

planet itself. But though he worked out this idea with great logical acumen and brilliant rhetoric, he had only a slender groundwork of ascertained fact on which to base his pictures of the successive stages through which the earth has passed. Such a groundwork could not be laid down without much patient detailed observation of the rocks, and a comparison of the records afforded by them in different countries. Yet even in Buffon's time the first seeds of Stratigraphy had been sown which, before the end of the eighteenth century, were to germinate in so wide an expansion of geological theory.

In tracing the history of the idea of a chronological sequence among the rocks of the earth's crust it is interesting to mark its independent origination in different countries. In regions where minerals, more especially coal-seams, had long been worked it was familiar knowledge that a certain definite order could be traced among the rock-formations. Thus in England, prolonged mining in the coal-fields led to a clear recognition not only of a local order of arrangement, but of a sequence which might be capable of wide application. The first writer in England whose observations on this subject deserve to be cited is John Strachey, who contributed two papers to the *Philosophical Transactions* in the years 1719 and 1725, in which he recognised the sequence of the geological formations in the south-west of the country, enumerating in their proper order the various leading subdivisions of the stratigraphical series from the Coal to the Chalk. He likewise recorded the important fact that while the Coal-strata are all more or less inclined, the overlying