

*Spongodes dendrophyta*, n. sp. (Pl. XXXVIc. figs. 2a, 2b).

Resembling *Spongodes florida* and *Spongodes corymbosa*, but more luxuriantly and loosely branched, with the polyps surmounted by large, spiny spinules.

The upright stem consists of a short, spindle-shaped, barren trunk, which is attached at the base by means of stolon-like processes to Mussel shells, fragments of stone, grains of sand, &c., and a thick stem-portion from which numerous loosely ramified branches are given off on all sides, bearing at their ends umbels of polyps. Owing to the loose ramification and the distances which separate the different umbels of each twig, the stem and branches, together with their offsets, are visible everywhere in the polyp-bearing portions of the colony. The branches are of different lengths, so that the umbels project for various distances, and the entire colony calls to mind a luxuriantly branched tree.

The whole colony is 100 mm. high and 85 mm. in greatest diameter. The length of the barren trunk is 20 mm., and its diameter 18 mm. Length of one of the larger branches 36 mm. Diameter at the base 12 mm.

The stem diminishes somewhat in size below, with a rather flabby outer covering, which when dry becomes wrinkled. At a height of 20 mm. the first branches come off around the circumference; they are not, however, all at the same level, but some are higher than others. The branches are broad and flattened from above downwards; ramification takes place for the most part in a plane perpendicular to the long axis of the stem. Coming off straight from the latter their twigs sink downwards somewhat, and thus protect, roof-like, the upper portion of the trunk. Further up the stem, which increases somewhat in diameter, arise irregularly and from all sides several larger branches, which quickly ramify. At first they come off at right angles, but their twigs are placed more vertically and directed towards the summit; in shape they are more cylindrical than the first set.

The end of the stem bifurcates into two short divergent branches. The ramification of the branches is analogous with that of the stem. The lateral branches arise at different heights; from these twigs come off, whose secondary twigs finally bear the groups of polyps. Since the twigs grow to about equal heights their secondary twigs form, with the polyp heads, umbels. Owing to the strong divergence of the secondary branches the umbels of one and the same secondary branch again form, amongst themselves, larger umbel-like groups. Each terminal twig bears a bundle of five to seven polyps, whose heads are surmounted by large spicules projecting like needles above the umbels.

The entire colony is somewhat flabby, only the terminal twigs and the umbels are more rigid.

In the barren trunk the mesoderm of the lower portion is filled with red spicules of a peculiar shape, disposed at regular distances from one another. They are mostly crosses, whose arms are placed vertically or obliquely to one another, like an X, and which may