short, somewhat terminally expanded principal rays, bear several (three, four, or more) long terminals with toothed transverse terminal discs. The rosettes with slender groups of S-shaped terminals, which occur abundantly in Rossella antarctica (Pl. LV. fig. 14), are absent in this species, and their place is taken by small plumicomes, in which the short principal rays bear broad, plano-convex, transverse discs, from the convex external surface of which several whorls of fine S-shaped terminals arise in perianth-like fashion, as in the plumicomes of Polylophus philippinensis (Pl. LIV. figs. 4, 6).

The dermal skeleton contains, besides simple medium-sized hypodermal oxypentacts, strong rough or toothed pentacts with rounded or truncated, straight, cylindrical rays, such as occur in Rossella antarctica. In these forms there is a very constant occurrence of a knob-like or hemispherical projection at the distal side of the point of intersection—the evident rudiment of a sixth distal radial ray.

The gastral skeleton does not differ essentially from that of Rossella antarctica.

The long basalia, which are always smooth inside the body, but sometimes have lateral barbs outside the body, bear on their extremities four markedly recurved, simply pointed anchor-teeth, in which the central canal can be detected.

Genus 4. Acanthascus, n. gen. (Pls. LVI., LVII.).

Thick-walled goblet-shaped forms firmly attached at their base. The deep simple gastral cavity opens superiorly in a round, smooth-margined osculum. From the external surface of the body isolated, or more rarely grouped oxydiact pleuralia project radially. The parenchyma contains oxyhexasters with short principal rays, and various discohexasters. The dermalia are small roughened tetracts and pentacts.

1. Acanthascus grossularia, n. sp. (Pl. LVI.).

In the vicinity of Possession Island (Station 148, lat. 46° 47′ S., long. 51° 37′ E.), from a depth of 210 fathoms, on a hard ground of gravel and shells, an egg-shaped sponge was dredged, which in size and form resembled a large gooseberry. The lower pole had been broken off. At the superior pole there is a circular, smooth-margined oscular aperture, leading into a saccular gastral cavity 2.5 cm. in depth. Through the smooth internal skin of the cavity the efferent canals can be seen, 1 to 2 mm. in width; the larger afferent canals were, in the same way, visible through the external skin. From the outer surface, which is on the whole uniformly arched and smooth, numerous simple smooth and pointed needles, irregularly distributed, project obliquely outwards and upwards, and attain a length of 5 to 10 mm. Near the oscular opening these prostalia are