

under the hammer, and it has all the properties of flint; a greater degree of heat causes it to flow, and converts it into real glass.

Clay and sand are therefore matters perfectly analogous, and of the same class; if clay, by condensing, may become flint and glass, why may not sand, by dissolution, become clay? Glass appears to be true elementary earth, and all mixed substances disguised glass. Metals, minerals, salts, &c. are only vitrifiable earth; common stone and other matters analogous to it, and testaceous and crustaceous shells, &c. are the only substances which cannot be vitrified, and which seem to form a separate class. Fire, by uniting the divided parts of the first, forms an homogeneous matter, hard and transparent, without any diminution of weight, and to which it is not possible to cause any alteration; those, on the contrary, in which a greater quantity of active and volatile principles enter, and which calcine, lose more than one-third of their weight in the fire, and retake the form of simple earth, without any other alteration than a disunion of their different parts: these bodies excepted, which are no great number, and whose combinations produce no great varieties in nature, every other substance, and particularly