

shaped and a trifle more than one and a half times as long as broad, the broadest part being some distance below the middle. In *O. trychnum* it is provided with a vertical linear series of four depressions along the median line; these are very compressed, except for the uppermost, which is small and rounded. In *O. simplex* the depressions are irregular in shape and arrangement (Pl. II, figs. 32-33). Unlike the dental plates of the foregoing species, that of *Ophiomusium cancellatum* is somewhat spatulate in shape, much less than twice as long as broad and furnished with several distinct, rather irregularly arranged projections on the adoral surface; neither foramina nor depressions occur anywhere (Pl. II, fig. 34).

The oral plates of *Ophioplocus japonicus* and *O. imbricatus*, which bears some resemblance to those of the Ophiochitonidae, are almost as long as high and somewhat divergent proximad so as to become axe-shaped in lateral view. The abradial muscular areas are of moderate size and roughly triangular in shape, with the angles rounded. The adradial muscular areas are rather large, vertical, reaching from near the ventral margin to the upper one and gently curved so as to assume an elongate S-shape (Pl. VI, figs. 17-20). The oral plate of *Ophioplepis* is more elongate than that of *Ophioplocus*; the abradial and adradial muscular areas are comparatively small. That of *O. cincta* is a little longer than high and its distal half is abruptly contracted. The abradial muscular area is of moderate size, broader than high and somewhat oval in shape. The adradial area is rather large, vertically elongate, slightly curved distally below and gradually divergent upwards (Pl. VI, figs. 15-16). The corresponding plate of *O. cardioplax* is still elongate and more distinctly reduced in size at the distal half than in *O. cincta*, but is somewhat enlarged at the distal end. The adradial muscular area is also of moderate size and oval in shape, while the abradial one is rather large, elongate, oblique and tapering upwards (Pl. VI, figs. 13-14). The oral plate of *O. annulosa* is quite similar to that of *O. cardioplax* in outline, but the abradial and adradial muscular areas of the former become somewhat smaller than in the latter. The abradial muscular area is oblong and oblique, while the adradial one is nearly vertical and compressed fusiform (Pl. VI, figs. 11-12). The oral plate of *Ophiozonella longispina*, which resembles that of *Ophioplocus*, is axe-shaped, a trifle higher than long and distinctly divergent proximad. The abradial muscular area is moderate in size and nearly rounded. The adradial area, which resembles that of *O. japonicus*, is well developed, vertical and of elongate S-shape (Pl. VI, figs. 9-10). The oral plate of *Ophiozona aedilepis* agrees with that of the foregoing species in many characters. On the other hand, that of *Ophiotylos leucus* is very elongate and about twice as long as high, the proximal part being not so remarkably enlarged. The abradial muscular area is small and transversely elliptical, while the adradial one is rather large, elongate and oblique (Pl. VI, figs. 21-22). The oral plate in *Ophiomusium cancellatum*, *O. trychnum* and *O. simplex* is also very elongate, from about two to two and a half times as long as high and not distinctly divergent proximad, while the distal part con-

and Fig. 12—Adradial view of *Ophiocoma litalanxa* \times 21. Fig. 13—Abradial view; and Fig. 14—Adradial view of *Ophiocoma brevipes* \times 7. Fig. 15—Abradial view; and Fig. 16—Adradial view of *Ophiocoma pica* \times 7. Fig. 17—Abradial view; and Fig. 18—Adradial view of *Ophiocoma scolopendrina* \times 7. Fig. 19—Abradial view; and Fig. 20—Adradial view of *Ophiocoma erinaceus* \times 7. Fig. 21—Abradial view and Fig. 22—Adradial view of *Ophiomastix variabilis* \times 11. Fig. 23—Abradial view; and Fig. 24—Adradial view of *Ophiomastix palaoensis* \times 7. Fig. 25—Abradial view; and Fig. 26—Adradial view of *Ophiomastix mixta* \times 7. Fig. 27—Abradial view; and Fig. 28—Adradial view of *Ophiomastix lütkeni* \times 7. Fig. 29—Abradial view; and Fig. 30—Adradial view of *Ophiomastix annulosa* \times 7. Fig. 31—Abradial view; and Fig. 32—Adradial view of *Ophiarthrum elegans* \times 7. Fig. 33—Abradial view; and Fig. 34—Adradial view of *Ophiarthrum pictum* \times 7.