

among them vertical oscillations of the water-layers and vortex movements. Many things go to prove that these are phenomena of general occurrence. We must picture to ourselves great

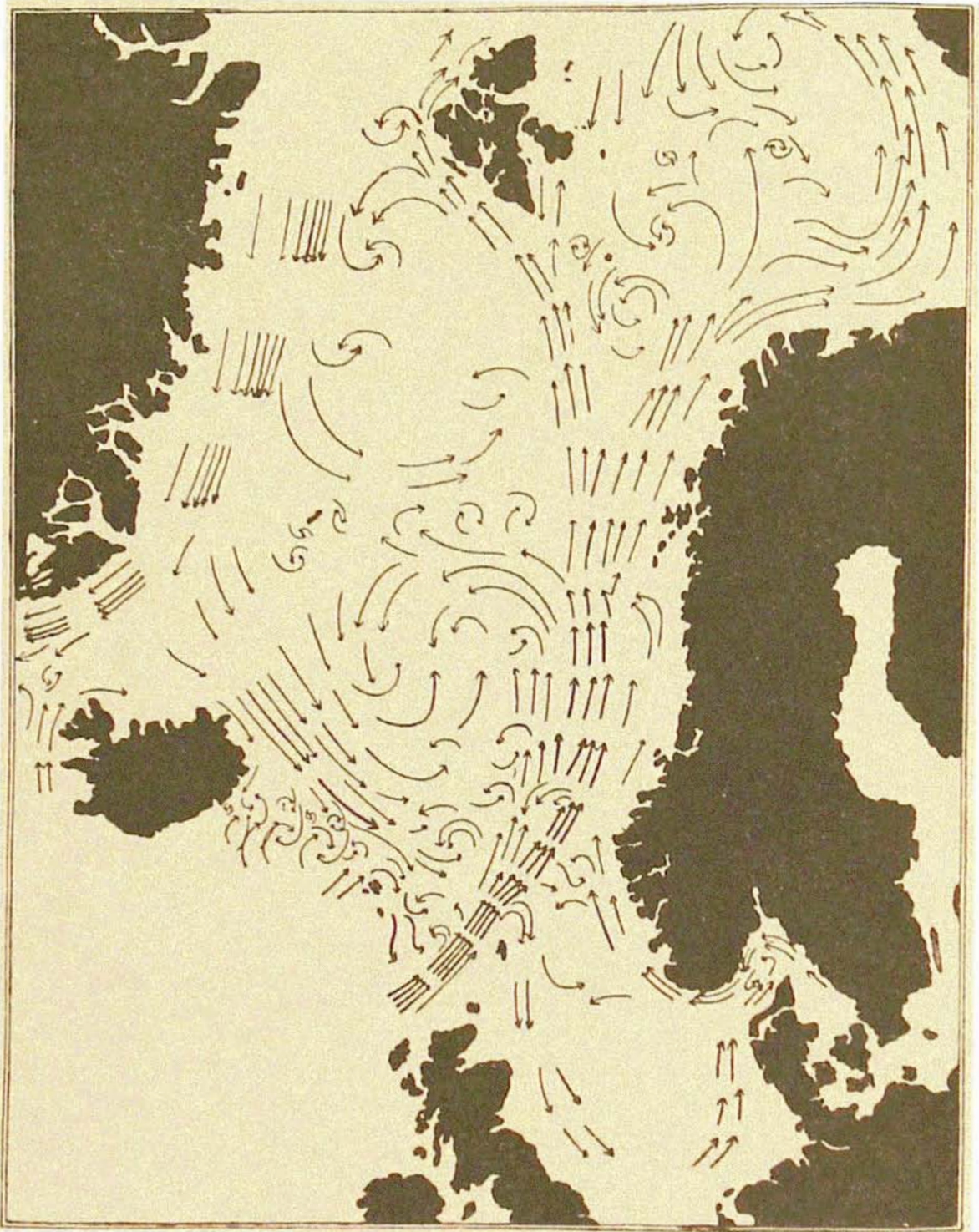


FIG. 193.—THE CURRENTS OF THE NORWEGIAN SEA.

submarine waves moving through the water-masses, alterations of depth in the layers according to changes in the velocity of the currents, standing waves, and great vortices. We must further conceive of constant fluctuations in the velocity, partly