

sections). I always observed in its interior the "flattened sack of singular shape" which Darwin called "the acoustic sack." As long as I knew this sack only from preparations of *Lepas anatifera*, young specimens of which I cut into series of sections some years ago, I really considered it with Darwin and Krohn¹ as a sack. Guided by this opinion, I wrote the passage² in which I gave it as my opinion that the interpretation of Krohn was more in accordance with the facts than Kossmann's; for Kossmann called the sack a "Klumpen," *i.e.*, an irregularly-shaped mass, which is sometimes quite solid, sometimes is only furnished with very irregular cavities. A glance at Pl. VI. fig. 10 will easily convince the reader that Kossmann's suggestion is now indeed mine also; the curious body looks like a compact mass, being composed of smooth layers which have probably been more or less parallel to the wall of the sack, and a granular substance binding these layers together. All the cells bordering the sack, as also those forming the part which is turned outward, participate in the act of secreting the fluid, which hardens to compose the compact body. Hence it is suspended as by two short arms in the opening which leads from the funnel of the oviduct into the curious sack. The compact body must be evacuated before the eggs can pass through the curious sack and the narrow duct, and I think that this is done by the retraction of the margin of the opening which leads from the funnel into the sack. In one of my series of preparations of *Scalpellum vulgare* the opening of the sack is as wide as that of the funnel; the arms of the compact body form a transverse partition between funnel and sack, the remaining part of the compact mass being suspended in the middle of this partition. Regarding the structure of this same apparatus in other genera of Cirripedia I have little to add. In *Lepas anatifera* and *Lepas hillii* the structure of the oviduct is the same as in *Scalpellum*. The funnel at the end of the oviduct where it communicates with the sack seems to be wanting; in a very complete series of preparations of *Lepas hillii* the oviduct can be followed up to where it communicates with the sack. Its structure is very markedly different from that of the sack, so that the place where the one ends and the other begins can easily be seen (Pl. VI. fig. 11). It widens only very inconsiderably to meet the opening of the sack. The wall of the sack is composed of very high and narrow cells (0.05 mm. high and 0.003 mm. wide), having an oval nucleus about half way up. The length of the sack itself in *Lepas hillii* is about 0.8 mm. In *Lepas anatifera* it is a great deal more; in a specimen, the capitulum of which measured 38 mm., the greatest diameter of the sack was 3 mm., the shoe-shaped mass in its interior measuring about 2 mm. I observed the curious sack at the end of the oviduct also in *Balanus corolliformis*, Hoek, and in *Balanus tintinnabulum*, Linné. Its size in the first species is about 0.5 mm.; the way in which the oviduct communicates with the sack in this species is very like that in *Scalpellum*,—the oviduct is considerably swollen at the extremity which meets the sack.

¹ Krohn, *loc. cit.*, p. 361.

² Zool. Chall. Exp., part xxv., p. 12.