Station 78.—July 10, 1873; lat. 37° 24′ N., long. 25° 13′ W.; 1000 fathoms; globigerina ooze. Station 146.—December 29, 1873; lat. 46° 46′ S., long. 45° 31′ E; 1375 fathoms; globigerina ooze. Station 156.—February 26, 1874; lat. 62° 26′ S., long. 95° 44′ E.; 1975 fathoms; diatom ooze.

Ophiopyrgus.

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

Disk high and dome-shaped, covered with thick swollen plates, and surmounted by a central primary plate, which rises like a cone. Arms slender, smooth, and tubular, with side arm plates very large, and upper and under arm plates small. Basal tentacle pores very large; those beyond small and situated near sides of arm. An arm comb. Arm spines minute, and standing on outer edge of side arm plate. Two long genital openings in each interbrachial space.

This is the most singular-looking genus yet found among the Ophiuridæ. With its peglike central primary plate and dome-like disk it suggests a simple armed Crinoid whose head has been broken from the stem. By its heavy, closely soldered plates and peculiar tentacle pores, it recalls *Ophiomusium*; by its enclosed mouth tentacles and arm comb, it brings to mind the deep-sea *Ophioglyphæ*, but it differs pretty widely from both.

Ophiopyrgus wyville-thomsoni, Lym. (Pl. IX. figs. 15-17).

Ophiopyrgus wyville-thomsoni, Lym., Bull. Mus. Comp. Zool., vol. v., part 7, p. 121, pl. v. figs. 135-137, 1878.

One minute arm spine on basal joint; farther out, none; a double arm comb over top of arm, the upper one consisting of three or four small papillæ on edge of outer end of genital scale; the under, likewise of three or four papillæ, on edge of side arm plate. Interbrachial space below wholly filled by mouth shield.

Diameter of disk 4 mm; height of disk 4.3 mm; length of arm 13 mm.; width of arm 1.2 mm. Mouth papillæ small, similar, separated, tooth-like; seven or nine to each angle, whereof the innermost is slightly largest. Mouth shields longer than broad, oval, with a peak inward, occupying the entire interbrachial space below, and bending upwards to half the height of arm. Side mouth shields very small and sunken, meeting within, and covering only the inner peak of mouth shields. First under arm plate very long axe-shape, with a curved edge outward and a long, tapering point inward, compressed between two large oval tentacle pores; second plate similar, but smaller; third and fourth plates shorter and still smaller; beyond which the plates are represented by a small knot of a transverse diamond-shape, and growing rapidly less towards end of arm. Side arm plates large, but not swollen, meeting widely above and below, occupying most of the arm, which acquires thereby a tubular, rapidly tapering form. The side arm plates belonging to second under plate are wide, and stretch laterally to meet the mouth shield. Disk as