

hard facts which told a tale of paramount importance and exciting interest, revealing in each formation of the Earth's crust pages of unwritten history: it was the Earth telling its own tale.

Sir Archibald Geikie then pointed out the salient conclusions which had been already arrived at, with reference to the boundless antiquity of the globe, presented Lord Kelvin's views as to the limit of time that may be assigned to our planet's antiquity. "He estimated that the surface of the globe could not have consolidated less than 20 millions of years ago, for the rate of increase of temperature inwards would in that case have been higher than it actually is; nor more than 400 millions of years ago, for then there would have been no sensible increase at all." "One hundred millions of years" was regarded by him as the probable amount of time which embraces the Geological history of the globe."

These calculations, Sir Archibald holds, "may require revision," and states "that there must be some flaw in the physical argument." From his own observations on "degradation" or "denudation," the erosion of rocks and deposition of sediments, he has reached the conclusion that "the rate of deposition of new sedimentary formations over an equivalent area of sea-floor, may vary from one foot in 720 years to one foot in 6,800 years."

Then the "slow progress of organic variation" is discussed, giving its quota of evidence in support of the antiquity of the world. Precise data are wanting in this particular. "We know, says the distinguished geologist, "that within human experience a few species have become extinct, but there is no conclusive proof that a single new species has come into existence, nor are appreciable variations readily apparent in forms that live in a wild state." He then instances the seeds and plants found with Egyptian mummies being precisely the same as those of modern Egypt. This negative evidence, of no change, is an important factor in the problem, and indicates the lapse of an enormous interval of time sufficient to modify forms of shells, etc.

With reference to this problem and the Ice Age on which Sir Archibald Geikie has so ably and oftentimes written, he says: "If the many thousands of years which have elapsed since the Ice Age have pro-