Ophiobyrsa rudis, Lym. (Pl. XVI. figs. 18-20; Pl. XLIII. figs. 16-18).

Ophiobyrsa rudis, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 131, pl. viii. figs. 198-200, 1878.

Disk closely covered with short spines. Arms very long, tapering, and nearly cylindrical. Six short arm spines.

(Type specimen from Station 161.) Diameter of disk 28 mm. Length of arm 300 mm. Width of arm without spines 3.5 mm. One small, short, delicately pointed mouth papilla on each side of the mouth angle, and at the apex a clump of short, sharp, spine-like papillæ, which occupy the place of teeth. Mouth shields obscured by thick skin; only their rounded outline may be distinguished. Side mouth shields and upper arm plates entirely concealed by thick skin. Side arm plates project to form a thin, short, flap-like spine ridge. On the upper surface of the arm there are two longitudinal rows of very short, stout spines arranged in pairs, and usually standing on tubercles. Disk five-sided and rather thin, covered by a thick skin, which is closely and evenly beset above and below with short, stout, smooth, sharp spines or thorns; they are somewhat longer and more numerous near the margin of the interbrachial spaces, and are almost wanting just over the base of each arm. Six equal, short, blunt, flat, somewhat rough arm spines, partly covered by skin, not so long as an arm joint, and placed on the edge of side arm plate. Tentacles large, simple, and round. No tentacles scales. Colour in alcohol, disk, yellowish-brown; arms the same, but much lighter.

Station 161.—April 1, 1874; off entrance to Port Philip; 38 fathoms; sand.

Ophiomyxa.

Ophiomyxa, Müll. & Tr., Syst. Ast., 1842.

Disk and arms wholly covered with a thick, naked skin. No tooth papillæ. Mouth papillæ and teeth in the form of flattened lobes, with saw-like cutting edges. Arm spines stout, bulging at the base, thorny at the point, covered round the base with thick skin; near the tip of the arm, the lower arm spine has hooks along its edge. Arms rounded; arm plates imperfectly developed. No tentacle scales. Two genital openings, beginning outside the mouth shield.

A thick naked skin envelops the arms and disk where it is strengthened by a line of marginal, overlapping scales; minute scales are also more or less scattered on its under surface. The small, irregular radial shields rest their inner end on a clump of scales, after the fashion of *Ophiocoma*. Their outer end is articulated to a long, stout, rounded genital plate, to whose side, at a point far inward, is attached a short genital scale, the two together making a figure somewhat like a lobster claw. A row of stout scales unites the mouth shield to the genital plate. The arm bones have a rather long flat top with a

¹ See Bull. Mus. Comp. Zool., vol. iii., part 10, pl. vi. fig. 18.