

progress—silt has been changed into clay—calcareous mud into limestone—sand into sandstone—pebbles into conglomerates and breccia—and animal and vegetable remains have been imbedded, and added to the mineral accumulations of the past ages of our planet.

Beneath the surface, the action of electro-chemical forces has been alike unintermitting—vegetable matter has been converted into bitumen, coal, amber, and the diamond—earth into crystals—limestones into marble—clay into slate, and sedimentary into crystalline masses; the volcano has poured forth its rivers of molten rock—the earthquake rent the solid crust of the globe—beds of seas have been elevated into mountains—subsidences of the land and irruptions of the ocean have taken place—and the destructive and conservative influences of both fire and water have been constantly exerted; the phases of action have alone differed in duration and intensity.

44. ROCKS COMPOSED OF ORGANIC REMAINS.—  
In a previous discourse I dwelt upon the highly interesting subject of the elaboration of solid material from gaseous and fluid elements by vital action, and the formation of islands and continents by countless myriads of living instruments. It is my present purpose to consider how far the present solid materials of the earth's surface have been derived from organized beings. The processes by which animal and vegetable structures are converted