

arm the spines are more slender, and the second much longer, attaining to 5 mm. The under spine is marked by its thickness; beyond base of arm it is somewhat curved. Tentacle scales large, thick, pointed, flattened, sensibly smooth, except towards end of arm, where they bear two or three microscopic thorns. Colour in alcohol, dull straw.

It is not easy to say how much of the peculiar creasing of the disk and sinking of the radial shields is due to the contraction of the animal drawn from a depth and immersed in strong alcohol, and how much is natural. Of nine specimens one had radial shields much wider and more nearly on a level with the disk; but in the rest the radial shields were deeply sunken. Six specimens from the "Blake" expedition (Agassiz and Sigsbee, 1878) seemed a variety of this species. They were from 480 to 860 fathoms, near Cuba. All had the radial shields not at all sunken and of a broad pearseed-shape; only the centre of the disk bore stumps, which were little articulated cylinders bearing a crown of thorns. The largest specimen, with a disk of 8 mm., had seven arm spines, which were stouter than in Challenger specimens and shorter, their lengths being 2, 3, 2.2, 2, 1.5, 1.5, 1.2; and the lowest spine, though thick, was scarcely or not at all curved. The other specimens were young, and had long slender arm spines, and the under one curved. The Challenger specimen from Station 33 resembled these.

Station 3.—February 18, 1873; lat. 25° 45' N., long. 20° 12' W.; 1525 fathoms; Station 33.—April 4, 1873; off Bermudas; (var. ?); 435 fathoms; mud. Station 84.—July 18, 1873; lat. 30° 38' N., long. 18° 5' W.; 1124 fathoms.

*Ophiomitra carduus*, Lym. (Pl. XIV. figs. 4–6).

*Ophiomitra carduus*, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 154, pl. ix. figs. 236–238, 1878.

Outer edges of under arm plates swollen. Tentacle scales strongly thorny. Under arm spine straight.

(Type specimen from Station 87.) Diameter of disk 10 mm. Width of arm without spines 2.8 mm. Mouth papillæ nine to eleven to each angle, of which the inner central one has a flat spearhead-shape; the others irregularly conical with blunt points; several of them much larger, and resembling the innermost one; others, especially the outermost, small, crowded, and ill-defined. Mouth shields small, broader than long, with an obtuse angle within and a truncated angle or a broken curve without, outer edge somewhat indented; length to breadth 1.7 : 2.2. Side mouth shields very broad and curved on their outer edge, almost crescent-like. Under arm plates near base of arm large, much wider than long, with a small swelling at their outer edge, which is gently curved and reaches nearly across the arm; lateral sides re-enteringly curved, with a peak within, where each plate is widely separated from its neighbour by the side arm plates. Upper arm plates somewhat swollen, bounded without by a gentle curve, and within by an obtuse angle or a deep curve. Side arm plates stout and prominent, meeting broadly