teeth, which are sometimes almost spiniform, but usually flattened. Mouth shields much wider than long, with a well marked obtuse angle inward and the outer side gently curved; length to breadth, '7: 1'1. Side mouth shields long, rather narrow, of nearly equal width, slightly curved, and fully meeting within. First under arm plate small, longer than broad, hexagonal, with rounded corners; the plates beyond are rather small, wider than long, bounded without by a broad curve, and within by an obtuse angle; the lateral sides are very short, or are confounded in the outer curve. Side arm plates small, somewhat wider than long, fan shaped, with inner angle rounded. Disk rather thick, finely and uniformly granulated above and below, about seventeen grains in the length of 1 mm. Four cylindrical, tapering, rather slender arm spines, whereof the uppermost is longest: lengths to that of an arm joint, 1'1, '6, '5, '4: '6. One small, narrow tentacle scale. Colour in alcohol, straw.

Station 320.—February 14, 1876; lat. 37° 17' S., long. 53° 52' W.; 600 fathoms; hard ground.

Species of Ophiochondrus not herein described.

Ophiochondrus convolutus, Lym. (Pl. XLIII. figs. 11-15).

Ophiochondrus convolutus, Lym., Bull. Mus. Comp. Zool., vol. i., part 10, p. 328, 1869; Il. Cat. Mus. Comp. Zool., No. vi., pl. ii., fig. 7; Bull. Mus. Comp. Zool., vol. v., part 9, p. 223.

West Indies; 175 to 292 fathoms.

Hemieuryale.

Hemieuryale, V. Mart., Monatsb. König. Akad. Berlin, 1867.

Teeth. Numerous small crowded mouth papillæ. No tooth papillæ. Disk small and covered with scales and large swollen radial shields. Arms long, and rolling in a vertical plane, furnished with under and side arm plates of the ordinary form, but covered above by a mosaic of small, swollen plates, whereof one, much larger and higher than the rest, is on each side of the arm. Two short genital openings in each interbrachial space.

Here is another solid structure comparable to Ophiochondrus. The great radial shields with their thickened margins occupy almost the entire upper disk (Pl. XLIII. fig. 7). To each is jointed a massive, shapeless genital plate (o) extending quite to the mouth shield, and which has soldered to it a small genital scale (n). The mouth angles are compact, and the mouth frames (f) scarcely flaring over the nerve ring is a small, single, rounded peristomial plate (v). Beyond the disk the arm bones are elongated, much as in Ophiochondrus (fig. 10), and, in profile, exhibit an umbo (1) projecting from the hinder end, and a still larger articulating shoulder from the outer end; while below are large