

only two where deep hauls were made. On the later cruises the centre of abundance (as shown by the closely placed lines in fig. 12) was definitely in the northern oceanic water just south of the Newfoundland banks. It decreased in quantity to the north,

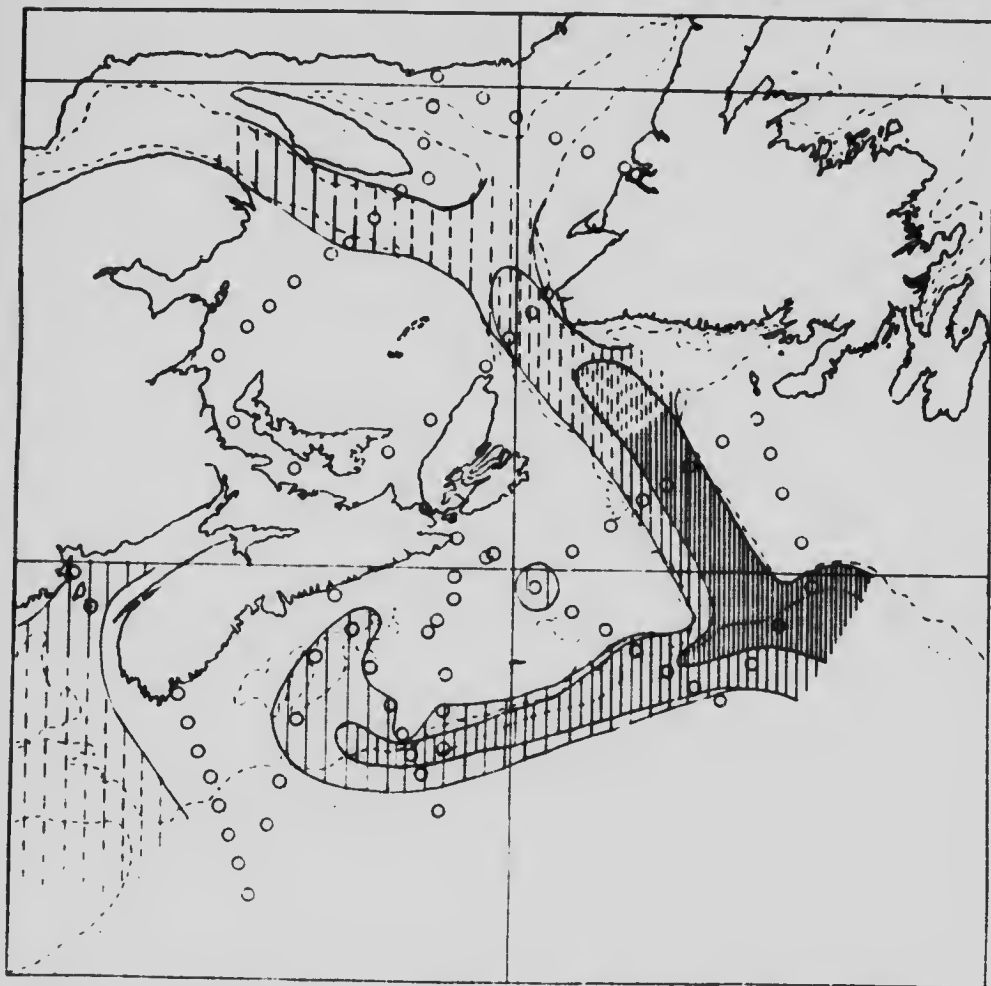


Fig. 12.—Distribution of *E. hamata*, July August 1915. Zones showing frequencies of 1 to 20, 21 to 75 and 75 and over per station.

west, and south. The agreement with the distribution of *S. maxima* is very evident. They both belong to the deeper part of the boreal oceanic water and show its extension up the Laurentian channel and to the south along the outer side of the continental shelf and to some extent over the banks, but diminishing in amount in each direction. The two species differ in that *S. maxima* can not endure as much of a decrease in salinity as can *E. hamata*, and does not extend as far up the Laurentian channel or over the banks as the latter species. It can, however, endure an increase in salinity better than *E. hamata*, as it occurs in the outer Gulf Stream stations, where the latter is absent on the later cruise though present on the earlier. High temperature may, however, be as potent a factor in excluding *E. hamata* from the Gulf Stream as high salinity.