

whereof the one next the under arm plate is much the smaller. Colour in alcohol pale grey.

Station 171.—July 15, 1874; lat. 28° 33' S., long. 177° 50' W.; 600 fathoms; rock.

The following four genera are allied. *Ophiacantha* is distinguished by the delicate scales and slender radial shields obscured by skin; *Ophiothamnus*, by its wide naked radial shields, and by the peculiar jaw cover of three symmetrical pieces; *Ophiomitra* by the coarse disk plates and scales, and wide naked radial shields; and *Ophiocamax* by the tufts of numerous spiniform mouth and tooth papillæ, and the scales of the mouth tentacles borne on a special plate. The old genus *Ophiacantha* embraces the greatest variety of forms, from *Ophiacantha bidentata* and *Ophiocantha vivipara*, which come near *Ophiocoma*, to the delicate *Ophiocoma pentacrinus*, with its thorny, translucent arm spines and its knotted arms.

Ophiacantha.

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

Disk somewhat thick and swollen and clad in a thin skin, that more or less obscures the underlying even coat of fine imbricated scales, which sometimes completely covers the long narrow radial shields, and bears spines, thorns, or rough grains. No tooth papillæ. Mouth angle rather large and bearing numerous (7–16) sharp, rather long, papillæ. Teeth sharp and elongated. Arm spines hollow, numerous (4–11); usually rough or thorny. Side arm plates large, and nearly or quite meeting above and below. Two genital openings in each brachial space.

From its under side the disk scaling is seen to be thin and usually uniform. It is supported by long narrow, bar-like radial shields, whose outer end is but little enlarged where it joins the thick, club-headed, somewhat rounded genital plate, to which is attached a short, blade-like scale. The arm bones are wider than high, and have thin simple wings whose margins are not grooved. Their outer and inner faces are of the typical form, and have the lower canal like a small, nearly-closed notch. The mouth angles are stout and compact, and the tops of the mouth frames wide, a portion being covered by the thick, rounded, rather large peristomial plate, which is in a single piece.

A comparison of species shows some good specific differences resting on internal structure, and some divergence from the generic type. Thus *Ophiacantha abnormis* has both jaw and peristomial plate exceptionally narrow, while the radial shield is wide and thin, and the genital scale much longer than is usual. *Ophiacantha vivipara* and *Ophiacantha granulosa* have their radial shields prolonged inward by lines of imbricated, supplementary scales, thus showing a slight approach to *Ophiocoma*.

See Plate XLI. figs. 12–14.