

dorsal middle line. Their number is so small that it does not much surpass that of the polyps.

The rachis is cylindrical, with very little sarcosoma.

The axis is round, and measures in the lower part of the rachis 0.9 mm. in diameter.

The maximum length of the calcareous needles is 0.70 to 0.74 mm., and the breadth 0.14 mm. In the tentacles, needles of 0.40 to 0.45 mm. run up the aboral side of the stem, forming a strong axis, and two or three smaller needles are found in the base of each secondary tentacle. In the sarcosoma of the stalk and the rachis itself the needles are shorter and more slender, and go down to a size of 0.085 to 0.14 mm. in length, and 0.028 mm. in breadth.

Of three specimens of this sea-pen only one was entire, the second wanted the stalk, and the third the end of the rachis.

	A.	B.	C.
Length of the whole polypidom,	100 mm.
Length of the rachis,	62	140	...
Length of the stalk,	38	...	51.5
Upper swelling of stalk,	1.7	...	2.0
Upper swelling of end-bulb,	1.3	...	2.5

Habitat.—Station 241, North Pacific, east of Japan, lat. 35° 41' N., long. 157° 42' E. Depth, 2300 fathoms. Bottom temperature, 1.1° C. Red clay. June 23, 1875.

2. *Scleroptilum durissimum*, n. sp.

All smaller branches of the tentacles studded with calcareous corpuscles.

The Challenger collection contains only one imperfect specimen of this form, which comes very near *Scleroptilum grandiflorum*. The principal differences are the following:—

a. The polyps are smaller.

b. The smaller branches of the tentacles possess in their whole length at their aboral side a strong axis or train of needles of 0.054 mm. in length.

c. The needles of the sarcosoma of the polyps are a little shorter (0.28 mm. in length, 0.085 mm. to 0.11 in breadth).

d. The needles of the sarcosoma of the rachis are more numerous and longer.

Habitat.—Station 235, North Pacific, south of Yeddo, lat. 30° 7' N., long. 138° 0' E. Depth, 564 fathoms. Bottom temperature, 3° 3 C. Mud. June 4, 1875.

Section II.—RENILLEÆ.

Renilla, Lam.

1. *Renilla mülleri*, M. Schultze (Pl. XI. fig. 46).

The Challenger brought home a great number of this *Renilla*, of which I give in fig.