

and to what period of a tree's existence it is to be continued, we should then be able to form more correct ideas of how far "W. H." is justified in his concluding affirmation—"that increased vigour, stature, and bulk are its sure result;" a position which, though backed by 40 years' experience, I must still very seriously question.—*Quercus*.

*Swan Marking*.—For the sake of the reader who is unacquainted with what is called "swan marking," I shall briefly state how that is done, without entering into details as to when and how such laws or regulations relative to swans were established. When swans are kept on large streams by different proprietors, their servants meet about the last week in August, and besiege, as it were, the river, and cut the same kind of mark on the beaks of the young swans as that on the bills of the parent birds. They also pinion, or cut off the two first joints from one wing—one joint not being enough—then return the bird to the water. By that means each proprietor's swans are known. When it happens that swans belonging to different proprietors mate together, the brood are equally divided, the odd cygnet always going with the cock bird. In order to settle disputes, the old swans are caught and claimed by the marks already noticed. Some speak against pinioning of swans. I suspect, however, that the necessity of it is apparent; for, supposing they were not migratory, and had the use of their wings, it is likely they would suffer themselves to be caught by the neck with a crook, as a shepherd does his sheep? Even in the pinioned state it is attended with difficulty, especially in large rivers. On the Yare I lately observed a brood of 10 swans, being the greatest number I ever saw or heard of. Those acquainted with Ornithology know that our common swan is not identical with the wild sort that visits us in winter, but with what is called the mute swan common in Russia, and is met with in some parts of this country, without a master.—*J. Wighton*.

*Strawberries, Asparagus, &c.*—With all due deference to "Villagius," I must demur to the inferences contained in his letter last week. In nine cases out of ten, according to my experience, if you manage two Strawberry-beds in the same way—one bed being one, and the other three years old—you will have the best crop from the latter. Therefore it is quite clear, as his crops were equal according to superficial observation, his experiment proved against the mutilating, unscientific system of cutting off the lungs of the plants. Now, as to the time of applying salt to Asparagus, I have stated the result of practice, not theory. I have applied salt, after dressing in the autumn and early in the spring—1 lb. to the square yard—with the most striking advantage. Now the questions to decide upon this interesting subject are—1st, Do we actually apply the salt to the dormant root, by covering the surface in autumn? To this question I answer in the negative; inasmuch as the salt has to be washed through a considerable depth of soil before it reaches the root, and it is only reasonable to infer that when it does arrive there, its caustic character will have materially altered by dilution and chemical decomposition. 2d, Will not the salt do decided harm by being applied to the delicate green, living texture of the young shoots late in spring? Let "Villagius" try it, and I will wager him the best dish I cut next year that he will destroy or materially injure his plants. But, as I said before, I made my statement from practice, not theory. My beds are now looking beautiful, with lofty, flourishing plants. As soon as they begin to die back, I shall cut and dress them, and apply the salt as heretofore on the surface, to be gradually washed in by the winter rain. Should I fail, I hope "Villagius" will tell me where to send him the lost wager.—*C. R. Bree, Stowmarket*. [We quite agree.]

*Toads and Frogs*.—A few weeks ago, among "Notices to Correspondents," I observed an inquiry in reference to toads: the question was—Do they eat slugs? I am now enabled to say that they do. I am satisfied that they are carnivorous, and that they do not eat either fruit or vegetables. I referred to the "Penny Cyclopædia," and found an excellent article under the word "Frog." I there learned that they live on slugs and other small animals; that they take their prey with great rapidity and swallow it immediately, without mastication. I went into my garden, found a slug, and put it on the end of a stick, and gently introduced it before a toad; I kept my eye upon it, and soon it disappeared; and at the same time I saw the toad swallow: so rapidly, however, had the toad taken the slug in with his tongue, that I did not see it done. I believe both frogs and toads live on the pests of the garden. I am always glad to see them. Last summer I had many slugs, and they destroyed several crops; this summer I have had plenty of frogs and toads, and very few slugs.—*Jasper Stokes, Birmingham*.

*Pine-apples*.—As the system of growing and fruiting Pines without pots is becoming general, it is desirable to become acquainted with those substances which are most conducive to their growth. It is evident that Pines when planted out attain more robustness, and this mode is certainly more natural than that of confining them in pots; but whether it is more favourable to the production of larger fruit than the old plan, remains to a certain extent undecided. Pines will grow in any soil, and other plants will do the same, but the results will be different. A strong soil favours the production of large fruit, and in this the habit of the plant is more compact; a light substance, such as leaves or tan, has an opposite effect—the plant and fruit grow quite disproportionate. Pines growing in leaves half decomposed, will, in a given period, be larger plants than those growing in loam; the

leaves are equally broad and the roots are more abundant, but they are altogether deficient in substance and compactness. I cannot suppose there is any advantage to be derived from laying up a heap of soil before it is wanted for use, particularly when a few inches only of the surface is taken. When spread about that depth it is more exposed to every atmospheric change than when it is in one mass and turned several times during a twelvemonth. In preparing a bed over a tank the first stratum should consist of rough gravel for two or three inches in depth; above that the same depth of leaves or other litter should be laid; then the last layers, consisting of two parts loam, one leaf-mould, and one horse-droppings, well mixed together, should be fifteen or eighteen inches in depth. Pines grown in such a compost, and duly attended to with heat, will reward the owner with excellent fruit. Sometime ago I was informed by a gentleman, lately residing in India, that in some of the Pine districts near the sea, where the soil is naturally strongly impregnated with saline substances, Pines flourish and produce enormous fruit. The ocean, at times, flows over the ground; probably, therefore, a little salt introduced into soil for Pines might prove efficacious to them.—*Mémet*.

*Gray Parrot*.—I have read the different statements respecting the treatment recommended for keeping a favourite bird from plucking off its feathers. My treatment in regard to its food is quite the reverse of many of your correspondents. I have two fine birds, which I have had for this last seven or eight years; their food has been bread and butter in the morning, meat two or three times a-day, or anything the family may have—such as Potatoes, pudding, cake, fish, fruit—everything except salt meat; that is avoided, if too salt. Their tins are filled with clean water every day, and their cages cleaned out and sand put in; they take tea, and spirits with water when given them; they are taken out on the hand every day, and fondled over two or three times to exercise their wings, which I consider is very beneficial to their health and the beauty of their plumage. I have never given them any seed or soaked bread. With the above treatment my birds have always been in good health; their plumage has always been good, and they have never lost their feathers till the time of moulting, and even then they have never looked unsightly.—*James Woods, Harwich, Essex*.

*Variegated Leaves*.—Mr. Groom has stated in last Number that the leaves of some of his Pelargoniums have become regularly edged with white in consequence of his having watered the plants with sulphate of ammonia which had been exposed to the air for some time. Last autumn I planted many young Box-trees; and I have for some weeks observed that nearly all the young leaves in most of them are symmetrically tipped with white, giving the young branches a mottled appearance. I counted twelve trees thus affected. The older leaves are rarely tipped, with the exception of two bushes, in which they are regularly tipped, and the younger ones much less so. Mr. Groom states that in his Pelargoniums the older leaves are chiefly affected. The Box-trees are quite healthy, and growing well. I gave to some of them nitrate of soda, but it has made no difference in this variegation. Those growing in deep shade are not tipped, nor are some older trees. These facts may appear trivial; but I think the first appearance, even if not permanent, of any peculiarity which tends to become hereditary (as I fear is the case with the variegated Sycamore) deserves being recorded.—*C. Darwin*. Mr. H. W. Bucknall, of Westminster-lodge, Bristol, also forwarded leaves taken from three Greengage Plum-trees, which were regularly edged with yellow. Mr. Bucknall writes that the trees were watered with ammoniacal liquor diluted with five times its bulk of water by mistake, instead of ten times. The whole of the leaves of each tree have turned yellow round the edges, the rest remaining a healthy green. The trees perfected their fruit well, and are otherwise in good health. The same mixture, he adds, was used on Peaches and Nectarines, but did not affect them.

*Lilium lancifolium album, &c.*—In the spring of 1843 I paid three guineas for a flowering bulb of one of these fashionable Liliums, which flowered well, and also ripened a pot of seed, which I sowed in a shallow box; this was kept during the whole summer in a Melon-frame, and was watered and nursed with particular care. Notwithstanding this, however, not more than half a dozen plants ever appeared; these did not produce more than one leaf, and put forth small bulbs about the size of a grain of Wheat. After these were fully ripened, I proceeded to take them up, and in so doing I was surprised to find the whole of the soil in the box full of bulbs, superior even to those that appeared; they were an inch deep in the soil on which the seeds producing them had been laid upon the surface; the seeds, as they swelled by moisture, were barely covered. I have thus most unexpectedly found myself in possession of 180 bulbs; and I should like to know how these wholesale underground operations were conducted. This circumstance should induce others to examine narrowly their seed-pans before discarding them; as, before this was known to me, I am sure that I have sacrificed thousands of bulbs.—*N. M. T.*

*Transmutation of Corn*.—Is it possible that Wheat, Barley, and Oats, can change, from being kept from coming into ear? If so, then perhaps it may be true that Primroses, turned root upwards and made to grow so, become Cowslips. I have always laughed at the idea, but it is believed in some parts of Wiltshire. I have been also told that if single Primroses, Tulips, Polyanthuses, and Auriculas, are turned root upwards, they

will become double in a year or two. Can it be? Mignonette kept from flowering for a year becomes a shrubby plant and perennial, but still it remains Mignonette, only much more powerful as to scent.—*A Non-believer*.

*Wistaria sinensis*.—I have a plant of this truly beautiful and ornamental climber, about five years old, which has been allowed to grow in a very irregular state; no attention has been paid to it during that period. Early in March of this year I thought, on seeing the noble specimen in the Horticultural Gardens at Chiswick, that something might be done to assist Nature in forming a similar specimen, in course of time, out of my deformed plant. Accordingly, I cut and trimmed all the branches to within a quarter of a foot of the stem, leaving two wood-buds, and also flower-buds, varying from one to three on each spur; after which it has bloomed well. About the middle of March I commenced giving it a plentiful supply of water, twice or three times a week. This I continued to do for about six weeks, occasionally loosening the ground about the roots, so as to prevent the earth becoming baked under the influence of a May sun. It went on growing, and still continues doing so; but two of the principal shoots, measuring 26 feet, the growth of this year, have turned by a freak of Nature into monstrosities as flat and about the same thickness as a penny-piece. They are about 7 feet in length, turning upwards and dividing into two branches at the extremity: one branch measures two and the other one foot from the division. Will you inform me what plan, under these circumstances, had better be adopted in order to insure a healthy and vigorous growth next spring.—*T. D. Gordon*. [Your branch is what botanists call fasciated; it is of no consequence, for the new branches, &c. will come from it all the same if you get it ripe. It arises from over-luxuriance.]

*Country Shows*.—We have a Society in our village, and on the morning of its July meeting I met a respectable tradesman whom I shall call Mr. Smith, and said: "Well, Mr. S., I suppose I shall see some of your plants at the Show to-day?" Mr. S. "No you won't, ma'am. What is the use of my sending plants when—and—and—and—will beat me out and out? Haven't they the use of the greenhouse, stove, manures, and all that their masters' purse can buy; and what chance can I have with my frame only? Depend upon it, ma'am, those Horticultural Societies will not last long, if they don't alter! Now, if I had a chance of a prize I would send my plants, and I would take my family, and some of my friends would go too, and then they would get as many shillings towards their funds; but now I stay at home, or I go to the Stag and smoke my pipe instead." X. "Then you think there should be a prize for tradesmen, or those persons who possess a frame only?" Mr. S. "Certainly I do; but, bless you, they'll never do anything till they let the women have a share." X. "Then you think there should be a lady's prize?" Mr. S. "No, I don't mean quite that—I mean that there should be prizes for women only; let there be two of them—one for ladies, and the other for women in a lower rank, or it will be just the same as it is now with the men. Why, ma'am, it would do no end of good; instead of being stitch, stitch, stitch, all day long at that worsted-work, why they would get out into the air, and it would do them a world of good." X. "Well, Mr. S., I should be glad to see your suggestions carried into effect; but I fear—" Mr. S. "Ah, well, ma'am, all I can say is, that if something is not done our Society will die of consumption; and if they will only use a little common sense about their rules, why they will prevent consumption in others, for instead of spending our evenings at a tavern, we should be tending our plants." We then separated, and I send Mr. Smith's hints, as showing what I know to be general sentiments respecting garden societies.—*X.*

*Onions*.—A piece of garden ground, 13 yards long, and 4 feet wide, cultivated by Mr. Everitt, gr. to D. Hoste, Esq., Barwick House, Norfolk, produced this year 28 st. 12 lbs. of White Spanish Onions. Is not this an unusually fine crop?—*W. E.*—[Very.]

*Wasps*.—A few weeks since I observed in the *Chronicle* a statement made by a correspondent to the effect that a wasps' nest might be easily destroyed by means of turpentine. I have since tried the experiment, and, in accordance with your correspondent's directions, I inserted the neck of a bottle containing a small quantity of turpentine into the mouth of the hole, and plastered it round with clay. The result was, that it not only did not destroy the nest, but the next morning a wasp, perfectly alive, actually came out from the bottle! I wish to know wherein I was wrong in making my experiment, and how your correspondent reconciles this fact with his former statement.—*H. P.* [Spirits of turpentine poured into wasps' holes will certainly kill them; the bottle experiment we have not tried.]

*Growth of Trees*.—Respecting the elongation of the spaces between the tiers of branches on a tree after they are formed, it is said, that after a year's stem-shoot is fully formed, it will elongate, and that a side-branch at one time—say any given number of feet from the ground—shall in a few years afterwards be raised considerably higher from the surface. Whoever defends such a notion has surely never attentively observed the growth of trees. Take a Fir, for instance, after it has been planted, even 20 or more years, it will be found that the lower branches are as close to the surface of the ground as when it was planted, and of course the distance between each successive tier of branches remains of the same length, as those spaces never elongate after they are formed.—*W. Billington*.