

space below covered with thin scales sparsely set with small grains, which stand also on the margin. Two large genital openings, extending from the outer corners of mouth shield to margin of disk. On first joint, outside disk, four sharp slender arm spines, placed high on side arm plate, the uppermost one as long as an arm joint, the others progressively shorter; on joints beyond there are only two short spines. One large rounded tentacle scale on the inner edge of each tentacle pore; the second pair of mouth tentacles have a wide flap-like scale hinged on the side mouth shield, and enclosed by the wide outer mouth papillæ. Colour in alcohol, very light grey.

This is one of the very few deep-sea species that have a loose granulation on the disk.

Other specimens had the disk scales more regularly disposed than in fig. 13, and the radial shields pear-seed shape with an angle inward.

Station 218.—March 1, 1875; lat. $2^{\circ} 33' S.$, long. $144^{\circ} 4' E.$; 1070 fathoms; globigerina ooze.

Ophiopyren.

Ophiopyren, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, 1878.

Disk granulated. Teeth; no tooth papillæ; numerous mouth papillæ arranged in a close line. Mouth frames long and conspicuous. Side mouth shields small¹ and widely separated by the mouth shield. Under arm plates divided in two parts by a crease or joint. Arm spines standing on outer edge of side arm plates. Two genital openings in each interbrachial space.

Ophiopyren stands, perhaps, near *Pectinura*, from which it is distinguished by the divided under arm plates and the tendency to minute grain-like papillæ along the genital opening. The peculiar division of the under arm plates by a crease or soldered joint rises in this way; near the tip of the arm the inner piece of the plate occupies most of the space, under the form of a long narrow plate having a sharp angle without, where are the tentacle pores bordered by a narrow rim, and this rim, growing gradually wider and thicker, forms the outer piece as it appears near the base of the arm.

Besides delicate imbricated scales, the disk is covered by flat, nearly semicircular, closely joined radial shields, to which are joined slender, rounded, slightly clubbed, genital plates, with a thin, blade-like genital scale. The arm bones, beyond the disk have an outer apophysis like that of *Ophioplax*. But the most striking feature is the double peristomial plate, one half stretching on either side, as a long narrow strip, from the outer corner of the mouth frame, to the centre of the mouth angle.

See Plate XXXIX. figs. 4–6.

¹ Their strict homology with the side arm plates is very plain in this genus, especially in *Ophiopyren longispinus*.