

It may be stated here that *Gephyra*, which has not only been found in the Mediterranean, but also off the N.W. coast of France and off the Irish coast, has been included by Andres amongst the true Actiniaria, as a member of the genus *Sagartia*, as modified in his monograph of the Naples Actiniaria.

Haacke (67) in a review of the morphological relations of the Anthozoa, discusses the position of the Antipatharia from data supplied by the researches of Lacaze Duthiers and v. Koch. As will be shown later, the species on which these observations are chiefly founded, viz., *Antipathes larix*, can scarcely be considered typical of the group. On this account the diagram of Haacke illustrating the arrangement of the mesenteries (sarcosepta) in *Antipathes* is misleading, and as a matter of fact the six mesenteries first described by Lacaze Duthiers, although unequally developed, are all complete in the usual sense in which that term is applied. This subject will be discussed in greater detail when considering the morphology of the group.

Carter in 1880 described (69) under the name *Hydradendrium spinosum*, a species dredged in the Gulf of Manaar, which was supposed to belong to the Hydractiniidæ. The species in question, of which good figures are given, has a branched chitinous axis densely covered with spines. The polyps were not observed. It appears from a later paper by the same author (70) that the Rev. A. M. Norman suggested that the species in question was probably an *Antipathes*, and Carter admits its close resemblance to *Antipathes ulex*, Ellis and Solander. He then discusses the affinities of *Antipathes*, and its probable relation to the Hydractiniidæ. Surely the researches of Lacaze Duthiers in 1866 showed that this could not be the case, whilst v. Koch in 1878 demonstrated that *Antipathes larix*, Esper, possesses all the essential characters of true Zoantharia. The question need not be discussed here further than to state that through the kindness of Mr. Moore of the Liverpool Museum I have been enabled to examine a specimen of Carter's species, which undoubtedly is very closely allied to *Antipathes ulex*, Ellis and Solander. There are, however, certain differences between this form and specimens of *Antipathes ulex* which I have seen, but whether these are of specific value I am unable to decide at present. In the meantime I have regarded Carter's species as distinct.

In the Report on the Challenger Actiniaria (72) R. Hertwig discusses incidentally the phylogenetic relations of the Antipatharia. A new family of Actiniaria is established for certain interesting Actinians, particularly those described by Moseley:—*Actinia abyssicola* and *Actinia gelatinosa*, together with others related to them. The following are the characters:—

AMPHIANTHIDÆ.—Hexactiniæ, which are attached to the axial skeletons of Gorgonidæ, with shortened sagittal and elongated transverse axis; transverse axis lying parallel to the axial skeleton of the *Gorgonia*; circular muscle mesodermal; the principal septa only are perfect and sterile. In addition to the species included in the Challenger collection, Hertwig supposes the *Actinia s. catherinæ*, Lesson, and *Gephyra dohrnii*, v. Koch,