Wall smooth, with twelve longitudinal furrows, and numerous small openings at the posterior end of the body; twelve tentacles, each with an adaxial and an abaxial longitudinal furrow; six pairs of septa.

Habitat.—Station 149. Off Kerguelen Islands. (a) January 9, 1874. Lat. 49° 16' S., long. 70° 12' E. Betsy Cove. Depth, 25 fathoms. Two specimens. (b) January 29, 1874. Christmas Harbour. Depth, 120 fathoms. One specimen.

Dimensions.—Height, 1.5-2 cm.; breadth, 0.5-1 cm.

The three specimens of *Halcampa clavus* which were sent me for examination varied in size; the two specimens taken in Betsy Cove were smaller than the one dredged up in Christmas Harbour, and differed from it in habit of body. I believe, however, that they should be referred to the same species, as the slight difference in size and form may be the consequence of difference in age and degree of contraction, and their anatomical constitution harmonizes completely. I examined the larger specimen, which was specially well preserved, and one of the smaller ones.

The body is divided by two circular constrictions into three sections lying one behind the other. The middle section, the scapus—if we adopt the nomenclature proposed by Gosse for *Edwardsia*—in the largest individual was rather longer than the other two sections taken together, and about 1 cm. broad (Pl. III. figs. 1 and 4); it passed anteriorly into a short neck-like part bearing the tentacles, the capitulum, and posteriorly into a terminal part, 0.5 cm. long and broad, the physa. A cuticular deposit, like that covering the scapus of the *Edwardsia*, did not exist, but on the other hand the wall is regularly divided by twelve longitudinal furrows, which begin at the upper end between the twelve tentacles and reach as far as the lower umbilically depressed end. The longitudinal furrows are crossed by numerous transverse furrows, which, however, may be caused by the strong contraction of the animal.

The wall is transparent and thin-membraned except at the points where the scapus passes into the capitulum and the physa; at the points mentioned it is greatly thickened by increase of the supporting substance on the one hand and by numerous pleatings of its endodermal and ectodermal surfaces on the other. The pleatings are caused by an increase in the lamellæ of the circular muscles, and may therefore be termed the upper and lower sphincters, though they are by no means sharply defined. If we examine the wall closely in longitudinal section we see that all over the inner side there is a layer of circular fibres. The underlying supporting substance is divided into two layers, an inner, narrower, nearly homogeneous layer, which stains a darker red in carmine, and an outer, broad, fibrous layer, the two being separated by a sharp line. The inner layer is pleated at tolerably regular intervals, into supporting folds, which run circularly, and project into the gastric space; they usually remain simple, and are rarely bifurcated at their margins. Their surface is covered with numerous very fine, secondary folds, which bear a layer of muscular fibrillæ, so that each circular fold appears finely pinnated