sided, outer edge straight, lateral corners much rounded, and an angle inward; length to breadth '8:1. Side mouth shields squarish and large, widely separated by mouth shields, similar in form and position to the side arm plates beyond. First under arm plate small triangular, with an acute angle inward, and outer edge slightly curved; second plate four-sided, wider without than within; third plate as long as broad, much wider without than within, having outer corners rounded. All the plates are apparently composed of two pieces,—an inner, which has a sharp angle outward, and an outer, which comprises the rest of the plate. Side arm plates broad, not swollen, meeting neither above nor below. Upper arm plates wider without than within, considerably arched, and with outer corners prolonged in small peaks. Disk round and thick, covered above and below with very minute granulation, 15 or 20 grains in the length of a millimetre. Radial shields small, of a rounded pear-seed shape, nearly or quite joined, and to be seen only when the granulation has been removed. Genital openings extending from outer edge of mouth shield to margin of disk. Genital scales hidden by the skin and granulation. On the interbrachial edge of the side mouth shields are four short rounded papillæ. Three long, very delicate, pointed arm spines, the middle one a little the longest, upper and under spine of about the same size, and about as long as an arm joint. One long pointed tentacle scale on each of the first pair of tentacle pores; beyond there are two, one large and rounded, and one smaller and narrower. Colour in alcohol, white.

The description is from a specimen larger than the one figured.

A smaller specimen (Station 24) was more evenly granulated, and the radial shields were quite hidden. The upper arm plates were so thin as to show the arm bones through.

Station 24.—March 25, 1873; off Culebra Island; 390 fathoms; mud. Station 33.—April 4, 1873; off Bermudas; 435 fathoms; mud. Station 23.—March 15, 1873; off Sombrero Island; 450 fathoms; globigerina ooze.

Ophioconis.

Ophioconis, Ltk., Addit. ad Hist., part 3, 1869.

Entire disk, including more or less of the mouth angles, covered by a close and fine granulation. Numerous (7-9), slender, hollow arm spines. Numerous (10-14) small close-set mouth papillæ to each angle. Teeth. Few or no tooth papillæ. Two genital openings in each brachial space.

A general delicacy of structure characterises the skeleton (Ophioconis miliaria) including the disk scales which are small and thin, and the radial shields which are small and separated. Genital plate rather weak, and flattened, with a slightly clubbed head, and a thin genital scale attached at some distance inward. The mouth frames, which