## 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.

March 24, 1846.—At length we reached Memphis, in the The town on which this ancient and vener-State of Tennessee. able name is conferred, appears the newest of the large places we have yet seen on the Mississippi. It is growing with great rapidity, standing on a bluff now fifty-two feet above the levelof the water when the river is high. The cliff is the abrupt termination of deposits similar to those of fresh-water origin, which I have before alluded to at Natchez and Vicksburg. vellow loam, forty feet thick, reposes on sand with quartz pebbles, which rests on clay, not visible at the time of my visit. Such a site for a town, in spite of the slow undermining of the cliffs, is permanent by comparison with the ordinary banks of the river for hundreds of miles continuously; for, as a general rule, the stream in the alluvial plain is either encroaching a foot or more annually, so as to wash away buildings, if there be any on the bank, or is retreating, so that a port soon becomes an inland town. The people of Memphis are ambitious that their city should be a great naval arsenal, and there are considerable naval stores here; but as frigates require from eighteen to twentythree feet water, and men-of-war thirty feet, while the bar at the mouth of the Mississippi affords at present no more than sixteen feet water, their hopes can not be realized till a ship canal is made from some point on the Mississippi to the Gulf of Mexico.

After we left Memphis, we were shown, on the Tennessee