

diately covers the sandstone of Calabozo, which appeared to me, on the spot, to be identical with our red sandstone, I am uncertain of the age of its formation. The secondary rocks of the Llanos of Cumana, Barcelona, and Caracas, occupy a space of more than 5000 square leagues. Their continuity is the more remarkable, as they appear to have no existence, at least on the east of the meridian of Porto Cabello ($70^{\circ} 37'$) in the whole basin of the Amazon, not covered by granitic sands. The causes which have favoured the accumulation of calcareous matter in the eastern region of the coast chain, in the Llanos of Venezuela (from $10\frac{1}{2}^{\circ}$ to 8° north), cannot have operated nearer the equator, in the group of the mountains of the Parime, and in the plains of the Rio Negro and the Amazon (lat. 1° north, to 1° south). The latter plains however, furnish some ledges of fragmentary rocks, on the south-west of San Fernando de Atabapo, as well as on the south-east, in the lower part of the Rio Negro and the Rio Branco. I saw in the plains of Jaen de Bracamoros a sandstone which alternates with ledges of sand and conglomerate nodules of porphyry and Lydian stone. MM. Spix and Martius affirm that the banks of the Rio Negro, on the south of the equator, are composed of variegated sandstone; those of the Rio Branco, Jupura, and Apoporis, of quadersandstein; and those of the Amazon, on several points, of ferruginous sandstone.* It remains to examine if (as I am inclined to suppose) the limestone and gypsum formations of the eastern part of the littoral Cordillera of Venezuela differ entirely from those of the Llanos, and to what series belongs that rocky wall† named the Galera,

* Braunes eisenschüssiges Sandstein-Conglomerat (Iron-sand of the English geologists, between the Jura limestone and green sandstone.) MM. Spix and Martius found on rocks of quadersandstein, between the Apoporis and the Japura, the same sculptures which we have pointed out from the Essequibo to the plains of Cassiquiare, and which seem to prove the migrations of a people more advanced in civilization than the Indians who now inhabit those countries.

† Is this wall a succession of rocks of dolomite or a dyke of quadersandstein, like the Devil's Wall (Teufelsmauer), at the foot of the Hartz? Calcareous shelves (coral banks), either ledges of sandstone (effects of the revulsion of the waves) or volcanic eruptions, are commonly found on the borders of great plains, that is, on the shores of ancient inland seas. The Llanos of Venezuela furnish examples of such eruptions near Parapara,