

We reposed at the foot of the cavern whence those flames were seen to issue, which of late years have become more frequent. Our guides and the farmer, an intelligent man, equally acquainted with the localities of the province, discussed, in the manner of the Creoles, the dangers to which the town of Cumanacoa would be exposed if the Cuchivano became an active volcano, or, as they expressed it, "se veniesse a reventar." It appeared to them evident, that since the great earthquakes of Quito and Cumana in 1797, New Andalusia was every day more and more undermined by subterranean fires. They cited the flames which had been seen to issue from the earth at Cumana; and the shocks felt in places where heretofore the ground had never been shaken. They recollected that at Macarapan, sulphurous emanations had been frequently perceived for some months past. We were struck with these facts, upon which were founded predictions that have since been almost all realized. Enormous convulsions of the earth took place at Caracas in 1812, and proved how tumultuously nature is agitated in the north-east part of Terra-Firma.

But what is the cause of the luminous phenomena which are observed in the Cuchivano? The column of air which rises from the mouth of a burning volcano\* is sometimes observed to shine with a splendid light. This light, which is believed to be owing to the hydrogen gas, was observed from Chillo, on the summit of the Cotopaxi, at a time when the mountain seemed in the greatest repose. According to the statements of the ancients, the Mons Albanus, near Rome, known at present under the name of Monte Cavo, appeared at times on fire during the night; but the Mons Albanus is a volcano recently extinguished, which, in the time of Cato, threw out rapilli;† while the Cuchivano is a calcareous mountain, remote from any trap formation.

\* We must not confound this very rare phenomenon with the glimmering commonly observed a few toises above the brink of a crater, and which (as I remarked at Mount Vesuvius in 1805) is only the reflection of great masses of inflamed scoria, thrown up without sufficient force to pass the mouth of the volcano.

† "Albano monte biduum continenter lapidibus pluit."—Livy, lib. xxv. cap. 7. (Heyne, *Opuscula Acad.*, tom. iii. p. 261.)