

specimen in which very few radial calicles had as yet developed around the central cup.¹ From young forms of the genus *Agaricia*, notably from those of the species *Agaricia fragilis*, Dana, it seems to me impossible satisfactorily to distinguish the genus *Leptoseris*, and most likely the two genera will have to be united.

Owing to the presence of dissepiments in this genus, it must be placed under the Plesiofungidæ, although the extremely close relationship between it and the Cycloseridæ seems to render such a classification extremely artificial. More research is needed on the presence of dissepiments in allied genera, and on the value which is to be placed on these structures for the classification of the Fungida.

Three species were obtained.

1. *Agaricia fragilis*, Dana.

Agaricia (Mycedia) fragilis, Dana, Zoophytes, p. 341.

A large and interesting series of specimens was obtained. They are of all sizes, from the very young stages up to those with a diameter of 25 cm., and show very clearly the great variability in the characters of the species. This variability was pointed out by Pourtalès in his Report on the Deep-Sea Corals,² where he remarks:—"Several of the specimens obtained by me in the same dredgeful, if seen separately from different localities, would unhesitatingly be pronounced different species." As stated by him, the species is distinct from *Agaricia undata*, but, as remarked by Milne-Edwards and Haime, it is very closely allied to it. Excellent figures are given in the plates of the Report on the Florida Reefs, in which all the developmental stages are figured. Pourtalès obtained it in the deep-sea dredgings, and remarks that it is not uncommon at less depths, although not common on reefs; but Professor Moseley remarks on its occurrence in very shallow-water on the Bermuda reefs, and states that it "occurs growing in colonies, in great abundance, in water from a foot to a fathom in depth, inside small caverns."³

Two specimens, obtained from St. Thomas, differ somewhat from the greater number of Bermuda ones in being thicker at the central parts, in having the calicles less closely placed, and in being more contorted and incrusting. They would seem to fall into the *Mycedium danæ*, Duchassaing and Michelotti, but this can only be regarded as a thick variety of the *Agaricia fragilis*, since the thickness, in different specimens, is very variable.

Localities.—Bermuda; St. Thomas.

¹ Voy. au pôle sud de Dumont D'Urville, Zool., vol. v. pl. xxix. fig. 1.

² *Illust. Cat. Mus. Comp. Zool.*, No. iv. p. 48.

³ Notes by a Naturalist on the Challenger, p. 27.