

acter. The dental plate is generally entire, more or less elongate, and provided with a vertical series of small, rounded depressions along the median line. The oral plate usually tapers distally so as to become axe-shaped in side view. The abradial muscular area is tolerably developed, but does not form a distal wing. The adradial area is small and lies low down on the plate.

The dental plates of *Ophiologimus hexactis* and *Ophiophrura liodisca* are delicate, more than twice as long as broad and club-shaped in outline, gradually diverging downwards. The depressions are small, rounded, from four to seven in number, and form a vertical linear series along the median line of the plate; or the series may form an inverted Y, owing to the fact that the lowermost two lie side by side near the ventral margin, though their arrangement is often irregular (Pl. I, figs. 14–15). The plate of *Ophiolimna diastata* is fairly well developed, about twice as long as broad and somewhat spatulate in shape, the upper part being slightly narrower than the lower one. The depressions number six, distinct and more or less compressed; they decrease in size as they proceed downwards, though the uppermost one is the smallest (Pl. I, fig. 16). The dental plates of *Ophiomitrella ikedai* and *O. sterifera* are also elongate, about two and a half times as long as broad and somewhat club-shaped, being a little swollen at some distance downward from the middle. The depressions are very small in both species; in *O. sterifera* those at the middle part are hard to recognise, while in *O. ikedai* they are all distinct, and number seven (Pl. I, figs. 17–18). The corresponding plate of *Ophiophthalmus cataleimoidus* bears a close resemblance to that of *O. ikedai*, but is more elongate than the latter and more than three times as long as broad; the depressions also number seven and are rather compressed. On the other hand, that of *O. normani* is rather similar to that of *O. diastata*, but is divided into two or three pieces by transverse fissures; the depressions number five and are distinct and more or less compressed, the middle ones being larger than the rest (Pl. I, figs. 19–20). The dental plate of *Ophiacantha*, which is usually very elongate, is somewhat variable in its characters. That of *O. mitsuï*, which has intermediate features between those of *Ophiolimna diastata* and *Ophiophrura liodisca*, is comparatively short, a trifle less than two and a half times as long as broad and somewhat spatulate in shape, slightly divergent ventrad. The depressions number four, are of moderate size, transversely elliptical and subequal, except the lowest one which is the smallest (Pl. I, fig. 24). The plates of *O. acanthinotata* and *O. bisquamata* are very long, more than three times as long as broad, somewhat club-shaped and slightly enlarged ventrad. The depressions number six to eight, are small and more or less rounded; in *O. acanthinotata* they are arranged in a vertical series, while in *O. bisquamata* the lowest two lie horizontally side by side (Pl. I, figs. 21–22). Those of *O. pentagona* and *O. rhachophora* are bar-shaped and about three times as long as broad, with their upper and lower ends rounded. These depressions are also small; in *O. pentagona* they number five, while in *O. rhachophora* they cannot be counted accurately, because the middle ones disappear as in *Ophiomitrella sterifera* (Pl. I, figs. 25–26). The dental plate of *Ophiotreta gratiosa* is also bar-shaped, elongate and more than three times as long as broad. There are five rather distinct, compressed depressions along the median line; besides these, two small rounded ones are present near the ventral margin, arranged horizontally (Pl. I, fig. 23). That of *Ophiothamnus venustus* is somewhat club-shaped and less than three times as long as broad, with rounded upper and truncated lower ends; the depressions number four and are rounded and distinct (Pl. I, fig. 27). The plate of *Ophiocamax rugosa*, which is nearly related to that of *O. diastata*, is two and a half times as long as broad and slightly divergent ventrad, with rounded upper and two-sided lower margins; the depressions number seven, are