

contain nearly five per cent. of potash, sulphuret of iron, peroxide of iron, carbon, &c. The contact of so many moistened heterogeneous substances must necessarily lead them to a change of state and composition. The efflorescent salts that abundantly cover the aluminous slates of Robalo, shew how much these chemical effects are favoured by the high temperature of the climate; but, I repeat, in a rock where there are no crevices, no vacuities parallel to the direction and inclination of the strata, native alum, semi-transparent and of conchoidal fracture, completely filling its place (its beds), must be regarded as of the same age with the rock in which it is contained. The term "contemporary formation" is here taken in the sense attached to it by geologists, in speaking of beds of quartz in clay-slate, granular limestone in mica-slate, or feldspar in gneiss.

After having for a long time wandered over barren scenes, amidst rocks entirely devoid of vegetation, our eyes dwelt with pleasure on tufts of malpighia and croton, which we found in descending toward the coast. These arborescent crotons were of two new species,* very remarkable for their form, and peculiar to the peninsula of Araya. We arrived too late at the Laguna Chica, to visit another rock situated farther east, and celebrated by the name of the Laguna Grande, or the Laguna del Obispo.† We contented ourselves with admiring it from the height of the mountains that command the view; and, excepting the ports of Ferrol and Acapulco, there is perhaps none presenting a more extraordinary configuration. It is an inland gulf two miles and a half long from east to west, and one mile broad. The rocks of mica-slate that form the entrance of the port, leave a free passage only two hundred and fifty toises broad. The water is everywhere from fifteen to twenty-five fathoms deep. Probably the government of Cumana will one day take advantage of the possession of this inland gulf, and of that of Mochima,‡ eight leagues east of the bad road of Nueva Barcelona. The family of M. Navarete were waiting for us with impatience on the

* *Croton argyrophyllus*, and *C. marginatus*.

† Great Lake, or the Bishop's Lake.

‡ This is a long narrow gulf, three miles from north to south, similar to the fiords of Norway.