

CHAPTER XXXII.

GEOGNOSTIC DESCRIPTION OF SOUTH AMERICA.

North of the River Amazon, and East of the Meridian of the Sierra Nevada de Merida.

THE object of this memoir is to concentrate the geological observations which I collected during my journeys among the mountains of New Andalusia, and Venezuela, on the banks of the Orinoco, and in the Llanos of Barcelona, Calabozo, and the Apure; consequently, from the coast of the Caribbean Sea, to the valley of the Amazon, between 2° and $10\frac{1}{2}^{\circ}$ north latitude.

The extent of country which I traversed in different directions, was more than 15,400 square leagues. It has already formed the subject of a geological sketch, traced hastily on the spot, after my return from the Orinoco, and published in 1801. At that period, the direction of the Cordillera on the coast of Venezuela, and the existence of the Cordillera of Parime, were unknown in Europe. No measure of altitude had been attempted beyond the province of Quito; no rock of South America had been named; there existed no description of the superposition of rocks in any region of the tropics. Under these circumstances, an essay tending to prove the identity of the formations of the two hemispheres, could not fail to excite interest. The study of the collections which I brought back with me, and four years of journeying in the Andes, have enabled me to rectify my first views, and to extend an investigation which, by reason of its novelty, had been favourably received. That the most remarkable geological relations may be the more easily seized, I shall treat aphoristically, in different sections, the configuration of the soil, the general division of the land, the direction and inclination of the beds, and the nature of the primitive, intermediary, secondary, and tertiary rocks.