

The Sierra Parime is one of the most extensive granitic strata existing on the globe\*; but the granite, which is seen alike bare on the flanks of the mountains and in the plains by which they are joined, often passes into gneiss. Granite is most commonly found in its granular composition and independent formation, near Encaramada, at the strait of Baraguan, and in the vicinity of the mission of the Esmeralda. It often contains, like the granites of the Rocky Mountains (lat. 38°—40°), the Pyrenees, and Southern Tyrol, amphibolic crystals,† disseminated in the mass, but without passing to syenite. Those modifications are observed on the banks of the Orinoco, the Cassiquiare, the Atabapo, and the Tuamini. The blocks heaped together, which are found in Europe on the ridge of granitic mountains (the Riesengebirge in Silesia, the Ochsenkopf in Franconia), are especially remarkable in the north-west part of the Sierra Parime, between Caycara, the Encaramada, and Uruana, in the cataracts of the Maypures and at the mouth of the Rio Vichada. It is doubtful whether these masses, which are of cylindrical form, parallelepipedons rounded on the edge, or balls of 40 to 50 feet in diameter, are the effect of a slow decomposition, or of a violent and instantaneous upheaving. The granite of the south-eastern part of Sierra Parime sometimes passes to pegmatite,‡ composed of laminary felspar, enclosed in curved masses of crystalline quartz. I saw gneiss only in subordinate layers;§ but, between

\* To prove the extent of the continuity of this granitic stratum, it will suffice to observe that M. Lechenault de la Tour collected in the bars of the river Mana, in French Guiana, the same gneiss-granites (with a little amphibole) which I observed three hundred leagues more to the west, near the confluence of the Orinoco and the Guaviare.

† I did not observe this mixture of amphibole in the granite of the littoral chain of Venezuela, except at the summit of the Silla of Caracas.

‡ Schrift-granit. It is a simple modification of the composition and texture of granite, and not a subordinate layer. It must not be confounded with the real pegmatite, generally destitute of mica, or with the 'geographic stones' (piedras mapajas) of the Orinoco, which contain streaks of dark green mica irregularly disposed.

§ The magnetic sands of the rivers that furrow the granitic chain of the Encaramada seem to denote the proximity of amphibolic or chloritic slate (hornblende or chloritschiefer), either in layers in the granite, or superposed on that rock.