

As to the young specimens, from 10 to 5 mm. in size, so thoroughly studied by Wyville Thomson, it is to be noted further that besides the already mentioned ovoid form of the body, the slender development of the fir-tree-like distal ray of the dermal pinules is striking.

3. *Pheronema grayi*, Sav. Kent.

This Portuguese species is distinguishable, even on external macroscopic inspection, by its likeness to the nest of a chaffinch, and by the scattered disposition of the lateral and basal prostalia, which are not grouped in bundles. Though there was no specimen at my disposal for more intimate study, I shall attempt to sum up the characteristics on the strength of the descriptions and figures before me, and as the result of notes which I made on some specimens in the British Museum. The breadth and height of the two-third spherical form are approximately equal, and measure 10 to 12 cm. The loose beard-like root-tuft has a length of 26 to 60 cm. or more. The circular oscular aperture measures 5 cm. in diameter, and bears on its margin a continuous annular fringe of perpendicularly projecting needles, of which the freely projecting portions are about 10 cm. long. While the prostalia lateralia over the rest of the external surface are uniformly but sparsely scattered, there is here, as in *Pheronema carpenteri*, a thicker zone, about 12 mm. below the marginal fringe. The zone consists of pleuralia, projecting radially, or directed somewhat obliquely outwards and upwards. When the sponge was brought on board "the sarcode investing and constituting the sponge body was," according to Saville Kent (*loc. cit.*, p. 284), "of a brilliant orange colour."

In regard to the spicules, it is to be noted that they essentially agree with those of *Pheronema carpenteri*, and from the report which I have given above in regard to the prostalia of *Pheronema carpenteri*, it will be seen that even "the long attenuate spinulate forms and others with straight spines" which Saville Kent figures as characteristic of *Pheronema grayi*, are not absent from the former. It is possible that the spinose needles with a five-pointed terminal and external knob, which I found in *Pheronema carpenteri* projecting as lateral prostalia from the neighbourhood of the oscular margin, are absent in *Pheronema grayi*, but this supposition requires to be corroborated by direct investigation, which I have not been able to accomplish.

4. *Pheronema hemisphaericum* (Gray).

As W. Marshall has noted, the genus *Labaria* erected by Gray (with a single species, *Labaria hemisphaericum*, Gray), cannot be separated from *Pheronema*, Leidy. This form (from the Philippine Island, Zebu) has been described by Gray, Carter, and with special