

repeated at several different levels in the face of the same bank. I first remarked one of these at a point forty-five miles above New Orleans, and they increased in number as we ascended. When first told of this phenomenon, before visiting the Mississippi, it appeared to me very difficult of explanation. I soon, however, discovered that the great river, in its windings, often intersects the swamps or cypress basins which had been previously filled up with fine mud or vegetable matter, at various distances from the former river-channel.

Suppose an ancient bed of the Mississippi, or some low part of the plain, to become fit for the growth of cypress, yet to be occasionally flooded, so that the soil is slowly raised by fine mud, drift wood, or vegetable matter like peat. As the cypress (*Taxodium distichum*) often attains to the age of three or four centuries, and, according to many accounts, occasionally in Louisiana to that of two thousand years, it is clear that the bottoms of the oldest trees will often be enveloped in soil several feet deep, before they die, and rot down to the point where they have been covered up with mud. In the mean time other trees will have begun to grow on adjoining spots, at different and considerably higher levels, and eventually some of these will take root in soil deposited directly over the stump or decayed trunk of some of the first or oldest series of cypresses. They who have studied the delta affirm that such successive growths of trees are repeated through a perpendicular height of twenty-five feet without any change occurring in the level of the land.\*

Proceeding up the river, we soon passed Bayou Sara on our right hand, and came to the isthmus called the Raccourci cut-off, across which a trench nine feet deep has been dug, in the hope that the Mississippi would sweep out a deep channel. This "cut-off," should it ever become the main channel, would enable a steamer to reach, in one mile, a point, to gain which costs now a circuit of twenty-six miles, and two and a half hours. Unfortunately, when they cleared the forest in this spot, the soil of the new canal was found to consist of a stiff blue clay,

\* See Dickeson and Brown, Silliman's Journal, Second Series, vol. v. p. 17, Jan. 1848.