

menon; for the trunks of the dicotyledons, in spite of the heat of the climate, and the intensity of the light, are less burnt within the tropics than in the temperate zone. It may be said that the trunks of the ferns, which, like the monocotyledons, are enlarged by the remains of the petioles, decay from the circumference to the centre; and that, deprived of the cortical organs through which the elaborated juices descend to the roots, they are burnt more easily by the action of the oxygen of the atmosphere. I brought to Europe some powders with metallic lustre, taken from very old trunks of *Meniscium* and *Aspidium*.

In proportion as we descended the mountain of Santa Maria, we saw the arborescent ferns diminish, and the number of palm-trees increase. The beautiful large-winged butterflies (nymphales), which fly at a prodigious height, became more common. Everything denoted our approach to the coast, and to a zone in which the mean temperature of the day is from 28 to 30 degrees.

The weather was cloudy, and led us to fear one of those heavy rains, during which from 1 to 1·3 inch of water sometimes falls in a day. The sun at times illumined the tops of the trees; and, though sheltered from its rays, we felt an oppressive heat. Thunder rolled at a distance; the clouds seemed suspended on the top of the lofty mountains of the Guacharo; and the plaintive howling of the araguatoes, which we had so often heard at Caripe, denoted the proximity of the storm. We now for the first time had a near view of these howling apes. They are of the family of the alouates,\* the different species of which have long been confounded one with another. The small sapajous of America, which imitate in whistling the tones of the passerres, have the bone of the tongue thin and simple, but the apes of large size, as the alouates and marimondes,† have the tongue placed on a large bony drum. Their superior larynx has six pouches, in which the voice loses itself; and two of which, shaped like pigeons' nests, resemble the inferior larynx of birds. The air driven with force into the bony drum produces that mournful sound which characterises the aragua-toes. I sketched on the spot these organs, which are imper-

\* Stentor, Geoffroy.

† Ateles, Geoffroy.