is densely crowded with test cells of rather large size and various shapes. There are also grains of sand in considerable quantity imbedded in the test, and masses of pigmented test cells are present in the outer layer.

The Mantle is well developed, and the muscle bands are strong. Most of them run in a longitudinal direction.

The Branchial Sac is long and narrow. The transverse vessels are all of one size. The stigmata are small and inconspicuous.

The Alimentary Canal is relatively small and forms a short loop.

The Post-Abdomen is large. It is as wide as the anterior part of the body.

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

This species does not look like a Compound Ascidian when seen from the outside (Pl. XXXII. fig. 11). It is peculiarly interesting on account of the modification of the external layer of the test, and also on account of the very considerable depth (600 fathoms) from which it was obtained.

It is attached by a large spreading base which extends somewhat beyond the edge of the colony and is of a dark grey colour. From this rises a low dome-shaped mass of a dull yellowish-brown colour and with a finely roughened surface. It is perfectly opaque, and no Ascidiozooids or marks indicating their presence are visible (Pl. XXXII. fig. 11).

On making sections of the colony it is found that the colour is due to the outer layer of test, the inner parts being of a dark opaque grey. In this inner region the dull yellow bodies of the Ascidiozooids are seen penetrating the test in all directions. They are not arranged with any regularity, and they are inclined at various angles to the surface.

The test although stiff is brittle, probably a result of the numerous imbedded sand grains, shell fragments, sponge spicules, &c. The test cells are large and granular; they vary greatly in shape. The most remarkable point, however, in the test is the presence in the outer layer of a great number of closely placed masses of large granular cells (Pl. XXXII. fig. 13, *tc′*.); the cell masses are usually of a rounded form, or polygonal from mutual pressure (see Pl. XXXII. fig. 12). It is these masses which, by making the test above them project slightly, form the roughness which is visible on the external surface of the colony. At first I was inclined to regard them as enlargements upon vessels in the test corresponding to the terminal knobs found in the outer layer of the test of some species of *Culeolus* [1] and some of the Botryllidæ (see Pl. III. fig. 9, *t.k.*). A careful examination of the test, however, showed that no vessels were present, and that the cavities in the test matrix, in which the masses of cells were placed (Pl. XXXII. fig. 12), had no tubes leading from them, but were closed upon all sides. Therefore I am now disposed to consider the cells as modified test cells and not as blood-corpuscles.

[1] See Part I. of this Report, p. 91, pl. viii. fig. 2, 1882.