

immortal Theory. Most of the facts cited by him were more or less familiar to men ; and some of the obvious inferences to be drawn from them had been deduced by other observers before his time. But no one until then had grouped them into a coherent system by which the earth became, as it were, her own interpreter. The very obviousness and familiarity of his doctrine at the present time, when it has become the groundwork of modern geology, are apt to blind us to the genius of the man who first conceived it, and worked it into a harmonious and luminous whole.

In the course of his journeys in Scotland, Hutton had come upon many examples of rocks that were not stratified. Some of these occurred among the Primary masses ; others were observable in the Secondary series. Reflecting on the probable reaction of the heated interior of the globe upon its outer cooler shell or crust, he had come to the conclusion that many, if not all, of these unstratified rocks were to be regarded as material that had once been in a molten condition, and had been injected from below during some of the great convulsions indicated by the disturbed strata. He distinguished three principal kinds of such intrusive rocks—"Whinstone," under which term he included a miscellaneous series of dark, heavy, somewhat basic rocks, now known as dolerites, basalts, diabases and andesites ; Porphyry, which probably comprised such rocks as felsite, orthophyre and quartz-porphyry ; and Granite, which, though the term was generally used by him in its modern sense, embraced some rocks of more basic character.

He showed that the whinstones correspond so