## PROCEEDINGS

OF THE

## BIOLOGICAL SOCIETY OF WASHINGTON

## AN ADDITION TO THE CORAL FAUNA OF THE AQUIA EOCENE FORMATION OF MARYLAND.

BY T. WAYLAND VAUGHAN.

Since my report on the Eocene corals of Virginia and Maryland, published by the Maryland Geological Survey\*, was written, Mr. Chas. Schuchert and Mr. R. S. Bassler have collected some interesting specimens at upper Marlboro, Maryland, making one important addition to the fauna. The additional species for this locality, collected by these gentlemen are Paracyathus marylandicus Vaughan (collected by Mr. Schuchert), originally described from Piscataway, Maryland, and Haimesiastraa conferta Vaughan (collected by Mr. Bassler), the types coming from Gregg's Landing, Alabama. The first species has no especial geologic significance, although it is interesting to be able to note it from another locality. The second species is represented by a single small and imperfectly developed specimen, but possesses much importance, as it had hitherto been found only in Alabama, where it ranges in the Eocene from the Midway to the Wood's Bluff, its best development being in the Gregg's or Bell's Landing horizon. The occurence of this species is additional evidence for correlating the Aquia formation with the Gregg's Landing horizon, but what is much more important, it is

<sup>\*</sup>Eocene, 1901, pp. 222-232, pl. LXI, figs. 3-15.

the first compound coral that has been found in the Eocene of Virginia and Maryland, and shows a northward range of an Alabaman species. The physical conditions, however, apparently were not favorable for luxuriant growth. Two factors were probably active. Apparently the Aquia deposits were laid down in water somewhat deeper than those of the same age in Alabama. More probably the most important factor was the colder temperature in the Maryland-Virginia region. Both deep water and low temperature are detrimental to a development of colonial corals, especially those that tend to be somewhat or pronouncedly massive.

The species previously known from the Aquia formation are: Flabellum sp., Turbinolia acuticostata Vaughan, Trochocyathus clarkeanus Vaughan, Paracyathus marylandicus Vaughan, Balanophyllia desmophyllum Milne Edwards and Haime, and Eupsammia elaborata (Conrad). Only the last two species were known to occur also in Alabama. The Flabellum may be dropped from the list, as it could not be specifically determined. Now of the six determined species (including the addition of Haimesiastraa conferta), we have three common to the Aquia formation of Virginia-Maryland and the Gregg's Landing horizon of Alabama.