somewhat swollen and flaring outward, meeting broadly below; separated above by the upper arm plates, which are somewhat arched, with the inner side narrower than the outer, which is curved. Disk round, smooth, and flat, covered above and below with minute thin scales; in the centre are several rounded primary plates, and one of nearly equal size in each interbrachial space. Radial shields pear-seed shape, with inner angle blunt, and outer corners rounded; separated their entire length by fine overlapping scales. Genital scales hidden, except their tips, outside the radial shields, which bear an arm comb of a few minute papillæ, as does sometimes the first upper arm plate. Three slender, cylindrical, tapering, pointed arm spines, the upper one being much longer and larger than the two lower; lengths to that of an arm joint 3.4, 1, .8:1. Tentacle scales minute and rounded; there are two or three to each of the second mouth tentacles; usually one on the outside of the basal pores, and one on the inside of the pores farther out on the arm. Colour in alcohol, disk nearly white; arms above pale grey. It is in general like Ophiocten pallidum, but the flatter and wider arms bear a very long upper arm spine.

Station 78.—July 10, 1873; lat. 37° 24′ N., long. 25° 13′ W.; 1000 fathoms; globigerina ooze. Station 146.—December 29, 1873; lat. 46° 46′ S., long. 45° 31′ E.; 1375 fathoms; globigerina ooze. Station 168.—July 8, 1874; lat. 40° 28′ S., long. 177° 43′ E.; 1100 fathoms; grey ooze.

## Species of Ophiocten not herein described.

Ophiocten abyssicolum, Ltk., Addit. ad Hist., part 1, p. 51, 1868. Ludwig, Echin des Mittelmeeres, p. 548.

Ophiura abyssicola, Fbs., Linn. Trans., vol. xix. p. 146, pl. xiii. fig. 8, 1843.

Ægean Sea; 150–200 fathoms.

Ophiocten depressum, Lym., Bull. Mus. Comp. Zool., vol. i., part 10, p. 320, 1869; Ill. Cat. Mus. Comp. Zool., No. vi., pl. ii. fig. 10.

Florida; 315 fathoms.

## Ophiomusium.

Ophiomusium, Lym., Bull. Mus. Comp. Zool., vol. i., part 10, 1869.

Teeth; no tooth papillæ; mouth papillæ soldered in a continuous row, so that their former outlines are scarcely to be seen. Disk covered by plates and radial shields, all of which are intimately soldered, forming a surface like porcelain. Upper and under arm plates minute; side arm plates meeting above and below; swelled, intimately soldered