

which the lower floor becomes here connected with the upper floor along the crooked lines, Pl. V\*. *Fig. 23 k*. We have thus sixteen defined areas of concentric folds, eight of which are narrow and eight broad, and thirty-two bundles of radiating folds, sixteen of which are longer, bordering on the narrow pouches, and sixteen shorter, bordering on the broad or tentacular pouches, though at first it may appear as if there were only sixteen such radiating bunches. A closer examination (Pl. IV. *Fig. 2*) shows plainly how the triangular prolongation of each narrow area of concentric folds is connected with two bundles (*b*) of longer radiating folds, and each wider area of concentric folds is equally connected with two bundles (*c*) of short radiating folds. The dividing line between these longer and shorter bundles corresponds to the crooked lines; and as the gelatinous ridges, which form these lines, separate the narrow from the broad pouches, it is plain that the long bundles are folds of the lower floor of the narrow pouches, and the short bundles folds of the lower floor of the broad pouches.

In describing the folds of the lower floor, I have thus far only alluded to their most prominent aspect, as seen from the lower surface of the disk; but it is evident that, unless their structure be more complicated than it seems to be at first sight, it would not be possible for such prominent ruffles, placed so close to each other, to retain their relative position in a curtain stretched over the extensive surface which they cover, unless they were held together by immovable fastenings. This is secured in two ways. In the first place, they are soldered to the upper floor along the crooked lines; in the second place, they are not simple folds, but the lower floor consists of two layers folding in opposite directions, in such a manner that the longitudinal folds of one layer are held together by the transverse folds of the other layer, and vice versa; while, at the intersections, the surfaces circumscribed are pressed against each other in the form of little serial sacks, as may best be understood by a comparison of figures 12 and 13, of Pl. V\*. *Fig. 12* representing the concentric folds, *e'* and *d'*, as seen from the outer surface, and *Fig. 13*, the same folds on a somewhat larger scale, in a transverse section. *Fig. 3 b* and *c* represents the same arrangement, on a smaller scale, for the radiating folds. Pl. IV. *Fig. 7*, represents the concentric folds from the inner surface turned towards the main cavity, where the radiating folds of the inner layer, which hold them together, are more strongly marked than the concentric folds themselves, which are most prominent on the outer surface. Secured in this way, this double system of concentric and radiating folds is not only held together, but forms innumerable serial pouches, alternately gaping inwardly and outwardly; and as *Cyanea* advances in age, each pouch becomes more complicated by the deepening of the pouches and the further folding of their walls, eventually giving them the aspect of rows of comb-like sacs. It has already been stated, that the folded part