

they appear to draw largely upon the faith of the reader. We must first admit the existence of a deoxydised metallic nucleus, and its inflammability, or at once give up the theory. It is possible that the interior of the earth consists of metallic alloys, though there is as much reason to believe that it is composed of almost any other substance; but we will grant, for the sake of the argument, that the earth beneath its superficial covering consists of metals, for it is only a matter of opinion, and we may imagine it one substance as well as another. We are next required to admit that this metallic nucleus is of such a character as to suffer oxydisation by the presence of water, the hydrogen being liberated and ignited. To determine the nature of the metallic nucleus, we must examine the character of the lava that is ejected, or the earths composing the crust of our globe, which are supposed by the theory to have been, at some former period, a part of the metallic nucleus. Dr. Daubeny accurately states that silica, alumina, lime, and iron, are the chief ingredients of volcanic products. The metallic alloy, therefore, must be composed of silicon, aluminium, calcium, and iron. Now, of all electro-positive substances, silicon is the most incombustible; it may be made white-hot in the open air, without evincing any tendency to burn; and, so far from decomposing water at common temperatures, it may be boiled in that fluid. There is every reason to believe that silicon is not a metal, but has a closer resemblance to carbon, a non-metallic substance; but, however this may be, it is so far from alloying with the metals, that it has no tendency to unite with other bodies, except when in a nascent state, or when double affinities are exerted. We cannot help remarking, that it was only a short time after Berzelius had discovered the properties of silicon, that Davy renounced his theory. A consideration of the properties of aluminium is equally fatal to the theory; for it sustains no visible alteration by long boiling in water, even when in the state of fine powder, and oxydises only when raised to a red heat. Of calcium and iron we need not speak; the former is only an imaginary substance, and the properties of iron are too well known to require a remark.

That any compound of these substances should fulfil the conditions required in the theory, is, we think, utterly impossible. It is true that metallic alloys are more oxydisable