

of Linnæus belong—have the mouth not under, but at the anterior termination of the head,—in itself an evidence that the position of the mouth at the extremity of the muzzle, common to the greater number of the osseous fishes, can be no very high character, seeing that the humblest of the *Suctorii* possess it; and that many osseous fishes, whose mouths open, not on the under, but the upper side of the snout, as in the distorted and asymmetrical genus *Platessa*, are not only in no degree superior to their bony neighbors, and far inferior to the placoid ones, but bear, in direct consequence of the arrangement, an expression of unmistakable stupidity. The objection, however, admits of a greatly more conclusive reply.

“This fish, to speak in the technical language of Agassiz,” says the Edinburgh Reviewer, in reference to the ancient ichthyolite of the Wenlock Shale, “undoubtedly belongs to the Cestraciont family of the Placoid order,—proving to demonstration that the oldest known fossil fish [1845] belongs to the highest type of that division of the vertebrata.” I may add, that the character and family of this ancient specimen was determined by our highest British authority in fossil ichthyology, Sir Philip Egerton. And it is in depreciation of Professor Sedgwick’s statement regarding its high standing that the author of the “Vestiges” refers to the supposed inferiority indicated by a mouth opening, not at the extremity of the muzzle, but under the head. Let us, then, fully grant, for the argument’s sake, that the occurrence of the mouth in the muzzle is a sign of superiority, and its occurrence under the head a mark of great inferiority, and then ascertain how the fact stands with regard to the *Cestracion*. “The Cestracion sub-genus,” says Mr. James Wilson, in his admirable treatise on fishes, which forms the article