

*Conclusion.*

In the facts before us, we have an uninterrupted series of evidence, derived from the family of Fishes, by which both bony and cartilaginous forms of this family, are shewn to have prevailed during every period, from the first commencement of submarine life, unto the present hour. The similarity of the teeth, and scales, and bones, of the earliest Sauroid Fishes of the coal formation (*Megalichthys*), to those of the living *Lepidosteus*, and the correspondence of the teeth and bony spines of the only living Cestraciant in the family of Sharks, with the numerous extinct forms of that sub-family, which abound throughout the Carboniferous and Secondary formations, connect extreme points of this grand vertebrated division of the animal kingdom, by one unbroken chain, more uniform and continuous than has hitherto been discovered in the entire range of geological researches.

It results from the review here taken of the history of fossil Fishes, that this important class of vertebrated animals presented its actual gradations of structure amongst the earliest inhabitants of our planet; and has ever performed the same important functions in the general economy of nature, as those discharged by their living representatives in our modern seas, and