

CONTENTS.

ix

CHAPTER XXXIII.

Bluffs at Memphis.—New Madrid.—No Inn.—Undermining of River Bank.—Examination of Country shaken by Earthquake of 1811-12.—Effects of Passage of Waves through Alluvial Soil.—Circular Cavities or Sand-Bursts.—Open Fissures.—Lake Eulalie drained by Shocks.—Borders of Sunk Country, west of New Madrid.—Dead Trees standing erect.—A slight Shock felt.—Trade in Peltries increased by Earthquake.—Trees erect in new formed Lakes.—Indian Tradition of Shocks.—Dreary Forest Scene.—Rough Quarters.—Slavery in Missouri	PAGE 171
---	-------------

CHAPTER XXXIV.

Alluvial Formations of the Mississippi, ancient and modern.—Delta defined.—Great Extent of Wooded Swamps.—Deposits of pure Vegetable Matter.—Floors of Blue Clay with Cypress Roots.—Analogy to Ancient Coal-measures.—Supposed "Epoch of existing Continents."—Depth of Fresh-water Strata in Deltas.—Time required to bring down the Mud of the Mississippi.—New Experiments and Observations required.—Great Age of buried and living Cypress-trees.—Older and newer Parts of Alluvial Plain.—Upraised Terraces of Natchez, &c., and the Ohio, the Monuments of an older Alluvial Formation.—Grand Oscillation of Level.—The ancient Valleys inhabited by Quadrupeds now extinct.—Land-shells not changed.—Probable Rate of Subsidence and Upheaval.—Relative Age of the ancient Alluvium of the Mississippi, and the Northern Drift	183
---	-----

CHAPTER XXXV.

Departure from New Madrid.—Night-watch for Steamers.—Scenery of the Ohio River.—Mount Vernon, Ornithology.—No Undergrowth in Woods.—Spring Flowers.—Visit to Dr. Dale Owen, New Harmony.—Fossil Forest of erect Trees in Coal-measures.—Movers migrating Westward.—Voyage to Louisville.—Professional Zeal of one of "the Pork Aristocracy."—Fossil Coral-reef at the Falls of the Ohio, Louisville.—Fossil Zoophytes as perfect as recent Stone-corals	200
---	-----