

Cœnenchyma rather thick, with numerous spicules; polyps crowded together, but in a uniserial manner on the axis; each polyp somewhat overlapping the one in front of it. When the tentacles are retracted the polyps measure from 5 to 6 mm. in height. Spicules on the polyp bodies, large, spindle-shaped; those at the base of each tentacle are small, and are arranged in eight rows, so that when the tentacles are retracted they form an opercular covering over the oral cavity; some of the larger spicules are bent, rough at the ends, or have the ends prolonged into irregular projections.

The spicules measure 1.5-0.13; 0.75-0.13; 0.53-0.12; 0.35-0.12; 0.25-0.04; 0.54-0.13; 0.75-0.02 mm. (these latter are to be found in the tentacles).

Habitat.—Station 232, Yedo; May 12, 1875; depth, 345 fathoms; bottom, green mud.

2. *Strophogorgia verrilli*, Perceval Wright (Pl. I. figs. 2, 2a; Pl. VA. fig. 3).

Strophogorgia verrilli, Perceval Wright, Narr. Chall. Exp., vol. i. pt. ii. p. 697, 1885.

Colony unbranched. Axis calcareous, thin, hair-like. The only specimens found are without their basal attachments, and are about 18 cm. in length. The cœnenchyma on the axis is thick; the spicules composing it are arranged side by side, and are intercalated with one another. The polyps are arranged in a uniserial manner on the axis, and measure about 3.5 mm. in height by 1 mm. in width; the body portion of each polyp is covered with broad, spindle-shaped spicules, which are larger and denser on the portion of the body nearer the axis; at the base of the tentacles, and extending for a little way down the body of the polyp, the spicules are arranged in eight rows, which on the tentacles being inverted, become folded over the oral cavity and form an eight-rayed quasi-operculum; the large spicules are irregular in outline, often dentate at one or both ends.

The polyps are placed on the stem, at distances of about 6 mm. apart.

Some of the largest of the spicules measure 2 mm. in length by 0.25 mm. in breadth, others 0.99-0.12; 1-0.16; (at broad extremities) 1 and 1-0.12; (in middle) 0.56-0.08; 0.54-0.08; 0.58-0.1 mm.

Habitat.—Station 235, Japan; depth, 565 fathoms; bottom, green mud.

Station 237, Japan; depth, 1875 fathoms; bottom, blue mud.

3. *Strophogorgia challengerii*, Perceval Wright (Pl. I. figs. 1, 1a; Pl. VA. fig. 2).

Strophogorgia challengerii, Perceval Wright, Narr. Chall. Exp. vol. i. pt. ii. p. 691, 1885.

The colony is unbranched, erect, calcareous, long and flexible, with an average height of about 45 cm. The axis is extremely brittle, highly iridescent; about 1 mm. in diameter; base with several thin, rhizome-like processes. The cœnenchyma of the axis is extremely thin, with scarcely a trace of spicules; letting the stem be seen easily