

for differences in soil and situation, let it be presumed, that in all trees, growing in their proper climates, of three hundred years of age and upwards, each one of their concentrical layers has, during their whole lives, on an average, annually added one-sixteenth part of an inch to their diameters. Then according to such a mode of calculation, the before mentioned great chesnut tree of France, of thirty feet in circumference, must have been nine hundred and sixty years old; and thus it would seem, that the tradition and conjectures, as to its age, were nearly correct. According to the same mode of calculation, the great sycamore, (*platanus occidentalis*,) on the right bank of the Ohio, above Marietta, which was found, in the year 1802, to be at least fifteen feet in diameter, must have been then fourteen hundred and forty years of age. (*w*) But a much larger sycamore has been described by Pliny, as being then, in the first century of the christian era, alive and standing in Syria, whose trunk, hollowed by time, afforded a retreat, for the night, to the Roman consul Lycinius Mutianus, with eighteen of his retinue. The interior of this grotto was seventy-five feet in circumference, and the summit of the tree resembled a small forest. (*x*) This great sycamore must have been then, according to this mode of calculation, more than two thousand years old. (*y*)

(*w*) 1 Mich. Am. Sylva, 325.—(*x*) 1 Mich. Am. Sylva, 325.

(*y*) 'Some instances of great size and extreme longevity in exogenous trees, where the statement can be relied upon, may not be uninteresting. The *pinus lambertiana*, a species of pine indigenous to northern California, probably attains a greater size than any other known tree. One specimen measured by Mr. Douglas, an English botanist, was two hundred and fifteen feet in height, fifty-seven feet nine inches in circumference, at a distance of three feet from the ground, and seventeen feet five inches at one hundred and thirty-four feet; thus giving as the solid contents of the trunk alone, about twelve hundred cubic feet. This was probably the largest single mass of timber ever measured by man. A sycamore growing near Marietta, Ohio, measures fifteen feet six inches in diameter; or, supposing it cylindrical, more than forty-five feet in circumference. There is said to be an oriental sycamore, growing near Constantinople, one hundred and fifty feet in circumference, with an internal cavity of eighty feet. The largest oak, known in England, was called Damony's oak, in Dorsetshire, and was sixty-eight feet in circumference. With respect to the age of trees, it may be remarked, that an elm has been known to reach the age of three hundred and thirty-five years; an ivy four hundred and fifty; an orange six hundred and thirty; an olive about seven hundred; a cedar of Lebanon eight hundred; a white oak one thousand and eighty; and a yew between thirteen and fourteen hundred. De Candolle estimates the age of a Mexican cypress at six thousand years; but then his estimate was formed by dividing the semi-diameter of the trunk, by the average thickness of the layers of that species of tree, and for reasons before mentioned, cannot be relied upon. If it were indeed so old, its young shoot must have been watered by the waves of the deluge. The