

at La Guayra. A ravine, called the Quebrada de Tipe, descends from the table-land of Caracas towards Catia. A plan has long been in contemplation for making a cart-road through this ravine and abandoning the old road to La Guayra, which resembles the passage over St. Gothard. According to this plan, the port of Catia, equally large and secure, would supersede that of La Guayra. Unfortunately, however, all that shore, to leeward of Cabo Blanco, abounds with mangroves, and is extremely unhealthy. I ascended to the summit of the promontory, which forms Cabo Blanco, in order to observe the passage of the sun over the meridian. I wished to compare in the morning the altitudes taken with an artificial horizon and those taken with the horizon of the sea; to verify the apparent depression of the latter, by the barometrical measurement of the hill. By this method, hitherto very little employed, on reducing the heights of the sun to the same time, a reflecting instrument may be used like an instrument furnished with a level. I found the latitude of the cape to be  $10^{\circ} 36' 45''$ ; I could only make use of the angles which gave the image of the sun reflected on a plane glass; the horizon of the sea was very misty, and the windings of the coast prevented me from taking the height of the sun on that horizon.

The environs of Cabo Blanco are not uninteresting for the study of rocks. The gneiss here passes into the state of mica-slate,\* and contains, along the sea-coast, layers of schistose chlorite.† In this latter I found garnets and magnetical sand. On the road to Catia we see the chloritic schist passing into hornblende schist.‡ All these formations are found together in the primitive mountains of the old world, especially in the north of Europe. The sea at the foot of Cabo Blanco throws up on the beach rolled fragments of a rock, which is a granular mixture of hornblende and lamellar feldspar. It is what is rather vaguely called *primitive grunstein*. In it we can recognize traces of quartz and pyrites. Submarine rocks probably exist near the coast, which furnish these very hard masses. I have

\* Glimmerschiefer.

† Chloritschiefer.

‡ Hornblendeschiefer.