

in accordance with a fancied similarity, but by no means in consequence of a careful comparison. And, if some of these appellations are still used by modern zoölogists, it is hardly because they acknowledge a real resemblance between them, but rather to avoid useless innovations. The time has come, however, when such apprehensions should no longer prevent us from a critical comparison, and if the result should show essential differences between all the parts which bear names otherwise in use to designate characteristic parts of other animals, then the dread of a large increase of technical terms ought to be superseded by the hope that the changes may be for the real advantage of science.

Let us take a general survey of the curious animal to which this chapter is devoted. Seen floating in the water it exhibits a large circular disk, of a substance not unlike jelly, thick in the centre, and suddenly thinning out towards the edge, which presents several indentations. The centre of that disk is of a dark purplish-brown color, while the edge is much lighter, almost white and transparent. This disk is constantly heaving and falling, at regular intervals; the margin is especially active, so much so, that, at times, it is stretched on a level with the whole surface of the disk, which, in such a condition, is almost flat, while, at other times, it is so fully arched that it assumes the appearance of a hemisphere. These motions recall so strongly those of an umbrella, alternately opened and shut, that writers, who have described similar animals, have generally called this gelatinous disk the umbrella.¹ From the lower surface of this disk hang, conspicuously, three kinds of appendages. Near the margin there are eight bunches of long tentacles, moving in every direction, sometimes extending to an enormous length, sometimes shortened to a mere coil of entangled threads, constantly rising and falling, stretching now in one direction and then in another, but generally spreading slantingly in a direction opposite to that of the onward movement of the animal. These streamers may be compared to floating tresses of hair, encircling organs which are farther inward upon the lower surface of the disk. Of these organs, there are also eight bunches, which alternate with the eight bunches of tentacles, but they are of two kinds; four are elegant sacks, adorned, as it were, with waving ruffles projecting in large clusters, which are alternately pressed forward and withdrawn, and might also be compared to bunches of grapes, by turns inflated and collapsed. These four bunches

¹ The name of umbrella, for the gelatinous disk of all Discophorous Medusa, is so characteristic, that I would unhesitatingly have retained it to designate that part of the body of an Acaleph, were there not many members of the class in which it assumes forms so entirely different from the flat, bell-shaped outline it exhibits here, that the simile

would no longer be appropriate. I need only remind the reader of the globular form of Pleurobrachia, or of the cylindrical form of Idyia, or of the winged Bolina, or of the polygonal form of many compound Siphonophora, and, perhaps still more, of the club-shaped Hydroids, and of the young Discophore.