Colella quoyi, n. sp. (Pl. XIV. figs. 1-6).

The Colony consists of a more or less rounded mass attached by a short peduncle. The upper part or head is usually rounded at the top and broader at the lower end. It may be flattened somewhat in one direction. The surface is even and very smooth. No common cloacal apertures are visible. The colour is light grey. The lower part of the head is sometimes darker than the stalk and the upper part.

The length of the head is 1.3 cm., the breadth 1.5 cm., and the thickness 0.9 cm. The length of the peduncle is about 0.8 cm., and its average thickness 0.5 cm.

The Ascidiozooids are elongated antero-posteriorly, and are placed at right angles to the outer surface. They are about 2 mm. in length and 1 mm. in breadth. The anterior end is moderately broad, and bears the branchial aperture. The posterior is rounded, and is formed mainly by the reproductive organs.

The Test is moderately firm and solid. The outer layer is smooth and is specially firm. It is of a light grey colour, but very transparent. In sections the homogeneous matrix shows very many small cells of various shapes scattered through it. Very few large bladder cells and no pigment cells are present.

The Mantle is thin. It is fairly muscular over the branchial sac, but membranous on the viscera. The muscle bands are rather irregular in their course.

The Branchial Sac is wide and rather thin. The transverse vessels are narrow and all of much the same size. There are four rows of stigmata, containing from twelve to twenty each. The stigmata are long and narrow with pointed ends.

The Endostyle is conspicuous. It is bent considerably at its anterior and posterior ends.

The Dorsal Lamina is in the form of a series of triangular languets. They are not long.

The Tentacles are placed close together. There are about twelve, all of the same length.

The Alimentary Canal is comparatively small and simple.

The Reproductive Organs are very large, and form the greater part of the visceral mass.

Locality.-Cascade Bay, Kerguelen Island; depth, 25 fathoms.

Three specimens of this species were obtained in Cascade Bay, Kerguelen Island, at a depth of 25 fathoms. Two of them (see Pl. XIV. fig. 1) are very much alike, and correspond to the description given above. The third specimen is a little different (Pl. XIV. fig. 2). The head is more regular in shape, and narrows more at the lower end than in the other two specimens. The Ascidiozooids are arranged more or less regularly in vertical lines. Each line is formed of two rows in which the Ascidiozooids alternate, so as to form a series of zigzag lines extending up from the base. The