

In the German, considering him as a geologist, the ideal element predominated. That Werner's powers of external discrimination were extremely acute, we have seen in speaking of him as a mineralogist; and his talent and tendency for classifying were, in his mineralogical studies, fully fed by an abundant store of observation; but when he came to apply this methodizing power to geology, the love of system, so fostered, appears to have been too strong for the collection of facts he had to deal with. As we have already said, he promulgated, as representing the world, a scheme collected from a province, and even too hastily gathered from that narrow field. Yet his intense spirit of method in some measure compensated for other deficiencies, and enabled him to give the character of a science to what had been before a collection of miscellaneous phenomena. The ardor of system-making produced a sort of fusion, which, however superficial, served to bind together the mass of incoherent and mixed materials, and thus to form, though by strange and anomalous means, a structure of no small strength and durability, like the ancient vitrified structures which we find in some of our mountain regions.

Of a very different temper and character was William Smith. No literary cultivation of his youth awoke in him the speculative love of symmetry and system; but a singular clearness and precision of the classifying power, which he possessed as a native talent, was exercised and developed by exactly those geological facts among which his philosophical task lay. Some of the advances which he made, had, as we have seen, been at least entered upon by others who preceded him: but of all this he was ignorant; and, perhaps, went on more steadily and eagerly to work out his own ideas, from the persuasion that they were entirely his own. At a later period of his life, he himself published an account of the views which had animated him in his earlier progress. In this account³³ he dates his attempts to discriminate and connect strata from the year 1790, at which time he was twenty years old. In 1792, he "had considered how he could best represent the order of superposition—continuity of course—and general eastern declination of the strata." Soon after, doubts which had arisen were removed by the "discovery of a mode of identifying the strata by the organized fossils respectively imbedded therein." And "thus stored with ideas," as he expresses himself, he began to communicate them to his friends. In all this, we see great vividness

³³ *Phil. Mag.* 1833, vol. i. p. 38.