

ceptions. The enormous numbers and wide diffusion of fossil shells, which had so vividly impressed his imagination, proved to him that the land must have lain long under the sea. But he had no idea of any general cause that leads to elevation of the sea-bottom into land. He was thus constrained to resort to his imagination for a solution of the problem. Burnet had supposed the original ocean to be contained within the earth, and that it only escaped at the time of the Flood, when, by the heat of the sun, the crust of the globe had cracked, and thus allowed the pent-up waters to rush out. Buffon's theory was hardly less fanciful. But he reversed the order of events. He inferred from the abundance of fossil shells that there had once been a universal ocean, and that by the giving way of the crust, a portion of the waters was engulfed into caverns in the interior, so as to expose what are now mountains and dry land.

For some thirty years after the publication of his *Theory*, Buffon continued to work industriously in all departments of natural history. At last, in 1778, having long meditated on the problem of the origin of the earth, he published his famous *Époques de la Nature*. In this work he arranged the history of the globe in six epochs—intervals of time of which the limits, though indeterminate, seemed to him none the less real. He tried indeed to form some idea of their duration on the basis of a series of ingenious experiments with globes of cast-iron of different sizes, and though the method on which he proceeded could not give him reliable results, and his estimates have accordingly no scientific value, they possess the highest