is placed in the centre of the tunnel. The second row consists of two scale-like spicules which tightly embrace one-half of the body of the polyp, the everted edges are triangular in shape, these measure about 1.5 mm. in length by 1 mm. in width. The third row also consists of two scales about 1 mm. square, with everted frill-like margins. All these three series are doubtless movable on one another. The opercular series of from six to eight triangular-shaped scales are remarkable, in that those nearer the axis are less calcareous and less fully developed than the outer ones, so that this portion of the polyp is, when in a fully expanded condition, nearly naked.

The spicules of the connechyma are oblong thickened scales, arranged side by side, not imbricated, very feebly tuberculate or granular (tubercles or granules striate), sometimes slightly irregular branched. Measurements, 1.3-0.2 mm. in narrowest and 0.302 in broadest end; 0.804-0.3; 0.4-0.106; 1.204-0.404; 0.402-0.102; 0.402-0.1 mm.

The spicules of the polyp bodies are very irregular in form. Those of the two adjoining lateral polyps on each whorl have been already referred to. They are in shape somewhat like the clawed petal of a pink, and in the drawing (Pl. XIV. fig. 5) are seen in profile. The blade or expanded portion is 2 mm. broad by 1 mm. deep, and the claw-like part is 1.5 mm. long; it is placed at an angle to the blade, but its base is nearly as broad as the broadest part of the blade. The outer spicules of the inner polyps are much smaller and less winged. Some of the opercular spicules are triangular and keeled, others are folded on themselves. When they, on the withdrawal of the tentacles, approach one another, the larger and outer four fall over the inner series and become themselves slightly imbricated like the petals in a papilionaceous corolla. The larger opercular scales measure 1-0.5; 1.3-0.6 mm. The polyp tentacles have some needlelike spicules, about 0.3-0.02 mm.

This remarkable form, in the peculiar bilateral arrangement of its whorls of polyps upon the main axis, recalls to some extent *Callozostron*.

Habitat.-Reefs, Fiji. (This is almost certainly a deep-sea form.)

Genus 2. Stachyodes,¹ n. gen.

Axis sparingly and dichotomously branched, consisting of a dense horny matrix, with calcareous particles intermixed in the older portions, highly iridescent. Polyps in closely arranged verticils, about five in each verticil, tentacles retractile, when retracted the opercular scales touching the basal scales of the lower row of polyps. Polyps with oral region opening downwards. Spicules of the bodies of the polyps in three series of two each, the spicules of each series either touching each other. or overlapping, and symmetrical.