

isthmus which, stretching from north to south, formerly joined the peninsula of Araya to the island of Margareta. In that island a neck of very low land, three thousand toises long, and less than two hundred toises broad, conceals on the northern sides the two hilly groups, known by the names of La Vega de San Juan, and the Macanao. The Laguna Grande of Margareta has a very narrow opening to the south, and small boats pass by portage over the neck of land or northern dyke. Though the waters on these shores seem at present to recede from the continent, it is nevertheless very probable, that in the lapse of ages, either by an earthquake or by a sudden rising of the ocean, the long island of Margareta will be divided into two rocky islands of a trapezoidal form.

The limestone of the Barigon, which is a part of the great formation of sandstone or calcareous breccia of Cumana, is filled with fossil shells in as perfect preservation as those of other tertiary limestones in France and Italy. We detached some blocks, containing oysters eight inches in diameter, pectens, venuses, and lithophyte polypi. I recommend to naturalists better versed in the knowledge of fossils than I then was, to examine with care this mountainous coast (which is easy of access to European vessels), in their way to Cumana, Guayra, or Curaçao. It would be curious to discover whether any of these shells, and these species of petrified zoophytes, still inhabit the sea of the West Indies, as M. Bonpland conjectured, and as is the case in the island of Timor, and perhaps in Guadaloupe.

We sailed on the 4th of November, at one o'clock in the morning, in search of the mine of native alum. I took with me the chronometer and my large Dollond telescope, intending to observe at the Laguna Chica (Small Lake), east of the village of Maniquarez, the immersion of the first satellite of Jupiter; this design, however, was not accomplished, contrary winds having prevented our arrival before daylight. The spectacle of the phosphorescence of the ocean, and the sports of the porpoises which surrounded our canoe, somewhat atoned for this disappointment. We again passed those spots where springs of petroleum gush from mica-slate at the bottom of the sea, and the smell of which is perceptible from a considerable distance. When it