

SIGNS OF THE VIGOR, MATURITY, AND DECAY IN TREES.

Signs announcing the Vigor of a Tree.—The branches, especially towards the top, are vigorous; the annual shoots strong and long; the leaves green, vigorous, and thick, principally at the summit, and falling late in autumn; the bark is clear, fine, united, and nearly of the same color from the foot to the large branches. If at the bottom of the veins, or divisions of the thick bark, there appear smaller divisions, which follow from below upwards, in the direction of the fibres, and live bark be observed at the bottom of these divisions, it is an indication that the tree is very vigorous, and rapidly increasing in size. If some of the lower branches, killed by others, are yellow, languishing, and even dead, this is an accidental effect, and is no proof of the languor of the tree. Finally, it is a sign of vigor when branches are seen at the summit of the tree, rising above the others, and being much longer; but it is to be observed, that all trees with round heads do not throw out branches with equal force.

Signs which indicate that the tree is mature.—Generally, the head of the tree is rounded; the shoots diminish in length each year, and the farthest shoots add to the length of the branches only by the length of the bud; and the leaves are put forth only in the spring, and become yellow in the autumn before those of vigorous trees, and at this time the lower leaves are greener than the upper. The branches incline towards the horizon, and form angles sometimes of sixty or seventy degrees. These apparent signs, and the thinness of the layer deposited by the sap, indicate that the tree makes but small additions to itself, and now it should be cut down. The nature of the soil should be examined, as well as the kind of tree, to enable a judgment whether the tree should be left to increase still further, or whether it will be more proper to fell it. An exact age cannot be assigned for each species; but it has been observed that an elm, situated in an insulated plantation, may be felled with advantage, when between seventy and eighty years of age.

Signs of decay in a Tree.—When a tree becomes crowned (that is, when the upper branches die), it infallibly indicates, especially for isolated trees, that the central wood is undergoing alteration, and the tree passing to decay. When the bark separates from the wood, or when it is divided by separations which pass across it, the tree is in a considerable state of degradation. When the bark is loaded with moss, lichens, or fungi, or is marked with black or red spots, these signs of alteration in the bark justify the suspicions of alteration in the wood within. When sap is seen to flow from clefts in the bark, it is a sign that the tree will soon die. As to wounds or gutterings, these defects may arise from local causes, and are not necessarily the results of old age.—*Loudon's Magazine.*

HARDINESS OF SWEET APPLE TREES.—In Wisconsin, where the thermometer not unfrequently sinks to 15° or 20° below zero, and where the fertility of the soil induces a very rapid growth in summer, the tenderer fruit trees are often severely injured in winter. A correspondent of the *Prairie Farmer* states that sweet apples are, for the most part, more hardy than acid ones, and better adapted to very severe climates. Out of one hundred and fifty varieties, twenty-two were sweet apples; of the latter, eleven proved themselves more hardy than any other eleven in the whole list, and only three of the sweet apples appeared to be tender.

THE POISON PLANTS.—"Ah, well may a shudder go through the frame as we hear the name of the next, the *Tanghin*, or Poison-tree of Madagascar! 'Can such a fair young tree,' we are tempted to exclaim, 'be

charged with the horrible murders related of that poison?' Surely no tale of death is told by these green leaves and not unattractive aspect? Go to the benighted island, and, pointing to its glossy foliage, listen to the recital of the accused use to which this tree is turned which he will tremblingly pour into the ear. In the ordeal of the tanguin a great assembly is summoned to witness the trial of an unfortunate wretch, accused, justly or unjustly, of crime. The accused heard, the mock trial concluded, the proof of innocence or guilt is to make the accused swallow a nut of the tanguin tree, which is managed by the direction and under the superintendence of the priests. If his stomach is in a condition to reject this frightful poison, he is pronounced innocent, and is instantly released to receive the congratulation of his friends on his fortunate escape. But if he be a man of stronger digestion, his stomach retaining the deadly substance, the demonstration of his guilt is complete, and the convulsive death-struggles of the miserable man conclude the evidence, to the satisfaction of the assembled multitude. It is a mournful truth, that the issue of the tanguin ordeal is rather an inclination of the feeling of the priests towards the accused than of his innocence or guilt. It is easy to conjecture how this is managed. Well known to the wandering Indian is the shrub, whose light green bark and delicate foliage make it conspicuous in attractiveness even here—the *Mulioe*-plant. The specimen is from four to five feet high, the natural stature being eight feet; and little could the ignorant spectator imagine, from the innocence and luxuriance of its aspect, that in its vessels run a deadly poison, and in its cells lay locked at the same time the wholesome and excellent food we call cassava!"—*Wanderings through the Conservatories at Kew.*

FLOATING BEE-HOUSES.—In Lower Egypt, where the flower harvest is not so early by several weeks as in the upper districts of that country, the practice of transportation is carried on to a considerable extent. About the end of October, the hives, after being collected together from the different villages, and conveyed up the Nile, marked and numbered by the individuals to whom they belong, are heaped pyramidally upon the boats prepared to receive them, which, floating down the river, and stopping at certain stages of their passage, remain there a longer or shorter time, according to the produce which is afforded by the surrounding country. After travelling three months in this manner, the bees having culled the perfumes of the orange flowers of the Said, the essence of roses of the Facium, the treasures of the Arabian jessamine, and a variety of flowers, are brought back, about the beginning of February, to the places from which they have been carried. The productiveness of the flowers at each respective stage is ascertained by the gradual descent of the boats in the water, and which is probably noted by a scale of measurement. This industry produces for the Egyptians delicious honey and abundance of beeswax.—*Dr. Beren.*

THE BULLFINCH'S WEEDS.—The bullfinch, when caged and fed much on hemp-seed, is particularly liable to become black. Many years ago, at Ederder y, near Belfast, where a pair of bullfinches had been for some time kept, the male died, and the female, whose grief for his loss was very evident, soon afterwards moulted, and assumed a full garb of black. Such being considered equivalent to the widow's "weeds," was looked upon as almost supernatural; and more particularly so when, after a year of mourning, she, at moulting time, threw them partially off, and exhibited some white feathers in her wings.—*Thompson's Natural History of Ireland.*

It is more difficult to prevent being governed, than to govern others,