indeed be regarded as such. Krohn has not given a description of these glands, nor is such a description to be found in the literature of the group. For *Balanus* I myself published figures of these glands some years ago,[1] when it was my opinion that the ovarian cœca might perhaps develop from these bodies—a serious error pointed out by Claus. My excuse was firstly that these bodies, scattered everywhere between the young ovarian cœca, had never been observed in a sessile Cirriped before, and secondly that Darwin had led me into error by describing the cement-glands as adhering to the basal membrane or basal calcareous plate of the Balaninæ. I should have paid more attention to a footnote in Krohn's paper (p. 357), in which he states his opinion that the true cement-glands of the Balanidæ might also be found between the ovaries or in the connective tissue surrounding the mantle.

The cement-glands of *Lepas anatifera*, of *Conchoderma virgatum*, and of *Scalpellum vulgare* are nearly of the same shape and size. Those of *Lepas anatifera* are a little larger, the longest diameter measuring 0·15 to 0·2 mm., whereas those of *Scalpellum vulgare* are smaller, having a diameter of about 0·125 mm. (The largest diameter of one of the cement-glands of *Balanus improvisus* is not quite 0·2 mm.). The interior of the cells is filled with a plasmatic mass, which shows the curious property of staining rather intensely with aluminium carminate. At the same time, the large nucleus, which occupies nearly the centre of the cell, and which measures half the length of the cell itself, is coloured also and much more intensely. In many preparations the body of the cell shows an extremely delicate granular structure, whereas the nuclei are coarsely granulated, or appear to have a fibrillar structure. In *Lepas* nucleoli have not yet been observed. Pl. II. fig. 5 shows the condition of the cement-cells in the Cypris-larva. I do not quite understand in what way the pear-shaped gland develops from these cells. The size of the latter is about 0·03 mm., at least in the case of *Lepas australis*. Towards one side, and as a rule in the longer axis of the cell, its wall is produced so that the cell assumes the shape of a pear; this produced part slopes into a long and narrow duct (Pl. V. fig. 5). The structure of this duct is very simple; here and there small cells are visible in its wall (measuring about 0·005 mm.), which on the exterior is lined by a kind of thin cuticle.

The ducts of the different cement-glands unite together to form a much more capacious duct; a little before the place where the junction is observed, a transverse short duct often runs from one branch to the other; all the ducts together form an irregular network, the thickest branches finally pour out their contents into two longitudinal ducts. The ducts (fig. 5, *d*), which communicate directly with the glands, have a diameter of about 0·025 mm.; the two longitudinal ducts in which the contents of the narrow ducts are evacuated, measure about 0·05 mm. in width. In a

[1] P. P. C. Hoek, Zur Entwickelungsgeschichte der Entomostraken, I. Embryologie von Balanus, *Niederländ Archiv f. Zool.*, Bd. iii. pp. 47–82, 1876.