Astroschema horridum, Lym. (Pl. XXX. figs. 1-4).

Astroschema horridum, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 66, pl. xvii. figs. 458-461, 1879.

Entire surface covered with little, swollen, oblong angular plates or scales, bearing minute points.

(Type specimen from Station 170.) Diameter of disk 12.5 mm. Length of arm 195 mm. Width of arm near disk 4.7 mm.; height of arm 4.2 mm. Seven stout, thickened, rather small teeth, of the usual short spearhead shape. The mouth angles are paved with large, flattened, swollen grains, but have no true papillæ. Arms nearly cylindrical, very slightly swollen for their first 20 mm., beyond which they taper very regularly. They are evenly and pretty closely beset with minute points, like little blunt spines, about 4 in the length of 1 mm.; these, on allowing the surface to dry, are seen to stand on small, swollen, oblong, angular plates or scales, which may be considered as exaggerated grains set with points. This covering continues quite to the end of the arm, where, however, the grains are more rounded and without points. Disk thick, rising a little above the arms, elegantly scalloped on its margin, with large radial shields (ribs), which are thick, swollen, and projecting at their outer ends, and taper inward to the centre where they meet; its surface is paved with little oblong, angular, swollen plates or scales, rather coarser than those of the arms, and bearing similar minute points. Genital openings straight, and occupying about one-half the height of the disk. Mouth tentacles enclosed in a tube of flat grains; the next pair has no tentacle scale; the next one and those beyond have two, which are short at first, but about 40 mm. out become somewhat suddenly elongated, the upper one, about 1.3 mm. in length, remaining blunt, spiniform, while the lower and larger takes on the form of a cylinder 3 mm. long, with a rough, swollen end. The two lines of pores lie closer together than usual, so that the furrow on the lower side of the arm is narrow. Colour in alcohol, pale reddish-brown.

Station 170.—July 14, 1874; lat. 29° 45′ S., long. 178° 11′ W.; 600 fathoms.

Astroschema tumidum, Lym. (Pl. XXII. figs. 8-12).

Astroschema tumidum, Lym., Bull. Mus. Comp. Zool., vol. vi., part 2, p. 68, pl. xvii. figs. 450-453, 1879.

Disk and arms covered by regularly spaced, pointed, conical grains. The bases of the arms for two or three joints are strongly swollen.

(Type specimen from Station 192.) Diameter of disk 8 mm. Length of arm 135 mm. Greatest width of arm close to disk 3.7 mm. Width beyond the swelling 2.3 mm. Height of arm at same point 1.8 mm. Seven or eight short, flat teeth, with a curved cutting edge; the lowest one smallest. The general granulation of the disk is continued in a somewhat coarser form over the mouth angles, and up their sides; but