

opinions which some other persons have entertained as to the origin of the same phenomena.

VOLCANOES.

Geology was for a long time a combination of hypotheses, but for many years past it has been advancing to the rank of a practical science. Although it has gained much by the industry and zeal of those who have devoted themselves to its improvement, yet it is still necessary that some care should be exercised in the admission of statements as facts, and all hypotheses should be examined with a jealous regard to the advantage of science. So long as Stahl and Beccher haunted chymistry with their phlogistic phantom, every phenomenon was wrapped in the mist which it generated; and so the random conjectures of cosmogonists have enveloped the facts recorded upon the page of material existence. In describing the geological constitution of the earth, we are accustomed to speak of the agencies which we suppose to act upon it as though it could not exist unless it preserved the character with which it has been invested by our imagination, and could not have existed at all unless it had been formed according to our own plan. Now geologists are cured of the mania by which their predecessors were afflicted, and direct their energies to the discovery of truth, our knowledge of volcanic forces, and the phenomena which attend volcanic activity, will soon, it is hoped, be so much increased as to enable us to determine, with much more certainty than we now do, the extent and relations of the volcanic cause. There was a time, and it is almost within the remembrance of some of our readers, when the Mounts Etna and Vesuvius were universally considered the types of volcanic activity, and the existence of the igneous cause was determined by a comparison of phenomena with those which attended the eruption of those celebrated mountains. The extensive observations made by those who have recently engaged in the study of rocks, have already given us a more accurate conception of volcanic action, have exposed to view many facts probably connected with the cause, and made us tolerably acquainted with the geographical position of mountains and their periods of activity.

There is a great want of definite application in the use of the words volcano and volcanic cause. Sometimes they are