

KENTUCKY GEOLOGICAL SURVEY, J. R. PROCTER, DIRECTOR.

Kentucky Fossil Corals

A MONOGRAPH OF THE FOSSIL CORALS
OF THE

Silurian and Devonian Rocks of Kentucky

BY WILLIAM J. DAVIS

[In Two Parts

Part II]

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LETTER FROM THE AUTHOR.

Mr. John R. Procter,

Director Kentucky Geological Survey:

DEAR SIR: As you know, several years have passed since I began the work of describing and illustrating the fossil corals of Kentucky. The delays incident to preparing such a work for the press, occupied as I am most of the time with engrossing public duties, have suggested that now, since the plates and the explanations of the plates have been completed, it is best to publish these as PART II., simply prefacing them with an alphabetical index.

The text of Part I. will be finished in a few months. PART I. consists of 1. An **Introduction**, which treats of the growth and habits of coral-making animals, their place in nature, etc.; 2. A **Descriptive Text**, which classifies the fossil corals found in the Silurian and Devonian Rocks of Kentucky, showing the relations of families, genera, and species, and describing them; 3. A chapter of **Popular Notes**, which, following the technical descriptions, presents the salient traits of structure or function characterizing the skeletons of species of the same genus, on the modifications of which the differentiation is based, and collates comprehensively the resemblances and differences of related genera and the more widely divergent family peculiarities; 4. A **Glossary**, in which are given the meanings and, in most cases, the etymologies of the technical terms used in the text; 5. An **Index**, systematically arranged.

The literature of this subject is diffused through many volumes of State and Government reports and society periodical or casual publications. Many zealous students of palaeontology, confused by synonymy or per-

plexed by descriptions and figures of badly-preserved fossils, have abandoned research among these interesting and beautiful forms for the easier study of mollusks, crinoids, worms, or crustaceans. May I express the hope that the present work will prove a useful manual to the student ?

As will be seen, the number of plates is one hundred and thirty-nine, the number of specimens figured about one thousand. The number of species described is more than three hundred; of these about one hundred and seventy are new and heretofore undescribed. The beautiful condition in which these fossils occur in Kentucky and the care with which they have been freed from their matrix have permitted a satisfactory photographic delineation by the "artotype" process. Mr. E. Klauber, of Louisville, has done this part of the work under my supervision in the most artistic style. My thanks are due to this gentleman for the assistance he rendered me in "setting up" the fossils before the camera, and for his amiable co-operation during the several years we have been engaged together in plate-making.

Permit me also to thank you, sir, the Director of the Survey, and the other officers of the State of Kentucky, whose generous consideration has given me the opportunity to publish this contribution to the geology of the country in so handsome a volume.

Very respectfully, your obedient servant,

WILLIAM J. DAVIS.

LOUISVILLE, 1885.

POLYPI.

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