

the valleys of small tributaries of the Ohio, such as those of Big Bone Lick, in Kentucky, and Mill Creek, near Cincinnati, are of geological celebrity, in consequence of the great number of skeletons of extinct mammalia, such as the megalonyx, mastodon, elephant, and others, which seem to have lived, and have been mired in ancient morasses, before the land began to sink; for the great mass of fluviatile loam and gravel forming the terraces, has been superimposed on the black bog earth containing such bones. The teeth, however, and bones of similar extinct quadrupeds, especially the mastodon, are occasionally met with scattered through the incumbent gravel and loam, so that the same assemblage of quadrupeds continued to inhabit the valleys while the first change of level or the subsidence was going on. By simply extending to the valley of the Mississippi, the theory before applied to that of the Ohio, we may, as already stated at p. 142, in reference to the Port Hudson bluffs, account for the geological appearances seen in the larger and more southern area.

It has been long ascertained that in Norway and Sweden a gradual rise of the land above the sea has been going on for many centuries, producing an apparent fall in the waters of the adjoining ocean. The rate of elevation increases as we proceed northward from Gothenburg to the North Cape, the two extremities of this line being distant more than a thousand geographical miles from each other, and we know not how much farther north or south the motion may be prolonged under water. The rise of the land, which is more than five feet in a hundred years at the North Cape, gradually diminishes to a few inches in a century in the neighborhood of Stockholm, to the south of which the upward movement ceases; and in Scania, the southernmost part of Sweden, appears to give place to a slight movement in an opposite or downward direction.*

We also know that part of the west coast of Greenland, extending about 600 miles north and south, has been subsiding for three or four centuries, between latitudes 60° and 69° N.† But whether, in this instance, the rate of depression varies in different parts of the sinking area, has not yet been determined. In spec-

* Principles of Geology, 7th Ed. p. 506.

† See "Principles," *ibid.*