

of the lower floor is attached to the upper floor along the crooked lines; but it may not be superfluous to add, that in proportion as *Cyanea* grows older, the gelatinous mass which forms these ridges, grows not only wider, but also more prominent, and isolates the different fields of folds more completely from one another, as seen in Pl. V^a. *Fig. 12 k*. These prominent ridges of the crooked lines are best seen in transverse sections, as in *Fig. 4*, between *e* and *e'*, and in *Fig. 5*, between *c* and *a*. In Pl. IV. *Fig. 1*, the ridges have barely begun to be visible at the lower surface, and in *Fig. 2* of the same plate they are not yet apparent.

The most prominent difference between the tentacles of *Cyanea* and *Aurelia*, consists not only in the difference of their position, but also in the nature of their connection with the main cavity of the body. In *Aurelia*, the tentacles communicate indirectly with the main cavity through the marginal circular tube; while in *Cyanea*, they communicate directly with the wide pouches, which open freely into the central cavity of which they are in reality only radiating prolongations. This constitutes, unquestionably, another distinctive family character of the *Cyanidæ*, as the tentacles of this genus are not strictly homologous with those of *Aurelia*; while the eyes, which are modified tentacles, are truly homologous with those of *Aurelia*. The tentacles themselves are more complicated in *Cyanea* than in *Aurelia*; they are far larger in proportion to the size of the animal, and much more diversified among themselves, as a mere glance at Pl. III. may show. Their power of contraction and expansion is truly wonderful, and the changes they undergo are quite surprising. When fully expanded to the utmost limit of their capability, they appear like mere threads of a uniform thickness for their whole length. When retracted they thicken at the places which are most contracted, and this thickening is in proportion to the degree of contraction. The extremity, however, is generally the most swollen part, though occasionally several swellings may be noticed along the length of one and the same tentacle, while it is drawing in. When the contraction takes place regularly, from the tip towards the base, they may appear like large clubs suspended to a thin thread. I cannot suppress my admiration for the skill with which Mr. Sonrel has reproduced all these tentacles in their wonderful entanglement, and yet with such distinctness, that every one may be traced in unbroken continuity, from its point of attachment to the furthest distance to which it stretches. He has succeeded in giving them all the variety of aspect which they present in active motion, when in the same bunch some of the tentacles may be entirely drawn in to within a fraction of an inch of their point of attachment, and others stretched to their utmost length, while others, again, wave from one bunch across the other bunches, or flow in undulating lines, or bend upon themselves, or are twisted in a spiral, and still others appear