

the Azores; but it is certain, that the island of Bourbon as well as Teneriffe, exhibits only a heap of lavas and basalts. No volcanic rock rears its head, either on the Gros Morne, or on the volcano of Bourbon, or on the colossal pyramid of Cimandef, which is perhaps more elevated than the Peak of the Canary Islands.

Bory St. Vincent nevertheless asserted, that lavas including fragments of granite have been found on the elevated plain of Retama; and M. Broussonnet informed me, that on a hill above Guimar, fragments of mica-slate, containing beautiful plates of specular iron, had been found. I can affirm nothing respecting the accuracy of this latter statement, which it would be so much the more important to verify, as M. Poli, of Naples, is in possession of a fragment of rock thrown out by Vesuvius,* which I found to be a real mica-slate. Every thing that tends to enlighten us with respect to the site of the volcanic fire, and the position of rocks subject to its action, is highly interesting to geology.

It is possible, that at the Peak of Teneriffe, the fragments of primitive rocks thrown out by the mouth of the volcano may be less rare than they at present appear to be, and may be heaped together in some ravine, not yet visited by travellers. In fact, at Vesuvius, these same fragments are met with only in one single place, at the Fossa Grande, where they are hidden under a thick layer of ashes. If this ravine had not long ago attracted the attention of naturalists, when masses of granular limestone, and other primitive rocks, were laid bare by the rains, we might have thought them as rare at Vesuvius, as they are, at least in appearance, at the Peak of Teneriffe.

* In the valuable collection of Dr. Thomson, who resided at Naples till 1805, is a fragment of lava enclosing a real granite, which is composed of reddish feldspar with a pearly lustre like adularia, quartz, mica, hornblende, and, what is very remarkable, lazulite. But in general the masses of known primitive rocks, (I mean those which perfectly resemble our granites, our gneiss, and our mica-slates) are very rare in lavas; the substances we commonly denote by the name of granite, thrown out by Vesuvius, are mixtures of nepheline, mica, and pyroxene. We are ignorant whether these mixtures constitute rocks *sui generis* placed under granite, and consequently of more ancient date; or simply form either intermediate strata or veins, in the interior of the primitive mountains, the tops of which appear at the surface of the globe.