hook are wide, and have peculiar intermediate transverse markings, like those on certain feathers.

The tube forms a single coil, which measures from 3 to 5 mm. across, according to the direction of the axis; but a terminal piece apparently pertaining to it is not included in this calculation. The tube is finely marked with somewhat wavy transverse ridges, except on the free part, which has only one or two isolated transverse processes and some longitudinal ridges. The aperture of the tube is round. A smaller tube runs outside the foregoing in the attached portion at the margin.

The hooks thus differ from those of Spirobranchus (Cymospira) giganteus, Pall. (British Museum specimens, from St. Vincent, West Indies), in having a well-marked dorsal inflection, in the great projection of the anterior bifid process, and in the nature of the outline beneath the latter. The hooks of Cymospira brachycera, Baird, from Australia, also have a very diagnostic shape, the anterior inferior process being short and turned upward. A small form, Cymospira decumbens, Sowerby, occurs in the same collection from Van Diemen's Land, and differs from the Challenger form in the operculum and uncini. Grube does not figure the hooks of his Philippine species of Spirobranchus (Serpula tricornigera and Serpula quadricornis), and thus their relationship is in some respects uncertain.

Spirorbis, Daudin.

Spirorbis sp. (?)

Habitat.—A fragment occurred on Polyzoa dredged at Station 149G (off Christmas Harbour, Kerguelen), January 29, 1874; lat. 48° 50' S., long. 69° 18' E.; depth, 110 fathoms; surface temperature, 40° 2; sea-bottom, volcanic mud.

A fragment of a coiled tube, apparently belonging to the Serpulidæ, comes from the Admiralty Islands. It has a diameter of 2.5 mm. and a length of 17 mm., is marked by transverse wrinkles and a few longitudinal furrows. It is nearly round, the attached parts being flattened, and a slight ridge occurring here and there. A spinous Lepralia is attached to a sheltered portion of the external surface.

Another empty, smoothly rounded tube, somewhat regularly coiled round a central axis which is hollow, was trawled at Station 201 (off the Philippines, Basilan Strait), October 26, 1874; lat. 7° 3' S., long. 121° 48' E.; depth, 82 fathoms; surface temperature, $83^{\circ}\cdot0$; sea-bottom covered with stones and gravel. The tube is a long one, with a diameter at its widest part of 2.5 mm. This coiled arrangement round an oblique (hollow) axis is peculiar. Externally are various Lepralia.