

as we approached the convent of Caripe. Everything here changes its aspect, even to the rock that accompanied us from Punta Delgada. The calcareous strata becomes thinner, forming graduated steps, which stretch out like walls, cornices, and turrets, as in the mountains of Jura, those of Pappenheim in Germany, and near Oizow in Galicia. The colour of the stone is no longer of a smoky or bluish grey; it becomes white; its fracture is smooth, and sometimes even imperfectly conchoidal. It is no longer the calcareous formation of the Higher Alps, but a formation to which this serves as a basis, and which is analagous to the Jura limestone. In the chain of the Apennines, between Rome and Nocera, I observed this same immediate superposition.* It indicates, not the transition from one rock to another, but the geological affinity existing between two formations. According to the general type of the secondary strata, recognised in a great part of Europe, the Alpine limestone is separated from the Jura limestone by the muriatiferous gypsum; but often this latter is entirely wanting, or is contained as a subordinate layer in the Alpine limestone. In this case the two great calcareous formations succeed each other immediately, or are confounded in one mass.

The descent from the Cuchilla is far shorter than the ascent. We found the level of the valley of Caripe 200 toises higher than that of the valley of Guanaguana.† A group of mountains of little breadth separates two valleys, one of which is of delicious coolness, while the other is famed for the heat of its climate. These contrasts, so common in Mexico, New Grenada, and Peru, are very rare in the north-east part of South America. Thus Caripe is the only one of the high valleys of New Andalusia which is much inhabited.

* In like manner, near Geneva, the rock of the Mole, belonging to the Alpine limestone, lies under the Jura limestone which forms Mount Salève.

† Absolute height of the convent above the level of the sea, 412 toises.