

of action on these latter animals : in a few moments they are digested. Many of them contain internally considerable quantities of air, but whether they imbibe it from the atmosphere, extract it from the ocean, or secrete it from within their bodies, we are equally ignorant. A great number of these Medusæ are phosphorescent, and glare amidst the gloom of night like globes of fire ; yet the nature, the principle, and the agents of this wonderful property remain to be discovered. Some sting and inflame the hand that touches them ; but the cause of this power is equally unknown."

Professor Richard Owen quotes these " lively paradoxes " to show the progress made since then in clearing up many points that were obscure at their time, and to show that even the skilful naturalist, with abundant material at hand, may plod on with uncertainty unless aided by the higher powers of the microscope. Recent works published by Professors Agassiz and Clark, and Mr. A. Agassiz, have detailed very fully the anatomy and classification of our native species.

The Jelly-fishes of our coast are represented by numerous globular and disk-like animals of a gelatinous texture, more or less transparent, having certain appendages consisting either of longitudinal bands of vibrating fringes, as in one order ; or, as in another order, having appendages surrounding the mouth, and others, thread-like, hanging from the margin of the disk. The parts most conspicuous within the body are the ovaries, or egg-sacks, the stomach, and certain tubes running from the stomach to the periphery of the body.

These animals are apparently radiated in their structure ; at all events, it is difficult in certain groups to distinguish a right and left side, and for this reason they are called Radiated animals, and form one of the three classes of the branch Radiata.

The Jelly-fishes of our coast are common in our harbors and inlets, where the water is fresh and pure from the ocean. A very ready and convenient way to collect them is to moor your boat on the shady side of a wharf where the reflected rays of the sun are avoided, and, as the tide sweeps gently past, to dip them as they are borne along by the current. Some little practice is necessary to discern the small-

er kinds, for many species are very minute, and other species, though of good size, are nevertheless hard to distinguish on account of extreme transparency. They may be dipped from the water with a tin dipper, though a wide-mouthed glass jar is better for this purpose. As they are secured, they may be poured into a wooden pail for assortment and examination at home ; or, better, a large glass jar, carried on purpose to hold them, may be filled at once, as too frequent changes destroy them.

Some species are very hardy, and may be kept alive for weeks, while others live only a few hours, gradually diminishing in size till they appear to melt away in the water.

Among the more common forms met with on our coast is the *Pleurobrachia*. Words fail in describing the beauty and singularity of this Jelly-fish. Conceive a globular body the size of a walnut or larger, but perfectly transparent, having eight bands of rapidly-vibrating fringes surrounding the body, running from one pole to the other like the ridges on a walnut, and two thread-like appendages, festooned with hundreds of shorter threads, trailing out behind the body like the tail of a comet, and you have a general idea of this Jelly-fish.

The zones of vibrating fringes act like so many little oars, and impel the body through the water. At times, only the fringes on one side are in motion ; and then the body rotates in the water like a vital globe. Anon, the different zones alternate in action, and the body describes a spiral course in the water. The most beautiful prismatic hues are exhibited when these fringes are in motion ; and these brilliant changing colors often lead to their detection in the water. The long thread-like appendages, already mentioned, are the most wonderful portion of the structure of this Jelly-fish. They are lined with hundreds of smaller threads which start at right angles from the main threads, and all are of the extreme tenuity. The distance these appendages can be projected from the body, the instantaneous manner in which they are drawn within the body, and the perfect control the animal manifests in their movements, seems incredible until the movements have been actually witnessed. When contracted, these appendages occupy a space of exceeding minuteness ; and, when projected from the