

opinions I have deduced from the climatic action of these steppes considered as surfaces, or continuous masses. They have observed that downs enclosed within cultivated and wooded land sooner yield to the labours of the husbandman than soils alike circumscribed, but forming part of a vast surface of the same nature. This observation is extremely just, whether in reference to soil covered with heath, as in the north of Europe; with cistuses, mastic-trees, or palmettos, as in Spain; or with cactuses, argemones, or brathys, as in equinoctial America. The more space the association occupies, the more resistance do the social plants oppose to the labourer. With this general cause others are combined in the Llanos of Venezuela; viz. the action of the small grasses which impoverish the soil; the total absence of trees and brushwood; the sandy winds, the heat of which is increased by contact with a surface absorbing the rays of the sun during twelve hours, and unshaded, except by the stalks of the aristides, chanchuses, and paspalums. The progress observable on the vegetation of large trees, and the cultivation of dicotyledonous plants in the vicinity of towns, (for instance around Calabozo and Pao) prove what may be gained upon the Llano, by attacking it in small portions, enclosing it by degrees, and dividing it by coppices and canals of irrigation. Possibly the influence of the winds, which render the soil sterile, might be diminished by sowing on a large scale, for example, over fifteen or twenty acres, the seeds of the psidium, the croton, the cassia, or the tamarind, which prefer dry, open spots. I am far from believing that the savannahs will ever disappear entirely; or that the Llanos, so useful for pasturage and the trade in cattle, will ever be cultivated like the vallies of Aragua or other parts near the coast of Caracas and Cumana: but I am persuaded, that in the lapse of ages a considerable portion of these plains, under a government favourable to industry, will lose the wild aspect which has characterized them since the first conquest by Europeans.

After three days' journey, we began to perceive the chain of the mountains of Cumana, which separates the Llanos, or, as they are often called here, "the great sea of verdure,"* from the coast of the Caribbean Sea. If the Bergantin be

* "Los Llanos son como un mar de yerbas"—"The Llanos are like a vast sea of grass"—is an observation often repeated in these regions.