

a convex projection, covers the even edge of the next following; thus also the lateral edges cover one another. Towards the base of the polyp the scales become smaller, and are irregularly placed, and at length pass over into the three-cornered or irregularly polygonal scales of the cœnenchyma. Length to breadth in mm.—0·3 and 0·29–0·6; 0·41–0·06; 0·38–0·25; 0·38–0·15.

In the tentacles the spicules are spindle-shaped, flat bodies, which are placed longitudinally and form three or four irregular rows, as in the *Spiculosæ*; they measure from 0·35 to 0·09 mm.

The lower layer comprises small, irregular, flat, longish forms, often biscuit-shaped, or lobed with toothed edges, 0·14–0·06; 0·12–0·05; there are also double and quadruple forms.

*Habitat*.—Station 170, off the Kermadec Islands; depth, 520 fathoms; bottom, volcanic mud.

11. *Dasygorgia geniculata*, n. sp. (Pl. IV. fig. 5; Pl. V. fig. 7).

The small, slender, elastic stem is upright, bent in a zigzag manner owing to its undergoing an angular bending at the origin of each branch. The branches arise in spirals from three sides of the stem at great intervals, the fourth stands in line with the first. The branches are usually ramified horizontally to the stem, and give off twigs of the third order, which come off nearly at right angles. The polyps are placed on the stem and branches; on the stem in short spirals, on the branches one or two on an internode. The polyps are covered with small scales, which overlap one another on opposite sides and lie transverse to the axis of the polyp; the scales are continued up the tentacles in two rows. The cœnenchyma contains small, spindle-shaped to flat bodies, placed parallel with one another.

The colony described is without its base, and has a height of 120 mm. The little stem, in the lower part, has a diameter of 1·5 mm. The branches arise at considerably wide intervals of 3 mm.; at the commencement they are a little thinner than the stem. They come off from three sides of the stem, the fourth branch comes again into line with the first, and hence a spiral of three branches is formed. The height of the spiral reaches constantly 10 mm. At the origin of each branch the stem undergoes an angular bending on three sides, which gives it a zigzag form and makes it appear like a spiral twisted round a central axis. The branches form nearly right angles with the stem. The branches give off twigs from one side in a horizontal plane. They are bent at angles in the opposite direction to the expansion of the twigs. The twigs bear lateral twigs, and these only in individual cases bear twigs of the third order. The terminal twigs are short, spine-like. The length of the branches reaches 25 mm., and the length of the internodes 5 to 6 mm.