The Mantle is so crumpled that it is almost impossible to ascertain its original outline, but it seems to have been rather elongated for a Cranchia, but not so long as a Taonius. It is fused with the head in the middle line dorsally, and also on each side in a minute cartilaginous patch with the base of the siphon, which is short and conical. The mantle has no tubercles, but is covered with oval black specks about 2 mm. apart. The pen forms a thin cartilaginous line down the back, and is very slightly expanded posteriorly. The head and arms are entirely wanting. The length is about 3 cm., the breadth 1 cm. It is readily distinguishable from Brock's form by the absence of tubercles on the mantle, and approaches more than any other form with which I am acquainted Dr. Pfeffer's Megalocranchia, which, however, there can be little doubt is based upon a small Taonius.

Cranchia sp.

Habitat.—Surface between the Cape and Marion Island. One young specimen mounted in Canada balsam.

About this portion of the cruise, Dr. v. Willemoes-Suhm notes in his diary that a few specimens of *Cranchia* were taken in every haul of the tow-net, but this is the only one that has come into my hands from this region.

Each sessile arm has only one sucker, except the ventral, which have two; the horny ring of the suckers seems to have no teeth, but is surrounded by papillæ. The tentacles have suckers with smooth rings, surrounded by two rows of papillæ, a point in which they differ from those of *Cranchia reinhardtii*, and some of them seem to have a fringe round the margin. The pen is not visible.

Taonius, Steenstrup.

Loligopsis (pars), d'Orbigny, Tryon, de Rochebrune, &c. Desmoteuthis, Verrill. Procalistes, Lankester. Phasmatopsis, de Rochebrune. Megalocranchia (?), Pfeffer.

Body elongated, semitransparent, head comparatively small, eyes prominent, sometimes very large. Mantle united with the back of the head by a firm band, which widens posteriorly, the surface of the back either directly continuous with that of the head, or marked off, if at all, by an exceedingly slight fold. Mantle also connected with the body at either side of the base of the funnel. Funnel devoid of a valve, but possessing Verrill's organ.¹ Fins meeting at the posterior end of the body usually in a point.

¹ By this name I denote an apparatus which has been found in every species of *Taonius* examined by me, except *Taonius cymoctypus*. It consists of two pads within the funnel near its base, and a little posterior to them in the middle line one or two tubercles. It is figured by Verrill, who first noticed it, in his *Desmoteuthis tenera* (Ceph. N. E. Amer., pl. lv. fig. 2d).