

probable that a greater number of starfishes were obtained than are here recorded ; those enumerated, however, appear to be all the authenticated examples now preserved.)

In the "Knight Errant" collection are 9 genera, 1 subgenus, 10 species, and 2 varieties ; of which 4 genera, 2 species, and 2 varieties are new (two of the new genera being based on types of which representatives were previously known).

In the "Triton" collection are 11 genera, 11 species, and 2 varieties ; of which 5 genera, 4 species, and 1 variety are new, and two of the new genera are established on types of which representatives were previously known.

In the latest summary of the Asteroidea, published by M. Perrier<sup>1</sup> in 1878, 454 species are enumerated, representing 52 genera. Three of the genera, however, included by M. Perrier are invalid or synonymous, the abstraction of which reduces the number recognised by him to 49. Representatives of 38 of these genera were obtained by the Challenger ; that is to say, representatives of more than three-fourths of the previously known types. The remaining 11 genera are either extremely rare or of very local occurrence. These figures indicate in a striking manner that the collection made by the Challenger affords a fair representation of the general character of the Asterid fauna of the globe, so far as known.

The proportionally large number of new species is not surprising, when it is borne in mind that a considerable portion of the track of the Challenger passed through regions which had hitherto been wholly unexplored, or in which the dredge had never previously been employed.

The long list of Asterids inhabiting abyssal depths brought to light by the Challenger and the other Expeditions herein discussed may be said to have opened a new chapter in the history of the Asteroidea. The summary of these forms, nearly all of which belong to previously unknown types, given in the Tables appended to the Report affords the most striking evidence of the important contribution made by the Challenger to our knowledge of the group. Reference to these Tables will render any words of comment by me unnecessary here.

The archaic characters of a number of the deep-sea forms are highly remarkable, and furnish not only a confirmation of the validity of the classification now adopted for the Asteroidea, but also give an important clue to the systematic position of many of the extinct members of the Class.

The large accession of new forms has greatly extended our knowledge of the morphological plasticity of many types, and has thrown important light on the constitution and relations of groups and families. In all cases the descriptions take cognisance of external and general morphological structure, and are not confined merely to details of specific difference, from the systematist's point of view.

All the systems of classification previously employed by writers on the Asteroidea are, in

<sup>1</sup> *Nouv. Archives Mus. Hist. Nat.*, 2e Série, t. i. p. 73.