bases of the tentacles themselves are three spinose slightly curved spindles, which converge in pairs with their points directed towards the apex of the tentacle, while a third, smaller and flatter, fills the space between the two convergent spindles. The folded-in portion of the tentacles is also equipped with small spicules arranged *en chevron*.

The axis is horny and fibrous, its colour yellowish brown, darker in the older parts, longitudinally grooved, with wide axial canal; the presence of the canal causes the thin twigs, when dried, to appear shrivelled up. As appears from the description, this species resembles very closely the Mediterranean species *Bebryce mollis*. The colony is, however, more branched, the polyp calyces are larger, and there are also differences in the dimensions of the spicules.

The colour of the colony is light brown in the specimens preserved in spirit, white when dried.

Habitat.—Station 190; lat. 8° 56′ S., long. 136° 5′ E., Arafura Sea; 49 fathoms; green mud.

Anthogorgia, Verrill.

Anthogorgia, Verrill, Amer. Jour. Sci., vol. xlv. p. 412, 1868; Proc. Essex Inst., vol. vi. p. 44, Sept. 1869.

The genus was established by Verrill for a species of Muriceidæ from the China Sea, *Anthogorgia divaricata*, Verrill, with the following diagnosis:—"Verrucæ prominent, tubular, the summit eight-rayed in contraction, formed by a thin integument, in the surface of which large, long, mostly bent spindles are embedded at various angles, and so interlaced as to form a sort of network of spicula with depressions between. Cœnenchyma granulous, filled with large warty spicula similar to those of the Verrucæ, but usually shorter and stouter." Specimens taken during the voyage of the "Gazelle," off the coast of West Australia, resemble in habit those of the genus *Villogorgia*, Duch. and Mich., but they do not agree in the character of the spicules, which are never spinose plates, but are spindle-shaped. Moreover, *Anthomuricea*, Wright and Studer, which resembles Verrill's genus in the form of the calyces, differs in the irregular distribution of the calyx spicules. It seems to me best to place in this genus one of the Muriceidæ from Japan, which was obtained among the Challenger specimens.

Anthogorgia japonica, n. sp. (Pl. III. figs. 2*a*, 2*b*; Pl. V. fig. 6).

The colony is upright, branching in one plane, and consists of a main axis, with twigs and secondary twigs from its two sides. The horny axis is covered with a thin