tentacles are more and more developed in proportion as they are further removed from the mouth. But Leucothea shows that oral tentacles may be as extensively developed as those which issue from the sides of the body. That the tentacles of the Ctenophoræ cannot be homologized with either the tentacles around the mouth, or those around the disk, of Discoid Medusæ, has already been shown.

After this digression, if we return to a more direct consideration of the form of Bolina, we find that it differs from Pleurobrachia in the extraordinary development of two lobes in the actinal prolongation of the anterior and posterior spheromeres (*Figs.* 88, and 89 *z t n x*), inclosing, when shut, the mouth and its appendages, each lobe extending transversely to the antero-posterior diameter, one forward and the other backward; so that they contribute, when expanded, to increase the already prominent length of the longitudinal diameter, leaving a deep, transverse chasm between them, at the bottom and centre of which the mouth (*Fig.* 88 *m*) is situated. The body thus shuts up by the alternate approximation and separation of two valve-like lobes, hanging downward, and placed, one in front and the other behind the spherosome, in a position precisely inverse to that of the valves of Acephala, which rest upon the sides of the body, and move laterally. In addition to these two large, broad lobes, there are on each side two smaller lobes (*r r*), the auricles, which arise from the body at about the same height as the anterior and posterior lobes. They are simple, short, narrow appendages, converging or diverging alternately, and thus shutting from the side and above the great transverse fissure of the animal. With the power which these animals enjoy of opening widely or shutting closely the anterior and posterior lobes by contraction and dilatation, and thus bringing them alternately close together or stretching them far forward and backward, their general appearance is constantly so completely changing that it requires a long acquaintance with them fully to appreciate the connection of all their parts in their different attitudes, and the influence of the movements of certain parts upon the position of others and upon their functions. The activity of the circulation through the chymiferous tubes, and the position the main branches of the central cavity assume during these changes, are constantly modified, as are also the width of the body and the power of its contractions. And, in the same proportion that the extent of the longitudinal diameter is modified by the expansion and contraction of the anterior and posterior lobes, the height of the animal, compared to its width and length, is also constantly changing. If we add to this the diversity of images which are brought before us when we watch these animals in their various movements from different sides, facing alternately the longer or the shorter diameter, the sides or the actinal and the abactinal areas, I venture to say, that it is impossible to make correct descriptions and to give true representations of such animals, unless they have been watched for a long time in