

visceral mass is visible, on the left side. The creature has no mouth or digestive canal, or other organs, excepting the egg-producing gland which consists of ovarian follicles between thin muscular septa, each follicle containing a syncytium or mass of united protoplasmic bodies, showing small deep-staining nuclei (the oogonia) and larger nuclei, which are centres of oocytes. Small vacuoles or spaces are present in each oocyte, but there is no trace of yolk in any of these primitive developing eggs. Egg-shaped bodies, much larger than the young eggs, occur in the ovary and in the ventral part of the sac or mantle cavity. These bodies exhibit a central mass of small cells, with nuclei, and a thin cuticle (like the embryonic cells of the Cypris-larvæ described later) around which is a yellow layer of globules, really yolk, outside of all being an external cuticle. There also occur, in the developing eggs, two or three vacuolated cells, each having a darkly staining nucleus. Mr. Potts could find no trace of spermatocytes, and he concluded that the species is parthenogenetic, the eggs in the ovary, in his opinion, hatching out embryos resembling the Ostracod, *Cypris*, and these migrating between the muscular layer and the inner ectoderm of the mantle, break through the latter, and then assume the form and structure of the Cypris stage. Among the Cypris-larvæ in the mantle cavity are large cells which may be degenerated ova, probably from the mantle wall, these having dropped into the mantle cavity. Mr. G. W. Smith found that in *Sacculina*, as Mr. Potts tells us, a few unfertilized eggs remained in the ovary after most of them had reached the mantle cavity; but, in *Mycetomorpha*, these developing eggs are in an advanced segmented condition, and so uniform in structure as to preclude any suggestion that they have degenerated.

On the left side of the thin-walled mantle sac is an indentation or bay, where a small round orifice occurs, (Fig. 3 *ea*) the exit of a duct, which curves round the visceral mass, and exhibits an internal opening or outlet from the mantle cavity. Through this duct some larvæ may be expelled, but it is unlikely, the walls being so thin and delicate, and lacking the strong musculature seen in *Sacculina* and *Pellogaster*, in which species the larvæ are forcibly ejected from the parent. Mr. Potts thinks that the larvæ escape in *Mycetomorpha* through apertures formed by the thinning away of the mantle at certain points. In the two Rhizocephalans, referred to, special colleterial glands secrete tenacious matter to bind the eggs in a mass and attach them to the mantle, and in this new form two disc-like patches occur on the upper (Fig. 3 *gl.*) and lower surface of the visceral mass, which from their position, etc., appear to correspond to such glands modified, and now secreting yolk-matter and nourishing