

through it. The polyps are placed on the stem in a uniserial manner; about 4 mm. apart; the axis is slightly swollen at the places where the polyps are attached; the tentacles are retractile. On the lower portion of the polyp body the spicules are few in number, but gradually towards the upper portion of the body these are arranged in eight rows, which when the polyp is contracted cover over the oral region and form an imperfect, conical operculum. Numerous specimens of this interesting species were found in the one haul of the dredge off Cadiz. The spicules are the smallest in all the known species. They are either narrow spindles, or of an oblong stellate form with a few lenticular-shaped ones on the tentacles.

Spicule measurements, 0.3-0.03; 0.3-0.025; 0.1-0.03; 0.075-0.02 mm.

Habitat.—Station IV., January 16, 1873; below Cadiz; depth, 600 fathoms; bottom, blue mud.

4. *Strophogorgia fragilis*, n. sp. (Pl. II. fig. 2; Pl. VA. fig. 4).

In this species, which might perhaps be referred to a new genus, the axis seems to have formed a creeping stolon, embedded in the mud; it is unbranched, very feebly calcareous. The coenenchyma on the axis is very thin, almost without spicules.

The polyps are large, elongate, arranged in a single row on the stem; about 1 to 5 mm. apart; the basal portion of each polyp is narrow, but it gradually widens towards the apex, becoming again slightly contracted about the middle. The polyps measure from 4 mm. to 4.5 mm. in height, with a diameter of from 1 to 1.5 mm. The tentacles are retractile.

The spicules on the basal portion of the bodies of the polyps are small and scattered all over the surface, towards the middle they become arranged into eight rows, which when the polyps are contracted are continued over the oral cavity, upon the base of the tentacles, forming an imperfect operculum.

The spicules are of a wavy spindle form, with sometimes one extremity expanded; at other times, the terminal points are very finely dentate; a few unsymmetrical double spindles and minute lenticular forms occur.

Spicule measurements, 0.68-0.08; 0.76-0.03; 0.6-0.04 mm.

Habitat.—Station 70, June 26, 1873; lat. 38° 25' N., long. 35° 50' W.; depth, 1675 fathoms; bottom, Globigerina ooze.

Subfamily 2. CHRYSOGORGINÆ.

Chrysogorgia, Verrill, Bull. Mus. Comp. Zool., vol. xi. No. 1, p. 21, 1883.

Colony branched. The axis invariably consists of a main stem, springing from a calcareous base, which is either disc-like or stoloniferous, and of branches, which come off from the stem in an ascending spiral. The latter are either uniserial (*Iridogorgia*), or