

sharp spines; size, 0·91 by 0·29 mm.; 1·1 by 0·2 mm., in the middle 0·58 mm. between the apices of the divergent processes. Double and quadruple structures, forming four to eight-rayed stars, 0·28 mm. in diameter, or forming irregular, jagged, almost shapeless calcareous bodies.

In the polyp-bearing head-portion of the stem and in the branches the variously-shaped spicules give place to spindles, which, at first placed transversely, in the twigs become arranged in longitudinal bands which are finally prolonged up the peduncles of the polyp heads. These spindles are long, either pointed at both ends or rounded off at one end, seldom straight, generally slightly bent or *f*-shaped. They are very thickly covered with fine, sharp spines. Their length reaches 0·6, 0·9 to 1 mm., with a thickness of 0·08 to 0·1 mm. In the peduncle of the polyp heads they form the bundles of spicules which surmount the latter; here the spindles reach a length of 3 mm., with a diameter of 0·21 mm. Frequently in these spicules one end appears to be truncated and produced into two short processes. The polyp heads are surrounded by eight groups of spicules directed from the base to the origin of the tentacles, and projecting like teeth somewhat above the latter. They are straight or slightly bent spindles and rods, covered with fine spines. They measure 0·6 by 0·05 mm.; 0·58 by 0·033 mm.; 0·3 by 0·025 mm.; 0·33 by 0·033 mm.; 0·2 by 0·033 mm.

The tentacles are folded together in repose and are covered with small red spicules. The colour of the colony is various. The trunk is greyish-white, the branches and twigs white. The polyp heads on many branches are dark flesh-coloured, owing to the red spicules; on others they are only yellow.

*Habitat.*—Torres Strait; depth, 8 to 11 fathoms.

Station 212, off Samboangan; depth, 10 fathoms. A young colony.

*Spongodes collaris*, n. sp.

The colony consists of an upright barren trunk and a polyp-bearing head, arranged in such a manner that the stem gives off at right angles, from its upper end, up to four branches, which, soon ramifying, bear umbels of polyps at their ends.

Halfway up the trunk in young colonies, and two-thirds of the way up in an older colony, there occurs a zone of flat projecting welts or folds around the stem. These form a kind of collar around the stem and their margin is covered with rows of polyps.

The trunk is fixed in the ground by means of tubular, stolon-like processes. From these it rises, increasing little in size, until it divides into the aforesaid branches, which come off from it at right angles. Up to the collar its outer covering is tough and rough, in spirit but slightly folded, and even in the dry state collapsing but slightly. Above the collar its consistency becomes softer; tracts of large obliquely and transversely placed spicules are visible to the unassisted eye, having intervening gaps of soft