

sible to say from what depth the fishes came. In the shallower dredgings, from 2175 to 1000 fathoms, on the edge of the Azores plateau, a larger number of species and individuals were found than in the deeper water, nearly all groups being represented.

The Ophiuroidea.—The Challenger collection of Ophiurans has been carefully examined and described by Mr. Theodore Lyman, who furnishes the following résumé of his Report:¹—“In no group, perhaps, was our knowledge more extended by the explorations of the Challenger than in that of the Ophiuroidea. The number of known living species was increased from 380 to about 550, or nearly by one half, while the corresponding increase of novel groups is indicated by the addition of twenty genera. By far the



FIG. 71.—*Ophiomusium pulchellum*, Wyv. Thoms. Oral aspect of the disk; seven times the natural size.

greater number of new species are of the deep-sea fauna; that is to say, they occur below the 100 fathom line, so that this Expedition has furnished the first opportunity of comparing the littoral and the deep faunæ over a wide extent of the oceans of the world. The result is that these Echinoderms are found to be animals which live very much in defiance of temperature, light, and water pressure. Something other than environment has determined their growth; or rather, their growth is not affected by an important part of their environment. To be sure there are some genera which are confined to the profound region of cold, darkness, and crushing weight; such are *Ophiotrochus*, *Ophioplithus*, and *Ophiernus*; but there are others, for example *Amphiura* and *Ophiacantha*, which are

¹ Zool. Chall. Exp., part xiv., 1882.