Subfamily 3. STYELINÆ.

Several representatives of this group of the Cynthiidæ have to be added to those previously described. The most noteworthy are the two remarkable species Bathyoncus discoideus and Bathyoncus minutus, for the reception of which I was inclined at first to found a new genus. It is better probably to refer them provisionally to the genus Bathyoncus, from which, however, they may possibly have to be separated afterwards when they become better known. There is only a single specimen of each species in the collection, and that of Bathyoncus minutus is much damaged. This latter form was obtained from a depth of 3125 fathoms, the greatest depth at which Tunicata have yet been found. The larger species, Bathyoncus discoideus, is a remarkably flattened disk-like form, which was found adhering to a manganese nodule brought up from a depth of 2300 fathoms.

Bathyoncus discoideus, n. sp. (Pl. XLVII. fig. 6; Pl. XLVIII. figs. 5-11).

External Appearance.—The shape is discoidal and almost perfectly flat. It is attached by the whole of one surface, and has a slight spreading margin. The apertures are both quadrate; they are situated on the upper flattened surface, and are moderately far apart. The surface is nearly smooth. The colour is pale grey, with a slaty tinge in some places.

The diameter in a line joining the two apertures is 2.9 cm., and the diameter at right angles to that is 3.1 cm.

The Test is thin but tough. It is almost opaque on the upper surface, but quite transparent on the lower attached surface. The upper surface is slightly corrugated.

The Mantle is thin and membranous. The musculature is close but very delicate.

The Branchial Sac has several folds upon each side. The internal longitudinal bars are well developed. There may be as many as eight bars on one of the larger folds. The transverse vessels are rather narrower than the internal longitudinal bars, and are all of the same size. The meshes are large, and are slightly elongated vertically.

The Tentacles are simple, and few in number.

The Alimentary Canal is relatively of small size. It is placed on the left side of the body, and forms an open loop.

The Reproductive Organs are in the form of small rounded bodies scattered over both sides of the mantle.

Locality.—Station 241, June 23, 1875; lat. 35° 41′ N., long. 157° 42′ E.; depth, 2300 fathoms; bottom, red clay; bottom temperature, 35°·1 F.

This is one of the most remarkable of the new Simple Ascidians discovered during the Challenger Expedition. A single specimen was obtained in the North Pacific, to the