

oxyhexasters with short principal and long terminal rays, and by discohexasters. Of these the one set have moderately short principals and four to six long S-shaped terminals, while the others have long substantial principals and numerous short, somewhat convex, terminals. The dermal and gastral skeletons contain compact pentacts and four-pronged scopulæ, in which the rough, slightly curved, or almost straight rough prongs are equipped with slight terminal knobs. Besides the dermal pentacts, there are bundles of fine radially disposed oxydiacts projecting beyond the bounding surface. Japan.

Genus 2. *Cyrtaulon* (*Volvulina*, O. Schmidt), n. gen.

The variously shaped body is traversed by very irregular canals. The dictyonal framework forms an irregular feltwork of plates and strands. The parenchyma contains peculiar spicules, which may be regarded either as scopulæ with tuft-like or radially-disposed prongs bearing terminal discs, or better, as discohexasters with one *much elongated* and strongly developed principal ray, and five others always much shortened, and bearing tufts of terminal rays.

Species 1. *Cyrtaulon sigsbeeii* (O. Schmidt).

A variously shaped, not unfrequently goblet-like form, in which the wall consists of an irregular feltwork, with cavities in which the apertures, both on the external and on the internal bounding surface, are covered with skin. The dictyonal framework itself consists of tubercled beams, in which here and there, especially near the surface of the sponge, the nodes of intersection are thickened and beset with wart-like prominences. The parenchyma contains uncinates with central thickening and modified scopulæ, or discohexaster forms with numerous thin prongs radiating out from the terminal node of the stalk, and bearing marginally toothed terminal discs. The dermal skeleton consists of medium-sized pentacts and hexacts, with typical scopulæ with knobbed prongs. Antille Islands, 100 to 300 fathoms.

Species 2. *Cyrtaulon solutus*, n. sp.

The only specimen as yet known is a cylindrical body within a cavity in a stone. The supporting framework is irregular with strands and plates. The dictyonal network exhibits small superficial tubercles, but no marked thickening of the nodes of intersection. The generically characteristic modifications of scopulæ or discohexasters, which occur in the parenchyma instead of the typical hexasters, exhibit on the knobbed and thickened end of the (otherwise pointed) stalk numerous thin radiating prongs or terminal rays, with small convex, marginally toothed terminal discs. Besides the pentacts of the dermal