several species from the Nauplius stage through all the many successive stages up to the adult form.

"The fourth subdivision of the Schizopoda, the Mysidæ, is represented both by deepsea forms and pelagic species. Of the first group a very peculiar form, Petalophthalmus armiger, has been described by v. Willemoes Suhm, distinguished by the rudimentary leaf-like eyes and more particularly by the very remarkable appearance of the male, in which the antennules, mandibular palps, maxillipedes, and partly also the legs, are very peculiarly modified. Another very large and handsome form from the Subantarctic Sea has been referred by v. Willemoes Suhm to the same genus, but is evidently not congeneric with Petalophthalmus armiger, although it exhibits a similar reduction of the visual organs. It has proved to be identical with a form described by Professor Sars as Boreomysis scyphops from the depths of the Arctic Sea, thus exhibiting another instance of a very peculiar geographical distribution, the very same species being found in the corresponding region in both hemispheres, without occurring in the wide intermediate space, comprising both the temperate and the tropical zones. Two more Mysidians with imperfectly developed lamelliform eyes have been collected in the southern hemisphere, both of which belong to the boreal genera Amblyops and Pseudomma, G. O. Sars, differing only very slightly from Norwegian species.

"Of pelagic Mysidæ, five species are represented in the collection. One of these, which has been collected off the Cape of Good Hope, belongs to the genus Auchialus of Kröyer, and is apparently identical with the typical species described by that author. Of the genus Siriella, Dana (or Cynthia, Thompson), the two species Siriella thompsonii, Edwards, and Siriella gracilis, Dana, seem to have a very wide geographical distribution, being found in nearly all parts of the oceans traversed by the Expedition. The two remaining pelagic species of Mysidæ belong to a new genus, Euchætomera, chiefly distinguished by the strongly plumose setæ on the several limbs, as also by the peculiar form of the telson. Both species were caught in the Pacific."

The Cumacea.—"The Cumacea are rather scantily represented in the collection, only eleven species having been secured, which may perhaps be accounted for by their generally small size and inconspicuous colours, causing them easily to be overlooked in the rough examination of the dredged material. Most of the species belong to the genus Diastylis, some of which were taken in very considerable depths, viz., down to 2025 fathoms. Perhaps the most striking among the Challenger Cumacea is a very slender form from the coast of Kerguelen Island, Hemilamprops serrato-costata, G. O. Sars, of which numerous specimens were collected during the stay of the Expedition at Christmas Harbour. In examining a parcel of dredged mud from this locality (120 fathoms), several more specimens have been picked out, showing that this form occurs there in great profusion. The examination of the mud also yielded a great quantity of other