

grained. of a bluish tint, and traversed by veins of calcareous spar of dazzling whiteness. These calcareous masses must not be confounded with the very recent depositions of tufa, or carbonate of lime, which fill the plains of the Tuy; they form beds of mica-slate, passing into talc-slate.* The primitive limestone often simply covers this latter rock in concordant stratification. Very near the Hato the talcose slate becomes entirely white, and contains small layers of soft and unctuous graphic ampelite.† Some pieces, destitute of veins of quartz, are real granular plumbago, which might be of use in the arts. The aspect of the rock is very singular in those places where thin plates of black ampelite alternate with thin, sinuous, and satiny plates of a talcose slate as white as snow. It would seem as if the carbon and iron, which in other places colour the primitive rocks, are here concentrated in the subordinate strata.

Turning westward we reached at length the ravine of gold (Quebrada del Oro). On examining the slope of a hill, we could hardly recognize the vestige of a vein of quartz. The falling of the earth caused by the rains had changed the surface of the ground, and rendered it impossible to make any observation. Great trees were growing in the places where the gold-washers had worked twenty years before. It is probable that the mica-slate contains here, as near Goldcronach in Franconia, and in Salzburgh, auriferous veins; but how is it possible to judge whether they be worth the expense of being wrought, or whether the ore is only in nodules, and in the less abundance in proportion as it is rich? We made a long herborization in a thick forest, extending beyond the Hato, and abounding in cedrelas, browneas, and fig-trees with nymphæa leaves. The trunks of these last are covered with very odoriferous plants of vanilla, which in general flower only in the month of April. We were here again struck with those ligneous excrescences, which in the form of ridges, or ribs, augment to the height of twenty feet above the ground, the thickness of the trunk of the fig-trees of America. I found

* Talkschiefer of Werner, without garnets or serpentine; not *eurite* or *weisstein*. It is in the mountains of Buenavista that the gneiss manifests a tendency to pass into eurite.

† Zeichenschiefer.