small mussel which appears to have spread enormously within recent years in our European river-systems. By the byssus, which is characteristic of these forms, it has attached itself to ships and rafts, and so procured transport from place to place. It should be noted that *Dreissensia* still retains a free-swimming larva, which thus secures the distribution of the species through all parts of a river below that to which the adult has been carried.

We have already referred to dispersal by the agency of wind. There is no doubt that this is most important in the case of small invertebrates which are able to encyst themselves, and in the case of those forms producing ova which can resist desiccation. Certain Rotifers, a species of *Cyclops*, and some Protozoa come into the former category, but into the latter comes a much greater number of types. We include the gemmules and statoblasts of sponges and Polyzoa, the summer eggs of various Entomostraca, and the horny-cased eggs of *Hydra* and the Rotifers. No doubt we may add to the list the seeds and spores of diverse aquatic plants.

The matter is peculiarly interesting in the case of Rotifers, which often appear in sporadic fashion in widely separated areas thousands of miles apart. We are as sure as we can be of anything in this somewhat speculative domain, that this remarkable discontinuous distribution is due to the transport of the ova (in some cases perhaps the encysted adults) by means of wind. The eggs are very minute bodies, few of them exceeding a three-hundredth of an inch in length, and many considerably smaller, so that they are specially adapted for transport with dust by the aerial currents which circle the globe. The finding of isolated specimens in remote districts, more striking amongst the Rotifers than in the case of most other animals, is a direct index of the minuteness of their resistant ova, which affords special facilities for wind-transport.

One other means may be mentioned as occasionally effecting the dispersal of fresh-water organisms, and that is the agency of floods. In flood-time barriers of river-systems may break down; but without going as far as this, we may conceive of local varieties, or even species, being swept from their point of origin in some backwater, and widely distributed within the same river-basin. Isolated ponds and lakes may receive in times of flood many organisms from a distance, or on the other hand they may have peculiar and characteristic forms carried out of them by the overflowing waters.

Enough has now been said to make it clear that the organisms which actually constitute the present-day fresh-water flora and fauna are unceasingly subject to dispersal within the limits of that medium, by a variety of different means. This being so, what is more likely than that these organisms should assume and retain a uniformity