaping a precipice of forty or fifty feet, for three weeks, the stream of half a mile in width and twenty feet in thickness, poured in one vast cataract of fire into the deep below, with fearful hissings and loud detonations. The atmosphere in all directions was filled with ashes, spray, and gases; while the burning lava, as it fell into the water, was shivered into millions of minute particles, and being thrown back into the air, fell in showers of sand on all the surrounding country.