One specimen of this species was obtained at Station 162, April 2, 1874, off East Moncœur Island, Bass Strait; depth, 38 to 40 fathoms; bottom, sandy.

Bathyoncus, n. gen.

Body ovate, sessile, slightly attached; apertures inconspicuous.

Test membranous and transparent.

Branchial Sac with several slight folds on each side, and a larger one on the left side near the dorsal edge; meshes square, no stigmata.

Dorsal Lamina a plain membrane.

Tentacles simple.

Alimentary Canal on the left side.

Genitalia a single elongated gland on each side.

This genus is formed for the reception of a single small specimen, found in deep water in the Southern Ocean. The chief peculiarity is in the structure of the branchial sac. Further remarks will be found under the description of the species.

Bathyoncus mirabilis, n. sp. (Pl. XXIV. figs. 8-12).

External Appearance.—The body is between ovate and discoidal in shape, and is compressed laterally. The anterior end is wide, slightly convex, and almost flat. The posterior end is narrower, and is slightly produced to form an area of attachment. The dorsal and ventral edges are equally but slightly convex, and converge towards the narrow posterior end. The sides are flattened. The apertures are both anterior, and are distant, inconspicuous and sessile; the branchial is near the anterior end of the ventral edge, and is directed ventrally and slightly anteriorly; the atrial is at the dorsal edge of the wide anterior end, and is directed anteriorly and dorsally.

The surface is even and smooth, except towards the posterior end, where it is a little irregular and rough from adhering sand, &c. The colour is pale yellowish-grey.

Length of the body, 1.4 cm.; breadth of the body, 1.2 cm.

The Test is thin, membranous, and rather transparent.

The Mantle is thin, and the musculature is not strong. The muscle bands are numerous and closely placed but very fine.

The Branchial Sac is very simple, forming a wide-meshed but strong network. There is one prominent fold on the left side, near the dorsal edge; and there are several others, much slighter, on each side. Each of these slighter folds is merely formed of three internal longitudinal bars, placed closely and united by short transverse ducts, which are twice as numerous as the transverse vessels, being placed both opposite to and between them. The transverse vessels are wide but distant, while the internal longi-