

siliceous webs whose threads are frequently provided with small terminal hooks or umbels. I would venture to suggest that we have here to deal with the retiform siliceous skeleton of certain Radiolarians in which terminal hooks or pronged terminal discs frequently occur quite similar to the hexasters of Hexactinellida.

This form was found in the neighbourhood of Dominica, on muddy ground, and at a depth of 611 fathoms.

In spite of the characteristic floricone described by Oscar Schmidt, it must still remain doubtful whether this form really belongs to the Euplectellidæ.

Genus 7. *Hyalostylus*, n. gen.

This genus contains only one species, *Hyalostylus dives*.

*Hyalostylus dives*, n. sp. (Pl. LXX).

This Hexactinellid (Pl. LXX. fig. 1) was dredged in the Mid South Pacific Ocean, lat. 39° 41' S., long. 131° 23' W. (Station 289), from a red clay ground at a depth of 2550 fathoms. The soft loose body measures 5.5 cm. in length, while from the lower end there extends a much damaged awl-shaped stalk, 11 cm. long, and 2 to 1 mm. thick. The whole sponge has been apparently so much compressed and distorted in the dredge, that from its present state it is difficult to decide certainly as to the original form of the living organism, though a reconstruction is, to a certain extent, still possible. In general form the body of the sponge resembles a laterally much-compressed cone, of which one of the narrow sides is uniformly rounded and the other much folded. The broader upper end is not transversely, but obliquely truncated, as the rounded, somewhat S-curved narrow side is rather longer than the other, which exhibits a simple convex contour. The upper surface is contracted in funnel-like fashion, and exhibits an irregularly folded infundibular opening. The lower end of the body is not drawn to a point, but is slightly rounded. The stalk springs from the base of the rounded, unfolded narrow side, and becomes gradually slender throughout its length.

As the sponge was given to me for investigation in an undoubtedly much altered form and condition, several questions as to its anatomical structure, and these of essential importance in determining its systematic position, have unfortunately to be left unanswered. Thus it must remain doubtful whether the cup-form of the body represents the original shape, whether the smooth external surface is really dermal, whether the folded portion of one side is merely a part of the external surface, whether the styliform stalk represents the intact form or only a fraction of the original, and so on.

Microscopic examination soon revealed that the tissue was not sufficiently well preserved to admit of the recognition of the arrangement and structure of the chambers,