The viscosity exhibits, as shown in Fig. 506, a similar course. We find a much greater viscosity in the waters of the Norwegian Sea than in those of the Atlantic. The conditions of viscosity at a depth of 50 metres in the Norwegian Sea correspond to the conditions at about 800 metres in the Atlantic, where at the surface we meet water-layers of small viscosity: "thin water."

If now we compare the distribution of animal life, as

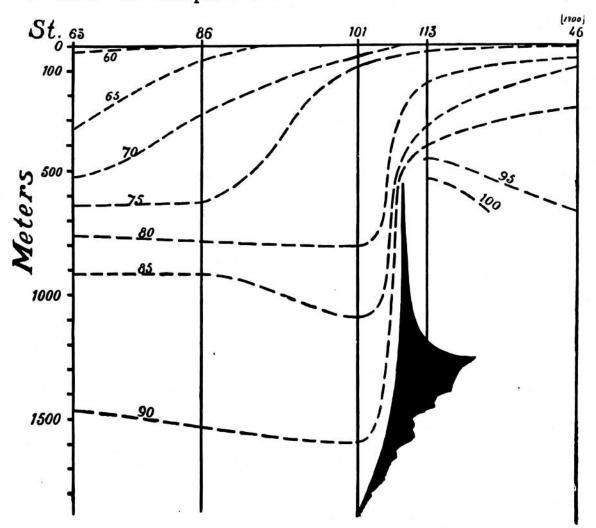


FIG. 506.—DISTRIBUTION OF VISCOSITY (see text) FROM THE SARGASSO SEA (STATION 63) TO LOFOTEN (NORWEGIAN SEA).

100 = the viscosity of distilled water at 0° C.

described in Chapter IX., with these facts, we may clearly understand many of the peculiarities of distribution.

Warm-water oceanic life.

From the distribution of specific gravity and viscosity it follows that in light, thin, and warm oceanic waters only those animals are found which have lowered their specific gravity by the aid of light substances (fats, water), or have increased their surface resistance by reducing their size or by developing special organs for floating. To the first type belong the Siphonophores (*Physalia*, *Physophora*, *Agalmopsis*, and many others), besides Medusæ, Salpæ, Doliolum, Pyrosoma, and