the sea. The Morro is a calcareous rock which has been lately fortified.

The view from the summit of the Morro is not without The rocky island of Boracha lies on the east, the beauty. lofty promontory of Unare is on the west, and below are seen the mouth of the river Neveri, and the arid shores on which the crocodiles come to sleep in the sun. Notwithstanding the extreme heat of the air, for the thermometer, exposed to the reflection of the white calcareous rock, rose to 38°, we traversed the whole of the eminence. A fortunate chance led us to observe some very curious geological phenomena, which we again met with in the Cordilleras of Mexico. The limestone of Barcelona has a dull, even, or conchoidal fracture, with very flat cavities. It is divided into very thin strata, and exhibits less analogy with the limestone of Cumanacoa, than with that of Caripe, forming the cavern of the Guacharo. It is traversed by banks of schistose jasper,\* black, with a conchoidal fracture, and breaking into fragments of a parallelopipedal figure. This fossil does not exhibit those little streaks of quartz so common in the Lydian stone. It is found decomposed at its surface into a yellowish grey crust, and it does not act upon the magnet. Its edges, a little translucid, give it some resemblance to the hornstone, so common in secondary limestones.<sup>†</sup> It is remarkable that we find the schistose jasper which in Europe characterizes the transition rocks, t in a limestone having great analogy with that of Jura. In the study of formations, which is the great end of geognosy, the knowledge acquired in the old and new worlds should be made to furnish reciprocal aid to each other. It appears that these black strata are found also in the calcareous mountains of the island of Boracha. Another jasper, that known by the name of the Egyptian pebble, was found by M. Bonpland near the Indian village of Curacatiche or

\* Kieselschiefer of Werner.

+ In Switzerland, the hornstone passing into common jasper is found in kidney-stones, and in layers both in the Alpine and Jura limestone, especially in the former.

# The transition-limestone and schist.

§ We saw some of it as ballast, in a fishing-boat at Punta Araya. Its fragments might have been mistaken for basalt.