

(Type specimen from Station 171.) Diameter of disk 4 mm. Length of arm about 22 mm. Width of arm near disk 1 mm. One rather long, flat papilla on either side of the base of the small, short mouth angle, and a pair, much rounded, at apex. Scales of first pair of mouth tentacles long and rather conspicuous. Mouth shields much wider than long, rounded, with a wide curve within, and outer side feebly curved. Side mouth shields very narrow within, where they meet; wider without. First under arm plate small and narrow, being squeezed between the outer ends of the side mouth shields; those beyond are as broad as long, bounded without by a clean curve, on lateral sides by slightly re-entering curves, and within by a truncated angle. Side arm plates very short, so that there is a considerable naked space between them on the sides of the arm; they stand well out, forming a strong spine ridge. Upper arm plates narrow, longer than broad, nearly pentagonal, with rounded corners and an angle inward. Disk delicate, covered above and below with minute, thin, nearly uniform, overlapping scales; nine or ten in the length of 1 mm. where they are smallest. Radial shields very small, slightly sunken, of a pear-seed shape, nearly or quite touching without, separated within by a narrow wedge of minute scales; length to breadth $\cdot 9 : \cdot 3$. Five or six short, nearly equal, stout arm spines, whereof the lower are cylindrical and tapering, and the upper somewhat flattened and wider; lengths to that of an under arm plate, $\cdot 6$, $\cdot 6$, $\cdot 5$, $\cdot 6$, $\cdot 6$, $\cdot 7$, $\cdot 4$. Near tip of arm there are three long, sharp, and very slender spines, twice as long as the arm joints; this so great variation of form is rare in *Amphiura*. One oval tentacle scale. Colour in alcohol, nearly white.

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

Amphiura acacia, Lym. (Pl. XVI. figs. 15–17).

Amphiura acacia, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 21, pl. xi. figs. 292–294, 1879.

Disk scaled on both sides. One minute tentacle scale. Three short, moderately stout arm spines. Radial shields short and wide.

(Type specimen from Station 235.) Diameter of disk 4.5 mm. Length of arm, about 32 mm. Width of arm near disk, 1 mm. One flat rounded papilla on each side of the mouth angle, and a pair, blunt and thicker, at the apex. Scales of the first pair of mouth tentacles flat, and low down, so as to seem nearly on a level with the outer mouth papilla. Mouth shields small, rounded, longer than broad, widest without, and having a rounded point inward. Side mouth shields three-sided, short and broad, widely separated within. Under arm plates narrow, longer than broad, five-sided, with an angle within, outer side nearly straight, and lateral sides a little re-enteringly curved. Side arm plates somewhat flaring, with a well-marked spine ridge, meeting narrowly above and barely separated below. Upper arm plates twice as broad as long, with a clean curve within and