

*Plan of this Essay.*

WHAT I especially propose to present in this discourse, is the plan and the result of my labours regarding Fossil Bones. I shall also attempt to trace a rapid sketch of the efforts that have been made up to the present day, to restore the history of the revolutions of the globe. The facts which I have been enabled to discover, form, without doubt, only a small portion of those which would be necessary to complete this ancient history; but several of them lead to decisive consequences, and the rigorous manner in which I have proceeded in their determination, affords me reason to think that they will be regarded as points definitively fixed, and which in their aggregate will form an epoch in science. Lastly, I trust their novelty will be a sufficient excuse for me, if I claim for them the earnest attention of my readers.

My object will first be to shew by what relations the history of the fossil bones of terrestrial animals connects itself with the theory of the earth, and for what reasons a peculiar importance is to be attributed to it, with reference to this subject. I shall then unfold the principles upon which is founded the art of determining these bones, or, in other words, of recognizing a genus, and of distinguishing a species, by a single fragment of bone,—an art, on the certainty of which