

Order 9. Cyclobranchiata is distinguished by the branchiæ, like little leaflets or pyramids, attached in a cordon under the border of the mantle, the sexes being united in the same individual. The animals are the lowest of the great Pectinibranchiate group, to which, however, they certainly belong. The technical character resembles that of Inferobranchiata, but the organization is very different. The last four orders having the branchiæ in the anterior portion of the body are now generally combined under the name of Prosobranchiata. Perhaps, it would be still better to make Cuvier's name Pectinibranchiata, which well expresses the common character, embrace them all. They constitute the specially typical group among the Gasteropoda, and their further sub-division is a subject of great interest.

Some late writers on the subject combining, as already explained, all the orders related to Pectinibranchiata under the name of Prosobranchiata, unite also Tectibranchiata with Nudibranchiata and Inferobranchiata under the common name of Opisthobranchiata, thus reducing the whole class to four orders. This, however, is liable to great objection from the decidedly distinct characters of Nudibranchiata, which seem manifestly to claim for it rank as an order. If we only reduce Inferobranchiata to Tectibranchiata, and give its natural and just extension to Pectinibranchiata, we have five well marked orders of which it seems evident that Nudibranchiata occupy the lowest place, and Pectinibranchiata, that which represents Gasteropoda among the orders. But Nucleobranchiata are remarkable for the high development of their organization, and for resemblance to the higher classes, Pteropoda and Cephalopoda, we may therefore place them first. Pulmobranchiata will without question stand second, and then we have the five orders reduced to their natural series. In forming his orders Cuvier relied on the different position of the branchiæ, and on the comparative development of the reproductive system, the former being admitted as the leading character. Allowing the correctness of his opinion on each point, there are other considerations which justify the combinations now proposed, since, for example, the branchiæ are essentially of the same kind in the whole of the Pectinibranchiata in the extended sense we have given to the term, and there are other points of resemblance uniting them as one great natural group, whilst the separation or union of the sexual distinctions may assist in determining the comparative rank of the families, though not allowed to multiply orders by breaking up a great natural assemblage.