

We now terminate, for the present, our additions to M. Figuier's work, and leave him to dilate in his own words upon some other aspects of volcanic action.*]

SUBMARINE VOLCANOES.

Underneath the basin of the seas, the soil occasionally opens after an earthquake, and from the bosom of the waters rises a volcano. Submarine volcanoes are by no means rare; their débris frequently accumulate into islands; and, in fact, many existing islands, such as Iceland and Sicily, are, to a great extent, the products of volcanic eruption. It is not often, however, that the isles or islets formed by the ejections of a volcano continue to exist, for the shifting materials of which they are composed are quickly carried away by the incessant action of the waves.

In our own time, men have seen the formation of a new island in the bosom of the Mediterranean; that of *Ferdinanda*, or *Julia*, which made its appearance in the month of July 1831, to the north-west of Sicily, and disappeared after a brief existence of two months. We shall place before the reader some accurate details respecting this curious apparition, which so quickly vanished—like the shadow evoked on the surface of a magic mirror.

If the island of which we speak had not already been interesting in its origin, it would have been rendered so by the multiplicity of the baptisms it was fated to undergo. It received seven different appellations. At first it was called *Sciacca*, from the small Sicilian town situated in its vicinity; afterwards *Nerita*, because it was supposed to be placed on the Nerita sandbank, whose position is shown in the excellent charts of the late Rear-Admiral Smyth. But it was quickly discovered that the island did not lie anywhere near the Nerita bank, which, moreover, is situated in 500 to 650 feet of water; a designation which would have given rise to serious errors was accordingly abandoned. M. Constant Prévost, the scientific plenipotentiary whom the Academy of Sciences, of Paris, had dispatched in all haste to the spot, to study the new-born islet from a geological point of view, agreed with the crew of the brig *La Flèche* to name it *Julia Island*; "a sonorous name," says the learned geologist, "whose harmonious Italian termination would readily be adopted by the nearest inhabitants." The name "Julia" would, moreover, recall the month of July, when it made its appearance on the surface of the waters. Some authors, however, designate it by the name of the Sicilian captain *Corrao*, or that of the English Vice-Admiral *Hotham*, who were the first to perceive it on its emergence into "life and light."

Afterwards, the Royal Society of London adopted the name of *Graham*, pro-

* [In the preceding pages we have been indebted to Dr. Daubeny, "On Volcanoes;" Landgrebe, "Die Vulkanen;" Sir C. Lyell, "Principles of Geology;" Poulett Scrope, "On Volcanoes;" Professor Phillips, "Vesuvius;" Ansted, "Physical Geography;" Zurcher and Margollé, "Volcanoes and Earthquakes" (Eng. transl.), ed. 1868; besides various primary authorities.]