

nearly closed pouch, whilst the inverted ventral fold of the fulcral shield extends axial-wards as far as the root of the sterigma with which it is fused in great part. At one single small spot only there remains a narrow opening, which leads from the hollow space of the coronal sinus (*cs*) into the genital sinus (*ss*). This narrow opening, the "apertura sinus genitalis" (fig. 3, left, *sa*) lies at the point where the sterigma root (*st*) touches the proximal margin of insertion of the interrarial deltoid muscle (*md''*). The two sinus apertures of the two connected genitalia (of a pair) therefore lie near each other, and are only separated by the insertion of the interrarial deltoid muscle (*md''*). The ova are developed from the germinal epithelium in the hollow of the sinus on the concave side of the shield and essentially in the same way as in *Nauphanta* and the other Cannostomæ. The Mediterranean *Nausithoë*, which has never been sufficiently minutely investigated either in this respect or many others, shows no essential difference on this point.

The germinal epithelium of the endoderm, from which the ova in *Atolla* are developed, lies exclusively outside the genital sinus, on the concave inner side of the pouch-shaped folded sterigma, whose convex outer side is only covered by the usual sterile endoderm of the subumbra wall of the coronal sinus. The youngest ova lie inside the genital sinus, on its proximal margin, the oldest ova on the distal margin, both on its dorsal and its ventral wall. We consequently find a double fertile germinal zone, which lies tangentially near the root of the sterigma, and forms a transverse ridge standing perpendicularly on the adradius. The youngest tangential rows of ova, which are followed to the outside distal walls (both on the dorsal and the ventral wall of the fulcral shield) by rows of older ova, lie on both sides of this neutral germinal zone. The oldest and ripest ova lie on the radial margin (radial section, fig. 9, *so*). The younger ova (on the proximal margin) are completely embedded in the gelatinous plate of the sterigma, and therefore lie in closed fulcral capsules, as in *Periphema* (Pl. XXV. fig. 7). This is equally the case in the closely allied *Nausithoë* and *Nauphanta* (Pl. XXVIII. fig. 15). The ripe ova of *Atolla* are very large and spheroidal, they are more than a millimetre in diameter, and contain a visible food-yolk. When completely ripe they fall into the genital sinus (*ss*), from which they are emptied through the narrow aperture (*sa*) into the coronal sinus (*cs*) and thence pass outside through the stomach and mouth. The ovaries both of *Atolla* and of *Nauphanta* were, unfortunately, badly preserved, the epithelium being almost entirely destroyed, so that the finer structure could not be satisfactorily investigated. The peculiar finer structure and development of these very old Cannostomæ appears, however, to present an essential homology with those of the Peromedusæ. In both the former (Ephyridæ and Linergidæ) and the latter (Pericolpidæ and Periphyllidæ) the remarkable and complicated conditions of the genitalia merit more minute investigation of well-preserved material.