

which are broad, heart-shaped, with a peak within. Mouth shields wider than long, broad, heart-shaped, with a rounded angle within, or wide transverse, rounded diamond-shaped. Side mouth shields rather narrow, of about equal width, meeting fully within. First under arm plate small and wider within than without; those beyond are wide shield-shaped, bounded without by a curve, on the lateral sides by re-entering curves, and within by an obtuse or truncated angle. Side mouth shields of moderate width, nearly meeting above and below, and having a well-marked spine crest. Upper arm plates broad, transverse diamond-shaped, with outer and inner angles rounded. Disk covered with rather thick overlapping scales, which are finest below, near the mouth shields, where there are about seven in the length of 1 mm. Above, the centre is occupied by a rosette of two circles of large rounded plates partially separated by a few small scales. Radial shields short, wide pear-seed shaped, separated their entire length by a narrow wedge of three scales. On interbrachial spaces below, a few minute, peg-like spines. Four short, cylindrical, tapering, blunt arm spines, all stout, especially the lower ones; upper spine longest, and about as long as one and a half joints. One large oval tentacle scale. Colour in alcohol, pale straw.

Station 73. —June 30, 1873; lat.  $38^{\circ} 30' N.$ , long.  $31^{\circ} 14' W.$ ; 1000 fathoms; globigerina ooze.

*Ophiactis carnea*, Ljn., Öph. Viv. Of. Kong. Akad., p. 324, 1866.

Station, Simon's Bay, Cape of Good Hope; 10 to 20 fathoms.

*Ophiactis pectorale*, Lym. (Pl. XXVII. figs. 4–6).

*Ophiactis pectorale*, Lym., Anniv. Mem. Bost. Soc. Nat. Hist., p. 10, pl. ii. figs. 26–28, 1880.

Disk without spines, and covered with thick, rounded scales, whereof the largest are near the radial shields. Two small tentacle scales.

Diameter of disk, 7 mm. Length of arm about 38 mm. Width of same, close to disk, without spines, 2 mm. Three large, flat, irregular mouth-papillæ on either side of the mouth angle; and one long, thick, blunt papilla, or tooth, at the apex. Mouth shields slightly swollen, wide diamond-shaped, with rounded angles and a slight lobe without; length to breadth, 1:1. Side mouth shields short, wide and of nearly equal width, meeting fully within. First under arm plate small, longer than wide, five-sided with rounded angles and curved outer edge; beyond, the plates are much broader than long, with an ill-marked angle within, short deep re-entering curves on the lateral sides, and outer side long and cleanly curved. Side arm plates short; narrowly separated above and below. Upper arm plates much wider than long, thick, slightly arched, with a broad rounded angle within, acute angles on the lateral sides, and outer edge gently curved. Disk thick, having deep radiating constrictions in the interbrachial spaces, extending even to the centre; it is covered with large, thick, flat, rounded, over-