

When the detonations become less frequent, rumbling sounds are heard, as the retreat of mighty waters ; and the mountain seems gradually to yield to exhaustion, or sinks into a state of partial rest, occasionally disturbed by explosions, and the ejection of scoriæ. Towards the conclusion of an eruption, that is, after the lava has ceased to flow, the surrounding country is frequently enveloped in dark clouds of black-coloured sand, or a white comminuted pumice.

The lofty mountains seldom eject lava from their summits, but from lateral openings ; for it requires far less power to open a passage in the side of the mountain than to elevate the intumescent mass to the summit. In the last eruption of Teneriffe a lateral opening was formed ; and, according to a calculation by M. Daubuisson, it would have required a force equivalent to a thousand atmospheres to raise a mass of lava to the elevated crater of the mountain.

We may now adduce a few examples of activity in the phase of paroxysmal violence ; and the difficulty is not to find a characteristic type, but to choose from the many authenticated and interesting details that are to be found in the page of philosophical records.

Vesuvius was in this phase in the year 1794. The first proof of the approach of the dreadful eruption which happened at this time, was during the night of the 12th of June, when a severe shock of earthquake was felt at Naples, and over the surrounding country. Nothing more occurred to rouse the fears of the inhabitants till the evening of the 15th, when the earth was again violently agitated. Shortly after this an opening was formed on the western base of the mountain cone, which, on after examination, was found to be 2375 feet in length, and 237 feet in breadth, and a stream of lava was ejected. Not long after the volcanic action had commenced, four distinct hills were formed, composed of lava, from each of which stones and other ignited substances were thrown in such quick succession, that it appeared as if they were each ejecting a vast flame of fire. At this time the lava flowed in great abundance, taking its course towards Portici and Resina. The inhabitants of Torre del Greco, rejoiced to see a prospect of their escape from the destroying fluid, were assembled together to return thanks for their deliverance, and to supplicate for their unfortunate neighbours, when they received the melancholy tidings that the lava had changed its direction, and was approaching their town