

paler color, than during the month of July, when they complete their entire development, at the approach of the spawning season.

When they first make their appearance, early in the spring, these Medusæ may be seen, as the sun rises higher above the horizon, floating in immense numbers near the surface of the water, as long as the sky is clear, the sun shines brightly, and the surface of the water remains smooth; though, at that time, they do not seem to seek the places most exposed to a glaring sun, but, on the contrary, appear more frequently about sheltered places, in the neighborhood of wharves, or near prominent rocks. They are, at this time, gregarious, but evenly scattered through the water, and nowhere crowding upon one another. As they grow larger they scatter more, and are found, at a greater distance from the shore, sometimes far apart one from the other, and evidently preferring the sunniest exposures. They may then be seen floating in every attitude, moving to and fro by the rythmical contraction and expansion of their disk, which, as they advance, is always turned in the direction of the progress. These contractions and expansions are as regular as respiratory movements; their rhythm presents slight variations only, larger specimens, however, contracting and expanding at somewhat longer intervals than smaller ones. The average number of these movements is from twelve to fifteen in a minute. There can be no doubt that these animals perceive what is going on about them, and that they are very sensitive to changes in the condition of the atmosphere. As soon as the surface of the water begins to be ruffled, ever so slightly, by the unequal pressure of the atmosphere, or the sky becomes cloudy or overcast, they sink into deeper water and vanish out of sight. Even accidental disturbances are perceived by them, for when approached, however carefully, the change of their course, or the unusual rapidity with which they sink, shows plainly that they are making the utmost efforts to escape, though their ability to do so is very limited. But under such circumstances their rythmical movements are plainly accelerated, their contractions more powerful, in consequence of which their increased specific gravity may accelerate their progression or facilitate their descent into deeper water.

At the time of spawning, towards the end of July or the beginning of August, they may be seen gathering again and clustering nearer together. That at this time they seek one another is unquestionable. I witnessed once, in front of my house at Nahant, a shoal of them, which was evidently in the act of spawning. It could be seen from the shore, at about half a mile's distance. Myriads of specimens had clustered together so closely that they formed an unbroken mass, between which an oar could not be thrust without hitting many at one blow. They were in such a deep phalanx, that it was impossible to ascertain how far below the surface they extended, while those in the uppermost layer were partially forced out of