

came the Alluvial series, consisting of recent loams, clays, sands, gravels, sinters, and peat.

This system was not put forward tentatively as a suggestion towards a better comprehension of the history of the earth. It was announced dogmatically as a body of ascertained truth, about which there could be no further doubt or dispute. Let me quote by way of illustration a few sentences from Werner's *Theory of Veins*, where he definitely expresses his opinions on these matters. "In recapitulating the state of our present knowledge," he observes, "it is obvious that we know with certainty that the floetz and primitive mountains have been produced by a series of precipitations and depositions formed in succession from water which covered the globe. We are also certain that the fossils which constitute the beds and strata of mountains were dissolved in this universal water and were precipitated from it; consequently the metals and minerals found in primitive rocks, and in the beds of floetz mountains, were also contained in this universal solvent, and were formed from it by precipitation. We are still further certain that at different periods, different fossils have been formed from it, at one time earthy, at another metallic minerals, at a third time some other fossils. We know, too, from the position of these fossils, one above another, to determine with the utmost precision which are the oldest, and which the newest precipitates. We are also convinced that the solid mass of our globe has been produced by a series of precipitations formed in succession (in the humid way); that the pressure of the materials, thus accumulated, was not the same