

the parasite was attached to its host. In the case of *Sylon schneideri*, however, I observed that the connection takes place in much the same way as Delage has described it in *Sacculina*. From a well-developed and rather voluminous basis (the "membrane basilaire" of Delage) numerous roots pass into the interior of the host, and in order to investigate this attachment it is necessary to make transverse sections of the host with the parasite attached to it. A part of the abdomen (the dorsal half having been removed) of a small specimen of *Hippolyte pusiola* with the *Sylon* attached, was embedded in paraffin in the usual way, and sections cut with the aid of the microtome.

Some of the sections so made are shown in Pl. CL. figs. 4-6. As it is not my intention to publish here an elaborate anatomical and histological description of *Sylon*—since both in regard to quantity and quality the material at my disposal was not sufficient—but only to give a preliminary orientation with regard to these little-known animals, a few words must suffice to describe this basilar membrane. It forms a circular disc equal in area to about one-fifth of the whole surface of the *Sylon*, and is not very thick, in the preparation shown in Pl. CL. fig. 4 measuring only about 0.2 mm.; it is composed of connective tissue, the nuclei being very small and numerous. The roots are not very abundant, but rather elongate and much ramified. In one respect there seems to exist an interesting difference between *Sylon* and *Sacculina*—in the latter genus the roots penetrate within the body of the Crab until they reach the wall of the intestine, but in *Sylon*, on the contrary, they as a rule do not reach so far. In *Carcinus mænas*, at the place where *Sacculina* is attached, the distance between the basilar membrane and the wall of the intestine is inconsiderable; in *Sylon* the same membrane is separated from the wall of the intestine by a dense mass of muscles (Pl. CL. fig. 4, *m*). Most of the roots (Pl. CL. figs. 4, 5, *r*) terminate on the ventral aspect of this mass of muscles, and only one root could be followed running close to the lateral surface of the abdomen of *Hippolyte* and directed to the dorsal part of the body. Most probably therefore *Sylon* lives, at least partly, on the blood of its host, and only to a limited extent draws its nourishment from the intestinal contents. Branches of these roots surround the central nervous system, passing through the abdomen in a very curious way (Pl. CL. figs. 4, 5, *n*).

According to Delage the basilar membrane and the roots belong to the internal part of the Rhizocephalid, the external part consisting of the visceral mass and of the mantle. The name "visceral mass" is perhaps not quite exact, as there is no trace of viscera, in the ordinary sense of the word (intestine, &c.), the contents being made up almost exclusively of one organ, namely, the very bulky ovary. After soaking in absolute alcohol, the ovary forms a very compact and hard body, which cannot easily be stained, is very brittle, and causes great trouble when cutting sections. It consists of extremely numerous more or less unripe eggs; in the specimens I investigated almost nothing could be observed of the true ovarian tubes, the ova being closely packed together in almost every direction. The latter are all nearly in the same condition of ripeness; each con-