found incorporated with aërolites, imparts to them a peculiar, but not, consequently, a *selenic* character; for in other regions of space, and in other cosmical bodies besides our Moon, water may be wholly absent, and processes of oxydation of rare occurrence.

Cosmical gelatinous vesicles, similar to the organic *nostoc* (masses which have been supposed since the Middle Ages to be connected with shooting stars), and those pyrites of Sterlitamak, west of the Uralian Mountains, which are said to have constituted the interior of hailstones,* must both be classed among the mythical fables of meteorology. Some few aërolites, as those composed of a finely granular tissue of olivine, augite, and labradorite blended together† (as the meteoric stone found at Juvenas, in the Department de l'Ardèche, which resembled dolorite), are the only ones, as Gustav Rose has remarked, which have a more familiar aspect. These bodies contain, for instance, crystalline substances, perfectly similar to those of our earth's crust; and in the Siberian mass of meteoric iron investigated by Pallas, the olivine only differs from common olivine by the absence of nickel, which is replaced by oxyd of tin.‡ As meteoric olivine, like our basalt, contains from 47 to 49 per cent. of magnesia, constituting, according to Berzelius, almost the half of the earthy components of meteoric stones, we can not be surprised at the great quantity of silicate of magnesia found in these cosmical bodies. If the aërolite of Juvenas contain separable crystals of augite and labradorite, the numerical relation of the constituents

* Gustav Rose, *Reise nach dem Ural*, bd. ii., s. 202.

† Gustav Rose, in Poggend., *Ann.*, 1825, bd. iv., s. 173–192. Rammelsberg, *Erstes Suppl. zum chem. Handwörterbuche der Mineralogie*, 1843, s. 102. "It is," says the clear-minded observer Olbers, "a remarkable but hitherto unregarded fact, that while shells are found in secondary and tertiary formations, no *fossil meteoric stones* have as yet been discovered. May we conclude from this circumstance that previous to the present and last modification of the earth's surface no meteoric stones fell on it, although at the present time it appears probable, from the researches of Schreibers, that 700 fall annually?" (Olbers, in Schum., *Jahrb.*, 1838, s. 329.) Problematical nickelliferous masses of native iron have been found in Northern Asia (at the gold-washing establishment at Petropawlowsk, eighty miles southeast of Kusnezk), imbedded thirty-one feet in the ground, and more recently in the Western Carpathians (the mountain chain of Magura, at Szlanicz), both of which are remarkably like meteoric stones. Compare Erman, *Archiv für wissenschaftliche Kunde von Russland*, bd. i., s. 315, and Haidinger, *Bericht über Szlaniczer Schürfe in Ungarn.*

‡ Berzelius, *Jahresber.*, bd. xv., s. 217 und 231. Rammelsberg, *Handwörterb.*, abth. ii., s. 25–28.