

tendency of the shell to rise to the surface would be counteracted by the strong muscular disk (Pl. 31, n.), with which the creature crawls, and adheres to the bottom, using freely its tentacula to seize its prey.*

Dr. Hook considered (Hook's Experiments, 8vo. 1726, page 308) that the air chambers were *filled alternately with air or water*; † and Parkinson (Organic Remains, vol. iii. p. 102), admitting that these chambers were not accessible to water, thinks that the act of rising or sinking depends on the *alternate introduction of air or water into the siphuncle*; but he is at a loss to find the source from which this air could be obtained at the bottom of the sea, or to

shells, and the specific gravity of the body of the animal, when contracted into the shell, may have exceeded that of water to the amount of another quarter of an ounce, there remains about half an ounce for the weight of fluid, which being introduced into the siphuncle, would cause the shell to sink; and this quantity seems well proportioned to the capacity both of the pericardium, and of the distended siphuncle.

* See Sup. Note.

† If the chambers were filled with water, the shell could not be thus suspended without muscular exertion, and instead of being poised vertically over the body, in a position of ease and safety, would be continually tending to fall flat upon its side; thus exposing itself to injury by friction, and the animal to attacks from its enemies. Rumphius states, that at the bottom, He creeps with his boat above him, and with his head and barbs (tentacula) on the ground, making a tolerably quick progress. The author has observed that a similar vertical position is maintained by the shell of the *Planorbis corneus*, whilst the animal is in the act of crawling at the bottom.