

J-shaped; colourless. Their length reaches 4 to 6 mm., with a thickness of 0.43; 0.4; 0.3 mm. They are continued up the twigs and peduncles of the polyp heads, where they take on a red colour, or are coloured half red and half white. The spindles which overtop the head are mostly red, nearly straight, and measure 2 to 3 mm. in length. Besides the large spindles there are also numerous smaller ones, mostly slender and slightly curved; measuring 1 mm. in length by 0.067 mm. in breadth; 0.3 mm. in length by 0.05 mm. in breadth. These spicules give to the branches and twigs a hard, brittle consistence.

The polyp heads, whose peduncles are absolutely encrusted with thick spindles, are likewise armed with spicules. These stand vertically on the base of the polyp, and surround the heads radially up to a point above the bases of the tentacles. They are spiny spindles, with sharp, rigid spines. Sometimes the spindles are blunted above and provided with several spines at the end; or they may be club-shaped at the end with one or two spiny processes. Between the longer spindles occur also shorter curved spindles. The colour of these is generally that of yellow ochre, or red. Size 0.8 by 0.07 mm.; 0.67 by 0.05 mm.; 0.55 by 0.055 mm.; 0.54 by 0.1 mm. At the club-shaped end; 0.3 by 0.06 mm.; 0.3 by 0.05 mm.

The colour of the colony varies much in different parts. The barren trunk appears dark purple; the stem and branches white. The polyp-umbels in the lower portion of the head are yellow, for the spicules of the polyp heads are here self-coloured. In the upper portion they are dark brownish-red and yellowish. The spicules of the polyp peduncles are purple, those of the heads yellow.

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

Spongodes florida (Esper).

Spongodes florida, Gray, Proc. Zool. Soc. Lond., 1862, p. 27, pl. iv. figs. 1-4; *non Spongodes celosia*, Less.; *nec Spongodes celosia*, var. *arborescens*, Dana.

The fragment in the collection is the upper part of a colony. Gray's description with the help of the figure leaves no doubt as to the identity of the species. The twigs are arranged in umbels and bear bundles of from four to ten polyps, which are only slightly overtopped, each by a large spicule, and are hence almost terminal.

The white polyp heads are covered with spicules, which form eight groups. Each group is composed of two rows of spicules converging towards the base of the tentacles, and also produced up along the tentacles. The stem and branches contain large spicules of a dark red colour, which are irregularly scattered, leaving naked spaces of soft, leathery outer covering, these are slightly curved spindles covered with spines, which reach up to 4 mm. in length. In the twigs the spicules are more thickly crowded and arranged longitudinally; as they are also in the peduncles of the polyp heads. Here they are