

tion by the hand of Nature. The globe of the earth has been penetrated by fire, and afterwards covered and disordered by water. The sand, which occupies the interior parts of the earth, is a *vitrified matter* ; and the layers of clay, by which its surface is covered, are nothing but the same sand having been decomposed by the operation of the waters. Granite, free-stone, flint, nay, all metals, are composed of this same vitrified matter, whose particles have been condensed or separated, according to the laws of their affinity. These substances are totally destitute of animation ; they exist, and will continue to do so, independently of animals and vegetables. There are, however, many other substances, which, although they have the appearance of being equally inanimate, originate from organized bodies ; and of this description are marble, lime-stone, chalk, and marl ; they being composed of the fragments of shells, and of those small animals which by transforming the water of the sea into stone, produce coral, and all the madrepores, whose varieties are numberless, and whose quantity are almost immense. Pit-coal, turf, and many other substances found in the upper strata, are also of this nature, they being only the residue of vegetables which have been more or less corrupted or consumed.

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