

A REVIEW OF THE FOSSIL OSTREIDÆ OF NORTH AMERICA; AND A COMPARISON OF THE FOSSIL WITH THE LIVING FORMS.

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INTRODUCTION.

Because of the great value of the common oyster as a favorite article of food, perhaps no subject connected with fossil conchology will be found to possess more interest to the general reader than that of the Ostreidæ, or oyster family. With this supposition in view I propose to present on the following pages a general review of that family as it is represented among the collections of fossil remains that have been made from North American strata. In addition to a general statement of the subject, with illustrations of the fossil forms, I shall give, for comparison, figures of the leading varieties of the oysters that are now found living upon our Atlantic coast. I had intended to illustrate the living oysters of the Pacific coast also, but I found it impracticable to obtain good specimens of them.

While much is known concerning the geological history of the oyster family within the area that now constitutes the North American continent, that history is and will doubtless always remain incomplete. This incompleteness is due mainly to the fact that among the fossil forms it is the shells alone that are available for study and to the further fact that these remains are usually few and very often too imperfect to exhibit all the characteristics which perfect shells possess. Besides this, the extreme variation in the form and other characteristics of the shell of the fossil, as well as the living Ostreidæ, renders their separation into species, and even into genera, a matter of much uncertainty. In the case of most other bivalve shells there is a certain precision of symmetry that is constant in every individual, from the earliest to the latest stage of its growth; but among the Ostreidæ, and especially in the typical genus *Ostrea*, asymmetry of the shell is the invariable rule. To what primary cause this asymmetry among the Ostreidæ is due, it is, with the present limitation of our knowledge, impossible to say; but it is certainly a characteristic of the whole family, including all its genera and its fossil as well as living forms.

The oyster family belongs to that division of the bivalve mollusca