

GENERAL INTRODUCTION.

Among the Hydroids to which the present part of the Report is devoted, the Gymnoblasic genera are but sparingly represented, while, on the other hand, a rich and highly interesting collection of Calyptoblastic forms has been obtained. These are for the most part well preserved—so well, indeed, that in many instances the hydranths and other soft parts of the colony have retained their characters in so good a condition as to allow of these parts being drawn with most of the natural features of the living animal.¹

It is however somewhat disappointing to find that a large proportion of species is represented by the trophosome alone, a fact probably due to the circumstance that many of these species were obtained at seasons when no gonosome is developed by them. Notwithstanding, however, the absence of this important element of the colony, it was seldom that any difficulty was experienced in assigning a specimen to its true place in the system.

No planoblasts or free-swimming sexual buds of Hydroid colonies are contained in the collection placed in my hands. A few deep-sea Craspedote Medusæ, some of which are probably the planoblasts of unknown Hydroid trophosomes, have formed part of a separate Report by Professor Haeckel.²

The rare occurrence in the collection of such species as are known to inhabit the European Seas is striking, and points to a definiteness in the geographical distribution of the Hydroida which could scarcely have been expected, and which certainly contrasts with the wide distribution met with among many species of Polyzoa.

Among the new forms described in the present part of the Report are several which render necessary the definition not only of new generic groups, but of new families. Among the groups most richly represented in the collection, and of which compara-

¹ Were it not that the Plumularinæ have been dealt with in the former part of this Report (Zool. Chall. Exp., part xx.), they would form the final group in the arrangement of the Hydroida here followed. The group here indicated under the name of Plumularinæ is exactly co-extensive with the Plumularidæ of the former part. The subordination of groups here employed is I believe in accordance with the requirements of Hydroid classification, but had been decided on too late to allow of its adoption in the part of the Report already published.

² Report on the Deep-Sea Medusæ, Zool. Chall. Exp., part vii.