

one is seen. Compared with the hook of *Placostegus assimilis*, the transverse striæ are much wider, while the hook on the whole is less.

The tube is comparatively smooth:

The hooks of this species seem to be minutely toothed, much more so than in the known forms. Their structure, indeed, approaches that of the genus *Omphalopoma* of Mörch,¹ but the conical nature of the operculum is characteristic.

Spirobranchus, Blainville.

Spirobranchus occidentalis, n. sp. (Pl. LV. fig. 10; Pl. XXIXA. figs. 31, 32).

Habitat.—Dredged at Station 33 (off the Bermudas), April 4, 1873; lat. 32° 21' N., long. 64° 35' W.; depth, 435 fathoms; surface temperature, 68°·0; sea-bottom, coral mud. It was attached to a tube of *Placostegus assimilis*.

The branchiæ have a sinuous arrangement, but such is probably due to their retraction within the tube on preservation in spirit, and they are only a little shorter than the body (the total for both being about 7 mm.). The radioles are marked by transverse wrinkles at somewhat regular intervals, and the tip of each ends in a smooth filiform process, slightly thickened distally. The terminal pinnæ reach as far outward as the latter.

The operculum had a short, horny, conical process (shaped somewhat like a hook) projecting from its surface, but it broke off before a figure could be made. This process was situated on an elevation near the edge most distant from the branchiæ, as usual in the group. The operculum is horny, blackish-brown in colour, and nearly circular. It is supported by a hollow membranous process, which is only a little constricted inferiorly, so that it is nearly cylindrical, the upper part of the peduncle being flattened out into a broad fan-shaped end to meet it. The cephalic collar is ample, presenting dorsally a large lateral lamella on each side of the median fissure, and being thrown into many frills ventrally, though no fissure occurs.

The anterior bristles (Pl. XXIXA. fig. 31) somewhat resemble those of the previous *Vermilia*, having a short tapering tip with well-marked wings, the edges of which are serrated.

The anterior hooks (Pl. XXIXA. fig. 32) have an elevated crown and a very long serrated edge, no less than eleven or twelve teeth occurring above the great fang. Moreover, the latter is produced in a remarkable way, and the tip is bifid. The dorsal line has a deep incurvation, but the ventral margin is nearly straight. There is a small truncated prow below the notch under the great fang. The striæ on the body of the

¹ *Op. cit.*, Revisio critica Serpulidarum, p. 421.