

Ætna. The colossal summits of the Andes, Cotopaxi and Tungurahua, scarcely have an eruption once in a century. The Peak of Teneriffe seemed to be extinguished for ninety two years, when it made its last eruption by a lateral opening in 1798. In this interval, Vesuvius had sixteen eruptions." The greatest eruptions of lava from Ætna and Vesuvius are always from the sides of these mountains; but these lateral eruptions finish by an ejection of ashes and flames from the crater at the summit of the mountain. In the Peak of Teneriffe, an eruption of lava from the summit has not taken place for ages; and in the recent great eruption of 1798, the crater remained inactive, nor did its bottom fall in.

The observation of M. Humboldt, that lofty volcanoes have the longest periods of repose, will not be found universally correct. The small volcano of Volcano, one of the Lipari islands, was in a dormant state for thirteen hundred years, while the volcano of Popocatepetl, fourteen leagues from Mexico, which is nearly eighteen thousand feet above the level of the sea, seems to be in a state of constant activity. It was ascended by Lieutenant William Glennie, in 1827. The volcano rises from a country that is 8216 feet above the sea; its sides are thickly wooded with pine forests to the height of nearly 13,000 feet: beyond this altitude vegetation ceased entirely. The ground consisted of loose black sand of considerable depth, in which numerous fragments of pumice and basalt were dispersed; above this, were several projecting ridges of loose fragments of basalt, arranged one above another. At the summit, the mercury subsided to 15.63 inches. The crater appeared to extend one mile in diameter; the interior walls consisted of masses of rock, arranged perpendicularly, and marked by numerous vertical channels, filled, in many places, with black sand. Four horizontal circles of rock, differently coloured, were also noticed within the crater. From the edges of the latter, as well as from its perpendicular walls, several small columns of vapour arise, smelling strongly of sulphur. The noise was incessant, resembling that heard near the sea shore during a storm. At intervals of two or three minutes, the sound increased, followed by an irruption of stones: the larger fell again into the crater, the smaller were projected into the ravine through which the party had ascended.

The volcano of Popocatepetl is, perhaps, the loftiest active volcano that has been ascended, and yet, according to Humboldt, it sometimes pours out currents of lava from the summit.

Those who are acquainted with hydrostatics, and know the immense power that would be required to raise even a column of water from the level of the sea to the top of Popocatepetl, Ætna, or Teneriffe, will not be surprised that, in lofty volcanic mountains, the lava forces itself out of the sides, and rarely rises to the top of the crater. It has been calculated, that the force required to raise a column of lava to the height of the summit of Teneriffe, (twelve thousand five