leading to the great village of San Jose de Tisnao. We passed the farms of Luque and Juncalito, to enter the valleys which, on account of the bad road, and the blue colour of the slates, bear the names of *Malpaso* and *Piedras Azules*.

This ground is the ancient shore of the great basin of the steppes, and it furnishes an interesting subject of research to the geologist. We there find trap-formations, probably more recent than the veins of diabasis near the town of Caracas, which seem to belong to the rocks of igneous formation. They are not long and narrow streams as in Auvergne, but large sheets, streams that appear like real strata. The lithoid masses here cover, if we may use the expression, the shore of the ancient interior sea; everything subject to destruction, such as the liquid dejections, and the scoriæ filled with bubbles, has been carried away. These phenomena are particularly worthy of attention on account of the close affinities observed between the phonolites and the amygdaloids, which, containing pyroxenes and hornblende-grünsteins, form strata in a transition-slate. The better to convey an idea of the whole situation and superposition of these rocks, we will name the formations as they occur in a profile drawn from north to south.

We find at first, in the Sierra de Mariara, which belongs to the northern branch of the Cordillera of the coast, a coarse-grained granite; then, in the valleys of Aragua, on the borders of the lake, and in the islands, it contains, as in the southern branch of the chain of the coast, gneiss and mica-slate. These last-named rocks are auriferous in the Quebrada del Oro, near Guigue; and between Villa de Cura and the Morros de San Juan, in the mountain of Chacao. The gold is contained in pyrites, which are found sometimes disseminated almost imperceptibly in the whole mass of the gneiss,* and sometimes united in small veins of quartz. Most of the torrents that traverse the mountains bear along with them grains of gold. The poor inhabitants of Villa de Cura and San Juan have sometimes gained thirty piastres a-day by washing the sand; but most

* The four metals, which are found disseminated in the granite rocks, as if they were of contemporaneous formation, are gold, tin, titanium, and cobalt.