

northern species have a length ranging between a tenth and a quarter of an inch ; at the same time the species at the two extremes of size are by no means dissimilar in general appearance. Among the Gammarina very few, and among the Caprellina none, are reported from very great depths. In the deep waters explored over a vast tract of the Pacific Ocean from Japan to Juan Fernandez the record for these tribes is almost a complete blank. Nevertheless it should not be hastily inferred that the creatures themselves are wanting in those localities, simply because sixty or seventy dips of the dredge over a course of many thousands of miles have not brought any to the surface. A collector exploring some small fraction of coast round his own home takes a species on a single occasion, and with repeated researches in the same locality does not find it again for years. He finds also that species abundant at one part of the year or in one locality of his district are not to be met with at all in the same place at other parts of the year or in other than the special locality at any part of the year. With this experience he will be little inclined to yield to the negative evidence as showing that the floor of the ocean even at its greatest depths is barren of any particular tribe of Amphipods. He will reflect that in the Southern Ocean a haul of the dredge from 1375 fathoms below the surface brought up a single specimen of a single species of the Gammarina, and that 200 miles away another haul from a still greater depth brought up another solitary specimen of the same species. The securing of these two specimens can be explained on the not very probable hypothesis that numbers of the species are distributed over the area where they were taken, so that dredging there was more likely to find them than not, or it may be explained on the more probable hypothesis of a lucky coincidence. Had the dredge often brought up Crustaceans of this division from great depths, the inference would scarcely have been a hasty one that there was an enormous population of them in the abysses of the sea ; as it very rarely brought them up, not indeed from the greatest depths, but from waters which not so long ago would have been thought extraordinarily profound for the existence of life at all, it may be at least suspected that no depth is necessarily out of their reach, and no large region of the ocean necessarily, from present evidence, out of their range. From a general point of view, and as showing the danger of arguing non-existence from non-appearance, it may be noticed that, whereas the Amphipodan fauna described from Kerguelen Island and its neighbourhood has hitherto been very scanty, it is this locality that has yielded more than any other searched by the Challenger. The dredgings indeed here were very numerous, and in shallow water ; but the question may still remain open whether similarly restricted areas of the Pacific at depths between 2000 and 3000 fathoms might not, if they could be explored with similar minuteness, produce at any rate a few representatives of the divisions of Amphipoda now under discussion.

“ In the large number of new species collected, none are very eccentric in difference of form from those already known. One of the most striking for its outward armature is