but for the most part of long spicules, of which the internal portion buried in the body is wholly smooth and runs out into a point, while the outer freely projecting portion (2 to 3 cm. in length), though, indeed, for the greater part of its length also smooth, is in the neighbourhood of the outer termination beset with teeth, directed obliquely outwards, and either runs out into a point, or exhibits a club-shaped thickening, with one terminal, and four cruciately disposed lateral points. Since most of the pleuralia are broken off, it is difficult to determine which mode of termination is the more abundant, and whether there are not here also spicules which are quite smooth on to the very end.

The marginalia, which project in a perfectly continuous series for 12 to 15 mm., and become narrowed towards their outer end, are always quite smooth in their inner pointed portion. Towards the exterior they bear small spines projecting obliquely outwards, and end in a sort of lance-like point.

The basalia (Pl. XLIV. fig. 11) are very long and for the most part quite smooth. While the inner end always runs out into a point, they terminate externally in a double-toothed anchor, in which both teeth diverge almost transversely, are very gently curved, and end in a point. The shaft becomes gradually narrower to within a certain distance of the end of the anchor, and then increases in thickness on the anchor itself. The inferior margin of the whole anchor is a simple continuous arc, like that of *Pheronema giganteum* (Pl. XLV. fig. 9).

On young specimens I have sometimes seen small anchor forms buried in the body, and in these the shaft was, for the most part, beset with lateral barbs projecting towards the inner end.

6. Pheronema giganteum, n. sp. (Pls. XLV., XLVI.).

At the same station where the almost spherical specimens of *Pheronema globosum* were obtained, *i.e.*, near Little Ki Island (lat. 5° 49′ 15″ S., long. 132° 14′ 15″ E.), the trawl brought up from a depth of 129 fathoms and from a blue mud ground, a single well-preserved specimen of another *Pheronema* form. This is well figured in Pl. XLV. fig. 1, in half its natural size, and in Pl. XLVI. fig. 1, one-third reduced, in longitudinal section.

It differs from *Pheronema globosum* in its large size, to which it owes its title of giganteum, while as to shape it presents a long ovoid and somewhat obliquely depressed form, the peculiarity being due to a slight one-sided flattening from the side of the inferior pole. It measures 48 cm. in length and 20 cm. in maximum diameter, and exhibits an irregularly tuberculate surface. At the superior pole there is a circular terminal aperture, 6 cm. in width, and surrounded by a somewhat sharply angular projecting margin, enclosing the almost cylindrical gastral cavity, which is more than 20 cm. in depth.

From small boss-like (2 to 5 mm. broad) elevations of the external body surface,