

off at sharp angles in a horizontal plane. The bending of the branches at the points where the twigs come off is very slight. The terminal twigs are very long, elastic, and flexible. The polyps, which arise with broad bases, are placed singly on the long internodes of the twigs and stand perpendicularly to their axis of support. The spicules are thick spindles, with a few very small warts. They are placed longitudinally in the polyps. The whole stalk, with its abundant, closely placed twigs, which appear to come off from all sides of the stem, recalls in appearance a delicately branched Conifer. The base appears as a flat, calcareous plate, 50 mm. in diameter and 0.5 to 1 mm. thick, which spreads itself out over a piece of recent sandstone. At one side the edge is turned over and holds on to the substratum. The stem rises from the middle of this base. It is sharply marked off from the white calcareous basis, from which it appears to arise directly, by the horny consistency of its axis and the brown colour. The height reaches 150 mm.

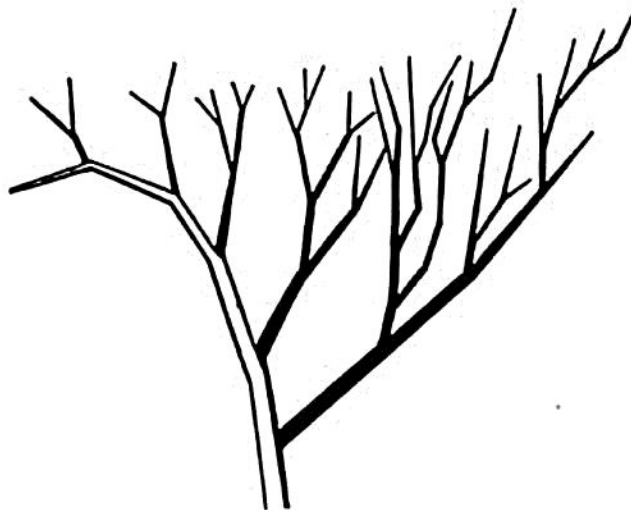


FIG. 4.—Ramification of *Dasygorgia cupressa*, n. sp.

The diameter at the base is 4 mm., and the branches, which commence at 7 mm. from the base, arise at successive heights from four sides of the stem. The fifth is always in line with the first. These five branches form a spiral turn round the stem, and the origin of the individual branches is closely approximated. In the lower part of the stem the difference between the origin of two branches is but 0.5 to 1 mm., while in the upper part it is 1.5 to 2 mm. A spiral turn in the lower part extends over 4 mm. of the stem, in the upper part over 8 mm. The branches leave the stem at rather less than a right angle, are directed somewhat outwards, and are of about the same length from the lower part to near the apex, reaching 50 mm. Their thickness at the point of origin reaches 2 mm.; the bendings which the stem everywhere undergoes at their origin give it the appearance of being twisted spirally around its central axis. The ramification of the branches takes place in the horizontal plane according to the usual law. The main branch is a little bent at the origin of the twigs, the first of which reach the thickness of the main stem.