

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 *Zinnigera*, *Balsam*, and *Salsifia*; plant plenty of Raspberry, Gooseberry, and Currant bushes. They like *Lime*, *Poplar*, *Apple*, *Almond*, *Thyme*, and *Yarrow*. *Orange* trees and *Apple* trees should be covered should the early summer prove very dry, place near your beehived two or three soap plants 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 I do not care a little as to an amateur, and wish to combine interest and pleasure with profit, you cannot do better than sell 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 naïve system. Bees naturally sooted or traverse the same class, I naturally prefer soot. "Excelsior" is the best for the small family.

• In answer to another inquiry—do I approve using striping frames as of Puff-bell, in order to expel the bees from spaces 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 not return to it. I have seen the bees in the only case in which I have recourse to it when any portion of the comb through accidental admission of wet, has become mouldy. A few whiffs of Puff-bell may be injected by means of an instrument sold for this purpose, during fine weather. 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 ready to their work. The only case in which I employ either this or tobacco smoke, which answers as well.

• Your inquiry or beehived should be placed as near your dwelling as possible, sheltered from the north and north-west winds, and at the greatest possible distance from poultry. Frequently, but quietly and unobtrusively, visit them, watch them at work late in your bees' season, and be especially ready to their aid, 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 apian family.

Home Correspondence.

Loudfall in Norfolk.—On Thursday, Sept. 25, a singular phenomenon took place in a field on the farm of Mr. Hastings, of Loudfall, in Norfolk, on the estate of the Earl of Leicester. Suddenly, and without visible warning, for Mr. Hastings had been over the field some 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, and 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 fields, but in a few minutes the ground over the whole of 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 often remembers during his occupation of the same estate. One of my correspondents has designed any more probable cause for this singular and very unpleasant occurrence?—*N.H., Oct. 4.*

Asplenium Alismatum.—*Yor. Rev.* contained a notice of the flowering of this plant in significant water near London during the hot weather in May. I had never seen it in blossom in the Thames valley last year, when it blossomed abundantly, throwing up its white flowers above the water. One of my correspondents has designed any more probable cause for this singular and very unpleasant occurrence?—*N.H., Oct. 4.*

to show themselves; and on the 11th, the temperature began rapidly to decline, and the threads disengaged without producing a single blossom. J. S. *Streptol*, *Viennae*, Oct. 5.

Relative Strength of Dodder and Cedar of Lebanon.—In your paper of October 3rd (1883), I observed an interesting article on this subject, interesting in as 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 Dodder bear the appearance of yielding from the weight of their own structure, and the timber of the tree has a reputation for softness in the Himalayas. In testing the strength of the Dodder and Cedar wood yielded by the slab from the engraving tree, I think the Dodder quite soot 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 equal to the very roots." It is hardly a very artificial mode of arriving at the conclusion to derive the Dodder of its own roots, and place it on the stock of its soft-wooded relative; thus the timber which was produced by the Dodder was nourished, and sustained, through roots and channels not its own, and will be supposed to have been deprived of all sap which it is capable of carrying and storing up. 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 Dodder, 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 cedar of its own leaves, these showing, as aforesaid, a softness and vigour only a little inferior to those of the cedar, and only a little further thickened is hardly more in this test, to point to the identity of age, for the stock must have been considerably older than the cedar; and even supposing the timber of both sets had been formed since the operation of grafting, it is not likely that a difference would arise to some extent from the medullary rays emerging from centres of various ages. Within the same tree, the wood the Dodder had been in as favour as formerly, and is not plumed 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 seedling crop in thin plantations, where it has shewn an ordinary good soil, excellent for a cover to game, and shewing 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 guarantee, I think, which is not to be despised, and being weight, the last of which I believe to be very great, more than the timber is thoroughly saturated. J. G.

Undeveloped Larch Plantations.—Is answer to "H. S. M." I may say that if the soil, gravel, and sand which enough to grow Larch freely, Dodders will make an excellent underwood when the Larches are thinned. If the soil is too poor for Larch, osman and American Spruce will do better, and the latter is a better soil 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 our Standard and Bush Peaches and Nectarines. I have this day observed, that the Standard Peaches, which I have marked from Noblesse and Royal Kensington, and Nectarines of the Violote Illive and Downum kinds, as finely favoured as from orchard-house or wall; but of course not as large as 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 concentrated chalk, lime, and heavy soil, and which are all with water, and where Bess on the Marcell burrstone growing 6 to 8 feet, and making the pillars in one season only from the bed. S. *Dillmore*, *Norwich*, *Stamer*, *Waltham*, Essex.

Wisteria sinensis.—In answer to Mr. Noble's inquiry as to whether the Wisteria has ever fruited in this country, I may remark that there is at present in the garden here a plant of the same kind, which has fruited on it which will apparently ripen soon, 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 such occasions it will be more abundant than in the common W. *sinensis* set single fruit. G. E. *Knox*, *Gardens*.

Ancient Gardening.—I should be very much obliged if any one who possesses a treatise on gardening or even an *Almanac* or two or 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 those 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.

Geographical Distribution of 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 more fertile soil, with a more fertile soil. Nothing more in this direction particularly attracts attention until we reach ourselves in the bog. Strating from the right bank of the Liffey in a north-westerly 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 *Helianthus*, *ostifolius*, and saw a few that *Melva muscosa* on a gravelly soil. *Ononis* *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 *Stellaria*, *Holcus* and *glabra*, are common in many localities. *S. graminis* and *S. alba* also occur. In every quarry and gravel pit *Rosa lactosa*, *Hypericum quadrangulum* is an every-day plant. *Urtica dioica* is common in the same soil, and *H. andersonianum* rare, and a plant of which is seldom seen on the road-sides. Both of these last St. John's Wort are well worthy planting about gentlemen's domains; *calycina* in particular has very large and elegant flowers, and looks well near the sides of slowly walls, planted among Laurels, &c. There is an extremely beautiful Alpine plant growing on some of the hills in the county, which I have not seen, and which nothing could be better for covering rocks and old walls; it spreads itself rapidly. On the lofty and picturesque rocks at Carton, *Geranium lucidum* and *Polygonum Sagittaria* are growing, but not very plentifully. *Geranium molle* and *G. pyrenaicum* are common. *G. sinuatum* is rather scarce. Another grand wall plant is sometimes found on old buildings, viz. *Linaria Cymbalaria*, which is a very pretty plant, and is generally found in certain localities, and is a good indicator of the wet nature of the soil and consequent necessity of drainage.

As the county is almost exclusively devoted to grazing, drainage 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 executed, the best crops of Grass have been obtained. The turf culture generally has a small bit of very rich bog under crops of Potatoes or corn; but I should say that the want of manure hinders 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 jivida* and *Chrysanthemum negotium* that I ever saw. The soil is very rich, and as a practice, especially in the latter part of the season, it is generally done in a very shallow style, and the 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 Carragh in the merry month of May, but it is useless to look for plants in drier weather. The sheep have it too for that. I wish to say nothing on the subject of the drainage of the extensive plain, as nearly completed in with the sheep as if a gardener had been at them with a pair of shears. At the lower end of the Carragh is situated the ancient town of Kildare. There I found the wild *Wallflower* blossoming on one of the finest old round towers in the country. J. *Duggan*, *Stratford*, *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 II (Chemical Society), Dr. Daubeny, in a paper "On the Thermal Waters of Bath," after alluding to the waters of Bath, and the waters of other springs, as well as, according to 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 these mineral. Judging from the circumstances, and the quantity of these springs are associated with volcanic action, I have thought that 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 requires