

the scales are smaller and obscured by skin. Radial shields small, ovoid, as long as broad, widely separated by a wedge of scales; length to breadth, 1·7 : 1·3. Genital openings wide, and extending quite from the mouth shield to the disk margin. Four smooth, cylindrical, rather slender, blunt, tapering arm spines, whereof the lowest is as long as an arm joint, the two upper ones as long as a joint and a half, and the third intermediate. One rather large oval tentacle scale. Colour in alcohol, grey, with arm inclining to straw.

Station 232.—May 12, 1875; lat. 35° 11' N., long. 139° 28' E.; 345 fathoms; sandy mud. Station 235.—June 4, 1875; lat. 34° 7' N., long. 138° 0' E.; 565 fathoms; mud. Station 236.—June 5, 1875; lat. 34° 58' N., long. 139° 30' E.; young; 420 to 775 fathoms; mud.

Species of *Ophiomitra* not herein described.

*Ophiomitra valida*, Lym. (Pl. XLI. figs. 4–6).

*Ophiomitra valida*, Lym., Bull. Mus. Comp. Zool., vol. i., part 10, p. 325, 1869; Ill. Cat. Mus. Comp. Zool., No. vi., pl. ii. figs. 4–6.

*Ophiomitra cervicornis* (young form), Lym., Ill. Cat. Mus. Comp. Zool., No. viii., part 2, p. 14, pl. ii. figs. 19, 20, 1875; Bull. Mus. Comp. Zool., vol. v., part 9, p. 231.

West Indies; 10 to 128 fathoms.

*Ophiomitra exigua*, Lym., Bull. Mus. Comp. Zool., vol. v., part 9, p. 231, pl. i. figs. 4–6, 1878.

Off Havana; 240 fathoms.

*Ophiocamax*.

*Ophiocamax*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, 1878.

Seen from within the radial shields are even larger than they appear from without. Near their outer point of junction are attached genital plates which are peculiar in that their inner ends lie on top of the arm and nearly touch each other, while their very thin, blade-like shafts slope downwards and inwards to the sides of the arms. Also attached to the radial shield are the curved, thin genital scales (Pl. XLI. fig. 9, *n*). The arm next the mouth frames is very large and wide, and its bones are strong, with wide, slightly grooved margins. Their faces are of a character wholly unlooked for, recalling the remote *Astrophyton* shapes. Thus, the outer face has no articulating peg at all and the articulating hollow above (fig. 10 : 4) is formed by a transverse hour-glass piece, the whole quite comparable to such a remote genus as *Sigsbeia* (Pl. XLIII. fig. 5). The inner face is of a character much more Ophiuroid (Pl. XLI. fig. 11), and is comparable to that