in the Earth leads us by analogy to the remarkable process exhibited in Venus. The portion of this planet which is not illumined by the Sun often shines with a phosphorescent light of its own. It is not improbable that the Moon, Jupiter, and the comets shine with an independent light, besides the reflected solar light visible through the polariscope. Without speaking of the problematical but yet ordinary mode in which the sky is illuminated, when a low cloud may be seen to shine with an uninterrupted flickering light for many minutes together, we still meet with other instances of terrestrial development of light in our atmosphere. In this category we may reckon the celebrated luminous mists seen in 1783 and 1831; the steady luminous appearance exhibited without any flickering in great clouds observed by Rozier and Beccaria; and lastly, as Arago* well remarks, the faint diffused light which guides the steps of the traveler in cloudy, starless, and moonless nights in autumn and winter, even when there is no snow on the ground. As in polar light or the electro-magnetic storm, a current of brilliant and often colored light streams through the atmosphere in high latitudes, so also in the torrid zones between the tropics, the ocean simultaneously develops light over a space of many thousand square miles. Here the magical effect of light is owing to the forces of organic nature. Foaming with light, the eddying waves flash in phosphorescent sparks over the wide expanse of waters, where every scintillation is the vital manifestation of an invisible animal world. So varied are the sources of terrestrial light! Must we still suppose this light to be latent, and combined in vapors, in order to explain *Moser's images produced at a distance*—a discovery in which reality has hitherto manifested itself like a mere phantom of the imagination.

As the internal heat of our planet is connected on the one hand with the generation of electro-magnetic currents and the process of terrestrial light (a consequence of the magnetic storm), it, on the other hand, discloses to us the chief source of geognostic phenomena. We shall consider these in their connection with and their transition from merely dynamic disturbances, from the elevation of whole continents and mountain chains to the development and effusion of gaseous and

* Arago, on the dry fogs of 1783 and 1831, which illuminated the night, in the *Annuaire du Bureau des Longitudes*, 1832, p. 246 and 250; and, regarding extraordinary luminous appearances in clouds without storms, see *Notices sur la Tonnerre*, in the *Annuaire pour l'an.* 1838, p. 279–285.