Polycarpa aspera, n. sp. (Pl. XLVII. figs. 3-5).

*External Appearance.*—The shape is rudely quadrate, tapering slightly towards the anterior end, and attached by the wider posterior end. The dorsal and ventral edges are slightly rounded, and the lateral compression is slight. The apertures are both placed on the anterior end, and are moderately far apart. They are projecting and conspicuous. The surface is uneven and rough. The colour is a dull opaque grey.

The length and the breadth are about 1 cm. each, and the thickness is rather less.

The Test is tough and leathery.

The Mantle is thick and opaque. The musculature is strong. There are longitudinal and transverse and also oblique muscle bands.

The Branchial Sac is large and has four well-developed folds upon each side. The internal longitudinal bars are strong and very numerous. The transverse vessels are not large. They are of two sizes, and occur the larger and the smaller alternately. The meshes are elongated vertically. The stigmata are wide; there are usually three stigmata in a mesh.

The Dorsal Lamina is a plain narrow membrane with no ribs and no teeth.

The Tentacles are simple and short. They are not numerous. There are at least two sizes which alternate with regularity. The larger tentacles are stout and rather inflated.

Locality.—Station 320, February 14, 1876; lat. 37° 17' S., long. 53° 52' W.; depth, 600 fathoms; bottom, green sand; bottom temperature, 37° 2.

This species is formed for a single small specimen obtained off the east coast of South America, at a depth of 600 fathoms. It is attached by the posterior end, and the test is expanded at the sides to form a spreading margin (Pl. XLVII. fig. 3). The mantle is not attached to the test. The muscle bands form a dense network.

The folds in the branchial sac are large and closely placed. There are many internal longitudinal bars upon each fold, and they are placed close together. These internal longitudinal bars may be considerably corrugated, as they are in the case of *Styela bythia* (see Part I., Pl. XVIII. fig. 6). In some places the branchial sac of this species shows irregularities. There are a great number of connectives running between the mantle and the branchial sac; some of them are very long and slender.

The tentacles are of two sizes which occur regularly, and there are also a number of intermediate very minute ones which present indications of being of a third and fourth order, and alternate regularly with those of the first and second (see Pl. XLVII. fig. 5).

The stomach is fusiform, and has its wall thrown into a large number of closely placed longitudinal folds. The intestine is long and is rather convoluted in its course. The anus has an everted lobed margin.

There are numbers of polycarps and endocarps upon both sides of the body. The polycarps are rather long and narrow. The endocarps are very numerous.