

137 species, are found between 150 and 500 fathoms, whereof seventy-two are confined within those limits, while thirteen descend from below 150 to below 1000 fathoms; and twenty to below 500. Between 500 and 1000 there have been discovered sixty-four species, whereof one-half, or thirty-two, are confined to those limits, while five descend from the starting-point below 500 to below 1000 fathoms. Finally, sixty-nine species in all get below 1000 fathoms, and of these fifty do not pass above that limit. Of course these numbers are temporary. More dredging will bring more species, and will extend the bathymetric range of many, and increase the proportion of the deep-water species to those of the littoral zone, which hitherto has been much more carefully explored. Nevertheless we may say, in general terms, that a very large proportion live exclusively on the littoral zone, and that therein are included species both of cold and of hot water, though the number of the latter is much the larger. Then there is a large fauna of fifty species, which live exclusively below 1000 fathoms and which have to endure a degree of cold near to freezing, an enormous water pressure, and an entire absence of sunlight. Between these extremes there are large groups whose favourite or even necessary habitat is restricted to given depths. Of the genera mentioned in Table I., *Ophioplocus*, *Ophionema*, *Ophionephthys*, *Ophiarachna*, *Ophiarthrum*, *Ophiomastix*, *Ophiopteris*, *Ophiogymna*, *Ophiocnemis*, *Ophiomaza*, *Ophiothela*, *Ophiopsammium*, *Ophioblenna*, *Astrophyton*, *Euryale*, and *Trichaster*, sixteen in all, do not go lower than 30 fathoms, and they, without exception, inhabit warm seas. This proves that certain groups demand a high temperature and cannot accommodate themselves to a lower one. Should any of them, therefore, be found fossil, it would be reasonable to infer that the horizon was a shallow covered by warm water. Nine genera have not yet been found above 1000 fathoms, *Ophioplinthus*, *Ophiernus*, *Ophiotrochus*, *Ophiocymbium*, *Ophiochytra*, *Ophiambix*, *Ophiogeron*, *Ophiohelus*, *Ophiotholia*; their occurrence, therefore, as fossils might denote a geological bottom of great depth and covered by cold water of very heavy pressure. To these might be added those species of *Ophioglypha* with swollen, microscopically tuberculated plates (*e.g.*, *Ophioglypha bullata*), and the species of *Amphiura* having four or five papillæ on each side of the mouth angle (*e.g.*, *Amphiura patula*), One species only, *Ophiacantha bidentata*, penetrates from the littoral zone to the lowest depths. It binds together the bathymetric faunæ as the humble *Amphiura squamata* unites the geographical. Six genera, *Ophiolipus*, *Ophioplax*, *Ophiobyrsa*, *Astroclon*, *Astrocnida*, and *Astroporpa* are found exclusively between 30 and 150 fathoms; five, *Ophiopyrgus*, *Ophiomastus*, *Ophiopyren*, *Ophiocentrus*, and *Ophiosciasma*, between 150 and 500; and four, *Ophiopleura*, *Ophiophyllum*, *Astrochele*, and *Astroceras* between 500 and 1000 fathoms.