

the gap between them, shows the small lowest tooth. Mouth shields rather small, rounded, broader than long, often with a little peak inward; length to breadth, 1:1·2. Side mouth shields short and wide; narrower within, where they barely meet. Under arm plates, rather small, as broad as long, shield shaped, with a gently curved outer side, lateral sides a little re-enteringly curved, and an obtuse angle within. Side arm plates wide, with a knob-like spine crest, meeting fully above and nearly or quite below. Upper arm plates transverse oval, twice as wide as long, separated by the side arm plates. Disk round and flat, but not thin; covered above and below with rounded, overlapping, flat, rather large, very thin, translucent scales, with indistinct outlines; above they are of pretty even size, except a marginal row of larger, each of which is ·7 mm. long; below they are much finer; about 3 in the length of 1 mm. Radial shields large, of a rhomboidal form, except that the outer side is rectangular, much longer than wide, strongly diverging, with the outer ends nearly touching, but separated within by a broad wedge of numerous scales; length to breadth, 3:1·2. Three stout, short, cylindrical, tapering, blunt arm spines; lengths to that of an under arm plate, 1·1, 1·2, 1·3:·8. Tentacle pores large, with one minute scale on lateral side of under arm plate. The roots of the second pair of mouth tentacles come low down, and thus seem framed by the surrounding hard parts. Colour in alcohol pale grey.

Station 299.—December 14, 1875; lat. 33° 31' S., long. 74° 43' W.; 2160 fathoms; grey mud.

*Amphilepis papyracea*, Lym.

*Amphilepis papyracea*, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 34, figs. 429-431, 1879.

Disk thin and flat, with thin, fine scales. Three tapering, rather slender arm spines, a little longer than an arm joint. No tentacle scale. Radial shields nearly or quite separated their entire length.

(Type specimen from Station 198.) Diameter of disk 9 mm. Width of arm close to disk, without spines, 1·5 mm. Two wide, slender pointed mouth papillæ on each side, standing high up on the jaws. Four teeth, the three upper ones flat and wide, with a curved cutting edge; the lowest thicker and more conical. Mouth shields flat and small, of a wide heart shape with a rounded angle inward and outer edge rounded; length to breadth, ·7:1. Side mouth shields wide without, where they enclose the corner of the mouth shield, narrow and just meeting within. Under arm plates pentagonal with inner angle slightly truncated, lateral sides re-enteringly curved, and outer edge straight. Side arm plates with outer edge swollen; meeting above, and nearly so below. Upper arm plates thin and translucent, of a transverse oval shape, about twice as wide as long. Disk smooth, flat, angular and very thin, covered with small, thin, rounded, ill-defined scales. Radial shields with a vague outline, of a bent pear-seed