In the *Myxine*, which feeds upon the internal parts of its prey, and buries its head and part of its body in the flesh, the openings of the respiratory organs are removed sufficiently far from the head to admit of respiration going on while the animal is so employed; and there are only two external openings, and six lateral pouches on each side, with tubes similar to those in the lamprey.

The *Perca scandens* (Daldorff,*) which is a fish inhabiting the seas of India, has a very remarkable structure adapting it to the maintenance of respiration, and consequently to the support of life for a considerable time when out of the water; and hence it is said occasionally to travel on land to some distance from the coast.† The pharyngeal bones of this fish have a foliated and cellular structure, which gives them a capacity for retaining a sufficient quantity of water, not only to keep the gills moist, but also to enable them to perform their proper office; while not a particle of water is suffered to escape from them, by the opercula being accurately closed.

The same faculty, resulting from a similar structure, is possessed by the *Ophicephalus*, which is also met with in the lakes and rivers of India and China. Eels are enabled to carry on respiration when out of water, for a certain period, in consequence of the narrowness of the aperture for the exit of the water from the branchial cavity, which enables it to be closed, and the water to be retained in that cavity.‡

I have already stated that, in all aquatic animals, the water which is breathed is merely the vehicle by which the air it contains is brought into contact with the organs of respiration. This air is constantly vitiated by the respiration of these animals, and requires to be renewed by the absorption of a

* *Anthias testudinus* (Bloch:) *Anabs* (Cuv.)

† This peculiar faculty has been already alluded to in volume i. p. 301.

‡ Dr. Hancock states that the *Doras costatus*, (*Silurus costatus*, Linn.) or Hassar, in very dry seasons, is sometimes seen, in great numbers, making long marches over land in search of water. Edin. Phil. Journal, xx. 396.