

in active volcanoes the frequency of the eruptions is in the inverse ratio of the height and the mass. The Peak also had seemed extinguished during ninety-two years, when, in 1798, it made its last eruption by a lateral opening formed in the mountain of Chahorra. In this interval Vesuvius had sixteen eruptions.

The whole of the mountainous part of the kingdom of Quito may be considered as an immense volcano, occupying more than seven hundred square leagues of surface, and throwing out flames by different cones, known under the particular denominations of Cotopaxi, Tungurahua, and Pichincha. The group of the Canary Islands is situated on the same sort of submarine volcano. The fire makes its way sometimes by one and sometimes by another of these islands. Teneriffe alone contains in its centre an immense pyramid terminating in a crater, and throwing out, from one century to another, lava by its flanks. In the other islands, the different eruptions have taken place in various parts; and we nowhere find those isolated mountains to which the volcanic effects are confined. The basaltic crust, formed by ancient volcanoes, seems everywhere undermined; and the currents of lava, seen at Lancerota and Palma, remind us, by every geological affinity, of the eruption which took place in 1301 at the island of Ischia, amid the tufas of Epomeo.

The exclusively lateral action of the peak of Teneriffe is a geological phenomenon, the more remarkable as it contributes to make the mountains which are backed by the principal volcano appear isolated. It is true, that in Etna and Vesuvius the great flowings of lava do not proceed from the crater itself, and that the abundance of melted matter is generally in the inverse ratio of the height of the opening whence the lava is ejected. But at Vesuvius and Etna a lateral eruption constantly terminates by flashes of flame and by ashes issuing from the crater, that is, from the summit of the mountain. At the Peak this phenomenon has not been witnessed for ages: and yet recently, in the eruption of 1798, the crater remained quite inactive. Its bottom did not sink in; while at Vesuvius, as M. von Buch has observed, the greater or less depth of the