

diameter. On individual twigs, however, the polyps are sometimes more closely packed and united together up to the head, so as to recall the condition of the preceding group.

The stouter bundle of spicules, occurring in the polyp peduncle, is here very feebly developed, so that the little head appears to be almost terminal. The margin of the head is surmounted by eight bundles of spindles arranged *en chevron* and projecting like teeth. The wall of the stem and branches is rather flabby; it contains numerous calcareous spindles, which are for the most part placed transversely, and are not closely packed. These spindles are, as a rule, slightly *f*-shaped and surrounded with small, sharp spines. They measure 0·83 by 0·045 mm.; 1·2 by 0·05 mm.

In the twigs the spicules are longitudinally arranged, and in the terminal twigs they lie close together so as to give the outer covering a rather firm and hard consistence. Here they reach a length of 2·5 to 4 mm., with a diameter of 0·25 mm. In the polyp peduncles they are arranged close together; one bundle, situated on the dorsal aspect of the same, contains from one to two stouter spindles, measuring 1·67 mm. in length and 0·12 mm. in thickness; and the polyp head is placed on the side of this bundle. The head is surrounded at the base by a circle of smaller spicules which point towards the margin, and form finally eight bands arranged *en chevron*. These project above the margin like the points of a crown, but can also close together like a lid over the mouth.

The white spicules of the head measure 0·4 by 0·058; 0·3 by 0·054; 0·33 by 0·04; 0·32 by 0·025; 0·45 by 0·058 mm.

The colour of one specimen is a purplish-red, with white polyp heads. The branches are rather pale red, in consequence of the slight development of the red spicules; the twigs and secondary twigs are dark red. The colour of the second specimen is pale red, only individual twigs are darker; here also the polyp-heads are white.

*Habitat*.—Torres Strait; depth, 8 to 10 fathoms.

*Spongodes pustulosa*, n. sp. (Pl. XXXVIA. figs. 3a, 3b).

The colony consists of a cylindrical, barren trunk, attached at the base by means of stolon-like outgrowths to foreign bodies such as sand and Mussel shells, and an elongatedly oval or more irregularly shaped head part, covered with polyps. The entire colony is upright, and in one case the lower portion of the trunk is creeping and covered with stolons, and quite rigid. Everywhere stiff spicules project above the polyp heads, thus giving a spiny surface to the head portion. The little polyp heads contrast well with the darker twigs by reason of their white colour, they occur singly all over like little pustules.