

soil, which is affirmed to be impregnated with sulphur. Hot sulphureous waters gush out with such violence that the ground is agitated by very sensible shocks. It is said that flames have been frequently seen issuing out since the great earthquake of 1797. These facts are well worthy of being examined.

IV. Petroleum-spring of the Buen Pastor, near Rio Areo. Large masses of sulphur have been found in clayey soils at Guayuta, as in the valley of San Bonifacio, and near the junction of the Rio Pao with the Orinoco.

V. The Hot Waters (Aguas Calientes) south of the Rio Azul, and the Hollow Ground of Cariaco, which, at the time of the great earthquake of Cumana, threw up sulphuretted water and viscous petroleum.

VI. Hot waters of the gulf of Cariaco.

VII. Petroleum-spring in the same gulf, near Maniquarez. It issues from mica-slate.

VIII. Flames issuing from the earth, near Cumana, on the banks of the Manzanares, and at Mariguitar, on the southern coast of the gulf of Cariaco, at the time of the great earthquake of 1797.

IX. Igneous phenomena of the mountain of Cuchivano, near Cumanacoa.

X. Petroleum-spring gushing from a shoal to the north of the Caracas Islands. The smell of this spring warns ships of the danger of this shoal, on which there is only one fathom of water.

XI. Thermal springs of the mountain of the Brigantine, near Nueva Barcelona. Temperature 43.2° (centigrade).

XII. Thermal springs of Provisor, near San Diego, in the province of New Barcelona.

XIII. Thermal springs of Onoto, between Turmero and Maracay, in the valleys of Aragua, west of Caracas.

XIV. Thermal springs of Mariara, in the same valleys. Temperature 58.9° .

XV. Thermal springs of Las Trincheras, between Porto Cabello and Valencia, issuing from granite like those of Mariara, and forming a river of warm water (Rio de Aguas Calientes). Temperature 90.4° .

XVI. Boiling springs of the Sierra Nevada of Merida.

XVII. Aperture of Mena, on the borders of Lake Mara-