

and bear one or more pinnules on one side only; the longer ones are regularly and alternately pinnate, the pinnules being very slender and usually provided with one to three very short secondary pinnules, chiefly on one side. Stem and stronger branches distinctly tapering, other portions of the corallum very slender. Height 5 cm., diameter in broadest part 4.5 cm. Diameter of the base of the stem 0.4 mm. Spines somewhat conical, and hooked upwards, arranged more irregularly than in *Antipathes ulex*, and without a marked spiral arrangement (Pl. II. fig. 12). I have not found the arrangement so regular as that shown in Carter's figure. Near the base of the stem the spines become very much elongated, and dendritic towards the tip, a character observed in other species, but not, so far as I remember, in *Antipathes ulex*, E. and S.

This species was regarded by Carter as the type of a new genus of Hydractiniidæ; there can, however, be no doubt that it belongs to the Antipathidæ, and is very closely related to *Antipathes ulex*, E. and S.; it may indeed be a very young form of that species. Mr. Moore, of the Liverpool Free Museum, has very kindly sent me a slide of this species, an examination of which shows the spines to have a different arrangement to those of *Antipathes ulex*, though in both, as also in *Antipathes myriophylla*, Pallas, they are distributed in a similar manner. In Carter's form the branches are not confined so much to one plane as is the case in typical *Antipathes ulex*.

For the present Carter's form is regarded as distinct, but the whole of the forms included in this section require further examination before reliable specific characters can be obtained.

*Habitat*.—Gulf of Manaar (west coast of Ceylon), in 65 fathoms (Captain Cawne Warren).

[*Antipathes*] *japonica*, n. sp. (Pl. XI. fig. 25).

Corallum small and laxly branched; branches bi- and tri-pinnate, with the subdivisions directed inwards as in the leaf of the Tansy (*Tanacetum*).

The stem has a rounded basal dilation for attachment, and has a diameter of 2.25 mm. below. Branches few, irregularly arranged, 7 to 9 cm. long, tapering, and bearing close-set alternate rows of rigid branchlets, 1 to 4.5 cm. long. These arise from a point slightly in front of the lateral margin of the branches, and are somewhat recurved. The smaller ones are simple, but most of them bear a number of alternate pinnules springing from the antero-lateral margins, which may be simple, but usually bear a further series of one to five short secondary pinnules, which again are not truly lateral, but have an anterior or antero-lateral insertion. In the mode of branching this species is intermediate between *Antipathes bifaria*, in which the two series of branchlets include a narrow acute angle, and *Antipathes myriophylla*, &c., in which the branchlets are lateral and the whole corallum in a plane, excepting the short setose pinnules, which in all the species of this section are directed more or less anteriorly. Spines moderately numerous, of a length