

(single or double) on this Chart represent the regions where the Salpæ occurred. As will be seen, up to the end of May the Salpæ were limited to the Atlantic, where the northern boundary was found on the voyage of the 'Thor' southwards to lie to the west of the Hebrides, and absolutely none were found in the Norwegian Sea or North Sea. Towards the end of July the conditions had quite changed, a fact of which I was able to convince myself on a cruise from Scotland to Bergen and from Bergen to the Shetlands, the Faroes, and Iceland. From the chart, on which the places where we found the Salpæ are marked by black spots, we see how the northern boundary has moved to the east and north. Thus a large tongue of the Salpæ had pushed its way north of the British Isles in a north-easterly direction, far towards the Norwegian coast, and in a northerly direction we see now that the Salpæ reached as far as north-west of the Faroes. And it was not a matter of small quantities. Thus at our station (Station 121, 1905) north of the Shetlands we took many hundred litres per half-hour haul; and in the quiet, calm weather we could see under the clear surface how the water was quite thick with the Salpæ which occurred here and, it is to be remarked, over small depths (less than 200 metres), along with other distinctly Atlantic oceanic forms, in almost as large quantities as we had found them anywhere, even in the Atlantic over deep water where they really belong. At the end of August, when the 'Thor' was coming southwards from Iceland, the northern boundary had moved somewhat, yet not very much. We see also that the south-eastern boundary in the North Sea had spread out farther, corresponding to a greater development of the large tongue in July."

Similar experience has also been gained during the Norwegian investigations. Thus in the survey of the "Michael Sars" investigations on pelagic organisms in the years 1900-1908, Damas writes as follows:—

"In the middle of the summer the invasion of oceanic forms from the Atlantic commences in the Faroe-Shetland channel. There we find an imposing array of species that are entirely absent from the Norwegian Sea, and that certainly do not belong to the fauna appropriate to that sea-basin. Among the most characteristic we may name: *Lepas fascicularis*, *Physophora borealis*, *Cupulita sarsi*, *Solmaris corona*, *Salpa fusiformis*, *S. runcinata*, and *S. irregularis*, *Arachnactis albida*, *Clio pyramidata* and *C. uncinata*. These forms do not enter *en bloc*, and the water-masses which convey them do not seem to have