

pertain to the outer world. This awakens, by the power of the imagination, a meditative, spiritual train of thought, where the untutored mind perceives only scintillations of light in the firmament, and sees in the blackened stone that falls from the exploded cloud nothing beyond the rough product of a powerful natural force.

Although the asteroid-swarms, on which we have been led, from special predilection, to dwell somewhat at length, approximate to a certain degree, in their inconsiderable mass and the diversity of their orbits, to comets, they present this essential difference from the latter bodies, that our knowledge of their existence is almost entirely limited to the moment of their destruction, that is, to the period when, drawn within the sphere of the Earth's attraction, they become luminous and ignite.

In order to complete our view of all that we have learned to consider as appertaining to our solar system, which now, since the discovery of the small planets, of the interior comets of short revolutions, and of the meteoric asteroids, is so rich and complicated in its form, it remains for us to speak of the ring of zodiacal light, to which we have already alluded. Those who have lived for many years in the zone of palms must retain a pleasing impression of the mild radiance with which the zodiacal light, shooting pyramidally upward, illumines a part of the uniform length of tropical nights. I have seen it shine with an intensity of light equal to the milky way in Sagittarius, and that not only in the rare and dry atmosphere of the summits of the Andes, at an elevation of from thirteen to fifteen thousand feet, but even on the boundless grassy plains, the llanos of Venezuela, and on the sea-shore, beneath the ever-clear sky of Cumana. This phenomenon was often rendered especially beautiful by the passage of light, fleecy clouds, which stood out in picturesque and bold relief from the luminous back-ground. A notice of this aërial spectacle is contained in a passage in my journal, while I was on the voyage from Lima to the western coasts of Mexico: "For three or four nights (between 10° and 14° north latitude) the zodiacal light has appeared in greater splendor than I have ever observed it. The transparency of the atmosphere must be remarkably great in this part of the Southern Ocean, to judge by the radiance of the stars and nebulous spots. From the 14th to the 19th of March a regular interval of three quarters of an hour occurred between the disappearance of the sun's disk in the ocean and the first manifestation of the zodi-