

tains, no more than for some other particular circumstances, shall add the observations and reflections which I have made on this subject.

I have endeavoured to form a clear and general idea of the manner in which the different matters that compose the earth are arranged, and it appears to me they may be reduced into two general classes; the first includes all the matters we find placed in strata, or beds horizontally or regularly inclined; and the second comprehends all matters formed in masses, or in veins, either perpendicular or irregularly inclined. In the first class are included sands, clays, granite, flints, free-stone, coals, slates, marls, chalks, calcinable stones, marbles, &c. In the second I rank metals, minerals, crystals, precious stones and small flints: these two classes generally comprehend all the known materials of the earth. The first owe their origin to the sediments carried away and deposited by the sea, and should be distinguished into those which being assayed in the fire, calcine and are reduced into lime, and those which fuse and are convertible into glass. The materials of the second class are all vitrifiable excepting those which the fire entirely consumes by inflammation.