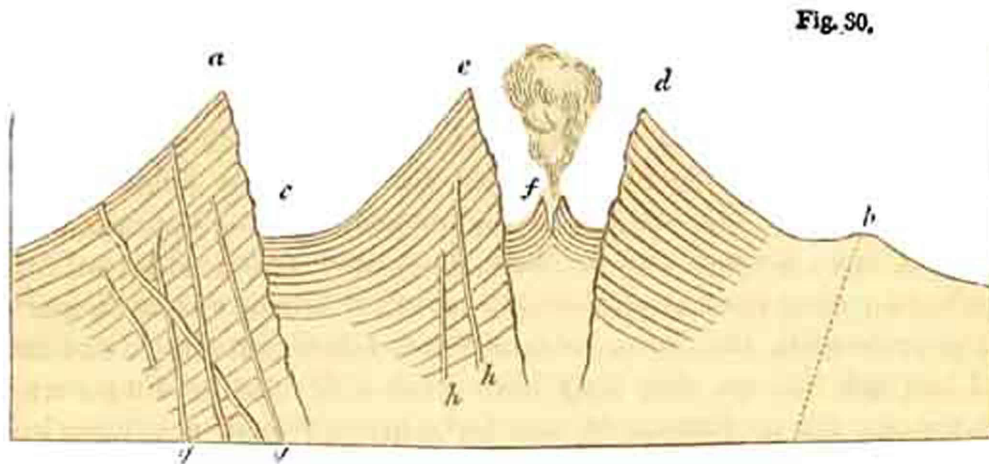


which surrounded the crater, at the bottom of which the insurgents were encamped. On the side towards the sea, the walls of this original cavity, which must have been three miles in diameter, have been destroyed, and Breislak was the first to announce the opinion that this destruction happened during the tremendous eruption which occurred in 79, when the new cone, now called Vesuvius, was thrown up, which stands encircled on three sides by the ruins of the ancient cone, called Monte Somma.

In the annexed diagram (fig. 30.) it will be seen that on the side of Vesuvius opposite to that where a portion of the ancient cone of Somma (*a*) still remains, is a projection (*b*) called the Pedamentina,



Supposed section of Vesuvius and Somma.

- a*, Monte Somma, or the remains of the ancient cone of Vesuvius.
- b*, The Pedamentina, a terrace-like projection, encircling the base of the recent cone of Vesuvius, on the south side.
- c*, Atrio del Cavallo.*
- d, e*, Crater left by eruption of 1822.
- f*, Small cone thrown up in 1823, at the bottom of the great crater.
- g, g*, Dikes intersecting Somma.
- h, h*, Dikes intersecting the recent cone of Vesuvius.

which some have supposed to be part of the circumference of the ancient crater broken down towards the sea, and over the edge of which the lavas of the modern Vesuvius have poured; the axis of the present cone of Vesuvius being, according to Visconti, precisely equidistant from the escarpment of Somma and the Pedamentina.

In the same diagram I have represented the slanting beds of the cone of Vesuvius as becoming horizontal in the Atrio del Cavallo (at *c*), where the base of the new cone meets the precipitous escarpment of Somma; for when the lava flows down to this point, as happened in 1822, its descending course is arrested, and it then runs in another direction along this small valley, circling round the base of the cone. Sand and scorixæ, also, blown by the winds, collect at the base of the cone, and are then swept away by torrents; so that there is always here a flattish plain, as represented. In the same manner, the small interior cone (*f*) must be composed of sloping beds, terminating in a horizontal plain; for, while this monticule was gradually gaining height by successive ejections of lava and scorixæ, in 1828,

* So called from travellers leaving their horses and mules there when they prepare to ascend the cone on foot.