

their inner surface, should be gradually removed to a greater distance from the hinge, so that it may preserve its relative situation with regard to the whole shell, and retain undiminished its power of acting upon the valves. For this purpose its adhesions are gradually transferred, by some unknown process, along the surface of the valves; and the progress of the removal may generally be distinctly traced by the marks which are left in the shell at the places before occupied by the attachments of the muscular fibres. The same process takes place when there are two or three muscles instead of one.

A few genera of Mollusca, such as the *Pholas*, have, in addition to the two principal valves, small supplementary pieces of shell. They have been accordingly comprised in the order of *Multivalves*, which also comprehends Cuvier's order of *Cirrhopoda*, including the several kinds of *Barnacles*, (the genus *Lepas* of Linnæus,) which are furnished with a great number of jointed filaments, or *cirrhi*, and form an intermediate link of connexion between the *Mollusca* and the *Articulata*. But the limits of this treatise will not allow me to dwell on the endless diversities of structure which this subject presents.

§ 5. *Pteropoda*.

IN the Mollusca belonging to the two orders which have now passed under our review, namely, the *Acephala* and *Gasteropoda*, the mantle, while it folds over the principal viscera of the body, leaves apertures for the admission of water to the gills, or organs of respiration. But there exist a few genera having the sac formed by the mantle closed on every side; a structure which renders it necessary to adopt a different arrangement with regard to the gills, and to place them externally, and we then find them spreading out like a pair of wings, on each side of the neck. Since this general closing of the mantle precludes, also, the formation of any organ of progressive motion corresponding to a foot, advantage is taken of the projection of the gills to