

- Station 281. *Arcturus abyssicola*.
 Station 302. *Acanthocope spinicauda*, *Ischosoma bacilloides*.
 Station 318. *Serolis neæra*.
 { Station 320. *Serolis neæra*, *Stenetrium haswelli*, *Arcturus americana*.
 { Station 323. *Neotanais americanus*.

It appears from the above list that the deep-sea Isopoda are distributed very unevenly over the floor of the ocean, and that there are long stretches of ocean where no species at all were found; these are the whole of the Central and Southern Atlantic, and the Central and Western Pacific.

I have bracketed together those Stations which are only separated by a very short interval, and this will show that, in most instances where Isopoda were met with, they were represented by a considerable variety of forms. More particularly to be noticed are Stations 146 and 147, Stations 168 and 169, Station 153, Station 158, Station 218, Stations 320 and 323, and Station 246.

The accompanying map illustrates the distribution of the deep-sea Isopoda.

SPECIAL PECULIARITIES OF THE DEEP-SEA ISOPODA.

It has been long known that the deep-sea Crustacea, as well as other deep-sea animals, are commonly blind, but the puzzling fact that this is by no means universally the case has exercised the ingenuity of naturalists; the well-known theory of abyssal light has been brought forward as an explanation of the persistence of eyes in certain forms.

Among the Isopoda thirty-four of the deep-sea species are totally blind, and three others, viz., one species of *Eurycope* and two of *Ischnosoma*, only represented by fragments, may in all probability be added to this list; in four species, viz., three species of *Serolis*¹ and *Cymodocea abyssorum*, the eyes are evidently degenerate; in eighteen species, on the other hand, there are well-developed eyes.

The significance of these facts, however, is not apparent from the statistics; they will require to be examined more closely. In the first place, it is noteworthy that of the eleven peculiar deep-sea genera only two, viz., *Acanthomunna* and *Bathynomus*, have eyes; of the remaining species, seven belong to genera of which the shallow-water representatives, so far as is known at present, invariably possess eyes;² these two series of facts are evidently of considerable importance.

On the other hand, the remaining eighteen, included in the genera *Munnopsis*, *Eurycope*, *Ischnosoma*, *Typhlotanais*, and *Cryptocope*, belong to genera which are invariably blind, even when occurring in quite shallow water; the significance of these

¹ See Part I. of my Report, Zool. Chall. Exp., pt. xxxiii.

² This includes those species with imperfect eyes, evidently on the way to disappearance.