The dermal pinuli have four tolerably long, smooth and gradually pointed basal rays, and a moderately long distal which bears strongly developed upward bent spines. Santa Cruz, West Indies, 180 to 248 fathoms.

Species 2. Pheronema carpenteri (Wyville Thomson).

The body has a somewhat broad ellipsoidal form, slightly truncated at the upper and lower pole, of which the latter bears the broad basal root-tuft as long as the body, while the superior pole is surrounded by the cuff-like fringe of spicules round the osculum. The radial tufts projecting in irregular distribution from the lateral surface of the body form an annular zone for a finger's breadth below the oscular margin. The parenchyma contains long and short uncinates. The amphidises have hemispherical terminal umbels, each with eight moderately broad paddle-shaped rays. The dermal pinuli have long, smooth, pointed basal rays, and a moderately long, somewhat bushy radial. North of Scotland, 530 to 1600 fathoms.

Species 3. Pheronema grayi, Sav. Kent.

The body has the form of a bullfinch nest, with broad gastral cavity, occupying about two-thirds of a sphere, and bearing a long beard-like basal tuft. The prostalia lateralia are almost uniformly distributed over the whole outer surface, but form besides, as in *Pheronema carpenteri*, a thick zone measuring a finger's breadth across below the oscular cuff. Otherwise the forms of spicules agree essentially with the above species. Portugal.

Species 4. Pheronema hemisphæricum (Gray).

Body urn-shaped, with a concave indentation (annular groove) both above and below a gentle median swelling beset with tufts of spicules. The spicules of the broad basal tuft project downwards as far as the body is long, and form a broad annular zone round a central free portion. The parenchyma contains small oxyhexacts, in which the rays bear raised lateral spines. The dermal pinuli have rough basal rays directed somewhat obliquely downwards, and a short slightly bushy radial. The gastral pinuli, on the other hand, have a long, slender radial ray. Zebu, Philippines.

Species 5. Pheronema globosum, n. sp.

The body occupies three-fourths of a sphere the size of a man's fist, and bears on its superior truncated extremity the wide oscular aperture of the flat gastral cavity. The