nearly meeting without, broader without than within, where they touch. First under arm plate small and three-sided, wider within than without; those beyond are one-half broader than long, with a curved outer side, and an irregular, more or less truncated angle within. Side arm plates unusually wide, but not much projecting, nearly meeting above and below. Upper arm plates much wider than long, three-sided, with a faintly curved outer side, and an angle, sometimes truncated, within. Disk plentifully set with short, slender, cylindrical spines, and covered with well rounded overlapping scales, which are large above (two or three in the length of 1 mm.), and more regular and much smaller below (four or five in 1 mm.). Radial shields sunken, rudely triangular, short and wide, separated by a broad wedge of three or four large scales; length to breadth 1·2:1. Four cylindrical, tapering, blunt, rather stout arm spines, the two upper ones largest and somewhat longer than an arm joint. One large, oval tentacle scale. Colour in alcohol, pale straw.

Station 174.—August 3, 1874; lat. 19° 10′ S., long. 178° 10′ E.; 210 to 610 fathoms; globigerina ooze. Station 171.—July 15, 1874; lat. 28° 33′ S., long. 177° 50′ W.; 600 fathoms.

Ophiactis hirta, Lym. (Pl. XX. figs. 4-6).

Ophiactis hirta, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 39, pl. xiii. figs. 365-367, 1879.

Disk finely scaled, and set with short minute spines. Radial shields small and pearseed shaped. Four moderately stout tapering arm spines, the uppermost longest. Two or three minute mouth papillæ on each side. Seven arms.

(Type specimen from Station 164a.) Diameter of disk 4.3 mm. Length of arm about 14 mm. Width of arm near disk 1.2 mm. Two or three small, narrow, scale-like mouth papillæ on either side of the very narrow mouth angle; and one wide, flat, and pointed at the apex; this last may, as in all similar cases, be considered the lowest tooth. Mouth shields small, of a much rounded diamond shape; sometimes nearly circular. Side mouth shields narrow, of nearly equal width, meeting within. Under arm plates rather small, as broad as long, bounded without by a strong curve, and within by three sides of an octagon. Side arm plates stout, projecting laterally in a well-marked spine ridge, meeting neither above nor below. Upper arm plates a little broader than long, transverse oval, with the inner sides more or less angular. Disk covered with coarse, thickened, irregular scales, those of the under surface being sometimes wholly obscured by a thick skin; those in the centre are largest, but the primary plates are not readily distinguishable; there are small, peg-like spines scattered over the entire surface. There are seven pairs of radial shields, which are small, sunken below the disk surface, of a blunt pear-seed shape, and separated by a rather wide wedge of three scales. Four smooth, rounded, tapering, moderately stout arm-spines; the upper one longest; lengths to that of an under arm