

from these are given off from the one side of the branches, and when themselves branched to a third degree, the same fact holds true. This mode of growth is very constant and it gives a graceful, semi-pendulous outline to the colony. The larger branches are of about the same thickness as the main stem. The axis is calcareous, brittle, with a thin cœnenchyma containing the characteristic spicules of *Juncella*.

The polyps are numerous both on the stem and branches, prominent. The tentacles fold in over the oral region of the polyp, and during the various stages of contraction the apex of the polyp body shows an eight-rayed star, formed of the basal portions of the infolding tentacles; when the contraction proceeds still further, a simple papilla is to be seen. The fully contracted verruca measures about 1 mm. in height and 0.5 mm. in width. On one surface of the stem and branches the polyps are absent, and on this naked portion a feebly marked groove may be seen winding up the stem. The polyps are much more numerous and crowded on the smaller branches, where they are placed in three or four rows.

The spicules are very uniform in size, many of the clubs are of an amber colour, the unsymmetrical clubs measure from 0.06-0.04 to 0.06-0.2 mm.; the double stars from 0.08-0.02 to 0.08-0.04 mm.; the needle-shaped spicules in the polyps, especially at the base of the tentacles, measure from 0.1-0.04 to 0.06-0.04 mm.

The colour of the cœnenchyma and the polyps varies from a reddish-yellow to a dark red. The bases of the polyps and the tentacles are of a much lighter hue.

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

Genus *Ellisella*, Gray (*emend.*).

Ellisella, Gray, Proc. Zool. Soc. Lond., p. 257, 1857.

„ Gray, Cat. Lithophytes Brit. Mus., p. 25, 1870.

„ Gray, *emend.*, Studer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 655, 1878.

Dr. Gray in 1857 (*loc. cit.*) established this genus for *Gorgonia juncea*, Pallas, *Gorgonia elongata*, Pallas, and *Gorgonia pectinata*, Pallas. Afterwards (1870) in his Catalogue he limited the genus to *Gorgonia elongata*, Pallas, and allied forms, referring the first and the last of the above-quoted species to the genera already established for them by Milne-Edwards. Studer (1878) emended Gray's generic diagnosis and added two new species, *Ellisella calamus* and *Ellisella maculata*, both from Mermaid's Straits in North-west Australia.

Ellisella maculata, Studer (Pl. XXXIV. fig. 9).

Ellisella maculata, Studer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 659, taf. iv. fig. 27, a, b, c, 1878.

One fragment of this species from Torres Strait in the collection is unbranched; it is about 150 mm. in length, from what appears to be its basal portion, with a diameter of