## THE ISOPODAN FAUNA OF DEEP WATER.

The following observations on the Isopodan fauna of the deep sea are mainly a recapitulation of the details that have been already given in considering the several families of Isopoda represented in the Challenger collection. It may be useful, however, to bring together these scattered facts, and to compare them with what is already known from the investigations of Sars and others.

Before stating the facts and discussing the various conclusions that may be arrived at from their study, it is evidently necessary to determine what is the boundary line between "shallow" and "deep" water.

In his Report on the Challenger Echinoidea, Agassiz divides the ocean into three territories: (1) littoral, up to about 100 fathoms; (2) continental, to 500 fathoms; and (3) abyssal, all the greater depths.

I do not propose in the present section to consider in detail the littoral forms, but I shall of course indicate those continental and abyssal species which also occur in the shallow waters.

Since so many of the species described by Professor Sars range from extremely shallow water up to 300 fathoms, and since so few (only ten) exceeded those limits, I shall, for the purpose of shortening my Table, commence with the 300 fathoms limit, not including those species that just touch that line. It appears to me, in fact, from a consideration of the bathymetrical distribution of the Isopoda, that the 300 fathoms line marks approximately the boundary between what may be termed deep-sea species and shallow-water species.

## BATHYMETRICAL TABLES.

In the following Tables those species which are referred to more than once are marked with a number or series of numbers corresponding to the other tables in which they will be found to occur.

TABLE I.—300 to 500 fathoms.

Munnopsis typica, Sars, shallow water. ,, latifrons, F. E. B. Eurycope gigantea, Sars, continental; II. Eurycope cornuta, Sars, shallow water. Ilyarachna longicornis, Sars, shallow water. Anceus hirsutus, Sars, continental.