

which is indicated by a cartilage-like speck in the body wall, there extend backwards two cartilage-like lines (fig. 11), diverging at an angle of some 60° , each of which bears about thirteen minute pointed papillæ; a similar row stands upon the tissue covering the gladius in the middle of the back. The *siphon* is short, bluntly conical, and usually projects only very little above the margin of the mantle.

The *Head* is very short but broad; the *eyes* are prominent and the lens protrudes from the larger portion of the organ; behind the eye is a papilla, and in front of and below it are several minute, white, spherical bodies (fig. 1), which in many cases are embedded in a prominent, irregularly-shaped mass of tissue.

The *Arms* (fig. 1) are short and very unequal, their order of length being 3, 4, 2, 1 (in some specimens 4 and 2 are almost equal); the third pair being twice as long as the second and three times as long as the first. Each arm bears two rows of minute pedunculate *suckers* (fig. 13), which have smooth horny rings. The *umbrella* extends halfway up the dorsal arms, and is of about the same breadth between them and the second and between these and the third, while it is absent between the ventral arms and between them and the third pair. The *buccal membrane* has five points, below it passes into two fillets which run side by side, separated by a narrow groove, to join the ventral arms (fig. 1). The *outer lip* is thin; the *inner* thick and rounded, both being smooth.

The *Tentacles* (fig. 12) are comparatively stout, twice as thick as the sessile arms, very slightly thickened towards the club, and then tapering to exceedingly fine points. The *club* has a very narrow delicate web up either side, and bears four rows of pedunculate *suckers* (fig. 14). These are rather larger at the middle of the club than at either end, and those of the two median series are slightly larger than the lateral ones; at the tip they are exceedingly minute; and two series of very small ones commence about half way up the stem and continue up to the club. They are spheroidal in form and oblique, with a small aperture, and a smooth *horny ring*, surrounded by long, narrow, radially disposed papillæ, from which radial grooves pass towards the margin.

The *Colour* (in the spirit specimens) is pale, almost white, semitransparent.

The *Surface* is smooth but for the papillæ above described.

The *Gladius* is as long as the mantle, very narrow, and slightly expanded behind into a lanceolate extremity.

The above description has been drawn up from specimens kindly lent to me by Professor Steenstrup; those obtained by the Challenger were young, only 7 to 8 mm. long in the body, and at first glance not at all unlike the figures of *Cranchia megalops*, Prosch,¹ and although I have no hesitation in referring them to *Cranchia reinhardtii*, they present many interesting differences from the more developed forms. The fins are smaller comparatively, the arms are shorter and have very few suckers, the dorsal arms

¹ Nogle nye Cephalopoder, figs. 4, 5, 6.