

shaped in outline, and subdivided into three or four parts, the middle ones of which are very small, but thick, whilst the upper and lower parts are long and narrow, curved along the outer margin (Pl. V, figs. 19-24). The abradial muscular area of *Amphiura pachyactra* is rather well defined; the indentations formed on each piece of the area from the inner margin are indistinct. The adradial muscular area of this species consists of two or three parts (Pl. V, figs. 27-28). The division of the abradial muscular area is imperfect in *Monamphiura lütkeni*; the adradial area comprises two parts (Plate V, figs. 25-26). In *Ophiopeltis aestuarii* the abradial muscular area is divided into three parts, the uppermost being the largest. This uppermost part is also deeply indented along the inner margin by several more or less branched, radially directed notches; the lower parts do not bear such notches. The adradial area is typically spoon-shaped (Plate V, figs. 29-30). In *Ophiopeltis octacantha* the oral plate resembles that of *Hemilepis arcystata* (Plate V, figs. 31-32).

Dental and Oral Plates of Ophiothricidae

The dental and oral plates of the Ophiothricidae are very similar to those of the Amphiuridae, especially to those of the Ophiactinae. The dental plate, which is entire and more or less swollen at the lower part, resembling a slipper in general appearance, bears a number of distinct foramina along the median line of the upper portion. Each foramen is usually divided into two lateral halves by a vertical bar, except the uppermost one, which is sometimes entire. Unlike the dental plate of the Amphiuridae, there is a marginal series of small, rounded foramina or depressions on each side of the lower portion; these are continuous with the upper foramina. Further, there are no depressions on the lower portion, such as occur in the Amphiuridae. The oral plate of this family is also wing-shaped. The abradial muscular area, which is large and ear-shaped in outline, protrudes distally like a wing and usually bears a branched indentation. The adradial one is essentially spoon-shaped, but in most cases the narrow lower part disappears completely.

FIG. 1—Abradial view; and Fig. 2—Adradial view of *Astroclon propugnatoris* × 7. Fig. 3—Abradial view; and Fig. 4—Adradial view of *Ophiologimus hexactis* × 21. Fig. 5—Abradial view; and Fig. 6—Adradial view of *Ophiophrura liodisca* × 11. Fig. 7—Abradial view; and Fig. 8—Adradial view of *Ophiolimna diastata* × 11. Fig. 9—Abradial view; and Fig. 10—Adradial view of *Ophiomitrella ikedai* × 21. Fig. 11—Abradial view; and Fig. 12—Adradial view of *Ophiomitrella sterifera* × 21. Fig. 13—Abradial view; and Fig. 14—Adradial view of *Ophiophthalmus cataleimmoidus* × 11. Fig. 15—Abradial view; and Fig. 16—Adradial view of *Ophiophthalmus normani* × 11. Fig. 17—Abradial view; and Fig. 18—Adradial view of *Ophiacantha acanthinotata* × 21. Fig. 19—Abradial view; and Fig. 20—Adradial view of *Ophiacantha bisquamata* × 11. Fig. 21—Abradial view; and Fig. 22—Adradial view of *Ophiotreta gratiosa* × 11. Fig. 23—Abradial view; and Fig. 24—Adradial view of *Ophiacantha mitsuui* × 11. Fig. 25—Abradial view; and Fig. 26—Adradial view of *Ophiacantha rhachophora* × 21. Fig. 27—Abradial view; and Fig. 28—Adradial view of *Ophiothamnus venustus* × 21. Fig. 29—Abradial view; and Fig. 30—Adradial view of *Ophiocamax rugosa* × 11. Fig. 31—Abradial view; and Fig. 32—Adradial view of *Ophiomoeris pentagona* × 21. Fig. 33—Abradial view; and Fig. 34—Adradial view of *Amphilepis diastata* × 21. Fig. 35—Abradial view; and Fig. 36—Adradial view of *Ophiactis hemiteles* × 21. Fig. 37—Abradial view; and Fig. 38—Adradial view of *Ophiactis macrolepidota* × 32. Fig. 39—Abradial view; and Fig. 40—Adradial view of *Ophiactis modesta* × 21. Fig. 41—Abradial view; and Fig. 42—Adradial view of *Ophiactis savignyi* × 21. Fig. 43—Abradial view; and Fig. 44—Adradial view of *Ophiopholis brachyactis* × 11. Fig. 45—Abradial view; and Fig. 46—Adradial view of *Ophiopholis mirabilis* × 11. Fig. 47—Abradial view; and Fig. 48—Adradial view of *Amphioplus asterictus* × 11. Fig. 49—Abradial view; and Fig. 50—Adradial view of *Unioplus macraspis* × 11. Fig. 51—Abradial view; and Fig. 52—Adradial view of *Amphioplus platyacanthus* × 32.