

ture of the coast to be 21 degrees, and allowing one degree for the decrement of caloric corresponding under this zone to 93 toises. We should not be surprised if this spring remained a little below the heat of the air, since it probably takes its source in some more elevated part of the peak, and possibly communicates with the small subterranean glaciers of which we shall speak hereafter. The accordance just observed between the barometrical and thermometrical measures is so much more striking, because in mountainous countries, with steep declivities, the springs generally indicate too great a decrement of caloric, for they unite small currents of water, which filtrate at different heights, and their temperature is consequently the mean between the temperature of these currents. The spring of Dornajito has considerable reputation in the country; and at the time I was there, it was the only one known on the road which leads to the summit of the volcano. The formation of springs demands a certain regularity in the direction and inclination of the strata. On a volcanic soil, porous and splintered rocks absorb the rain waters, and convey them to considerable depths. Hence arises that aridity observed in the greater part of the Canary Islands, notwithstanding the considerable height of their mountains, and the mass of clouds which navigators behold incessantly overhanging this archipelago.

From Pino del Dornajito to the crater of the volcano we continued to ascend without crossing a single valley; for the small ravines (*barancos*) do not merit this name. To the eye of the geologist the whole island of Teneriffe is but one mountain, the almost elliptical base of which is prolonged to the north-east, and in which may be distinguished several systems of volcanic rocks formed at different epochs. The Chahorra, or Montaña Colorada, and the Urca, considered in the country as insulated volcanoes, are only little hills abutting on the peak, and masking its pyramidal form. The great volcano, the lateral eruptions of which have given birth to vast promontories, is not however precisely in the centre of the island, and this peculiarity of structure appears the less surprising, if we recollect that, as the learned mineralogist M. Cordier has observed, it is not perhaps the small crater of the Piton which has been the principal agent in the changes undergone by the island of Teneriffe.