axiom in palæontology, that reptiles had never existed before the Permian or Magnesian limestone period, when at length, in 1844, this supposed barrier was thrown down, and carboniferous reptiles, terrestrial and aquatic, of several genera, were brought to light; and discussions are now going on as to whether some remains of an enaliosaur (perhaps a large Labyrinthodon) have not been detected in the coal of Nova Scotia, and whether certain sandstones near Elgin in Scotland, containing the bones of lacertian, crocodilian, and rhynchosaurian reptiles, may not be referable to the 'Old Red' or Devonian group. Still, no traces of this class have yet been detected in rocks as ancient as those in which the oldest fish have been found.

As to fossil representatives of the ichthyic type, the most ancient were not supposed, before 1838, to be of a date anterior to the Coal, but they have since been traced back, first to the Devonian, and then to the Upper Silurian rocks. No remains, however, of them or of any vertebrate animal have yet been discovered in the Lower Silurian strata, rich as these are in invertebrate fossils, nor in the still older primordial zone of Barrande; so that we seem authorised to conclude, though not without considerable reserve, that the vertebrate type was extremely scarce, if not wholly wanting, in those epochs often spoken of as 'primitive,' but which, if the Development Theory be true, were probably the last of a long series of antecedent ages in which living beings flourished.

As to the Mollusca, which afford the most unbroken series of geological medals, the highest of that class, the cephalopoda, abounded in older Silurian times, comprising several hundred species of chambered univalves. Had there been strong prepossessions against the progressive theory, it would probably have been argued that when these cephalopods abounded, and the siphonated gasteropods were absent, a higher order of