

ticed ax-men from Kentucky. I am informed that the superintendent of the gas-works, Dr. Rogers, who is now absent in Cuba, endeavored to estimate the minimum of time required for the growth of the cypress and other trees, superimposed one upon the other, in an upright position, with their roots as they grew, and had come to the opinion, that eighteen centuries must have been required for the accumulation. At the time of my visit the section was too obscure to enable me to verify or criticise these conclusions; but Mr. Bringier, the state surveyor, told me that when the great canal, before alluded to, was dug to the depth of nine feet from Lake Pontchartrain, they had cut through a cypress swamp which had evidently filled up gradually, for there were three tiers of the stumps of trees, some of them very old, ranged one above the other; and some of the trunks must have rotted away to the level of the ground in the swamp before the upper ones grew over them. If it be true, as I suspect from these statements, that the stools of trees which grew in fresh water can be traced down to a level below the Gulf of Mexico, we must conclude that the land has sunk down vertically. Perhaps some part of this subsidence might arise from the gradual decay or compression of large masses of wood slowly changing into lignite, for carbonated hydrogen is said to be constantly given out from the soil here wherever such masses of vegetable matter are decomposing; and during the excavation of these works much inflammable gas was observed to escape. That such upright buried trees are not every where to be met with in this part of the delta, I ascertained from Mr. Bringier. At his house, in the suburbs of New Orleans, a well has been sunk to the depth of twenty-seven feet, and the strata passed through consisted of sandy clay, with only here and there some buried timber and roots.

Walking through one of the streets of New Orleans, near the river, immediately north of the Catholic cathedral, I was surprised to see a fine date-palm, thirty feet high, growing in the open air. (See fig. 8.)

Mr. Wilde told me, that in 1829, in the island of Anastatio, opposite St. Augustine, in Florida, he saw one still taller, probably brought there by the Spaniards, who have introduced them