

broad. Both the crab and the oysters were seen alive by Mr. Robert Brown.*

From this example we learn the manner in which oysters may be diffused over every part of the sea where the crab wanders; and if they are at length carried to a spot where there is nothing but fine mud, the foundation of a new oyster-bank may be laid on the death of the crab. In this instance the oysters survived the crab many days, and were killed at last only by long exposure to the air.

Geographical Distribution and Migrations of Zoophytes.

Zoophytes are very imperfectly known; but there can be little doubt that each maritime region possesses species peculiar to itself. The Madrepores, or lamelliferous Polyparia, are found in their fullest development only in the tropical seas of Polynesia and the East and West Indies; and this family is represented only by a few species in our seas. The zoophytes of the Mediterranean, according to Ehrenberg, differ almost entirely from those of the Red Sea, although only seventy miles distant. Out of 120 species of Anthozoa, only two are common to both seas.† Péron and Lesueur, after studying the Holothuria, Medusæ, and other congeners of delicate and changeable forms, came to the conclusion that each kind has its place of residence determined by the temperature necessary to support its existence. Thus, for example, they found the abode of *Pyrosoma Atlantica* to be confined to one particular region of the Atlantic Ocean.‡

Let us now inquire how the transportation of Polyps from one part of the globe to another is effected. Many of them, as in the families Flustra and Sertularia, attach themselves to sea-weed, and are occasionally drifted along with it. Many fix themselves to the shells of Mollusca, and are thus borne along by them to short distances. Some polyps, like some species of sea-pens, float about in the ocean, and are usually believed to possess powers of spontaneous motion. But the most frequent mode of transportation consists in the buoyancy of their eggs, or certain small vesicles, which are detached, and are capable of becoming the foundation of a new colony. These gems, as they are called, have, in many instances, a locomotive power of their own, by which they proceed in a determinate direction for several days after separation from the parent. They are propelled by means of numerous short threads or *cilia*, which are in constant and rapid vibration; and, when thus supported in the water, they may be borne along by currents to a great distance.

That some zoophytes adhere to floating bodies, is proved by their being found attached to the bottoms of ships, like certain Testacea before alluded to.

* This specimen is in the collection of my friend Mr. Broderip, who observes, that this crab, which was apparently in perfect health, could not have cast her shell for six years, whereas some naturalists have stated that the species moults annually, without limiting the moulting

period to the early stages of the growth of the animal.

† Quart. Journ. Geol. Soc., vol. iv. p. 336.

‡ Voy. aux Terres Australes, tom. i. p. 492.