

Now, with this preparation of mind, permit me to state what has been ascertained by studying the fossils imbedded in the succession of strata. The deepest rocks of which we have any knowledge are those already named Eozoic. They are mostly hard and crystalline—such as we find in our innumerable bowlders. They were stratified originally, nevertheless; they were marine sediments, and if any marine creatures lived at the time, their relics were inclosed in the sediments. But you see how greatly the sediments have been changed to make of them granites and gneisses. If the change almost or completely obliterated the lines of bedding, it must also have destroyed most traces of the included fossils. As a fact, almost no fossil remains are found. Yet a few have been preserved to us. I do not intend to describe them at present; but you may learn that they belong to the very lowest grade of animal life. The ages during which they existed may be styled the REIGN OF PROTOZOANS.

The strata next above, in the lower part of the Palæozoic Great System, abound in the remains of marine animals; but no traces of fishes or other vertebrates have been found. This was the REIGN OF MARINE INVERTEBRATES. Their exclusive remains extend through two systems, *Cambrian* and *Silurian*. In the next higher formations we detect the bones and teeth and armor-plates of fishes. There were many invertebrates also, but, as the fishes were dominant in rank and prowess, we designate this age the REIGN OF FISHES. The strata deposited during this Reign form the *Devonian System*. Next came the relics of the first air-breathers which ever lived. We find their bones resembling those of modern salamanders or amphibians, though often much more powerful. This was the REIGN OF AMPHIBIANS; and the corresponding strata are the *Carboniferous System*. The Cambrian, Silurian, Devonian, and Carboniferous systems make up the Palæozoic Great System.

Next, as stated in our last Talk, come the strata which form the Mesozoic Great System. Through this, in addition to relics of amphibians, fishes, and invertebrates, we find for