able ; but during a total eclipse of the Moon (31st of May, 1848), Arago detected indubitable signs of polarization in the reddened disk of the Moon, the latter being a phenomenon of which we shall speak further on. (*Comptes Rendus*, tom. xviii., p. 119.)

That the moonlight is *capable of producing heat*, is a discovery which belongs, like so many others of my celebrated friend Melloni, to the most important and surprising of our century. After many fruitless attempts, from those of La Hire to the sagacious Forbes,* Melloni was fortunate enough to observe, by means of a lens (*lentille à échellons*) of three feet in diameter, which was destined for the meteorological station on Vesuvius, the most satisfactory indications of an elevation of temperature during different changes of the Moon. Mosotti-Lavagna and Belli, professors of the Universities of Pisa and Pavia, were witnesses of these experiments, which gave results differing in proportion to the age and altitude of the Moon. It had not at that time (Summer, 1848) been determined what the elevation of temperature produced by Melloni's thermoscope, expressed in fractional parts of the centigrade thermometer, amounted to.†

* Forbes, *On the Refraction and Polarization of Heat*, in the *Transact. of the Royal Society of Edinburgh*, vol. xiii., 1836, p. 131.

† *Lettre de M. Melloni à M. Arago sur la Puissance calorifique de la Lumière de la Lune*, in the *Comptes Rendus*, tom. xxii., 1846, p. 541–544 Compare also, on account of the historical data, the *Jahresbericht der Physicalischen Gesellschaft zu Berlin*, bd. ii., p. 272. It had always appeared sufficiently remarkable to me, that, from the earliest times, when heat was determined only by the sense of feeling, the Moon had first excited the idea that light and heat might be separated. Among the Indians the Moon was called, in Sanscrit, the King of the stars *of cold* (*'sîtala, hima*), also the *cold-radiating* (*himân'su*), while the Sun was called *a creator of heat* (*nidâghakara*). The spots upon the Moon, in which Western nations supposed they discerned a *face*, represent, according to the Indian notion, a roebuck or a hare; thence the Sanscrit name of the Moon (*mrigadhara*), *roebuck-bearer*, or (*'sa'sabhrit*), *hare-bearer*. (Schütz, *Five Hymns of the Bhatti-Kâvya*, 1837, p. 19–23.) Among the Greeks it was complained "that the sunlight reflected from the Moon should lose all heat, so that only feeble remains of it were transmitted by her." (Plutarch, in the dialogue "*De Facia quæ in Orbe Lunæ apparet, Moralia*," ed. Wyttenbach, tom. iv., Oxon., 1797, p. 793.) In Macrobius (*Comm. in Somnium Scip.*, i., 19, ed. Lud. Janus, 1848, p. 105) it is said, "Luna speculi instar lumen quo illustratur . . . rursus emittit, nullum tamen ad nos preferentem sensum caloris: quia lucis radius, cum ad nos de origine sua, id est de Sole, pervenit, naturam secum ignis de quo nascitur devehit; cum vero in Lunæ corpus infunditur et inde resplendet, solam refundit claritatem, non calorem." The same in Macrobius, *Saturnal.*, lib. vii., cap. 16, ed. Bipont, tom. ii., p. 277.