there is, on the foot, a small tubercle, at the same place as in the Pneumonodermatidæ and Clionopsidæ.

Posterior Gill with dorsal crest bearing on each side from eight to ten fringes, those of one side alternating with those of the other.

Buccal Appendages.—Two thick symmetrical cones, occupying the whole width of the buccal cavity.

Length.—About 1 cm. (the specimen, contracted in its posterior part, measures 8 mm. in the contracted state).

Colour.—Brownish-grey.

Habitat.—North Atlantic, lat. 38° 10' N., long. 74° 15' W.; off Carolina (U.S. National Museum and Brussels Museum); lat. 39° 22' N., long. 68° 34' W., October 3, 1883, steamer "Albatross," of the U.S. Fish Commission (Verrill, as *Clione longicaudatus*).

Observation.—The specimens collected by Professor Verrill are certainly identical with the one sent to the Brussels Museum, because the latter was also identified by Professor Verrill as *Clione longicaudatus*, and because they were collected near the same place.

The larvæ noticed by Professor Verrill under the name of *Trichocyclus dumereillii* (sic) are certainly not identical with the *Trichocyclus dumerilii* of Eschscholtz. Verrill's identification is due to the fact that all the Gymnosomatous larvæ with ciliated rings resemble each other very much. Although I have not seen these "*Trichocycli*," it seems to me that they are in reality the larvæ of *Notobranchæa macdonaldi*, because they were collected on the same day and at the same place as that species.

*2. Notobranchæa inopinata, n. sp. (Pl. III. figs. 5, 6).

Body and general aspect as in the foregoing species.

Neck a little less constricted.

Foot.—The anterior and posterior lobes are shorter than in Notobranchæa macdonaldi; the two anterior ones are less narrow and free only in their posterior half.

Posterior Gill.—The dorsal crest bears small fringes, somewhat spreading.

Buccal Appendages.—So far as I have been able to make out the single specimen 1 have studied, they are like those of the foregoing species.

Length, 4 mm.

Colour.—It cannot be estimated, the specimen having been stained with carmine by von Willemoes Suhm.

The state of the specimen does not allow of a more complete description being given. *Challenger Specimen.*—Station 242, June 24, 1875; east of Japan; lat. 35° 29' N., long. 179° 50' W.