

de los Vertentes (group of Canastra and the Brazilian Pyrenees), 450 toises. Further west, the surface of the soil seems to present but slight undulations; but no measure of height has been made beyond the meridian of Villaboa. Considering the system of the mountains of Brazil in their real limits, we find, except some conglomerates, the same absence of secondary formations as in the system of the mountains of the Orinoco (group of Parime). These secondary formations, which rise to considerable heights in the Cordillera of Venezuela and Cumana, belong only to the low regions of Brazil.

B. *Plains (Llanos) or Basins.*

In that part of South America situated on the east of the Andes, we have successively examined three systems of mountains, those of the shore of Venezuela, of the Parime, and Brazil: we have seen that this mountainous region, which equals the Cordillera of the Andes, not in mass, but in area and horizontal section of surface, is three times less elevated, much less rich in precious metals adhering to the rock, destitute of recent traces of volcanic fire, and, with the exception of the coast of Venezuela, little exposed to the violence of earthquakes. The average height of the three systems diminishes from north to south, from 750 to 400 toises; those of the culminant points (maxima of the height of each group) from 1350 to 1000 or 900 toises. Hence it results that the loftiest chain, with the exception of the small insulated system of the Sierra Nevada of Santa Marta, is the Cordillera of the shore of Venezuela, which is itself but a continuation of the Andes. Directing our attention northward, we find in Central America (lat. 12° — 30°), and North America (lat. 30° — 70°), on the east of the Andes of Guatemala, Mexico, and Upper Louisiana, the same regular lowering which struck us towards the south. In this vast extent of land, from the Cordillera of Venezuela to the polar circle, eastern America presents two distinct systems, the group of the mountains of the West Indies (which in its eastern part is volcanic) and the chain of the Alleghanies. The former of these systems, partly covered by the ocean, may be compared, with respect to its relative position and