

Diameter of disk 4 mm. Length of arm 12 mm. Width of arm without spines 1 mm. Mouth angles prominent and separated by wide mouth slits; at apex is a thick, rounded jaw plate bearing three sharp, spiniform tooth papillæ, above which are teeth of similar shape; on either side are two spiniform mouth papillæ, whereof the outer one is longer and serves as a tentacle scale to the second mouth tentacle. The condition of the single specimen did not allow the forms of the mouth shields and side mouth shields to be made out, as they were pretty closely soldered and more or less covered with skin; they seemed, however, similar to those of *Ophiohelus umbella*. Under arm plates of a long axe-shape, much broader without than within, with a widely curved, outer edge, deep re-entering curves on lateral sides, and a small angle within. Side arm plates nearly meeting below, widely separated above, having a feeble spine ridge on their outer margin; before partly drying the specimen it is hard to make out their outline. No upper arm plates, so that the curious double arm bones show through the translucent skin (fig. 6). Disk, soft and delicate, slightly puffed, covered uniformly with scales so very thin that they can only be seen under the microscope by a cross light. No radial shields. Three nearly equal, sharp, somewhat flattened, arm spines, about as long as an arm joint and a half. When cleaned with potash they appear as two parallel spiculæ united by cross-bars (fig. 8). At the ninth joint there still are three spines standing near the outer margin of the side arm plate, but at a large angle to the arm, and just inside their base is a single minute parasol spine, or pedicellaria, about 0.6 mm. long (fig. 9); and stouter and with a larger head than in *Ophiohelus umbella*. On the joints beyond there are no longer any common spines, but, instead, two close rows of parasol spines, three or four in each row (fig. 7). Tentacles large, long, smooth and not provided with scales.

Colour in alcohol, translucent bluish-white.

Station 175.—August 12, 1874; near Fiji Islands; lat. 19° 2' S., long. 177° 10' E.; 1350 fathoms; red clay.

Species of *Ophiohelus* not herein described.

*Ophiohelus umbella*, Lym. (Pl. XXVIII. figs. 10-11).

*Ophiohelus umbella*, Lym., Anniv. Mem. Bost. Soc. Nat. Hist., pl. i. figs. 5-10 and 16, 1880.

Off Barbadoes; 82 fathoms.

*Ophiotholia*.

*Ophiotholia*, Lym., Anniv. Mem. Bost. Soc. Nat. Hist., 1880.

Disk and arms capable of being raised vertically: the former covered by a delicate scaling set with minute spines. Mouth angles clothed with several rows of wide, flat