

which cause the insalubrity of the atmosphere. Can it be admitted that, under the influence of excessive heat and of constant humidity, the black crusts of the granitic rocks are capable of acting upon the ambient air, and producing miasmata with a triple basis of carbon, azote, and hydrogen? This I doubt. The granites of the Orinoco, it is true, often contain hornblende; and those who are accustomed to practical labour in mines are not ignorant that the most noxious exhalations rise from galleries wrought in syenitic and hornblende rocks: but in an atmosphere renewed every instant by the action of little currents of air, the effect cannot be the same as in a mine.

It is probably dangerous to sleep on the *laxas negras*, only because these rocks retain a very elevated temperature during the night. I have found their temperature in the day at 48° , the air in the shade being at 29.7° ; during the night the thermometer on the rock indicated 36° , the air being at 26° . When the accumulation of heat in the stony masses has reached a stationary degree, these masses become at the same hours nearly of the same temperature. What they have acquired more in the day they lose at night by radiation, the force of which depends on the state of the surface of the radiating body, the interior arrangement of its particles, and, above all, on the clearness of the sky, that is, on the transparency of the atmosphere and the absence of clouds. When the declination of the sun varies very little, this luminary adds daily nearly the same quantities of heat, and the rocks are not hotter at the end than in the middle of summer. There is a certain maximum which they cannot pass, because they do not change the state of their surface, their density, or their capacity for caloric. On the shores of the Orinoco, on getting out of one's hammock during the night, and touching with the bare feet the rocky surface of the ground, the sensation of heat experienced is very remarkable. I observed pretty constantly, in putting the bulb of the thermometer in contact with the ledges of bare rocks, that the *laxas negras* are hotter during the day than the reddish-white granites at a distance from the river; but the latter cool during the night less rapidly than the former. It may be easily conceived that the emission and loss of caloric is more rapid in masses with