sharp lateral corners, and broad nearly straight outer edge, which on the basal plates bear s two minute spines. Disk flat, having re-entering curves in the interbrachial spaces, and rather sparsely set with minute, short, blunt spines, which are fewer below. The outer end of radial shields are exposed over the base of each arm. Genital openings long and large, extending from mouth shield to disk margin. Six long, slender, smooth, cylindrica tapering arm spines, of which the two upper ones are as long as two arm joints, thence diminishing in length to the lowest, which is about as long as half a joint. Pores large and tentacles very long; on basal ones are two scales, of a pointed oval shape; on those beyond, only one. Colour in alcohol, straw.

Station 207.—January 16, 1875; lat. 12° 21′ N., long. 122° 15′ E.; 700 fathoms; mud. Station 210.—January 25, 1875; lat. 9° 26′ N., long. 123, 45′ E.; 375 fathoms; mud.

In its elongated mouth angles, this species somewhat resembles Ophiacantha hirsuta, but its arm spines are smooth and in all ways different.

Ophiacantha troscheli, Lym. (Pl. XIII. figs. 1-3).

Ophiacantha troscheli, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 142, pl. ix. figs. 222-224, 1878; Bull. Mus. Comp. Zool., vol. v., part 9, p. 230.

Narrow ridge-like radial shields, which are partly naked. Disk beset on radial shields and centre with short, scarcely thorny spines, and in the interbrachial spaces with grains. Arms long and sinuous. Five or six stout, nearly smooth arm spines.

(Type specimen from Station 33.) Diameter of disk 7 mm. Length of arm 84 mm. Width of arm without spines 1.8 mm. Seven stout, short, blunt-pointed mouth papillæ to each angle, of which the innermost, standing under the teeth, is sometimes represented by two. Six or seven short blunt teeth. Mouth shields small, with an angle within and a curve without; length to breadth '8:1.2. Side mouth shields wide, with curved sides, extending well beyond mouth shield on either side and meeting within. Under arm plates rather thick and somewhat obscured by skin; rudely pentagonal, with an obtuse angle inward; first plate longer than broad, irregular, compressed, six sided; second plate also longer than broad, curved without and wider than within. Upper arm plate rather thick, yet showing the median ridge of the underlying arm bone; four sided, outer side curved or wavy, and wider than inner one, lateral sides nearly straight; length to breadth, 1.2:1.2. Side arm plates not meeting above near base of arm, and barely touching below; projecting very slightly even near end of arm, so that the knotted or bead-like outline usual in the genus is not seen. Disk set with numerous, essentially smooth spines about 1 mm. long. which stand mostly in centre and on radial shields; interbrachial spaces sparsely granulated. Radial shields naked for a large part of their length, long, narrow, joined, raised above surrounding surface; scaling hidden. Five or six essentially smooth, tapering, and nearly equal arm