

variations apparently occur, for at a depth of 200 metres the temperature exceeds 17° C. in the Sargasso Sea, in the Mexican Gulf it is above 20° C., in the Indian Ocean it varies between 13° and 20° C., while in the southern Atlantic it is only a little above 10° or 12° C. The fauna living at this depth is thus subject to temperatures varying between 10° and 20° C., corresponding with what we found in the case of the fishes of the Atlantic coast banks from south of the Canaries to the south-western coast of Britain.

All the silvery fishes of the region between 150 and 500 metres are small, and the same remark applies to all the other organisms of the community. They consist almost exclusively of small crustaceans (copepoda, ostracoda, amphipoda), sagittidæ, pteropoda, and small medusæ. Besides these we commence to find the larvæ of squids and fishes, which, however, become more numerous in the layer above 150 metres.

Pelagic Communities in Depths less than 150 Metres.—In reviewing the pelagic oceanic forms I mentioned that they belong mainly to the warm belt on both sides of the equator between lat. 40° N. and 40° S., where both species and individuals are most numerous. Foraminifera, radiolaria (acantharia), copepoda, medusæ, siphonophora, pteropoda, and salpæ all occur in abundance, and the number of species rapidly decreases as soon as we leave tropical waters. This is also the case with the typical and most abundant surface fishes, the scopelidæ, which occur in numerous tropical and subtropical forms, while only a few species are found in the northern part of the North Atlantic.

The beautiful siphonophores *Physalia* and *Velella* were first seen by us during our short visit to the Mediterranean and in the Spanish Bay. On the way from the Canaries to the Azores and thence westward to Station 64 they were frequently seen, sometimes accompanied by *Agalmopsis* and *Cestus veneris*, besides various surface mollusca. On the other hand, none of these forms were observed on our northern track between Newfoundland and Ireland.

Distribution
of Siphono-
phora.

The shelled pteropods (Thecosomata) are vertically limited to a comparatively thin layer, extending in our northern section down to only 50 or 100 metres, and in the southern section to 250 metres, four-fifths of all the individuals taken occurring within these limits. No less than 3500 individuals comprising 22 species were preserved by us, and of these only about 500 specimens comprising 16 species came from the northern section.

Distribution
of Pteropoda.