

right or an acute angle with the next node, a condition which has induced Verrill, in his diagnosis, to make use of the expression "furcately branched." The branch of *Dasygorgia agassizii* figured in Verrill's work cited above (pl. ii. fig. 4), shows the law of branching signified, only the twigs come off from the branches at acute angles.

The accompanying woodcut is to illustrate this law of branching.

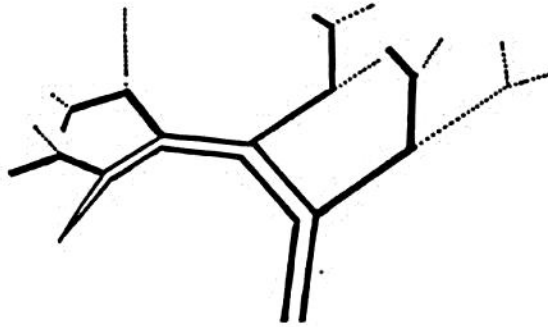


FIG. 1.—Mode of branching in *Dasygorgia*.

The polyps are large in relation to the twigs which bear them. Their form is cylindrical, somewhat enlarged towards the base; their diameter is always greater than that of the supporting twigs. The oral portion, with tentacles, is not retractile; in repose the tentacles are simply folded together over the oral disc, and protect the oral region by means of the spicules situated in their dorsal portions.

In some species the polyps are sparingly scattered on the stem, and on the branches and twigs, so that there are never more than two polyps on a node. The end polyp of the last twig is never apical. The point of the twig always projects beyond the base of the laterally placed polyp. In addition to the tentacle-bearing polyps there are in some species slightly conical zooids without tentacles. Spicules are present in the thin cœnenchyma, in the polyps and in the tentacles, completely filling the outer sides of the latter, while they are absent in the surfaces turned towards the mouth, as well as in the pinnules. There are always two layers of differently shaped spicules. Those of the outer layer are in some species (*Spiculosæ*) long and spindle-shaped, somewhat flattened spicules, blunt at the ends and provided with a fine sculpturing, in the form of little wart-like projections. Large in the polyps, on the dorsal part of the tentacles they take the form of smaller spindles, which lie side by side in from two to four rows, and overlap one another on opposite sides. On the calyx they are arranged longitudinally. The spicules of the cœnenchyma are usually somewhat different from the spicules of the polyps, sometimes larger and sometimes smaller than these. In some other groups, which may be distinguished as *Squamosæ*, the spicules are flattened, almost scale-like, covering each other. Their edges are often finely toothed, frequently lobate, and from the teeth run fine concentric furrows to a small nucleus. They form, on the tentacles, from one to three rows. On the calyx they are placed either obliquely to its long axis