seemed to me to be recognisable in that inter-mesenterial chamber which is equidistant from the ends of the transverse and sagittal axes. With this agreed the distribution of the tentacles; they were about equal in number to the mesenteries, and amounted to more than twenty-four, *i.e.* the first three cycles and some tentacles of the fourth were present, and those of the fourth cycle lay at points corresponding to the inter-mesenterial chambers above mentioned. In the other specimens, between forty and forty-eight mesenteries were present in the whole circuit of the body-wall, so that here the fourth cycle was nearly complete. The number of mesenteries was still greater in the angle between pedal disc and body-wall, the point where mesenterial growth is first recognisable in Actiniæ. This part being very transparent, the number could be determined with approximate accuracy, and reached to nearly a hundred.

From the fact that in places the mesenteries were discontinuous in transverse section, I infer the existence of mesenterial stomata. On the other hand, I could not demonstrate acontia; generative organs (testicular follicles) I saw only in one specimen, and, as they were at all points adherent to the mesenteries, I could not determine whether they were present on all mesenteries, or were wanting on the primaries.

Directive septa and siphonoglyphes were distinguishable on all four specimens, but only in two examples, namely the smallest and largest, could I accurately determine the position which agrees with the typical attitude of Amphianthidæ. The sagittal axis of this Actinian is at right angles to the long axis of the body on which it has fixed itself, or, in other words, the lengthening of the animal takes place in the direction of the transverse axis.

With tolerable certainty I can at length assert that only the mesenteries of the first order are complete.

With the sole example of *Amphianthus ornatum* from Station 56 was associated another Amphianthidan, externally so little characterised, that I decided not to describe it. It possessed a smooth body-wall, which was pleated only as the result of contraction; the pedal disc was 1·5 cm. long, and the total height 0·4 cm.

Family 9, Ilyanthidæ, Gosse.

Genus *Halcampa*, Gosse.

Halcampa kerguelensis,* n. sp. (Pl. II. fig. 5).

Tentacles devoid of longitudinal furrows, pointed; circular muscles of the body-wall weak; retractor muscles of the mesenteries powerfully formed.

Habitat.—(*a*) Station 149 A, Betsy Cove, Kerguelen, January 10, 1874; depth, 25 fathoms. Ten specimens. (*b*) The same locality; 25–30 fathoms. One specimen. (*c*) Station 149 G, off London River, Kerguelen, January 29, 1874; 110 fathoms.