

here is the great action, and here it is that the foot revolves, thus maintaining a rotatory motion, causing the valves to act as files upon the walls of its crypt, and thus to enlarge it when necessary; perhaps this action may also be connected with its respiration and nutriment; it is probably very slow and gradual, so as not to injure the frail apex of its shells.

In another rock-borer, of a form not suited to effect an excavation by a rotatory motion, the deficiency, we see, is compensated for, and it effects its purpose by employing chemical agency when its crypt becomes too small for it.

The sand-boring razor-shell, above described, would be impeded by a rough shell in excavating its deep burrow, its valves therefore are smooth and polished, and its body very narrow, and consequently meets with less resistance in its motion, either upwards or downwards—while the cockles, which do not bore to a great depth, are differently constructed, and proceed in a different manner.

We next come to those bivalves which fix themselves to the rocks, or in other secure stations, by means of a *Byssus*, which is usually formed of brown silken threads, intertwined like wool, spun from the foot of the animal, formed from a slimy fluid furnished by a gland situated under its base. Poli says, with respect to the byssus of mussels, which have all of them this faculty, that it is of the same structure with hair, and that, at the extremities, it is furnished with little cups or suckers, by which it adheres so firmly that the mussels can only be drawn from the water in great bunches. Some species are entirely enveloped with this substance. These provisions evidently indicate design and creative wisdom.

The giant *Clamp-shells** belonging to the bimuscular section, sometimes four feet in length and weighing more

* *Tridacne Gigas*.