

thermal springs* are seen issuing from the soil; and at length we reach the borders of the lake of Campoma, the exhalations from which contribute to the insalubrity of the climate of Cariaco. The natives believe that the hollow is formed by the engulfing of the hot springs; and, judging from the sound heard under the hoofs of the horses, we must conclude that the subterranean cavities are continued from west to east nearly as far as Casanay, a length of three or four thousand toises. A little river, the Rio Azul, runs through these plains, which are rent into crevices by earthquakes. These earthquakes have a particular centre of action, and seldom extend as far as Cumana. The waters of the Rio Azul are cold and limpid; they rise on the western declivity of the mountain of Meapire, and it is believed that they are augmented by infiltrations from the lake Putacua, situated on the other side of the chain. The little river, together with the sulphureous hot springs, fall into the Laguna de Campoma. This is a name given to a great lagoon, which is divided in dry weather into three basins situated north-west of the town of Cariaco, near the extremity of the gulf. Fetid exhalations arise continually from the stagnant water of this lagoon. The smell of sulphuretted hydrogen is mingled with that of putrid fishes and rotting plants.

Miasms are formed in the valley of Cariaco, as in the Campagna of Rome; but the hot climate of the tropics increases their deleterious energy. These miasms are probably ternary or quaternary combinations of azote, phosphorus, hydrogen, carbon, and sulphur.

The situation of the lagoon of Campoma renders the north-west wind, which blows frequently after sunset, very pernicious to the inhabitants of the little town of Cariaco. Its influence can be the less doubted, as intermitting fevers are observed to degenerate into typhoid fevers, in proportion as we approach the lagoon, which is the principal focus of putrid miasms. Whole families of free negroes, who have small plantations on the northern coast of the gulf of Cariaco, languish in their hammocks from the beginning of the rainy season. These intermittent fevers assume a dan-

* *El Llano de Aguas calientes*, E. N. E. of Cariaco, at the distance of two leagues.