

organization ; indeed, many of the combinations of baryum are virulent poisons.

*Of the earthy Bases.* (31) *Aluminum*, is the metallic basis of the earth *alumina* ; the characteristic ingredient of the well known salt, called *alum*. The metallic basis, like the preceding, no where exists ; but alumina, the compound of aluminum and oxygen, is one of the most abundant productions of nature ; and constitutes an ingredient, in by far the greater number of rocks and soils, upon the surface of the globe. The different kinds of clay, also, from which bricks, earthenware, &c., are formed, consist chiefly of this earth, in different states of purity ; so that it is a substance of great utility and importance. Alumina appears to have nothing to do with organization ; at least, it is not known to form a necessary constituent of any organized being, either vegetable or animal ; though it is in constant communication with organized beings ; and appears to be almost necessary, in some indirect way, to their existence. This fact is very remarkable ; for as the earth does not appear to be poisonous, it could scarcely have been so completely excluded from living bodies, except by some design beyond our comprehension.

(32) *Glucinum*, (33) *Yttrium*, (34) *Zirconium*, and (35) *Thorinum*, the four next elementary principles are the metallic bases of substances, usually considered as possessing the characters of