

facts is therefore not so great. Although the number of deep-sea species which have well-developed eyes is so large, they nearly all (all except three) belong to the two allied genera *Arcturus* and *Astacilla*, which thus form almost the only exception to the general statement that the deep-sea Isopoda are blind. It must not be forgotten that certain genera, e.g., *Pleurogonium*, which are confined to shallow water are blind.

It is extremely difficult to conceive of any reason for this great difference. Why should the species of one genus retain their eyes after migrating into the deeper waters while the species of another genus lose them? Possibly the explanation of these anomalies is to be sought for in considering the length of time that has elapsed since the migration of the different species into the abyssal regions of the ocean.

It will be, I hope, apparent to any one who has studied that portion of this Report which deals with the description of species, that the peculiar deep-sea genera are well marked as such, and it may be supposed, therefore, that they are old inhabitants of the deeper waters, consequently they have had time to lose their eyes; on the other hand, the deep-sea *Arcturi* are not widely different from their shallow-water allies, and perhaps therefore have only recently become a part of the abyssal fauna; these two assumptions appear to me justifiable, but it is, on the other hand, evidently a pure assumption to suppose that the deep-sea species of *Janira*, *Serolis*, &c., have been just sufficiently long inhabitants of the deep for the eyes to have become rudimentary or to have disappeared.

It is commonly stated that the deep-sea fauna comprises many species which are larger than their shallow-water representatives. This is certainly the case with the Isopoda. I need hardly allude to the appropriately-named *Bathynomus giganteus*,¹ which is by far the largest species of the order at present known; there are no other instances of deep-sea Isopoda which attain to so colossal a size, but in many families the deep-sea forms are decidedly larger than the shallow-water. Among the Asellidæ, *Stenetrium haswelli* is larger than any of the three shallow-water species of this genus; *Iolanthe* is a large Isopod compared with the size which other Asellidæ reach; the deep-sea species of *Eurycope* are in many cases much larger than the species known to inhabit the shallow water, and I have already referred to the large size of two at least of the deep-sea species of the genus *Serolis*. Many of the deep-sea *Arcturi* are of large size, but, on the other hand, certain shallow-water forms, such as *Arcturus baffini* and *Arcturus furcatus* are fully as large; it must be noted, however, that both these species range into deep water. Two deep-sea species of *Ischnosoma*, viz., *Ischnosoma bacillus* and *Ischnosoma bacilloides*, are very much larger than the single species, *Ischnosoma bispinosum*, which is known from shallow water.

A very noticeable feature in the organisation of the deep-sea Isopoda is the extremely great development of spines upon the body; this character is found in very many of the different families which inhabit the deeper waters. The deep-sea *Arcturi* are more

¹ See p. 152.