taining veins of copper-ore.* At the foot of this mountain two fine springs gush out from the serpentine. Near the village of San Juan, the granular diabasis appears alone uncovered, and takes a greenish black hue. The feldspar intimately mixed with the mass, may be separated into distinct crystals. The mica is very rare, and there is no quartz. The mass assumes at the surface a yellowish crust like dolerite and basalt.

In the midst of this tract of trap-formation, the Morros of San Juan rise like two castles in ruins. They appear linked to the *mornes* of St Sebastian, and to La Galera which bounds the Llanos like a rocky wall. The Morros of San Juan are formed of limestone of a crystalline texture; sometimes very compact, sometimes spongy, of a greenish-grey, shining, composed of small grains, and mixed with scattered spangles of mica. This limestone yields a strong effervescence with acids. I could not find in it any vestige of organized bodies. It contains in subordinate strata, masses of hardened clay of a blackish blue, and carburetted. These masses are fissile, very heavy, and loaded with iron; their streak is whitish, and they produce no effervescence with acids. They assume at their surface, by their decomposition in the air, a yellow colour. We seem to recognize in these argillaceous strata a tendency either to the transition-slates, or to the *kieselschiefer* (schistose jasper), which everywhere characterise the black transition-limestones. When in fragments, they might be taken at first sight for basalt or hornblende.† Another white limestone, compact, and containing some fragments of shells, backs the Morros de San Juan. I could not see the line of junction of these two limestones, or that of the calcareous formation and the diabasis.

* One of these veins, on which two shafts have been sunk, was directed hor. 2·1, and dipped 80° east. The strata of the serpentine, where it is stratified with some regularity, run hor. 8, and dip almost perpendicularly. I found malachite disseminated in this serpentine, where it passes into grünstein.

† I had an opportunity of examining again, with the greatest care, the rocks of San Juan, of Chacao, of Parapara, and of Calabozo, during my stay at Mexico, where, conjointly with M. del Rio, one of the most distinguished pupils of the school of Freyberg, I formed a geognostical collection for the Colegio de Mineria of New Spain.