sinking slowly, so narrow zones of land may be pushed up gradually to great heights—Bending of strata by lateral pressure—Adequacy of the volcanic power to effect this without paroxysmal convulsions - Page 157

### CHAPTER XII.

## DIFFERENCE IN TEXTURE OF THE OLDER AND NEWER ROCKS.

#### CHAPTER XIII.

UNIFORMITY IN THE SERIES OF PAST CHANGES IN THE ANIMATE AND INANIMATE WORLD.

Supposed alternate periods of repose and disorder—Observed facts in which this doctrine has originated—These may be explained by supposing a uniform and uninterrupted series of changes—Threefold consideration of this subject; first, in reference to the living creation, extinction of species, and origin of new animals and plants; secondly, in reference to the changes produced in the earth's crust by the continuance of subterranean movements in certain areas, and their transference after long periods to new areas; thirdly, in reference to the laws which govern the formation of fossiliferous strata, and the shifting of the areas of sedimentary deposition—On the combined influence of all these modes and causes of change in producing breaks and chasms in the chain of records—Concluding remarks on the identity of the ancient and present system of terrestrial changes

#### 174

### BOOK II.

### CHANGES IN THE INORGANIC WORLD.

#### CHAPTER XIV.

### AQUEOUS CAUSES.

### CHAPTER XV.

### ACTION OF RUNNING WATER - continued.

Course of the Po—Desertion of its old channel—Artificial embankments of the Po, Adige, and other Italian rivers—Basin of the Mississippi—Its meanders—Islands—Shifting of its course—Raft of the Atchafalaya—Drift-wood—Newformed lakes in Louisiana—Earthquakes in valley of Mississippi——206

#### CHAPTER XVI.

# TRANSPORTATION OF SOLID MATTER BY ICE.

Carrying power of river-ice—Rocks annually conveyed into the St. Lawrence by its tributaries—Ground-ice; its origin and transporting power—Glaciers—Theory of their downward movement—Smoothed and grooved rocks—The moraine unstratified—Icebergs covered with mud and stones—Limits of glaciers and icebergs—Their effects on the bottom when they run aground.—Packing of coast-ice—Boulders drifted by ice on coast of Labrador—Blocks moved by ice in the Baltic—Ground-ice and coast-ice in the Baltic—— 221