

of the water is composed of broken pieces, cemented by carbonate of lime, in which grains of quartzose sand are set. Whether rocks formed by polypi still living are found at great depth below this fragmentary rock of coral; or whether these polypi are raised on the Jura formation, are questions which I am unable to answer. Pilots believe that the sea diminishes in these latitudes, because they see the chain of rocks augment and rise, either by the earth which the waves heave up, or by successive agglutinations. It is not impossible that the enlarging of the channel of Bahama, by which the waters of the Gulf-stream issue, may cause, in the lapse of ages, a slight lowering of the waters south of Cuba, and especially in the gulf of Mexico, the centre of the great current which runs along the shores of the United States, and casts the fruits of tropical plants on the coast of Norway.\* The configuration of the coast, the direction, the force, and the duration of certain winds and currents, the changes which the barometric heights undergo through the variable predominance of those winds, are causes, the concurrence of which may alter, in a long space of time, and in circumscribed limits of extent and height, the equilibrium of the seas.† When the coast is so low, that the level of the soil, at a league within the island, does not change to extent of a few inches, these swellings and diminution of the waters strike the imagination of the inhabitants.

The *Cayo bonito* (Pretty Rock), which we first visited, fully merits its name from the richness of its vegetation. Everything denotes that it has been long above the surface of the ocean; and the central part of the Cayo is not more depressed

\* "The Gulf-stream, between the Bahamas and Florida, is very little wider than Behring's Strait; and yet the water rushing through this passage is of sufficient force and quantity to put the whole Northern Atlantic in motion, and to make its influence be felt in the distant strait of Gibraltar and on the more distant coast of Africa."—(Quarterly Rev., February, 1818.)

† I do not pretend to explain, by the same causes, the great phenomena of the coast of Sweden, where the sea has, on some points, the appearance of a very unequal lowering of from three to five feet in one hundred years. The great geologist, Leopold von Buch, has imparted new interest to these observations, by examining whether it be not rather some parts of the continent of Scandinavia which insensibly heaves up. An analogous supposition was entertained by the inhabitants of Dutch Guiana.