

developed in the larvæ of *Lepas australis* which I studied. Claus says that these glands consist of groups of cells which have either still the form of a sinuous string ("eines gewundenen Stranges"), or which lie scattered by the side of one another; the latter is the case in *Lepas australis*. Claus has not observed the communication of these glands with the cement-duct which he figures; at least in his figure they are at a very considerable distance from one another. I have not been more fortunate; I even failed to observe the cement-duct. The different cells (Pl. II. fig. 5) do not show much resemblance to the cement-glands of the full-grown animal; yet I think that Claus' supposition as to the nature of these elements is right. As regards the place they occupy in the Cypris-larva, it quite corresponds to the place they occupy in the full-grown animal, viz., in the most posterior (when the animal changes its position, the most superior) part of the peduncle. The Cypris-larva which furnished the drawing fig. 2 is a little older than the one figured in fig. 1. In the former the cement-cells are much more separated from one another than in the latter; moreover, their nuclei are much more easily distinguishable, and many of them are not so richly furnished with fatty granules as was the case in the younger condition. Very delicate and flat fibres in the later Cypris-stage are visible between the cement-cells; probably they represent the canals figured by Claus and considered by him as branches of the cement-ducts.

A pair of club-shaped bodies is situated near the ventral wall of the animal, the thickest part of which is directed towards the front of the Cypris and the narrower part of which can be traced as far as under the cœca of the œsophagus of this larva. These are described by Claus as the ovarium (figs. 1 and 2, *Od*). I observed these bodies also, and I think it very probable that they represent the female genital apparatus; they are especially distinct in the longitudinal section of the body shown in fig. 2. In this figure the valves of the Cypris are not represented; the clear margin round the body represents the chitinous wall of the future *Lepas*; the cells of the mantle serve as a matrix for its formation.

When we look now at the figure of the Cypris-larva of *Scalpellum regium* which is destined to develop into a complemental male, we observe great analogy as well as considerable difference. Pl. II. fig. 3 represents a larva which has probably attached itself lately, and which therefore is exactly in the same stage as the larva of *Lepas australis* which I have just described. It is somewhat different from the latter in general outline, being more elongate and not so high. At the hinder extremity the Cypris of *Lepas australis* is obliquely truncated and bluntly pointed, and that of the male of *Scalpellum* almost entirely transversely truncated. Like the former it is enclosed within a shell consisting of two valves of a very brittle constitution. The antennæ (*An*) are stretched forward out of the ventral slit between the two valves; they have in all essential respects the same structure as those of the full-grown complemental male, which will be described further on. At their base in the interior of the body of the larva a cellular