

I do not follow his system, and I may fancy that he at times subdivides too much, and indulges too much in the invention of names; but we owe to him the pressing on our notice, the importance of attention to the foot, the operculum and the odontophore of Gasteropods; much assistance in estimating the value of shell characters, and the essential principle that knowledge of the animal, the operculum and the odontophore must always be united with that of the shell before we can be satisfied as to its systematic relations in a natural arrangement. This last principle is not always convenient in its application, and we are sometimes driven to rely for the time on resemblances, which cannot be accounted certain proofs of real affinity, but even then it is well to know where our information is deficient, and it is truly important that where knowledge is accessible we should be excited to seek it, not supposing our work to be done whilst essential points are neglected. Few indeed have contributed as much as Dr. Gray to the progress of this part of Malacology and let him be honored accordingly.

I have already expressed the opinion that Cuvier's orders of Gasteropods were founded on the right principles, though increasing knowledge has shown that he divided somewhat too minutely for natural grouping. Those who have corrected his plan seem to have gone to the other extreme in uniting as one order the strikingly different Tectibranchiata and Nudibranchiata, which they have immediately to admit as sub-orders, and which every observer feels to be as well separated from each other, as either of them from the other received orders. Correcting this error we have, as already given, the five orders of Gasteropoda, and it remains to consider more particularly their families. As excelling in the organs of sense and in power, and as manifesting an approach towards the higher classes of the sub-kingdom, the Nucleobranchiata, though deviating most widely from the true Gasteropodous type, must rank as the first order. Those known are divided into two families: Firolidae with elongated bodies and either no shell, or a cap-like very delicate shell enclosing the branchiae with the heart and liver on the back of the animal; and Atlantidae with a shell into which the animal can withdraw and which has an operculum. Other forms probably exist or had existed but are not known to us. The nearest approach may possibly be found in *Janthina* among the Pectinibranchiata, which almost imitates the muzzle of Firolidae and resembles them in dentition. The branchiae partially protected by the shell are exposed on the back, and the animals are pelagic and floating with the operculum converted