

The limestone procured from the tertiary strata, with which the houses of imperial Paris are built, undergoes a slow process of disintegration which gradually reduces it to dust. People vulgarly attribute this effect to the moon, and the popular saying runs, "The moon eats the stones." The hydraulic chemist Belidor, when he heard it repeated, made the consoling remark, that such actions being reciprocal, and the earth much larger than the moon, the former would certainly eat the larger quantity !

Marble statues exposed in the open air suffer in a singular manner from the atmospheric action.

Felspar and arkose, exposed to the air, decompose rapidly ; they lose their silicate of potash, which is washed away by the rain on account of its solubility, and nothing but clay remains. Thus is formed, under our very eyes, the porcelain clay called *kaolin*.

It is for this reason that granite, composed of various silicates—as felspar, quartz, and mica—is far from becoming a guarantee for the durability of a building. The walls of the Church of Notre Dame at Limoges, built only four centuries ago, are already attacked to a depth of .275 to .314 of an inch. The Puy de Dôme, a trachytic rock, rests on a base of granite ; when you approach it on the Clermont-Ferrand side, you would think you were walking on a deposit of gravel, so great has been the disintegration of the granite. In some granite quarries, where the rock has been exposed to the air, a superficial decomposition is visible, penetrating to six and seven feet in depth. It is the same cause which has given their rounded outline to certain blocks, or boulders (*boules*) of granite, which have been discovered in the Saxon Erzgebirge, and to the boulders of basalt so abundant in Auvergne, which exfoliate, and "shed" in succession the concentric layers of their crust.

Basalt thus affected is finally reduced to dust, and forms a soil of exceeding richness.

The sandstone of Fontainebleau becomes very soft, after a certain time, if subjected to atmospheric influence, and under the blow of a hammer crumbles into powder.