

Any little expense in feeding introduces you to your bees and helps them wonderfully, and is never a loss. If you want to tempt the bees to feed in your own garden, sow Mignonette, Salvia, and Sainfoin; plant plenty of Raspberry, Gooseberry, and Currant bushes. They like Lime, Poplars, Apple blossoms, Thyme, and above all, Borage. Bees never touch double flowers. Should the early summer prove very dry, place near your bee-shed two or three soup plates half full of water, taking care to put in as many pebbles as each will hold. The bees require stepping-stones for their tiny feet, and otherwise they are necessary to save them from drowning.

"I am giving directions to those who desire to work economically. But if you can lay out a little as an investment, and wish to combine interest and pleasure with profit, you cannot do better than call on Neighbour, either in Regent Street or Holborn, where I have seen many varieties of hives, of different prices and all of good workmanship. The lateral system is the most elegant, but least productive. I do not like the nadir system. Bees naturally ascend or traverse the same plain, but mostly prefer ascent. 'Excelsior' is their favourite aspiration.

"In answer to another inquiry—do I approve using stupifying fumes as of Puff-ball, in order to expel the bees from supers full of honey?—I say certainly not. It may not injure the bees if judiciously administered. But it is not necessary. The bees will leave the super on its being detached from the hive and carried to a little distance, and will return immediately to their home and their queen. The only case in which I have recourse to it is when any portion of the comb through accidental admission of wet, has become mouldy. A few whiffs of Puff-ball may be injected by means of an instrument sold for this purpose, during five minutes. As soon as the humming noise ceases, lift the hive and cut out the mouldy portion of the comb, replace it, and in 20 minutes the bees will again be at work. This is the only case in which I would employ either this or tobacco smoke, which answers as well.

"Your apiary or bee-shed should be placed as near your dwelling as possible, sheltered from the north and north-east winds, and at the greatest possible distance from poultry. Frequently, but quietly and unobtrusively, visit them, watch them at work in your bee-glasses, or by windows in your bee-boxes. Let your children play beside them. They are fond of children, and unless violently irritated they will not injure them. I can state this from very ample experience. At the same time it is proper to state that some few persons are so offensive to bees that they must not approach them. Plenty of soap and water and fastidious cleanliness are essential to a bee-master's continued popularity with his apiarian family."

Home Correspondence.

Land-fall in Norfolk.—On Thursday, Sept. 29, a singular phenomenon took place in a field on the farm of Mr. Hastings, of Longham, in Norfolk, on the estate of the Earl of Leicester. Suddenly, and without visible warning, for Mr. Hastings had driven over the spot 20 minutes before, the ground gave way, and there appeared a chasm of 30 feet in diameter, and of more than 17 in depth. Mr. Hastings may be said to have had a narrow escape; for if the surface had sunk, as it might well have done, beneath the concussion of his gig, he must have been buried alive. At first there was no sign of danger to the adjoining surface, but as crowds of country people have flocked to the spot, thinking that they were visiting the scene of an earthquake, the land under this unusual pressure seems likely to give way in other places. Cracks are plainly seen for a radius of 50 yards in every direction. From the immediate appearance of water it is supposed that the ground has been undermined by a subterranean stream; but the science at command in a country place can do no more than guess at the cause of the phenomenon. One side of the chasm now looks as if it were the opening of a cave, the earth above which is a mere crust. There is a sensible depression of a foot or two over quite an acre of ground. Perhaps the cause is to be sought in the extraordinary dryness of the land, the like of which Mr. Hastings cannot remember during his occupation of half a century. Can any of your numerous readers assign any more probable cause for this singular and very unpleasant occurrence? *A. H., Oct. 4.*

Anacharis Alsinastum.—Your Paper contained a notice of the flowering of this plant in stagnant water near London during the hot weather in May. I had never seen it in blossom in the Thames until last year, when it bloomed abundantly, throwing up its white threads, terminated with their singular blossoms, from a considerable depth. They were all pistilliferous, but I noticed certain processes alternating with the pistils, which appeared like abortive stamens, as if the plant had some inclination to hermaphroditism. I recur to the subject because this year's observation enables me in rather an interesting way to fix pretty accurately the temperature needed to force this plant into bloom. Last year the time was the middle of August. The mean temperature of the river during July had been 66°, and during the week previous to the blossoming it had risen to 68°. This year the mean temperature of the river during July was only 64°; it rose to 67½° on the 6th of August, and numerous white threads began

to show themselves; on the 8th, the temperature began rapidly to decline, and the threads disappeared without producing a single blossom. *J. S., Streatley Vicarage, Oct. 5.*

Relative Strength of Deodar and Cedar of Lebanon.—In your Paper of October 1st (p. 943), I observe an interesting article on this subject—interesting in so far as it shows how the timber of the two kinds of trees named may be assimilated, but I think it by no means shows their relative strength. It is well-known that the Cedar of Lebanon, grown in this country, is often as soft as the most degenerate variety of Scotch Fir, while small branches of Deodar have the appearance of yielding firm, resinous timber of great strength, like that which the tree has a reputation for in the Himalayas. In testing the strength of the Deodar and Cedar wood yielded by the slab from the engrafted tree, I think the Deodar gets scant justice, notwithstanding the statement of the writer that "in the present sample we have an identity of condition which can very rarely be secured. Age, soil, exposure, climate, treatment, drainage, everything is the same, down to the very roots." It is surely a very artificial mode of arriving at the conclusion to deprive the Deodar of its own roots, and place it on the stock of its soft-wooded relative; thus the timber which was produced by the Deodar was nourished, and sustained, through roots and channels not its own, and may well be supposed to have been deprived of that copious flow of turpentine and rigidity of fibre, so important in the test of strength. Besides all this, I expect some will agree with me in thinking, that the sap which ascended from the root and was elaborated in the leaves of the Deodar, and thence descended, forming the timber of the Cedar portion of the trunk, may have formed it of better quality than had it been prepared by the ordeal of its own leaves, thus showing, as stated in the article referred to, only a difference of about one-sixth in favour of the Deodar. I further think there is hardly room in this test, to point to the identity of age, for the stock must have been considerably older than the scion; and even supposing the timber of both sorts had been formed since the operation of grafting, is it not likely that a difference would arise to some extent from the medullary rays emerging from centres of various ages? Within the last few years the Deodar has not been in such favour as formerly, and is not planted to the extent it deserves; this has arisen from unfavourable seasons, sudden changes of the weather, and the attacks of Fungus, similar to the casualties which overtake the Larch. Still it is one of the most valuable timber trees lately introduced, well adapted for growing as a succeeding crop in thin plantations, where it has shelter and ordinary good soil, excellent for a cover to game, and thriving when partially shaded better than any other of the tribe, except the Silver Fir; and although I have not been able to test its durability as a post or railway sleeper, I expect it is far greater than that of the Oak, or any other tree we have of the same age. It was introduced with this character respecting its incorruptible power, a quality far more valuable than its strength in resisting weight, the last of which I believe to be very great, when the timber is thoroughly matured. *J. G.*

Underwood for Larch Plantation.—In answer to "H. S. M." I may say that if the soil, gravel, and sand is rich enough to grow Larch freely, Deodars will make an excellent underwood when the Larches are thinned. If the soil is too poor for Larch, common and American Juniper, Snowberry, Berberis Aquifolium, and Holly may be planted, but the latter should be established before the rabbits are introduced. *J. G.*

Standard Peaches and Nectarines.—It appears that the late long hot and dry summer has had a great deal or all to do with the ripening of out-door Standard and Bush Peaches and Nectarines. I have this day (October 5), tasted Peaches raised here from the kernel marked from Noblesse, and Royal Kensington, also Nectarines of the Violette Hâtive and Downton kinds, as finely flavoured as from orchard-house or wall; but of course not so large as from the latter. These are bush trees raised four years back in an orchard-house, and when one year old planted out into a calcareous soil, or such as Mr. Rivers calls full of comminuted chalk, loam, and but little or no sand, but on a sunny slope, and where Roses on the Manetti luxuriate, growing 6 to 8 feet, and making fine pillars in one season only from the bud. *S. Dillstone, Nurseries, Sturmer, Halstead, Essex.*

Wistaria sinensis.—In answer to Mr. Noble's inquiry as to whether the Wistaria has ever fruited in this country, I may remark that there is at present in the gardens here a plant of *W. sinensis alba* with four pods or legumes on it which will apparently ripen seeds, and although this is the first time I have personally seen it fruiting, I believe it has done so before on more occasions than one. Whether it did so formerly in dry hot seasons or not, I am unable to learn, although I think it most probable that the hot weather is the cause of its fruiting, and that on each occasion it was the same white variety. I have never seen the common *W. sinensis* set a single fruit. *G. L., Kew Gardens.*

Ancient Gardening.—I should be very much obliged if any one who possesses a treatise on gardening or even an Almanac one or two centuries old would have the kindness to look what date is given as the proper

period for sowing Scarlet Runners or dwarf French Beans. I am anxious to ascertain, as far as is possible, whether these plants can now be sown at all earlier than was formerly the case. The title, date, and place of publication of any old treatise should be given. *Charles Darwin, Down, Bromley, Kent.*

Concluding Notes on the Flora of Kildare.—The geographical distribution of the flora of a country indicates in some measure the character of its soil. From the plants that I have already mentioned it will therefore be seen that that of Kildare varies greatly. Taking the Liffey as a starting point, and following a north-westerly direction, we gradually come into a poorer description of soil, with here and there fertile spots. On the Liffey many of the Umbellates grow most luxuriantly, especially *Anthriscus vulgaris*, *Angelica sylvestris*, *Pastinaca sativa*, and *Pimpinella Saxifraga*. A little to the northward we meet with *Gentiana Amarella*, and still farther on the pretty little *Euphorbia exigua*. Westward from this point, *Chlora perfoliata* finds a suitable habitat, and still further west is a region of Cotton Grasses. Nothing more in this direction particularly attracts attention until we find ourselves in the bog. Starting from the right bank of the Liffey in a south-easterly direction, we traverse an undulating country until we reach the foot of the Dublin mountains. On one spot, where the limestone rock crops up near the surface, I found *Melilotus officinalis*, and not far from that *Malva moschata* on a gravelly bank. *Coicus pratensis* is found sparsely scattered in a humid meadow in the same locality. Of the plants more generally distributed throughout the county, the two elegant white-flowered *Stellarias*, *Holostea* and *glauca*, are common in many localities. *S. graminea* and *S. uliginosa* also occur. In every quarry and gravel pit *Reseda Luteola* abounds. *Hypericum quadrangulum* is on every ditch, *H. calycinum* more sparingly scattered in some woods, and *H. Androsæum* rare, an odd plant of which is only seldom seen on the road-sides. Both of these last *St. John's Worts* are well worthy planting about gentlemen's demesnes; *calycinum* in particular has very large and elegant flowers, and looks well near the sides of shady walks, planted among Laurels, &c. There is an extremely beautiful Alpine plant growing on some old walls in Carton demesne, viz. *Erinus alpinus*, than which nothing could be better for covering ruins and old walls; it spreads itself rapidly. On the lofty and picturesque rocks at Carton, *Geranium lucidum* and *Poterium Sanguisorba* are growing, but not very plentifully. *Geranium molle* and *G. pyrenaicum* are common; *G. dissectum* is rather scarce. Another graceful wall plant is sometimes found on old buildings, viz., *Linaria Cymbalaria*. The kind of plants most generally found in certain localities surely indicate the wet nature of the soil and consequent necessity of drainage. But as the county is almost exclusively devoted to grazing, draining is not so essential as in a tillage country. The reclaiming of bog land has been successfully attempted in some instances, and where that operation has been properly conducted, fine crops of Grass have been obtained. The turf cutters generally have a small bit of reclaimed bog under crops of Potatoes or corn; but I should say that the want of manure baffles their efforts to a great extent. It was only the other day that I saw such a bit of ground as I am describing producing the poorest Potatoes and finest plants of *Senecio lividus* and *Chrysanthemum segetum* that I ever saw. On the few farms where tillage is practised extensively, it is generally done in a very superior style, and fine crops both of cereals and green crops is the result; in fact, better Turnips than are growing in some parts of Kildare it would be difficult to find. I walked over the Curragh in the merry month of May, but it is useless to look for plants in flower there. The sheep leave it too bare for that. I saw nothing on it but the most closely cropped herbage, with Furze bushes dotted up and down over the immense plain, as neatly cropped in with the sheep as if a gardener had been at them with a pair of shears. At the lower end of the Curragh is situated the ancient town of Kildare. There I found the wild Wallflower blooming on one of the finest old round towers in the country. *J. Douglas, Straffan, Kildare.*

Societies.

BRITISH ASSOCIATION: Sept. 15.—We select from the reports of the various Sections a few passages which will interest our readers:—

In Section B (Chemical Science) Dr. Daubeny, in a paper 'On the Thermal Waters of Bath,' after alluding very briefly to the mineral constitution of the Bath waters, as affording no adequate explanation of the medicinal virtues ascribed to them, proceeded to one point of scientific interest connected with their appearance, namely, the large volume of gas which they have gone on continually disengaging, apparently from time immemorial. Judging from the circumstance that the majority of these springs are associated with volcanoes, and likewise that the same gas is freely evolved from the latter, both in an active and in a dormant condition, it was, he observed, fairly to be inferred that the evolution of nitrogen is in some way or other connected with the same widely-spread and deep-seated cause. And if this really be the case, the phenomenon in question acquires