

pectinated at their lower edges like the teeth of a comb, and a Cycloid order, composed of fishes whose scales, like those of the salmon, are defined all around by a simple continuous margin; and no sooner was the division effected than it was found to cast a singularly clear light on the early history of the class. The earliest fishes,—first-born of their family, seem to have been all Placoids. The Silurian system has not yet afforded trace of any other vertebral animal. With the Old Red Sandstone the Ganoids were ushered upon the scene in amazing abundance; and for untold ages, comprising mayhap millions of years, the entire ichthyic class consisted, so far as is yet known, of but these two orders. Dur-

\* Here, as in the former diagrams (figs. 1 and 4), the horizontal lines represent the divisions of the great geologic systems; while the vertical lines indicate the sweep of the several orders of fishes across the scale, and the periods, so far as has yet been determined, of their first occurrence in creation.