

increasing weight of the deposits, which were accumulating on the ocean-floor, as well as the pressure caused by the repeated crust-inthrows, at last caused the collapse of the lower tiers. The sea-water rushed in to fill the depressed areas, and the level of the ocean sank. This was called the first revolution in De Luc's sequence of creative events. As the ocean sank, the present continents and islands made their appearance; plant seeds from the old continents were washed on the strands of the emerging lands, and soon a rich vegetation appeared. The fauna of the primitive ocean and lands in some cases left descendants to people the new oceans and lands, in other cases became extinct.

The bones of the large tropical mammalia found in the superficial strata of northern areas in the present continents were believed by De Luc to be the transported remains of extinct forms that had inhabited the older continents. According to De Luc, all known facts led to the conclusion that the new continents, and generally the present configuration of the earth, came into existence not more than 4000 years ago.

Four letters protesting against both Hutton and Playfair were reprinted in a diffuse work by De Luc, entitled *Elementary Treatise of Geology*. A large number of papers were contributed to journals by De Luc; but although he was a man who was held in high respect and favour during his lifetime, his papers have no permanent place in literature, and his attacks on the great Scottish geologists were absolutely without effect.

Like De Luc, the Parisian mineralogist and physician, De la Métherie, enjoyed considerable popularity among his contemporaries. His chief work, published at Paris in 1791, bore again the title *Théorie de la Terre*. De la Métherie's work was founded for the most part on Werner's teaching. Many of the erroneous notions in De Maillet's *Telliamed* were revived and new speculations attempted, but without any basis of observation. According to De la Métherie, all mountains, valleys, and plains took origin from the precipitation of crystals in a primeval ocean which covered the whole earth, and was of enormous depth. During the accumulation of rock-precipitates certain large subterranean cavities filled with air or vapour remained free from solid deposits. As the total volume of water diminished, a considerable portion of the