

## ON THE AGE OF TREES.

Trees may be considered the most permanent of all natural productions. They exist (as the following list published by Moquin-Tandon in his *Treatise on Vegetation*, translated from Schlegel's *Principles of Scientific Botany* shows) after the most stupendous works of man have crumbled into dust. The following are the ages computed by that intelligent botanist:—Palms exist from 200 to 300 years; *Cereus* 300; *Cherodendron* 327; *Ulmus* (Elm) 355; *Cupressus* (Cypress) 388; *Hedera* (Ivy) 443; *Acer* (Maple) 516; *Larix* (Larch) from 263 to 576; *Castanea* (Chestnut) from 360 to 626; *Citrus* (Lemon, Orange, &c.) from 400, 509, to 640; *Platanus* (Plane) 720; *Cedrus* (Cedar) from 200 to 800; *Juglans* (Walnut) 900; *Tilia* (Lime) from 364 to 1076; *Abies* (Spruce) 1200; *Quercus* (Oak) from 600 to 1600; *Olea* (Olive) from 700 to 2000; *Taxus* (Yew) from 1214 to 2880; *Schubertia* (*Toxodium*) from 3000 to 4000; *Leguminosæ* from 2052 to 4704; *Adansonia* (Baobab) 6000; *Dracæna* (Dragon Tree) 6000.

The ages some trees have attained are even very considerably greater than those, and some in our own country may have existed from 1000 to 2000 years. Pausanias the historian who flourished about the middle of the second century, mentions a plane tree of extraordinary size and beauty in Arcadia, supposed to have been planted by Menelaus, the husband of Helen, which would make the age of the tree about 1300 years.

The date upon which Moquin-Tandon founds his calculations are two; and are thus given in "*The Gardener's Magazine of Botany*," &c., for last month, viz., "first from historical data, and second from counting the zones." Thus, the colossal Dragon tree of Oratava is known to have existed, in almost its present condition, in 1402; and comparing it with the younger trees in its neighbourhood, its vast age is inferred. The yew trees at Fountains Abbey in Yorkshire, are known to have sheltered the Monks whilst the Abbey was building. The Abbey is now in ruins, but the trees retain their vigour; the lowest age that can be assigned them is twelve centuries; they are probably much more. But where trees have been cut down, the method of counting the zones has been had recourse to. There is no difficulty in this, when the tree is sound; but in many instances, the older trees are the more likely to be decayed in the centre. The plan then adopted is, to take a square inch, count the zones in it, multiply this number by the number of inches from the bark to the pith, which will then give the whole number of zones, and the age of the tree. The number, however, thus obtained, can only be looked upon as approximations to the truth, seeing that the zones of wood vary very much in thickness, not only one with the other, but in parts of the same ring.

Size is no indication of the age of a tree, as various species grow at very different rates, and the same species under different circumstances. The following table shows the different rates, at which some common trees grow:—

	1st Year.	2d Year.	3d Year.
	Ft. In.	Ft. In.	Ft. In.
Oak, circumference,.....0	10½	0 11½	1 0½
Larch,.....1	0½	1 3	1 4
Elm,.....2	7½	2 9	2 11
Lombardy Poplar,.....1	8	2 0	2 3½
Lime,.....1	8½	1 10½	2 0

Some trees attain an enormous size by their rapid growth. Species of *Eucalyptus* have been measured that reached a height of 250 feet, and measured 70 feet round their trunk.

The death of trees does not appear to arise from any natural period being assigned to the existence of their living tissues, or reproductive powers, "as conjectured by the late Thos. And. Knight." When the tissues of a tree are very old they lose their vitality, especially in the centre of the trunks of the trees; and being exposed to the atmosphere, or moisture, they readily decay. The process of new growth is sometimes more rapid than this decay, and thus trees exist with enormous cavities in their interior. The time, however, comes sooner or later, when a separation takes place between the roots and branches, and then the tree ceases to exist, although the tissue that has been conveyed away from it, in the form of slips and grafts, may still continue to flourish. The number of zones in trees will probably give a tolerable approximation to the years of growth in temperate climates; but even here, two may be formed in one year, if any great check of the growth suddenly occurs during the summer. In tropical climates the indication is far more doubtful; Adanson's computation, made in this way, carried the age of the Baobab's to from 5000 to 6000 years.

## AN OLD SCOTCH GARDENER'S VISIT TO A LONDON ASPARAGUS GARDEN.

I called upon Mr Grayson, gardener, Mortlake, in June last, in order to see his asparagus grounds. He is reputed (and justly I think) to be the largest and best grower in England; he has upwards of 50 acres under this crop—a bundle of it containing 150 buds, weighing 37 lbs., was some years ago sent to Buckingham Palace, on the 11th June. I made some inquiries as to the management of it, and was informed that he prepared the ground well by heavy dunging, &c., before planting it; but after this nothing farther was done, unless throwing down the ridges in the fall, and putting them up again early in Spring. Some parts had been upwards of 20 years down, and here the ridges stood highest; the reason for this, I was told, was that the longer it stood the more soil it requires put upon it, as the roots had a great tendency to draw upwards. I said I thought it might do with much