

small amphidiscs here are equal in abundance, and similar in form to those in the outer skin.

Even the larger afferent and efferent canals are furnished with pinuli, though in rapidly decreasing size and strength. The small amphidiscs also extend for a considerable distance as *canalicularia*.

In regard to the numerous radial pleuralia which project to a greater or less distance beyond the surface of the sponge, the uncinates proper demand special notice. These are long oxydiacts which are thickly surrounded by appressed barbs. They occur chiefly at the upper end in the neighbourhood of the oscular margin, and are always radially disposed so that the pointed ends of the barbs are directed inwards, and the anterior point of the whole spicule outwards (Pl. XLIII. fig. 2). Wyville Thomson has figured a specimen of such a long (up to 8 mm.) pleural uncinata (*loc. cit.*, pl. lxviii. fig. 4). Besides these a large number of cylindrical spicules of various calibre occur, frequently in the form of thin, coiled threads, which gradually decrease in thickness, towards both ends from a maximum diameter about the region of the external surface of the sponge. They terminate internally in a simple point, while the outer extremity generally evades observation owing to breakage. They are usually smooth, either altogether or for the greater portion of their length. Although these long, smooth, pleural prostalia are for the most part broken, and the external extremity only uncertainly distinguishable, a few seem to be intact. I was unable to decide whether there are any, or if so how many, pleuralia which run out externally into a point. Most of the long, projecting, smooth spicules gradually become thinner and thinner towards the extremity, but the fact that the terminal portions themselves are broken off, suggests that they do not simply form points, but terminate like the shorter forms about to be described, in which the outer ends were preserved. On several of the thin fibre-like pleural spicules, which are quite smooth on their internal pointed portion, one notices further outwards the appearance of small teeth, at first very inconspicuous, but afterwards gradually more prominent and spine-like. These are directed transversely or somewhat obliquely outwards. The outer or most external spinous portions of these pleuralia finally terminate in a club-shaped swelling with four cruciately disposed lateral elevations and a single terminal point. The lateral points either project transversely, or are directed obliquely outwards; more rarely they are bent somewhat inwards. In some instances it was possible to recognise in this terminal knob a hint of an axial canal intersection, corresponding to the five conical teeth.

These spinose monacts occur especially on the upper portion of the sponge-body. I have repeatedly found, even in the neighbourhood of the oscular margin, similar monacts of smaller size (2 to 3 mm.), which projected but slightly from the surface of the skin, and were throughout their whole extent, from the internal pointed end to the external terminal knob, uniformly thickly beset with small spines directed transversely or obliquely outwards (Pl. XLIII. fig. 2).