

The spicules of the polyp are large and broad, and overlap each other at the edges, they are continued up the tentacles in two rows. Their form is unsymmetrical. Generally a portion of the finely toothed upper edge projects forwards as a lobe; the one lateral edge appears truncated, the other rounded off. The height to length in mm. reaches 0.32-0.33; 0.1-0.23; 0.12-0.22.

The cœnenchyma has scales of an oval or irregularly rounded shape, 0.16-0.28; 0.12; 0.1-0.23 mm.

In the zooids there are little spinulose spicules; either a small disc-like scale with a spine and serrated edges, or with a blunt process, sometimes bifurcate at the end.

Disc-like spicules 0.12 mm., spine 0.16 mm. Flat portion of disc 0.2, spine 0.2 mm. Disc 0.14, spine 0.21 mm. The deep layer of spicules consists of small, oval, four-cornered, lancet-shaped, or three-cornered little bodies, 0.12, 0.08, 0.1 mm. in diameter, which are connected together by toothed edges.

*Habitat.*—Station 171, north of the Kermadec Islands; depth, 600 fathoms; bottom, hard ground.

13. *Dasygorgia axillaris*, n. sp. (Pl. IV. fig. 7; Pl. V. fig. 9; Pl. VA. fig. 11).

The upright little stem is angularly bent at the point of departure of the branches, and gives off branches at right angles, which are placed around the stem in spirals on three sides. The fourth branch stands in line with the first. The ramification takes place in different planes and proceeds to twigs of the fifth order. The polyps are small, pitcher-shaped, and are placed perpendicularly to their support. The axis is horny, elastic, flexible; in the stem, yellow, shining, with iridescent surface. Zooids are present on the cœnenchyma in great numbers. The scales of the polyps are relatively large, unsymmetrical, placed transversely to the long axis, iridescent. At the base of each tentacle stand one or two larger scales, whose upper edge projects above the base of the tentacle. The scales of the cœnenchyma are small, irregular, little plates.

The stem of the larger colony, which is broken off immediately above the base, is 100 mm. high, its diameter at the lower end reaching 1 mm. The branches first arise at a height of 50 mm., but their points of origin are traceable down to 15 mm. above the base. The branches come off from the stem in three directions, their points of origin form ascending spirals, the fourth branch always comes into line again with the first. At the origin of each branch the stem is angularly bent in the opposite direction, and the branch forms with it an obtuse angle. Since the bending takes place according to the three directions in which the branches arise, the axis appears to be spirally twisted. The difference in height between two branches, or the length of a stem internode, is 3 mm. The ramification of the branches takes place on the usual principle. The main branch, slightly thinner than the stem, is at first angularly bent in the horizontal plane