another part. The zooids are small and crowded; they are not always disposed in a single row on the stronger portions of the corallum, though this is usually the case on the branchlets and pinnules. Such rows of zooids are not, however, invariably confined to one surface of a branchlet, but may turn gently round the axis. There are usually about seven zooids to 1 cm., but they are more crowded on some parts than on others. The zooids are of the normal type in this genus, and show a slight elongation in the transverse axis. The peristome is elevated into a rounded knob, between the sagittal tentacles, on the surface of which the mouth opens. The tentacles are short, subcylindrical, and relatively thick.

The spines are very irregular in shape and size. On the slender pinnules they form dense and irregular masses, apparently arranged in no particular order. Each spine is very thick and often shows one or two dilations due to the irregular deposition of one horny layer on the top of another. This condition is followed by a more regular one in which the spines are distinctly arranged in dextrorse spirals, between which a single spine appears to be regularly interposed (Pl. I. fig. 6). In such cases the spines are more regular in size and shape; they are somewhat hooked upwards, and always have a blunt apex. The spirals are not so steep as those of *Antipathella minor*. Five longitudinal rows may be counted from one aspect, four of which are included in the spiral arrangement. The members of a row are about two lengths apart. On the stronger portions of the corallum the spines become more slender and pointed.

I was at first inclined to regard this specimen as identical with Antipathella reticulata (Esp.), an East Indian species, but an examination of the Copenhagen specimens of that species has shown the two forms to differ considerably, both in the form and in the arrangement of the spines.

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.

Antipathella contorta, n. sp. (Pl. I. figs. 8-11).

A fine spirit specimen of this species from the Strait of Magellan measures 60 cm. in length and 45 cm. across the broadest part. Two or three large pieces are preserved, which may have all formed one colony. The base is not preserved, but the strongest part of the stem (?) consists of two parts fused together, and has an oval section measuring 1.6×0.8 cm. Another single stem or main branch is nearly round, and has a diameter of 1 cm. Each stem or main branch gives rise to three or four strong branches, 5 to 8 mm. in diameter, which extend chiefly in one plane. Numerous more slender portions pass across from one branch to another, forming an open and irregular reticulum. The strong branches are long and irregular in their course (40 to 50 cm.), and have a section which in some parts is round, in others much flattened. These give rise to a number of smaller