

The spines are small, numerous, and triangular, with a sharp apex. The base is broad, often equal to the length of the spine. The upper side of the triangle is usually nearly straight, and extends in a plane nearly at right angles to the axis of the branchlet. The spines are apparently not arranged spirally, but in a typical portion are disposed in longitudinal rows, five of which may be counted from one aspect. Two of these, situated on the margins, have the spines at the same level; two other rows, the spines of which are again opposite, are arranged on each side of the middle line, whilst the fifth row passes down the centre of the axis in the aspect figured (Pl. I. fig. 11). The members of a row are two and a half to three lengths apart.

Habitat.—Station 308; January 5, 1876; lat. 50° 8' 30" S., long. 74° 41' 0" W., Strait of Magellan; depth, 175 fathoms; bottom, blue mud.

Genus *Aphanipathes*, n. gen.

Antipathes (pars), Auctt.

Corallum shrub-like with the branches free, or fan-like and reticulate. Spines usually elongate, equal, or longer in the polyp areas, smooth or papillose.

Polyps small and inconspicuous, often obscured by the elongate spines, which project through the peristome of many species, in spirit specimens. They have a more or less oval outline, the greatest diameter corresponding with the skeletal axis. The polyps are separated from one another by a depression of variable extent, through which the interzoidal communication is established by means of an axial stolon-like prolongation of their coelentera, as in most other Antipathidæ. The tentacles are usually very short, and project little beyond the surface of the peristome. They may, in spirit specimens, be reduced to mammiform elevations of the peristome, often difficult to make out amongst the projecting apices of the spines. In this genus the tentacles all arise from the peristome, and have a radiate or biradiate arrangement. Spines project through the soft tissues in numbers varying with the species. They often are pressed in amongst the mesenterial filaments, and sometimes project into the stomodæum. In such cases each spine is covered with a mesogloæal sheath clothed with entoderm, within which is the axis epithelium. The mouth is usually somewhat elongated in the sagittal axis, but the elongation is rarely very pronounced. There are ten mesenteries, arranged as in *Antipathes*. Probably, on account of the compressed form of the polyp, the secondary mesenteries are in this genus relatively more important, and reach nearly to the base of the coelenteron.

In addition to the species which I have been enabled to study, a number of those described by Pourtalès, having a type of polyp which he terms "sessile," have been included in the genus. The structure of the zooids of these forms is, however, not known,