

While these records of the Mississippi, which have been only partially deciphered, do not furnish all of the desired information, yet as far as they go they are invaluable.

Passing from the buried channel of the Mississippi to its continuation, now submerged beneath the waves of the Gulf of Mexico, we find evidence indicating such a stupendous continental elevation as to be almost incredible, were it not supported by collateral evidence, upon both the Pacific and Atlantic coasts. The soundings off the coast of the delta of the Mississippi indicate the outer margin of the continental plateau as submerged to a depth of 3,600 feet, indented by an embayment of another hundred fathoms in depth, at the head of which there is a valley a few miles wide, bounded by a plateau from 900 to 1,200 feet above its floor. This valley is now submerged to a depth of 3,000 feet, and is the representative of the channel of the ancient Mississippi river, towards which it heads.*

On the Pacific coast, in the region of Cape Mendocino, Prof. George Davidson has identified three valleys now submerged to from 2,400 to 3,120 feet, and several of inferior depth. These measurements are those of the valleys where they break through the marginal plateaus of the continent, at about six miles from the present shore, where it is submerged to the depth of 100 fathoms.†

The soundings along the Atlantic coast reveal similar deep fjords. The long-since known extension of the Hudson river, beneath the Atlantic waters, is traceable to the margin of the continental plateau, acquiring a depth of 2,844 feet, in front of which the soundings show a bar, covered with mud, which, however, is now submerged to the depth of only 1,230 feet. The unpublished soundings off the mouth of the Delaware river bring to light another valley, the floor of which is now covered by ocean waves to nearly 1,200 feet — its continuation seaward not having been ascertained. (Lindenkohl.)‡

Were the continent elevated only 600 feet, the Gulf of Maine would be replaced by a terrestrial plain, in some places 200 miles wide, but traversed by rivers, one of which, towards its mouth, would be 2,064 feet deep — that is to say, the bottom of the fjord is now submerged 2,664 feet. Even this great depth may not be its maximum, for along the line between the opposite banks, at the mouth, now beneath 100 fathoms of water (which is approximately the depth to which the real margin of the continent is submerged), we find that the sea is nearly

* J. W. Spencer, "The Mississippi River During the Great River Age," New Haven, 1884, p. 2.

† Geo. Davidson, Bull. Cal. Acad. Sc., vol. II, 1887, p. 265.

‡ Appendix 13, Rep. U. S. Coast and Geodetic Survey for 1887 (1889), pp. 270-73.