these, falling in the sea, are variously disposed of, and may be borne by currents far from their origin. If, like the same island, the volcanic heap, after subsisting for a time, is wasted away by the waves, we can easily predict the effect on the sea bed near ;—sloping strata of *volcanic sediments*, which may cover or envelop abundance of mollusca, and even fishes poisoned by mephitic gases, which frequently break forth in points not far from the centre of the eruption. Among the singularities of the eruptions of Vesuvius is the pouring forth of boiling water from the sides of the mountain (*Daubeny*, 156.). Eruptions of this nature are less rare in the New World. Humboldt mentions the singular fact, that with these aqueous eruptions pass multitudes of small fishes along with abundance of mud.

"When (on the 19th of June, 1698) the Peak of Carguairazo sunk down, more than four square leagues around were covered with clayey mud, called in the country "*lodozales*." Small fish known by the name of "prenadillas" (*Pymelodes Cyclopum*), — a species which inhabits the streams of the province of Quito,—were enveloped in the liquid ejections of Carguairazo.

These are the fish said to be thrown out by the volcano, because they live by thousands in subterranean lakes, and, at the moment of great eruptions, issue through crevices, and are carried down by the impulsion of the muddy water that descends on the declivity of the mountains. The almost extinguished volcano of Imbaburu ejected, in 1691, so great a quantity of prenadillas, that the putrid fever, which prevailed at that period, was attributed to miasmata exhaled by the fish." (*Humboldt on Rocks*, p. 455.)

Fetid mud, called "moya," burst, in enormous quantity, from the foot of the volcano of Tunguragua, in Quito, in 1797, and filled valleys and dammed the course of rivers. Sulphuric acid is mixed with the waters which flow from Purace, in Quito, and some other extinct volcanos.

Besides *ashes*, scoriæ and stones even of consider-