depths of 450, 315, and 152 fathoms respectively, while the depth of one, owing to the effacement of the label, has not been recorded.

The genus Perisiphonia, also a deep-water form, gives us two species, both obtained in the Australian Region, where Perisiphonia pectinata occurred at a depth of 700 fathoms, and Perisiphonia filicula at a depth of 150. One of these, however, Perisiphonia filicula, was also found in the Azoric Region at a depth of 450 fathoms, and thus affords an instance of the same species occurring in two regions so widely separated as the Azores and Australia, without any intermediate station offering an example of it.

Grammaria, already known as a northern form, is represented in the Challenger collection by three new species, all from a comparatively narrow zone of southern latitude, Grammaria insignis having been obtained off Marion Island, near the southern boundary of the Cape of Good Hope Region, and from a depth of from 50 to 100 fathoms, Grammaria stentor from Kerguelen with a depth of from 28 to 60 fathoms, and Grammaria magellanica from the Fuegian Region, where it was trawled from a depth of 70 fathoms. All the three species thus occur at moderate depths, and their distribution is interesting as affording an example of stations, for the most part widely separated in longitude, and yet lying within a few degrees of the same parallel of latitude.

Sertularia, with the limits assigned to this genus in the present Report, has, as may be expected, yielded to the dredge and trawl of the Challenger a greater number of species than any other genus. Of these—seventeen in all—four have occurred in the Region of the Cape of Good Hope, four in the Kerguelen Region, and three in the Fuegian. Of the remaining species three have been found at the northern side of the equator, where the Azoric, Nova-Scotian, and West Indian Regions have each given one; while on the southern side the Australian, East Indian, and South Pacific Regions have also yielded one each. Sertularia polyzonias and Sertularia filiformis [gracilis], both from the Fuegian Region, are quite littoral, the former occurring at a depth of from 5 to 12 fathoms and the latter at a depth of 9 fathoms, while Sertularia operculata, an abundant and characteristic species of the British Laminarian zone, is shown to have a singularly wide area of distribution, having been brought up by the dredge of the Challenger from a depth of 45 fathoms off the western coast of Patagonia.

The genus Diphasia is represented in the collection by a single species, Diphasia penaster, which was dredged in the Azoric Region from a depth of 450 fathoms.

Thuiaria is represented by six species, two of which come from the seas lying to the north of the equator, and four from the seas lying to the south. They range from the Azoric to the Fuegian Regions, and include only one very deep dwelling species, namely, Thuiaria hyalina from the South Atlantic Region, where it inhabited a depth of 770 fathoms. Thuiaria pharmacopola, from the Azoric Region, was dredged from