

Genus *Pteropathes*, n. gen.

The polyps are arranged in a single linear series confined to one aspect of a branch. They are so closely crowded that there is no cœnenchyma on the zooidal surface of the axis, and the line of demarcation between two adjoining polyps passes straight across. In front view the polyps have a rectangular outline, and an elongation in the transverse axis is never marked. The tentacles are fleshy fusiform processes, but frequently in spirit preparations become much contracted. They are arranged in pairs, the two lateral pairs being parallel to one another and rather near together, though not so close as in the genus *Aphanipathes*. The sagittal tentacles are inserted at a very much lower level than the others, and are often not visible from the anterior surface. The peristome is relatively flat around the mouth, and the lateral tentacles spring from it. The sagittal tentacles, however, are inserted at a point opposite the centre of the sclerobasic axis, and between them and the margin of the peristome there is a deep cleft. The sagittal tentacles when fully developed are rather larger and thicker than the others, but in spite of this fact they are the earliest to atrophy. Polyps with only four tentacles are of frequent occurrence. The stomodæum is elongated in the sagittal axis, and the ectoderm clothing its inner wall is thrown into irregular folds. These usually become elongate tubular processes at a little distance below the oral aperture, and have a lumen opening into that of the stomodæum. The convolutions of the stomodæum occupy a position which, in the main, is parallel to the sagittal axis of the polyp, and are sometimes more complex at one extremity of the stomodæum than at the other. The reproductive elements are contained in specialised bands of cells attached to the stomodæum and body-wall, and occupy almost the whole of the cœlenteron. The only known species has a laxly-branched corallum with very long and close-set spines. The polyps do not project much beyond the surface of the cœnenchyma, but are more prominent than those of *Aphanipathes*.

*Pteropathes fragilis*, n. sp. (Pl. IV. figs. 1-4; Pl. XIV. fig. 4).

Corallum with a rounded basal dilation for attachment. Stem, near the base, under 2 mm. in diameter; above slightly over 2 mm., on account of the greater length of the spines. The specimen is broken into several pieces—total height probably 45 cm. or more. The stem bears a number of distant elongate branches, irregularly arranged, 5 to 15 cm. long, simple, or bearing one, rarely two, branchlets. The branches are usually distant and of a diameter only slightly less than that of the stem. They are usually lateral, rarely opposite, and occasionally a branch springs from the posterior surface of the stem. Some of the lower branches form a very wide angle with the stem; others, parti-