

is surrounded by a bundle of diacts, which are provided with prongs on their pointed extremities (Pl. V. fig. 6), and have four conical swellings on the axial intersection.

The floricomes of the outer skin exhibit a form quite similar to that in *Euplectella aspergillum*, but it is important to note that they are almost twice as large. I usually found seven terminal rays on each principal.

The *gastral skeleton* exhibits on the inner side of the quadrate ledge-like network which projects into the large lumen of the tube the same slender pentacts which occur in similar positions in *Euplectella aspergillum*; on the other hand, on the inner side of the diverticula-like chambers which underlie the external gentle archings, slender dagger-like hexacts occur, with a prolonged distal ray, and a proximal ray projecting radially into the inner lumen (Pl. VI. fig. 3), raising the gastral membrane into pointed tubercles, and bearing on its end a floricome just like the similar dermal hexacts. It is interesting, however, that this gastral floricome does not agree either in size or form with the above-mentioned dermal floricome. The number of the terminal rays belonging to each principal amounts to ten or twelve in the former, but only to seven in the latter. The cup formed by these terminal rays is relatively broader (the diameter of the whole floricome is only half as large as in the case of the dermal floricome) (Pl. V. fig. 4).

Fragments of *Euplectella suberea*, Wyville Thomson, were collected by the Challenger in three different places:—

- (1) In 600 fathoms, lat. 36° 25' N., long. 8° 12' W.; Station IV.; west of Gibraltar.
- (2) In 1090 fathoms, lat. 35° 47' N., long. 8° 23' W.; Station V.; west of Gibraltar.
- (3) In 1600 fathoms, lat. 10° 11' S., long. 35° 22' W.; Station 124; between Pernambuco and Bahia.

The figure (Pl. V. fig. 1) is reconstructed from somewhat defective, and yet in some respects adequately preserved, specimens found to the west of Gibraltar (Stations IV., V.).

In a short review of the results of the French "Travailleur" expedition, Milne-Edwards¹ has noted (1881) that "two fine specimens of *Euplectella suberea* were taken off the Berlingues at 3307 metres." And Filhol² adds, "Les *Euplectella suberea* sont largement répandues dans l'Atlantique nord. Pendant la croisière du *Talisman* nous les avons draguées à diverses reprises par des fonds variés entre 900 et 2300 mètres. En certains points elles étaient d'une extrême abondance et devaient couvrir d'assez vastes capacités."

3. *Euplectella cucumer*, R. Owen.

Since I had the opportunity of seeing the original specimen of *Euplectella cucumer*, Owen, which is preserved in the British Museum, and of examining it so far as was possible without injuring the beautiful specimen, I shall here take the opportunity of briefly expressing my opinion in regard to this interesting form.

¹ *Comptes rendus*, xciii. pp. 871-931; *Ann. and Mag. Nat. Hist.*, ser. 5, vol. ix. p. 46.

² *La vie au fond des mers*, p. 282, pl. iii.