

they had seen stars at broad daylight: not having myself been a witness of this phenomenon, I did not pay much attention to it, but the unanimous assertions of the guides left me no doubt of its reality.* It is essential, however, that the observer should be placed entirely in the shade, and that he should even have a thick and massive shade above his head, since the stronger light of the air would otherwise disperse the faint image of the stars." These conditions are therefore nearly the same as those presented by the cisterns of the ancients, and the chimneys above referred to. I do not find this remarkable statement (made on the morning of the 2d of August, 1787) in any other description of the Swiss mountains. Two well-informed, admirable observers, the brothers Hermann and Adolph Schlagentweit, who have recently explored the eastern Alps as far as the summit of the Gross Glockner (13,016 feet), were never able to see stars by daylight, nor could they hear any report of such a phenomenon having been observed among the goatherds and chamois-hunters. Although I passed many years in the Cordilleras of Mexico, Quito, and Peru, and frequently in clear weather ascended, in company with Bonpland, to elevations of more than fifteen or sixteen thousand feet above the level of the sea, I never could distinguish stars by daylight, nor was my friend Boussingault more successful in his subsequent expeditions; yet the heavens were of an azure so intensely deep, that a cyanometer (made by Paul of Geneva) which had stood at 39° when observed by Saussure on Mont Blanc, indicated 46° in the zenith under the tropics at elevations varying between 17,000 and 19,000 feet.† Under the serene etherially-pure sky of Cumana, in the plains near the sea-shore, I have frequently been able, after observing an eclipse of Jupiter's satellites, to find the planet again with the naked eye, and have most distinctly seen it when the sun's disk was from 18° to 20° above the horizon.

The present would seem a fitting place to notice, although cursorily, another optical phenomenon, which I only observed once during my numerous mountain ascents. Before sunrise, on the 22d of June, 1799, when at Malpays, on the declivity of the Peak of Teneriffe, at an elevation of about 11,400 feet above the sea's level, I observed with the naked eye

* Consult Saussure, *Voyage dans les Alpes* (Neuchatel, 1779, 4to), tom. iv., § 2007, p. 199.

† Humboldt, *Essai sur la Géographie des Plantes*, p. 103. Compare also my *Voy. aux Régions Equinox*, tom. i., p. 143, 248.