vation is marked in the scale," we find him saying, "by an animal exchanging a multiplicity of parts serving one end, for a smaller number." The skull of a cod consists of about thrice as many separate bones as that of a man. But I do not well see that in this case the fact either of *simplicity* in excess or of *multiplicity* in excess can be insisted upon in either direction, as a proper basis for argument Nearly the same remark applies to the maxillaries as to the skull. The under jaw in man consists of a single bone; that of the thornback — if we do not include the two suspending *ribs*, which belong equally to the upper jaw — of two bones, (the number in all the mammiferous quadrupeds:) that of the cod of four bones, and, if we include the suspending *ribs*, of twelve. On what principle are we to hold, with *one* as the representative number of the highest type of jaw, that *two* indicates a lower standing than *four*, or *four* than *twelve*? In reference to the further statement, that in many of the ancient fishes "traces can be observed of the muscles having been attached to the external plates, strikingly indicating their low grade as vertebrate animals," it may be answer enough to state, that the peculiarity in question was not a characteristic of the *most* ancient fishes, — the Placoids of the Silurian system, — but of some Ganoids of the succeeding systems. The reader may remember, as a case in point, the example furnished by the nail-like bone of *Asterolepis*, figured in page 111, in which there exists depressions resembling that of the round ligament in the head of the quadrupedal thigh-bone. And as for the remark that the opening of the mouth of the Placoid, "on the under side of the head," is indicative of a low embryonic condition, it might be almost sufficient to remark, in turn, that the lowest family of fishes — that to which the supposed worms