delicate pinules with thin pointed basal rays, and with slender pointed free radial, as we have already described in the outer skin (Pl. XLVI. figs. 10, 11).

There is in the gastral skin a very abundant occurrence of large and long amphidiscs, with short, hemispherical, eight-rayed umbels, and tubercled, moderately slender, axial rods (Pl. XLVI. fig. 11), such as occurred sparsely in the dermal membrane. More abundant are the small, long amphidiscs, with slender, roughened axis rod, and short, hemispherical, eight-rayed terminal umbels.

The canalicular skeleton of the larger efferent passages differs essentially from that of the afferent ducts of the lacunar subdermal or subgastral spaces. Even macroscopic inspection of the internal surface of these canals and lacunæ, one notices a marked difference in the character of the surface, which is in the efferent canals quite rough and villous, while that of the afferent canals, and of the subdermal or subgastral lacunæ, appears comparatively smooth, or only exhibits a fine uniform roughness. On all the larger canals and lacunæ, the walls are supported by strongly developed hypocanalicular oxypentacts, with rays varying in strength, according to the size and width of the canals. Between the larger hypocanalaria, smaller forms always occur. The peculiarly rough nature of the afferent canals is conditioned by especially long, though not particularly broad autocanalicular pentact pinuli, in which the freely projecting cypress-like ray attains a length of 0·4 mm. and more. Of course between these long pinules shorter forms occur, with slender, slightly spinose, free radial rays (Pl. XLVI. fig. 6). Isolated amphidiscs of the larger sort and numerous representatives of the smaller type occur in the skin of the wider efferent canals (Pl. XLVI. fig. 6). Both the number and the size of the canalicular pinules and amphidiscs gradually decreases with the width of the canals, until they finally disappear in the neighbourhood of the chambers.

The lining layer of the large afferent canals and of the subdermal spaces is supported by smooth hypocanalicular oxypentacts entirely similar to those of the efferent canals. Both the autocanalicular pinuli and the amphidiscs are, however, entirely absent (Pl. XLVI. fig. 7, left).

The pleural prostalia, which project for 3 to 6 cm. from the lateral wall of the sponge, are strong smooth needles, which attain the thickness of a millimetre. They run to a point within the body, but the external termination unfortunately eluded distinct observation, since they were almost all broken off. Doubtless, however, they are either smoothly and simply pointed, or are terminally toothed, and end in a small five-pointed club. The same is true of the marginalia, which project for about 3 to 4 cm. I have already mentioned that numerous long uncinates with pointed external extremities project between the pleural prostalia.

The long basalia, which issue like the pleuralia in bundles, but become woven into a felted basal tuft, begin like the pleuralia and marginalia in an internal pointed end, swell out beyond the body into smooth cylindrical beams, which again decrease in thickness