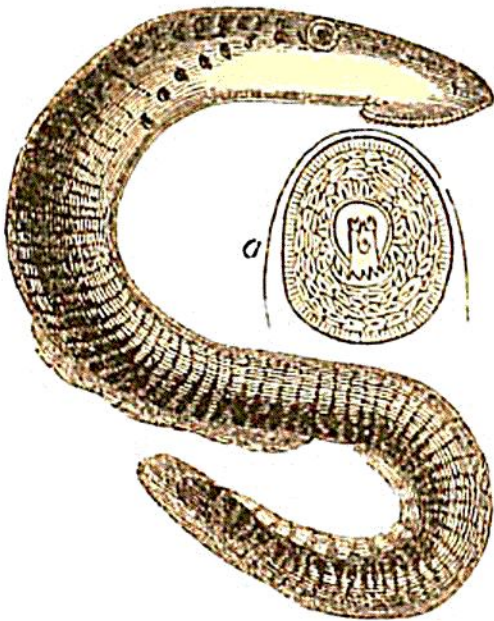


their skeletons, are the most imperfect of all the Vertebrates. They have neither *pectoral* nor *ventral* fins. Their *body*, apparently headless and eyeless, terminates anteriorly in a circular or semicircular fleshy *lip*, supported by a cartilaginous ring. Their *gills* consist of pouches instead

Fig. 104.



Lamprey (*Petromyzon fluviatilis*.)  
a. The Sucking mouth with its  
armature of teeth.

of pectinated organs. By means of their mouth, which, as well as the tongue, is armed with teeth, they fix themselves to fishes, and derive their nutriment from them. The *lamprey*,\* *lamperne*,† and *hag*, &c., belong to this Order.

*Order 2.*—The *Selacians* have gills, fixed by their outer margin, and not disengaged as in the *Osseans*, and they expel the water by lateral openings. To this Order the *sharks* and the *rays* belong.

*Order 3.*—The *Sturionians* agree with the *Ossean Fishes* in their gills, but their skeleton is cartilaginous. They have only a single orifice, covered with an operculum. The sole genera included in this Order are the *Sturgeon*,‡ and the *Sea-ape*.§

*Sub-class 2.*—The *Osseans* Cuvier divides into *four* Orders, viz., *Acanthopterygians*, *Malacopterygians*, *Lophobranchians*, and *Plectognathians*. These Orders, for reasons before assigned,|| I shall reverse.

*Order 1.* (*Cuv. 6.*)—*Plectognathian Fishes*. *Gill-covers* concealed under a thick skin. *Ribs* rudimental. *Ventral*

\* *Petromyzon fluviatilis*, &c.† *P. branchialis* ?‡ *Accipenser*.§ *Chimæra monstrosa*.

|| Vol. i. p. 160, and above, p. 234.