

PREFACE.

A GENERAL knowledge of Geology is probably of greater importance to the people of the United States than a like amount of information in any other department of natural science; but every one will admit the state of learning in this branch is not of a very high grade. There is a common complaint among well-informed people who have given Geology no special study that the language used is technical, the names long, difficult to understand, and not unfrequently bear upon their face the evidence of affectation, as if those coining the words had attempted to make them as obscure as possible. It is a fact, however, that technical names are absolutely essential to a correct understanding of every branch of Natural History; and when the system of nomenclature is once learned the names are readily understood, and much more easily remembered, than the arbitrary names of individual things possibly can be. In this work an effort has been made to popularize the rules of nomenclature, and to define the technical words in the text or in the Glossary.

Generic and specific names, which have been used by authors where the fossils are not known to occur in the Palæozoic rocks of North America, are printed in italics. Synonyms, names not described as required by the rules of nomenclature, preoccupied names, and those condemned for any other reason, are also printed in italics. When an author has referred his species to a genus to which it does not belong, the specific name will be found in italics under such generic name, and referred to the genus to which it belongs, and at the latter place the original erroneous generic reference will be found in parenthesis.

An attempt has been made to define all genera known from the Palæozoic rocks of North America; the name of the author of each genus is given, the date of coining the word, and an abbreviated reference to the book and page where published, and the etymology of the word and name of the type species. The names of all the species, arranged in alphabetical order, will be found under the genera to which they belong; and also the authors of them, the dates and places of publication, and very frequently