

[*Antipathes*] *pumila*, n. sp. (Pl. XI. fig. 17).

A small species resembling *Antipathes abies*, var. *paniculata*, in habit, but having short and more slender paniculate branches and more elongate spines. The corallum is slender, 9 cm. long and 6 cm. broad. The stem is straight, and the branches are arranged subspirally, four or five in one revolution of the axis; they are from 1 to 6 cm. long. Those about 3 cm. long bear eighteen to twenty-two subalternate branchlets, most of which are lateral or antero-lateral, but a few arise from the posterior surface. Frequently the longest and most complex branchlet (2 cm.) is inserted on the posterior surface of the distal half of a branch. Many of the branchlets are short and simple, but others bear two to five subsecund secondary branchlets, not all in one plane, but all directed towards one aspect. Some of these may again bear a short tertiary subsecund series. Occasionally one or two of the secondary branchlets, like those of the primary series, spring from the posterior surface of the axis. Ultimate branchlets 0.25 to 0.75 cm. long. Spines elongate, tapering, and directed upwards from a narrow base. They resemble those of *Aphanipathes wollastoni* closely in form. They are arranged in dextrorse spirals and also in longitudinal rows, six of which may be counted from one aspect of a branchlet. The members of a row are usually rather less than one length apart.

*Habitat*.—Kurrachee (Murray), Brit. Mus.

[*Antipathes*] *cylindrica*, n. sp. (Pl. IV. figs. 5-7).

Stem simple, erect, tapering, with five or six horny Annelid tubes closely applied to it; length of the larger specimen 32 cm., diameter at base 4 mm., near apex 0.6 mm. Only the apical 20 cm. now bears branches (Pl. IV. fig. 5). These are very closely set, subverticillate, or in a very close spiral, usually in four rows. The branches are relatively strong and short, much divided and subequal in length, giving a bottle-brush type of growth. The greatest diameter is about 4 cm. The branches are strong at first and taper rapidly to a hair-like point. Near the base they usually become forked (Pl. IV. fig. 6), and about the same point may bear an elongate and more slender branchlet, the whole three subequal in length, and separated from each other by a wide angle. Each arm of the main branch bears a number of irregularly pinnate or bipinnate branchlets, most of which are directed obliquely downwards. Fusions are frequent between the primary arms of the branches, but the pinnate branchlets are always free. The degree of complexity differs greatly in adjoining branches. Some bear elongate branchlets, which are simple or forked, others bear a tertiary series of branchlets. The branches and branchlets are all straight and rigid. The spines are short and triangular, distributed in a spiral manner and also in longitudinal rows, six of which are visible from one aspect. The members of a row are