

when the lobes are bent downwards (see the same figures as above). The festoon-like arches, or broken lines, within the deep emarginations, on the contrary, correspond to a thinning of the disk, forming, therefore, arch-like depressions, while the spaces along the short junctions, and along the scooped excavations above the ocular apparatus, are somewhat flattened. These bulgings and depressions form, in their combinations, the various irregularities which may be noticed upon the surface of the disk; they are, however, so slight that they may easily be overlooked. And yet, when the animal emerges upon the surface of the water, and the disk is slightly raised above its surface, spreading uniformly in every direction, and the light shines obliquely upon it, it is easy to see how the centre, which corresponds to the inner circle, is slightly depressed, and how that depression is surrounded by a circular wall, corresponding to the periphery of the inner circle, and how, again, the sixteen bulging masses of jelly separate sixteen unequal depressions, extending radiatingly from that circular wall towards the thinner edge, the inequality in width of these depressions arising from the circumstance that the more prominent parts of these bulging ridges follow the direction of the crooked lines, and are therefore nearer the long junctions than the short junctions. These unequal depressions are further limited towards the circumference of the disk, on one hand, by the festoon-like depressions in front of the short junctions, and this is the case for the wider depressions; and, on the other hand, by the scooped depression above the ocular apparatus, and this is the case for the narrower depressions. When, however, the disk is active, and, bending downward, bulges as a whole, in the shape of a gelatinous balloon, all these inequalities vanish almost entirely in a uniform hemispherical surface, with scalloped edges.

Between the lower surface of the disk and the floor from which the appendages of the lower surface are suspended, there is a wide cavity, divided into a number of chambers, radiating from a common central space to the circumference, where they terminate in numerous minute ramifications. But of this more presently. When the lower floor and all its appendages are removed from the lower surface of the disk (see Pl. IV. *Fig.* 1, in which a part of these organs is removed, in segments *a* and *a'*), all its inequalities are at once brought prominently into sight. In the centre there appears a flat, circular space, divided by colorless furrows into a number of unequal, irregular fields, the larger of which, however, are on the periphery of the circle, their defining outlines alternating more or less regularly with the radiating furrows outside of the circle. The circle itself is defined by a rather deeper circular furrow, also colorless. Following the short (*a'*) and the long (*o*) junctions, there appear sixteen deep furrows, the outlines of which, on a section, have the form of spherical triangles, more acute and deeper along the long junctions (Pl. V<sup>a</sup>. *Fig.* 3, *o'*), more open and shallower along the short junctions