

and also tapering downwards. The depressions number two, while the foramina comprise only one pair (Pl. II, fig. 21).

The oral plate of *Ophionereis variegata* is somewhat higher than broad. The abradial muscular area is rather large, ear-shaped and entire, forming a weak distal wing. The adradial one is also large, about as high as the plate and somewhat spoon-shaped, but the upper portion is not so distinctly enlarged (Pl. VI, figs. 5-6). The oral plate of *O. aplacaophora* is quite similar to those of Amphiruridae and Ophiothricidae. The abradial muscular area is well developed and forms a conspicuous distal wing; a number of distinct indentations enter the area from the middle of distal margin, the middle two of which pass through from the distal margin to the proximal one so as to divide the area into two parts dorso-ventrally. The adradial muscular area is perfectly spoon-shaped, the upper portion being distinctly enlarged. The corresponding plate in the remaining species is somewhat longer than high. In *O. dubia* (*marktanneri* type) and *O. thryptica* the abradial muscular areas are entire, rather large and ear-shaped, forming a slight distal wing; the adradial ones are also large and of an elongate S-shape (Pl. VI, figs. 7-8). In *O. dubia* (*dictydisca* type) the abradial muscular area is divided into two halves dorso-ventrally by a transverse area, and the adradial one is perfectly spoon-shaped like that of *O. aplacaophora*.

Dental and Oral Plates of Ophiocomidae

The dental and oral plates of members of the Ophiocomidae are almost uniform in their characters, and resemble those of the Ophionereididae. Of the two subfamilies, the Ophiocominae are a step more advanced in specialization of the dental and oral plates than are the Ophiopsilinae.

The dental plate of the Ophiocominae, which is entire and elongate, bears a vertical series of two or three foramina on the upper portion; these are generally divided as in the Ophionereididae, and diminish in size in sequence downwards. On the lower portion are a number of more or less regularly arranged, small, rounded projections, each of which has a tiny hollow on the centre. Further, it carries a small number of transverse ridges on the middle of the plate; these have not been observed in other ophiurans. The oral plate in this subfamily is wing-shaped and carries well developed abradial and adradial muscular areas.

The dental plate of *Ophiocoma brevipes* is rather short, about twice as long as broad, and tongue-shaped in outline; the upper end is truncated; the lateral margins are straight; the lower end is broadly rounded. The foramina, which occupy the upper half of the plate, number two and are very remarkable. The upper one is much larger than the lower one; each of them is divided into two lateral halves by a very broad median vertical bar. The lower lobe is narrow and furnished with a small number of inconspicuous rounded projections along the lower margin. The ridges in the middle are weakly developed (Pl. III, fig. 1). That of *O. latilansa* is somewhat more elongate than in the foregoing species, more than twice as long as broad, and more or less slipper-shaped in general aspect, the middle part being a little narrow. The projections on the lower lobe are more numerous than those of *O. brevipes* and arranged in three somewhat irregular vertical rows. The two transverse ridges on the middle part are poorly developed and make contact with each other so as to produce a figure-of-eight. The foramina on the upper portion number two, are distinct and divided by a narrow vertical ridge as in *O. brevipes* (Pl. III, fig. 2). The corresponding plates of *O. pica* and *O. erinaceus* are still more elongate, and two and a half times as long as broad; the former is somewhat slipper-shaped as that of