

of the arm. Upper arm plates broader than long, transverse oval, with lateral ends slightly pointed. Disk flat, but rather thick, its upper surface covered with small, slightly swollen, irregularly shaped, overlapping scales, about five in the length of 1 mm. where they are coarsest. Radial shields blunt pear-seed shaped, slightly pointed within, separated by one large and several small scales. Interbrachial spaces on the under surface covered by the same kind of scaling. Three stout, tapering, bluntly-pointed arm spines, about as long as a joint, the lowest slightly longer than the others, placed close together on the side arm plate. Two tentacle scales, the one on the brachial side small and narrow, the interbrachial one much larger, with wide, rounded edge. Colour in alcohol, nearly white.

Station 171.—July 15, 1874; lat.  $28^{\circ} 33' S.$ , long.  $177^{\circ} 50' W.$ ; 600 fathoms; rock.

*Amphiura patula*, Lym. (Pl. XVII. figs. 4–6).

*Amphiura patula*, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 31, pl. xii. figs. 335–337, 1879.

Five (sometimes only four) mouth papillæ on each side. One tentacle scale. Mouth papillæ squarish and crowded. Side mouth shields large and wide. Disk scales small, irregular, and crowded.

(Type specimen from Station 156.) Diameter of disk 14.5 mm. Width of arm close to disk, without spines, 2 mm. Five (sometimes only four) squarish, crowded mouth papillæ on either side, whereof the outermost and innermost are largest; besides these there is an odd one at the centre of the apex. Mouth shields small, rounded triangular, with a blunt angle inward. Side mouth shields short and stout, rudely triangular in shape, the inner angles not quite meeting at the apex of the mouth shield. Under arm plates pentagonal, with inner angle sometimes truncated, outer edge slightly rounded, and small re-entering curves on the lateral sides. Side arm plates narrow, bent, not very prominent, meeting above, but just separated below. Upper arm plates much broader than long, transverse oval, with outer and inner edges gently curved. Disk flat, covered with thin, flat, irregular, crowded scales, among which six small widely separated primary plates are with difficulty distinguishable. Radial shields large and broad, of a wide pear-seed shape, separated their entire length by a narrow wedge of three or four scales. On the under surface the scales are much finer and more rounded. Three short, round, bluntly tapering arm spines, the middle one larger than the others but not so long as an arm joint, and all placed low on the side arm plate. Only one longer than wide, somewhat swollen tentacle scale, on the brachial side of the tentacle pore.

Except that it has usually five, instead of four, mouth papillæ on a side, this species stands related to *Amphiura dalea*, from which it is distinguished by smaller arm spines,