

the larger branches one of 2.5 mm., the terminal branches have a basal diameter of 1.5 mm., and an apical one of 2.2 mm. The cœnenchyma is thin, but provided with a layer of large spindle-shaped spicules. The polyps are found chiefly on one surface, and on the margins of the stem and of the twigs of the colony, while the other portions of the surface are covered only with the cœnenchyma. The distance between the polyps is from 1 to 1.5 mm. On the thickened and flattened ends of the branches there are two opposite polyps. The polyps present an erect, wart-like body, with a broad base of a diameter of 1.5 mm., and a height of 0.8 mm., they are closed by an imperfect operculum. The spicules are mostly discernible by the eye. In the cœnenchyma they are somewhat flattened spindles, whose margins are furnished with dentations, which can intercalate with those of the neighbouring spicule. Sometimes, especially towards the base of the polyps, they expand into longish discs truncated on both sides, or running out into short prominences. Their surfaces are covered with rough wart-like protuberances. The longest spicules have a length of 3 mm., with a diameter of 0.2 mm.; others measure 1.3-0.5; 0.9-0.3 mm. On the polyps the spicules are discoid, arranged in the form of a ring, sometimes triangular, sometimes rhomboidal; towards the margin of the calyx they are scale-like, and the protuberances often take the form of comb-like teeth. Their thickness differs very much; their length by breadth is 0.9-0.3; 0.4-0.3 mm.

The operculum is formed of smooth, scaly and dentate spicules, which are found in the basal portions of each tentacle; these are at once distinguished by their violet colour, which contrasts with the white spicules of the body. Sometimes these are spear-shaped; sometimes they remind one of the Stachelplatten of *Paramuricea*. Their length by breadth, *i.e.*, the greatest diameter, is 0.54-0.41; 0.4-0.2; 0.26-0.07; 0.2-0.05; 0.33-0.16 mm. An incomplete ring of curved blunt spindles forms the collar. The axis is horny, rigid, and of a brownish-yellow colour; it is very feebly flexible. The colour of the cœnenchyma and of the polyps is white, but the oral region is of a dark violet. From *Acis orientalis*, Ridley, to which this species is nearly related, it may be distinguished by the form of the spicules and by the compressed stem.

Habitat.—Station 232, the *Hyalonema*-ground, Japan; depth, 345 fathoms; bottom, green mud.

Genus 12. *Muricella*, Verrill.

Muricella, Verrill, Trans. Connect. Acad., vol. i. p. 450, 1869.

Verrill (*loc. cit.*) subdivides the genus *Muricea*, as emended by Kölliker, into three divisions. One, *Muricella*, comprises the East Indian species; the species of the other two, *Muricea* and *Eumuricea*, being chiefly limited to the Atlantic Ocean and to the West American coasts. But *Muricella*, at least, differs so much from the others that we feel justified in keeping it generically apart; a conclusion adopted by Ridley.