centre of the island of Marguerita. This clay appears to lie immediately over the mica-slate, and under the calcareous breccia of the tertiary strata. I cannot decide whether Araya, which is rich in disseminated muriate of soda, belongs to the sandstone formation of the Impossible, which from its position may be compared to variegated sandstone (red marl).

There is no doubt that fragments of tertiary strata surround the castle and town of Cumana (Castillo de San Antonio), and they also appear at the south-western extremity of the peninsula of Araya (Cerro de la Vela et del Barigon); at the ridge of the Cerro de Meapire, near Cariaco; at Cabo Blanco, on the west of La Guayra, and on the shore of Porto Cabello; they are consequently found at the foot of the two slopes of the northern chain of the Cordillera of Venezuela. This tertiary stratum is composed of alternate beds of calcareous conglomerate, compact limestone, marl, and clay, containing selenite and lamellar gypsum. The whole system (of very recent beds) appears to me to constitute but one formation, which is found at the Cerro de la Popa, near Carthagena, and in the islands of Guadaloupe and Martinico.

Such is the geological distribution of strata in the mountainous part of Venezuela, in the group of the Parime, and in the littoral Cordillera. We have now to characterize the formations of the Llanos (or of the basin of the Lower Orinoco and the Apure); but it is not easy to determine the order of their superposition, because in this region ravines or beds of torrents and deep wells dug by the hands of man are entirely wanting. The formations of the Llanos are, 1st, a sandstone or conglomerate, with rounded fragments of quartz, Lydian stone, and kieselschiefer, united by a ferruginous clayey cement, extremely tenacious, olive-brown, sometimes of a vivid red: 2nd, a compact limestone, (between Tisnao and Calabozo) which, by its smooth fracture, and lithographic aspect, approaches the Jura limestone: 3rd, alternate strata of marl and lamellar gypsum (Mesa de San Diego, Ortiz, Cachipo). These three formations appeared to me to succeed each other in the order I have just described, the sandstone inclining in a concave position, northward, on the transition-slates of Malpasso, and southward, on the gneiss-granite of Parime. As the gypsum often imme-