

propagation of the motion. Thus, in the mines of Saxony, we have seen workmen hasten up alarmed by oscillations which were not felt at the surface of the ground.

If, in regions the most remote from each other, primitive, secondary, and volcanic rocks, share equally in the convulsive movements of the globe; we cannot but admit also that within a space of little extent, certain classes of rocks oppose themselves to the propagation of the shocks. At Cumana, for instance, before the great catastrophe of 1797, the earthquakes were felt only along the southern and calcareous coast of the gulf of Cariaco, as far as the town of that name; while in the peninsula of Araya, and at the village of Maniquarez, the ground did not share the same agitation. But since December 1797, new communications appear to have been opened in the interior of the globe. The peninsula of Araya is now not merely subject to the same agitations as the soil of Cumana, but the promontory of mica-slate, previously free from earthquakes, has become in its turn a central point of commotion. The earth is sometimes strongly shaken at the village of Maniquarez, when on the coast of Cumana the inhabitants enjoy the most perfect tranquillity. The gulf of Cariaco, nevertheless, is only sixty or eighty fathoms deep.

It has been thought from observations made both on the continent and in the islands, that the western and southern coasts are most exposed to shocks. This observation is connected with opinions which geologists have long formed respecting the position of the high chains of mountains, and the direction of their steepest declivities; but the existence of the Cordillera of Caracas, and the frequency of the oscillations on the eastern and northern coast of Terra Firma, in the gulf of Paria, at Carupano, at Cariaco, and at Cumana, render the accuracy of that opinion doubtful.

In New Andalusia, as well as in Chile and Peru, the shocks follow the course of the shore, and extend but little inland. This circumstance, as we shall soon find, indicates an intimate connection between the causes which produce earthquakes and volcanic eruptions. If the earth was most agitated on the coasts, because they are the lowest part of the land, why should not the oscillations be equally strong