

bottom of the sea. There now exist but few forms of this class; for instance, some species of *Lingula*, *Terebratula*, and others akin to them, which are but feeble remnants of the great variety of forms which represented the Lamp-shells in earlier periods of the earth's history. In the Silurian period they constituted the principal portion of the whole Mollusc tribe. From the agreement which, in many respects, their early stage of development presents with the Moss animals, it has been concluded that they have developed out of Worms, which were nearly related to this class. Of the two sub-classes of Lamp-shells, the Hinge-less (*Ecardines*) must be looked upon as the lower and more imperfect, the Hinged (*Testicardines*) as the higher and more fully developed group.

The anatomical difference between the Lamp-shells and the three other classes of Molluscs is so considerable that the latter may be distinguished from the former by the name of *Otocardia*. All the *Otocardia* have a heart with chamber (ventricle) and ante-chamber (auricle), whereas Lamp-shells do not possess the ante-chamber. Moreover, the central nervous system is developed only in the former (and not in the latter) in the shape of a complete pharyngeal ring. Hence the four classes of Molluscs may be grouped in the following manner:—

I. Molluscs without head. <i>Acephala.</i>	}	1. Lamp-shells (<i>Spirobranchia</i>).	}	I. Haplocardia (with simple heart).
II. Molluscs with head. <i>Cephalophora.</i>		2. Mussels (<i>Lamellibranchia</i>).		II. <i>Otocardia</i> (with chamber and ante-chamber to the heart).
		3. Snails (<i>Cochlides</i>).		
		4. Cuttles (<i>Cephalopoda</i>).		