The Challenger dredgings have yielded two new species of the singular Campanularian genus, Hypanthea. One of these comes from the Kerguelen region, where a species of the same genus had already been discovered by the Transit of Venus Expedition. The other is from the Falkland Islands in the Fuegian Region. Hypanthea is a comparatively shallow water form, inhabiting a bathymetrical zone which corresponds pretty closely with the Laminarian zone of the British coast. The species from Kerguelen, Hypanthea aggregata, came from a depth of from 10 to 60 fathoms, and the Fuegian species, Hypanthea hemispherica, from a depth of 12 fathoms. No example of Hypanthea has as yet been found outside of these two Regions. In both it covered the fronds of a Laminaria-like seaweed and was associated with Obelia geniculata, thus pointing to an interesting parallelism between the Hydroid faunas of Kerguelen and the Falkland Islands, two Regions which, though separated by a wide distance in longitude, lie nearly in the same parallel of latitude.

Our knowledge of the remarkable Perisiphonic genus, Cryptolaria, has been enriched by the discovery of eight species, all of which are new. The maximum development of the genus as it appears in the Challenger collection is in the Australian and East Indian Regions, from which three species out of the eight have been obtained. These are Cryptolaria abyssicola from a depth of 2600 fathoms, Cryptolaria geniculata from a depth of 315 fathoms, and Cryptolaria gracilis from a depth of 700 fathoms. The remaining five are more sporadic in their distribution, being dispersed among five Regions, with one species in each, namely, Cryptolaria humilis, Azoric, with a depth of 1000 fathoms; Cryptolaria flabellum, West Indian, with a depth of 390 fathoms; Cryptolaria diffusa, Sargassic, with a depth of 2500 fathoms; Cryptolaria crassicaulis, Cape of Good Hope, with a depth of 420 fathoms; and Cryptolaria pulchella, North Pacific, with a depth of 20 to 40 fathoms.

The United States exploration of the Gulf Stream, however, has shown that there is a large development of the genus in the West Indian Region, four species having been dredged during that exploration in the Gulf of Mexico. As far as we know at present, therefore, there are two centres of maximum development for *Cryptolaria*, an eastern centre in the East Indian and Australian Seas, and a western centre in the seas around the West Indian Islands, a phenomenon which, as we shall presently see, is also apparent in the distribution of the Plumularinæ.

The bathymetrical range of the various species shows further that Cryptolaria is essentially a deep-water genus. Among all the species brought home by the Challenger, only one, Cryptolaria pulchella, has been obtained from a depth under 315 fathoms. This comparatively shallow-water species has been dredged from a depth of 20 to 40 fathoms in the North Pacific, while four have been obtained from the great depths of 700, 1000, 2500, and 2600 fathoms respectively. Among those, for the knowledge of which we are indebted to the United States expedition, three have been dredged from