

Summary.

The general results may be summarised as follows :—

In the northern North Atlantic we find Atlantic, boreal, and Arctic forms. On our track from Newfoundland to Ireland we met chiefly Atlantic species at the surface (see Station 92, 0–200 metres). In deeper water we find certain Atlantic deep-sea species which nowhere in the ocean reach the surface, mingled with boreal species. At Station 80, situated in an area where the cold waters of the Labrador current communicate directly with the deep bottom layers, the boreal forms occur at all depths (Group 5), as they do in the Norwegian Sea; but to the east of Station 80, where the warm layers are thicker, we meet only the boreal forms in the deeper water, and in the

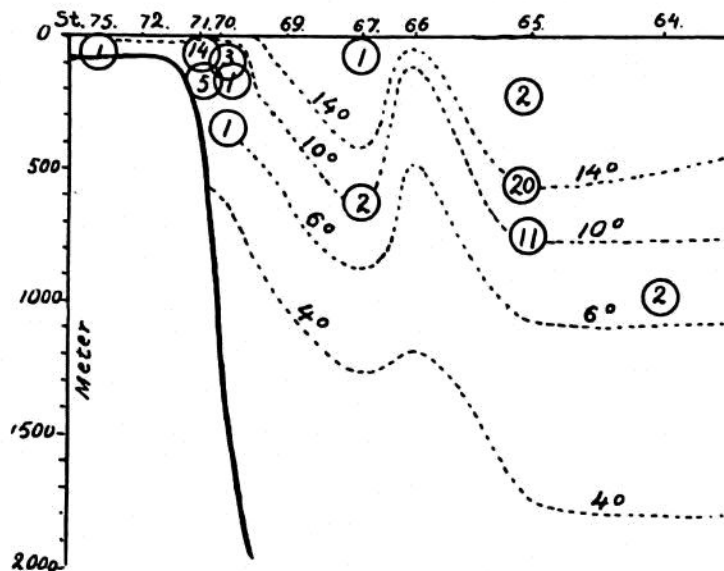


FIG. 488.—VERTICAL DISTRIBUTION OF *CLIONE LIMACINA* BETWEEN NEWFOUNDLAND AND THE SARGASSO SEA. The encircled figures denote the number of individuals captured.

Sargasso Sea at depths of 1000 metres. Thus *Euchæta norvegica* was taken at all depths at Stations 80 and 113; at Station 92 only from 1000 to 500 metres, and at Station 62 only at 1000 metres.

The genuine Arctic forms (Group 6) occur in waters with temperatures below 5° or 6° C., thus *Calanus hyperboreus* was taken on the Newfoundland banks at the surface,

at Station 80 only below 200 metres, and at Station 62 at 1000 metres.

As shown in Chapter III., this conformity appeared even during the cruise, and was obvious not only in regard to these small crustaceans, but for quite a number of other boreal and Arctic animals as well (see pp. 106-108 and 117-118). The most important boreal and Arctic forms encountered between Newfoundland and Ireland, besides the Copepoda previously mentioned, were: the medusa *Aglantha*, the Ctenophores *Beroë*, *Pleurobrachia*, and *Mertensia*, the worms *Sagitta arctica* and *Krohnia hamata*, and the pteropods *Limacina helicina* and *Clione limacina*.

During our voyage from the Sargasso Sea to Newfoundland and thence to Ireland, *Clione limacina* was, according to