(Pl. LXVIII. fig. 6). Another divergent rosette form is represented by a floricome-like discohexaster, which occurs in considerable abundance, especially in the subdermal trabecular space and on the transverse terminal expansions. This form exhibits six comparatively short and simple principal rays, each equipped with a whorled tuft of long, fine, S-shaped terminals. These bear on their extremities marginally toothed plates, which overhang towards the exterior. The number of terminals on each principal ray varies. Sometimes there are but six in a single whorl, sometimes eight, ten or more, and they are not always of equal length (Pl. LXVIII. fig. 5).

The parenchymal spicules of the stalk differ from those of the body in this, that the long diacts are stronger, and in part, at least, in the inferior portion of the stalk, directly united by synapticula. Besides oxyhexasters and discohexasters, peculiar hexacts occur with short but thick rays, which meet in the centre in a sort of trumpet-shaped basal expansion, forming a thick node of intersection. The outer rounded extremity is always beset with small spines, which sometimes extend over the entire length. The rays are either of equal length, as in Pl. LXVIII. fig. 7, or to some extent unequal, in that the rays on the same axis are equal to one another, but different from those on the other axes. Less frequently pentacts or tetracts occur of similar form.

The dermal and gastral skeletons are similarly composed of pentacts of variable size, in which the rays are thickly beset with small spines, either throughout as in the dermalia, or over the greater part of their length, that is with the exception of the central portion. At their extremities the rays are either simply rounded off, or thickened in club-shaped fashion. The dermalia have their tangential rays usually inclined somewhat inwards, and exhibit no distal tubercle at the node of intersection. The gastralia, on the other hand, have their tangentials disposed at right angles to the frequently reduced radial ray, and very often exhibit a tubercle or rounded knob, which projects into the gastral cavity, in the position of the sixth ray.

Genus 9. *Caulocalyx*, n. gen.

This genus contains the single species *Caulocalyx tener*.

Caulocalyx tener, n. sp. (Pl. LXIX.).

A fragment of a remarkable sponge form, imperfectly preserved, but indubitably referable to the family Rosellidæ, was trawled in the Mid South Atlantic, to the west of Tristan da Cunha (Station 333, lat. 35° 36′ S., long. 21° 12′ W.), from a depth of 2025 fathoms and a Globigerina ooze ground. It consisted for the most part of a fibrous stalk, frayed out inferiorly, and measuring 4 cm. in length, by 2 to 4 mm. in breadth. Towards the upper end radial lateral folds gradually increase in height, so as to form a cup-shaped