

The age of stumps and erect trunks of the deciduous cypress, whether living or buried, retaining their natural position, at points near the present termination of the delta, ought to be carefully examined, as they might afford evidence of the minimum of time which can be allowed for the gain of land on the sea. Some single trunks in Louisiana are said to contain from 800 to 2000 rings of annual growth, and Dr. M. W. Dickeson and Mr. A. Brown state, that the cypress brakes or basins, which fill up gradually, give place at length to other timber; but before this happens, the buried cypress stumps often extend through a deposit of vegetable and sedimentary matter twenty-five feet thick. "Sections of such filled-up cypress basins, exposed by the changes in the position of the river, exhibit undisturbed, perfect, and erect stumps, in a series of every elevation with respect to each other, extending from high-water mark down to at least twenty-five feet below, measuring out a time when not less than ten fully-matured cypress growths must have succeeded each other, the average of whose age could not have been less than 400 years, thus making an aggregate of 4000 years since the first cypress tree vegetated in the basin.\* There are also instances where prostrate trunks, of huge dimensions, are found imbedded in the clay, immediately over which are erect stumps of trees, numbering no less than 800 concentric layers."

Michaud, in his famous work on the forest trees of North America, mentions that stems of this deciduous cypress (*Taxodium distichum*) are met with in Florida, and in southern Louisiana, forty feet in circumference above the enlarged base, which is three or four times that size; but such individuals dwindle to nothing before the gigantic trunk near Santa Maria del Tule, in the province of Oaxaca, in Mexico, which was first mentioned by Exeter, who found its circumference to be 117·10 French feet. Zuccarini, has lately removed the doubts of De Candolle respecting this measurement, which was taken above the dilated base, for that was no less than 200 feet in circumference. In this stem there would be 5352 rings of annual growth, if one line a year was taken as the average growth, the deposit of wood

\* Silliman's Journal, Second Series, vol. v. p. 17. January, 1848.