which hang down from its surface, we have first to consider its appearance as an horizontal curtain, stretched from the margin of the disk to the outline of the actinostome. For some distance from the margin, inward, it is everywhere a comparatively thin, gelatinous membrane, with a smooth surface, connected with the upper floor by innumerable branching bridges, intercepting narrow channels, which communicate freely with the pouches of their respective areas, as seen Pl. V[a]. *Figs.* 23 and 24, and Pl. IV. *Fig.* 1. It would require a slight extension in the length of these bridges, in the direction of the main cavity, to transform all the channels which they inclose into a system of radiating tubes, similar to those of Aurelia or of Rhizostoma and Polyclonia. The pouches themselves must, therefore, be considered as homologous to chymiferous tubes. They are, in reality, wide-spreading chymiferous tubes, branching only at their peripheric termination, and resemble, in this respect, the chymiferous tubes of the young ephyra of Aurelia, as represented Pl. XI[b]. *Figs.* 4 and 17.

In the spaces of the lower floor, not occupied by the tentacles, the genital pouches, and the actinostome, the lower floor is not only thicker than along the margin, but it is also folded in a very peculiar manner. Some of the folds trend in the direction of the ambulacral and interambulacral pouches themselves, that is, from the centre towards the periphery; while others are concentric. All these folds are combined into well-defined systems. Pl. IV. *Figs.* 1 and 2, shows their distribution. Between each narrow pouch and the adjoining broad pouch, there is a bundle of radiating folds, each of which is readily seen to consist of two halves, the longer of which (Pl. IV. *Fig.* 2 *b*) flanks the narrow pouches, while the shorter (*c*) surrounds the bundles of tentacles from the side. The concentric folds, on the contrary, occupy, alternately, wider and narrower areas, in such a way that the narrow areas are stretched across the actinal termination of the ambulacral pouches and of the middle pouches of the interambulacra, Pl. IV. *Fig.* 2 *c*, while the broader areas cover the actinal part of the tentacular pouches, upon which they do not advance in a triangular prolongation, as the narrow areas do, but form a straight border to the actinal part of the field occupied by the tentacles. Towards the part of the lower floor immediately adjacent to the genital pouches, the concentric folds are continuous, and present none of the interruptions which further outside divide them into distinct areas. In fact, the lower floor, immediately outside of the actinostome, is a smooth membrane, as near the margin, and from this smooth floor hang the genital pouches, as sacks folding downwards, Pl. IV. *Fig.* 1, and the peduncle of the actinostome, Pl. IV. *Fig.* 2 *1 1*; while outside of the genital pouches the floor is gradually drawn into more and more distinct, continuous, circular folds (*Fig.* 2 *d'*), and becomes divided into distinct areas of concentric folds further outward (*d*). These divisions arise from the manner in