DEFINITION OF THE FAMILIES.

All the known families, except one, the Pseudocumidæ, being represented in the Challenger collection, I have found it advisable to give here short diagnoses of the same, and to enumerate the several genera contained in each of them. It may be remarked that these families do not seem to have strictly the same systematic value as those of the Schizopoda characterised in my former Report. The latter should perhaps more properly be regarded as groups of a higher rank, or as sections.

1. CUMIDÆ.

Integuments generally strong, calcareous. Tail not sharply defined from the trunk; in female very slender, cylindrical; in male much stronger, and with distinct epimeral plates. Eye generally present. Antennulæ very small, with one of the flagella rudimentary. Antennæ in male with posterior part of peduncle distinctly biarticulate, flagellum filiform and composed of numerous short articulations. Mandibles well developed, with the anterior branch produced and armed with a dense lateral series of spines. Epipodite of maxillipeds very large, navicular; gill-lobules numerous, leaf-like, arranged in a straight series; terminal plate of exopodite scale-like and strongly indurated. Second pair of gnathopoda rather large, with some of the joints expanded and laminar. The four posterior pairs of legs in both sexes simple, without any trace of exopodites. Five pairs of well-developed pleopoda present in male. Uropoda with both branches biarticulate, or the inner uniarticulate. Telson quite wanting.

Genera.

1. Cuma, Milne-Edwards.

Iphinoë, Sp. Bate.
Cumopsis, G. O. Sars.

2. Cyclaspis, G. O. Sars.

3. Stephanomma, G. O. Sars.

2. VAUNTHOMPSONIIDÆ.

Integuments thin, squamous. General form of body, antennulæ and mandibles much as in the Cumidæ. Eye present or wanting. Antennæ in male with flagellum composed of very elongate and slender articulations. Epipodite of maxillipeds (in female) very narrow, with only few and digitiform gill-lobules arranged in a semicircle; terminal plate of exopodite membranous. Second pair of gnathopoda with the joints scarcely expanded. The three anterior pairs of legs in female, and all but the last in male