

the sense of sight; they seem mere worms, furnished with fins and gills, and were so classed by Linnæus; but though now ascertained to be in reality fishes, they must be regarded as the lowest link in the scale — as connecting the class with the class *Vermes*, just as the superior cartilaginous fishes may be regarded as connecting it with the class *Reptilia*.

Between the osseous and the cartilaginous fishes there exist some very striking dissimilarities. The skull of the osseous fish is divided into a greater number of distinct bones, and possesses more movable parts, than the skulls of mammiferous animals: the skull of the cartilaginous fish, on the contrary, consists of but a single piece, without joint or suture. There is another marked distinction. The bony fish, if it approaches in form to that general type which we recognize amid all the varieties of the class as proper to fishes, and to which, in all their families, nature is continually inclining, will be found to have a tail branching out, as in the perch and herring, from the bone in which the vertebral column terminates; whereas the cartilaginous fish, if it also approach the general type, will be found to have a tail formed, as in the sturgeon and dog-fish, on both sides of the hinder portion of the spine, but developed much more largely on the under than on the upper side. In some instances, it is wanting on the upper side altogether. It may be as impossible to assign reasons for such relations as for those

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families seem better established. Of a pair of gigantic rays (*Cephaloptera giorna*) taken in the Mediterranean, and described by Risso, the female was captured by some fishermen; and the male continued constantly about the boat, as if bewailing the fate of his companion, and was then found floating dead. — See Wilson's article *ICHTHYOLOGY*, *Encyc. Brit.*, seventh edition