

though the number of lobes remains the same, the tentacular lappets being united with the ocular lappets. The lobes of the adult are, therefore, only partially homologous to the lobes of the young, each lobe being increased, in course of time, by the addition of a lappet from the intervening tentacular lobe. It is true Gegenbaur states that the specimens he has observed had already ovaries and spermaries, with eggs and spermatic cells, but it should not be forgotten that in *Aurelia* the genital organs are already beginning to be developed before the tentacles make their appearance (Pl. XI^b. *Fig.* 4). There is, therefore, nothing extraordinary in finding, as Gegenbaur has observed, from nine to twelve eggs in one ovary; and far from satisfying me that this is an evidence of maturity, I would rather infer from the small number of these eggs, that the *Medusæ* called *Nausithœ* are young animals, since in all mature *Discophoræ* thus far known, the number of eggs is always enormously large. There is, further, something in the figure of *Nausithœ* published by Gegenbaur, in Carus' *Icones Zootomicæ*, Pl. II. *Fig.* 17, which excites my distrust, and to which I take the liberty of calling his attention. In all the *Discophoræ* which I have examined, the angles of the mouth are in the radial prolongation of eyes, and the genital organs alternate with them. In the figure just quoted, on the contrary, the angles of the mouth alternate with ocular pouches, and there are four genital organs in the radial prolongation of the angles of the mouth, while four others alternate with them. Should this be true to nature, it would be contrary to every thing which I have thus far observed in the symmetrical arrangement of the parts in *Discophoræ*. I am, therefore, inclined to believe that the cross formed by the angle of the mouth has been incorrectly drawn in the figure of Gegenbaur, and that it should be turned so that the angles of the mouth should be brought in the radial prolongation of four of the eyes, and alternate with the ovaries. This change in the figure would bring other parts into natural relations which I also believe to be incorrectly represented here. The digitate appendages, *x* (Pl. II. *Fig.* 17, of Carus' *Icones*), which, as I have shown in the description of *Aurelia*, belong to the sexual system, do not appear here to be at all connected with the ovaries, for one set of the ovarian sacs is represented in the radial prolongation of the angles of the mouth, while the other set stands in a somewhat asymmetrical relation to these digitate appendages. But if the corners of the mouth were brought into the position I have alluded to above, each of the bundles of the digitate appendages (*x*) would at once assume symmetrical relations to two ovarian sacs, and if we now go one step further, and compare the figure so altered with either *Fig.* 2, Pl. XII. of my third volume, or Pl. XXXIII. *Fig.* 6 of Wagner's *Icones*, it will appear that the eight genital sacs of *Nausithœ*, as figured by Gegenbaur, are homologous to the lobes of the genital pouches, which, in *Pelagia*, extend towards the peduncles of the actinostome, and,