

Calcareous corpuscles are only found very scantily in the muscular layer in the lowest parts of the stalk. They are small oblong bodies of 7 to 22  $\mu$ , which are often united four together so as to form small star-like figures.

The axis is round, and of the common lamelliferous and fibrous structure. Its radiating fibres are very numerous, but short.

The measurements of nine well-preserved specimens of *Anthoptilum thomsoni* are as follow :—

	A.	B.	C.	D.	E.	F.	G.	H.	I.
Length of the whole polypidom,	420 mm.	560	530	362	422	410	400	360	440
Length of the stalk, . . .	65	87	75	63	67	75	65	61	57
Breadth of its enlargement, . . .	18	18	16	11	14	14	15	6.5	12
Breadth of the pen, . . .	25	...	...	...	...	...	...	...	...
Length of the polyps with the tentacles, . . . . .	19	17.5	...	20	13	18	17	12	16
Length of their tentacles, . . .	...	6-8	...	7	9	...	...	...	...
Breadth of the rachis, . . .	...	8-9	10	...	...	...	...	...	...

*Habitat*.—Station 320, Atlantic Ocean, south of Buenos Ayres, lat. 37° 17' S., long. 53° 12' W. Depth, 600 fathoms. Bottom temperature, 2°·7 C. Hard ground. February 14, 1876.

2. *Anthoptilum murrayi*, n. sp. (Pl. VI. figs. 19-21).

General appearance of *Anthoptilum thomsoni*, smaller, with smaller and less numerous polyps, two to three in each row. Polyps all sessile, widely separated from each other. Rachis without polyps in the middle line on both sides. Zooids more distant than in the last species.

Stalk long, slender, without distinct enlargement.

Polyps disposed in oblique rows of two to three, seldom four, on both sides of the rachis, which arrangement is not very apparent everywhere, all well separated from their neighbours, and the dorsal smaller than the ventral, with tentacles often far surpassing in length the bodies of the polyps.

The zooids cover the whole rachis between the polyps, and leave only the middle part of its ventral and dorsal aspect free. On the ventral side the zooids are situated on the margin and form not more than one single row, which is even interrupted here and there on the ventral side of the lowest polyps, whilst on the dorsal aspect they go nearer the middle line, and leave only a small part of the rachis free. These zooids, which in no case are situated on the bodies of the polyps as in *A. thomsoni*, measure 0.34 to 0.40 mm. in width, and their distance from one another is equal to, or greater than, their diameter. They have all two mesenteric filaments. The colour of the polypidom is pale red, the polyps brown, while the rachis and stalk are usually colourless, and present only here and there a light brown or pale rosy tint.