

traces of the existence of living Ostracoda. In by far the greater number of cases the specimens consist of detached valves, or of perfect, though empty, shells. When any vestige of the soft parts remained it was carefully examined, and three new genera, *Phlyctenophora*, *Bythocypris*, and *Crossophorus* are here described as a result of such investigation; some little new knowledge has also been gained of the characters of other genera. Still, as a whole, the results of the Challenger's work in this department are disappointing. I had thought it possible that in this, as in other departments of zoology, forms might have been found connecting our own age more distinctly than has hitherto been done, with bygone geological epochs, or, even more probably, showing new and remarkable variations of structural type. But these anticipations have in no way been realised. Amongst the marine Ostracoda of the British Islands alone we have at least thirty different genera represented. The whole of those brought home by the Challenger are distributed amongst twenty-eight genera, the British genera absent from the Challenger lists being *Potamocypris*, *Sarsiella*, *Darwinella*, *Eucythere*, *Bradycinetus*, and *Conchæcia*. But the comparison is scarcely, in this form, a fair one. The work of the Challenger gave us no collections whatever from between tide marks, nor from the laminarian zone, and these two zones usually swarm with microzoic life of all kinds. The genus *Paradoxostoma*, in British seas, is almost exclusively a littoral one, and it is in this zone that many members of other genera attain their best development. I do not doubt that shore-collecting in the tropical and sub-tropical seas would yield rich results to a student of the Ostracoda; and it has this great advantage over the dredge, that specimens are readily obtained living and unmutated.

Geographical distribution may most readily be studied by dividing the area explored into several districts, arranging under each the species met with within its limits. With this view I propose to divide amongst seven areas the whole of the Challenger explorations:—

1. North Atlantic Ocean (Stations 1 to 110 and 348 to 354).
2. South Atlantic Ocean (Stations 111 to 142 and 313 to 347).
3. South Indian Ocean (Stations 143 to 160).
4. Australasia, including the coasts of Australia, New Zealand, and the Eastern Archipelago south of the Equator (Stations 161 to 196 and 217 to 220).
5. South Pacific Ocean (Stations 271 to 312).
6. North Pacific Ocean (Stations 238 to 270).
7. Eastern Asia, including China, Japan, and the Eastern Archipelago north of the Equator (Stations 197 to 216 and 231 to 238).

A glance at the table of distribution will show that only two Ostracoda are found pliant enough to live in all of these seven areas; these are two natatory pelagic species, *Halocypris atlantica*, Lubbock, and *Halocypris breviostris*, Dana. The reason of this wide distribution is sufficiently clear; to animals living mostly near the surface of the sea, and dependent, probably, upon no restricted or specially localised supplies of food,