and felted, is difficult to estimate. In the largest forms it cannot be less than 10 to 20 cm.

The concave internal surface of the upper gastral cavity exhibits a tolerably firm and solid portion, about 10 mm. in breadth, and arched slightly inwards, while all the rest of the surface forms a tolerably well-differentiated quadratic lattice-work, the strands of which enclose meshes, 2 mm. or less in width.

From this description, and from the figure in Pl. XLIV. fig. 1, drawn from a photograph, the external specific differences between *Pheronema globosum* and *Pheronema hemisphæricum*, Gray, must be evident enough. As to parenchymal spicules, mention must be made of (1) the numerous rather large oxyhexacts, with long, straight, or slightly curved smooth rays, which are sometimes reduced in number so as to result in pentacts, tetracts, or triacts; (2) medium-sized smooth oxydiacts, which are for the most part somewhat bent; (3) long radial uncinates, reaching as far as the surface or even further; (4) very numerous short uncinates, which though especially abundant round about the efferent canals, occur in varied disposition, and are distinguishable from the long uncinates not only by their smaller size, but also by this, that the strong laterally inserted spines are curved, and somewhat markedly divergent; (5) slender oxydiacts of rarer occurrence, with strongly developed, or almost wholly reduced spines (Pl. XLIV. figs. 4, 7).

The numerous medium-sized and small amphidiscs (Pl. XLIV. fig. 3) which occur in the parenchyma, do not, in my opinion, really belong to it, but owe their origin to the outer skin, or to the membrane of the gastral or canalicular cavities, whence they have been forcibly pushed or floated into the parenchyma.

The dermal skeleton includes strong hypodermal oxypentacts with long, smooth, straight or slightly bent rays, measuring 10 mm. or more in length (Pl. XLIV. figs. 8, 9). The four tangential rays are inclined slightly inwards (Pl. XLIV. fig. 9). Numerous strongly developed autodermal pentact pinuli also occur, exhibiting a somewhat thick, bushy, free distal ray, thickly beset with strong, bent, lateral spines, and four moderately long, blunted basals, slightly inclined inwards, and thickly beset with short spines, (Pl. XLIV. figs. 3, 5). In various places the distal ray of the pinuli is somewhat more slender, of greater length, and slightly curved.

As to amphidiscs, I observe a large form, 0·2 mm. long, with campanulate but rather short terminal umbels, in which the eight, or more rarely six, umbel rays are tolerably smooth, and moderately rounded in paddle-like fashion (Pl. XLIV. fig. 6). The rather thick stalk is richly beset with roundish tubercles. Besides these, somewhat small amphidiscs occur, with exactly similar form, and finally very small forms, 0·02 mm. or less in length (Pl. XLIV. figs. 12, 13).

The dermal skeleton of the gastral cavity resembles that of the outer skin, except in this, that the pinules are furnished with a much longer and more slender distal ray.

The pleural prostalia consist of the long, more or less markedly projecting uncinates,