

are attracted by the magnet, and possess entirely the nature of that found in larger masses. To this class belong, for example, the stones of Blansko, Lissa, Aigle, Ensisheim, Chantonay, Klein-Wenden near Nordhausen, Erxleben, Château-Renard, and Utrecht. The stones of the other class are free from metallic *admixtures*, and present rather a *crystalline* mixture of different mineral substances; as, for example, the stones of Juvenas, Lontalax, and Stannern.

“ Since the time that Howard, Klaproth, and Vauquelin first instituted the chemical investigation of meteoric stones, for a long time no regard was paid to the fact that they might be mixtures of separate combinations; but they were examined only for their total constituents, and it was considered sufficient to draw out the iron by the magnet. After Mohs had directed attention to the analogy between some aërolites and certain telluric rocks, Nordenskjöld endeavored to prove that the aërolite of Lontalax, in Finland, consisted of olivin, leucite, and magnetic iron ore; but the beautiful observations of Gustav Rose first placed it beyond doubt that the stone of Juvenas consists of magnetic pyrites, augite, and a feldspar very much resembling labrador. Guided by this, Berzelius endeavored, in a more extended essay (*Kongl. Vetenskaps-Academiens Handlingar* für 1834), to eliminate, also by chemical methods, the mineralogical nature of the separate combinations in the aërolites of Blansko, Chantonay, and Alais. The road happily pointed out by him beforehand has subsequently been abundantly followed.

“ *a.* The first and more numerous class of *meteoric stones*, those with metallic iron, contain this disseminated through them, sometimes in larger masses, which occasionally form a skeleton, and thus constitute the transition to those meteoric masses of iron in which, as in the Siberian mass of Pallas, the other materials disappear more considerably. On account of the constant *presence of olivin*, they are rich in magnesia. The olivin is that part of the meteoric stone which is decomposed when it is treated with acids. Like the telluric, it is a silicate of magnesia and protoxide of iron. That part which is not attacked by acids is a mixture of feldspathic and augitic matter, whose nature admits of being determined solely by calculation from its total constituents, as labrador, hornblende, augite, or oligoclas.

“ *β.* The second much rarer class of meteoric stones have been less examined. They contain partly magnetic iron ore, olivin, and some feldspathic and augitic matter; some of