

instead of being firm and opaque like other Crustacea, appeared to be almost entirely uncalcified; indeed the only parts of the body at all hard and resistant are the mouth appendages and, though to a considerably less extent, the ambulatory limbs; the integument is naturally extremely transparent; it might perhaps be imagined that this specimen has but just shed its skin, but the presence of a colony of well developed Hydroids attached to the body seems to negative this possibility; the floor of the ocean at the locality where this specimen was dredged is composed of Globigerina ooze, and there is therefore no lack of calcareous salts which might otherwise explain the anomalous condition of the integument in this Isopod. At another Station in the Antarctic a somewhat similar Munnopsid was dredged, but in this species it is the abdomen only that is clear and transparent, and but little calcified; the rest of the body is comparatively hard and opaque.

“Several species are remarkable for the great development of spines, and one example dredged at Station 157 (1950 fathoms) especially so; the anterior part of the body (the abdomen is unfortunately lost) is furnished with a ring of long slender spines upon each segment a quarter of an inch or so in length. The excessive development of spines appears to be commonly met with among the deep-sea Isopoda; the long spine-like epimera of the deep-sea *Serolis* have been already referred to, and in many of the Arcturids the tubercles on the surface of the body are prolonged into sharp spiniform processes, attaining in many cases a considerable length, while one species at least, allied to the Munnopsidæ, has comparatively long and spiniform epimera analogous to those of *Serolis*. None of the Munnopsidæ possess eyes, but the deep-sea Arcturidæ in every case have well-developed eyes, strongly pigmented.

“Of the Cymothoadæ one example was dredged in deep water (Station 218, 1070 fathoms) which is of some interest; this Isopod is remarkable for the fact that *all* the abdominal appendages are modified into foliaceous gill lamellæ; the terminal pair are in no way different from the five preceding pairs, whereas in other Isopoda it is the general rule that this pair of appendages does not form branchial organs but swimming feet. Eyes are quite absent; the anterior antennæ are short and broad, consisting of two joints only; the second pair of antennæ have four joints and a terminal filament, and are much more slender; the first pair of thoracic appendages are clawed. The specimen measures about 70 mm. in length. The Challenger collection contains only one other species belonging to this family from deep water.

“The Sphæromidæ, judging from what is known at present, are but poorly represented in deep water; only two examples, apparently a male and a female of the same species, were dredged at Station 218, 1070 fathoms. This species is evidently closely allied to the genus *Næsa*, but is probably distinct; the most noticeable peculiarity is that the eyes are nearly abortive; there is no pigment present, and the cornea is not clearly faceted. Of the Anthuridæ one or two specimens were dredged in deep water.