

*Sauroid Fishes in the Order Ganoid.*

The voracious family of Sauroid, or Lizard-like Fishes, first claims our attention, and is highly important in the physiological consideration of the history of Fishes, as it combines in the structure both of the bones, and some of the soft parts, characters which are common to the class of reptiles. M. Agassiz has already ascer-

zerland, has long been one of the most celebrated, and least understood localities of fossil Fishes in Europe, and the mineral character of this slate had till lately caused it to be referred to the early period of the Transition series. M. Agassiz has found that among its numerous fishes, there is not one belonging to a single genus, that occurs in any formation older than the Cretaceous series; but that many of them agree with fossil species found in Bohemia, in the lower Cretaceous formation, or Pläner kalk; hence he infers that the Glaris slate is an altered condition of an argillaceous deposit, subordinate to the great Cretaceous formations of other parts of Europe, probably of the Gault.

Another example of the value of Ichthyology, in illustration of Geology, occurs in the fact, that as the fossil Fishes of the Wealden estuary formation are referrible to genera that characterize the strata of the Oolitic series, the Wealden deposits are hereby connected with the Oolitic period that preceded their commencement, and are separated from the Cretaceous formations that followed their termination. A change in the condition of the higher orders of the inhabitants of the waters seems to have accompanied the changes that occurred in the genera and species of inferior animals at the commencement of the Cretaceous formations.

A third example occurs, in the fact that M. Agassiz has, by resemblances in the character of their fossil Fishes, identified the hitherto unknown periods of the freshwater deposits of Oeningen, and of Aix in Provence, with that of the Molasse of Switzerland.