

most violence in the granitic soils of Caracas and the Orinoco. Igneous phenomena (if their existence be really well certified) are attributed by the people to the granitic peaks of Duida and Guaraçó, and also to the calcareous mountain of Cuchivano.

From these observations, it results that gneiss-granite predominates in the immense group of the mountains of the Parime, as micaslate-gneiss prevails in the Cordillera of the coast; that in the two systems, the granitic soil, unmixed with gneiss and mica-slate, occupies but a very small extent of country; and that in the coast-chain the formations of clayey slate (thonschiefer), mica-slate, gneiss, and granite, succeed each other in such a manner on the same line from east to west (presenting a very uniform and regular inclination of their strata towards the north-west), that, according to the hypothesis of a subterraneous prolongation of the strata, the granite of Las Trincheras and the Rincon del Diablo may be superposed on the gneiss of the Villa de Cura, of Buenavista, and Caracas; and the gneiss superposed in its turn on the mica-slate and clay-slate of Maniquarez and Chuparuparu in the peninsula of Araya. This hypothesis of a prolongation of every rock, in some sort indefinite, founded on the angle of inclination presented by the strata appearing at the surface, is not admissible; and according to similar equally vague reasoning, we should be forced to consider the primitive rocks of the Alps of Switzerland as superposed on the formation of the compact limestone of Achsenberg, and that [transition, or identical with zechstein?] in turn, as being superposed on the molassus of the tertiary strata.

II. FORMATION OF THE CLAY-SLATE (THONSCHIEFER) OF MALPASSO.—If, in the sketch of the formations of Venezuela, I had followed the received division into primitive, intermediary, secondary, and tertiary strata, I might be doubtful what place the last stratum of mica-slate in the peninsula of Araya should occupy. This stratum, in the ravine (aroyo) of Robalo, passes insensibly in a carburetted and shining slate, into a real ampelite. The direction and inclination of the stratum remain the same, and the thonschiefer, which takes the look of a transition-rock, is but a