

The axis is hard, but elastic, yellowish-brown, with a shining, somewhat iridescent surface.

The polyps have a length of 2 to 2.5 mm. They are pitcher-shaped, and in the specimen examined their bases are expanded in a sac-like manner owing to the great number of ova which they contain. On the stem and on the twigs there is, on an average, one polyp on an internode, seldom two. The cœnenchyma on the stem and branches is thin, yet only slightly transparent.

In the polyps the spicules are thin, transversely elongated scales, the upper edges of which cover the base of the next following. Their edges are undulating to lobate, the upper edge in particular being provided with a projecting convex lobe. One lateral edge usually appears drawn out into a point, the other blunted. The lower edge is notched. By way of sculpture the scales exhibit fine lines, which radiate from a central point.

The height to length in mm. reaches 0.25-0.1; 0.26-0.12; 0.33-0.12. In the cœnenchyma the spicules are smaller and more simply constructed, 0.21-0.04; 0.22-0.06 mm.

The deeper layer consists of much bent, rod-shaped forms provided with off-shoots and processes, and smooth forms which frequently exhibit a double and quadruple formation. At the base of the polyp, thin spicules, bent so as to correspond to the periphery thereof, and bearing teeth and spines on the convex side, form a ring around it; they reach 0.41 mm. in length. Further up they are straight, thorny, with three or four root-like processes at one end, 0.3 and 0.25 mm. long. In the cœnenchyma 0.12-0.05 mm.; 0.21-0.04 mm.; 0.11; 0.2-0.06 mm.

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

Station 201, off the Philippines; depth, 82 and 102 fathoms; bottom, stones, gravel.

## 12. *Dasyorgia acanthella*, n. sp. (Pl. IV. fig. 6; Pl. V. fig. 8).

The upright stem gives off branches in quick succession from four sides, which arise from the stem in short spirals. The branches come off from the stem nearly at right angles, and are bent in different planes at the points where the twigs come off. Ramification proceeds to the fifth order. The polyps are placed abundantly on the stem, about two in each of the short internodes; on the branches one or two in an internode; on the terminal twigs often three. The stem polyps are short and flattened, in contrast to the polyps on the twigs, which are obliquely directed towards the apex of the twig. Imbedded in the cœnenchyma of the axis there are little conical zooids. The scales of the polyps overlap one another on opposite sides, and are broad, flat and transversely placed; they are continued into the tentacles in two or three rows. The scales of the