

With these envelopes are specimens of birds and animals as in the Zoological Gardens, London. This is what is somewhat pompous language is here called the Garden of Acclimatization, in which all sorts of trees are to become hardy, and all sorts of birds, beasts, insects, and creeping things are to be introduced in the course of Paris.—I have seen in the garden of the Zoological Gardens, London, a very curious visionary. Not having seen the *Journal de la Société*, if there be one, or its programme, I don't know the limits assigned to this great idea, nor have I succeeded in learning anything of it more definite than that it is a wild one. You must therefore be contented with having it as a matter of fact. The main idea in acclimating plants are concerned. Be it known, then, to all men that the Society recognizes the necessity of learning experimentally whether *Pinus Sabina* is hardy, and if *Magnolia grandiflora* will live in the open air in Paris, will start this when you remember that the *Pinus* is among the hardiest of all trees, and how good M. Boursault used to grow the *Pinus* a quarter of a century ago in his garden in Paris. Another object of experiment is the Hungarian White Linden (*Tilia alba*), of which a wretched gardener in the garden of the Zoological Gardens, speaking under the name of some acclimatizing society, has written I mention these as examples of the childish way in which horticultural experiments (?) are conducted here. The whole affair is in that respect absurd. To be sure there are specimens of *Araracia Bielskii* and *axosia* in the garden, but it is not clear how keeping them in such a manner would be any benefit to the problem in the art of acclimatizing. In this matter I was equally perplexed to discover how it is proposed to acclimatize other species by growing them in a great conservatory or stove, in which they will be kept through the middle of some hundred "greenhouses" which the acclimatizers call them. But of this enough, it is not worth dwelling on such a subject. The situation is well: airy, dry, nicely wooded, and the very place for acclimating trials; and all most regret that the Garden of France with its fine landscape and its distinguished officers and most able professors, should be doomed to inaction on the skirts of the wine market and dirty Rue Copus, instead of being transferred to the beautiful Bois de Boulogne, now the resort of the Parisians, where a grand drive way would be a reasonable place where all the trees of Paris in Natural History are liberally stored away. One redeeming feature in this Jardin d'Acclimatization must not however be forgotten. It has a capital *Magnavivora* or gallery of Silk worms, a very pretty building in which the trees of the *Alberlas*, the *Ilizans* and the *Wills* Malberry have been raised, and in which the caterpillars are exhibiting themselves to the public, hard at work on the leaves of each peculiar. When I saw them last the leaves of *Alberlas* were alive with young worms, and some great green fellows were nearly full grown. This was far the most interesting object in the Garden. The practice of raising them is highly not so unprofitable as with cherries. One favorite, of which you cannot lose the like in England. I have done by me (*Les de la Pair*, No. 25) a *shop* of such articles which I recommend everybody who can afford a private garden to give a dozen to do and see. P. Bae Castiglioni.

Orchids, Fertilization of.—I have been endeavoring during several years to make out the many contrivances by which British Orchids are fertilized through insect agency. I am very anxious to examine a few exotic forms. Several gentlemen have kindly sent me specimens; but I have not seen one of Lindley's great district of *Arctostichum*, which includes the *Limnorchis*, *Vanillidula*, &c. If any one would have the kindness to send me a few flowers and buds of any member of the group, packed in a small tin box, by post, addressed Malvern, Worcestershire, I would be very glad to see you. Would you have the kindness to inform me, if in your power, whether the late Professor Morren has published anything (and where) on the fertilization of *Orchids* by insect agency? *Cherier Dawson*, *Dovec, Bromley, Kent*. There are many other orchid growers who are anxious to see your articles. After searching through Morren's multitudinous of pamphlets, we find nothing on *Orchids* except an occasional dissertation on *Orchis latifolia*, and some remarks on the cause of the mottledness in the lip of *Magnolias*.

Orchids, Culture of.—I was struck by the caution given to avoid manuring *Orchids*, as I can well remember seeing outside of Holt, in Norfolk, Cornwall, two plantations of Spruce and Larch, one on each side the road, well forced in, and with boards planted opposite each other, with wires as near as possible as follows:—The plants were sown in well-manured ground, and date. The other had no manure—These were planted in unmanured ground, and date the same as on the other board. The manured trees were at least twice as high, and had a far more robust and healthy appearance than those unmanured. It is a pity to see this caution given, as it is a matter of fact that I may also mention that a few years since I planted three *Deodars*, and the most sickly one, which I hardly expected to get up, I placed immediately over the spot where I had recently buried my splendid old favourite sitting. At first it made very slow progress, but for several years it grew rapidly, and in the end the roots had reached the dead *Deodar*, the growth has become most vigorous, the colour of the foliage pecu-

larly beautiful, and its branches far more stout than the other two; which, however, are very handsome. Hence I infer that manuring many of the *Conifers* may be safely and advantageously practiced. *Thomas Jolly, M.D., Roworth, Nassau*.—In September, 1892, on the eighth or ninth days of the month, I had the pleasure of my neck and arms in a field of sorrel and heavily manured with half-tonne horse and cow dung. At the end of the same week the question was asked through your Paper whether or not the application of manure would injure an *Aracacia*. The reply was—Yes, it is injurious to the whole race. I thought that I had a very good opportunity to test a serious blunder, but I patiently waited and watched the result. Nothing could be more satisfactory than the growth and appearance of the plants the following season. Since then I have invariably applied manure to every one of my plants, no kind in my own nursery, and always with the same satisfactory result. Therefore I have always recommended the application of manure whenever necessary, or an opportunity occurred for using it. As an illustration of what I have stated, I beg to say that about twelve months ago I had a very fine specimen of *Picea Nordmanniana* to a large tree in this neighborhood, which was intended to direct the transplantation of trees, &c., herself. A compost of manure and soil was prepared for this plant, including three barrow loads of the former. Nothing can exceed the beautiful appearance of this tree just now. It was situated close under the side of the same *Aracacia*, *Woods*, &c. Would your Correspondent—J. Philpotts—inform me whether the "good barrowload of stable-dung" which he applied to his "Drosera and *Picea Webbiana*" was fresh from the stable or rotten? because I am of opinion that a mixture of any kind would be beneficial, and such as the manure and the straw, &c., would also prevent the ground from cooling by evaporation. Confines forming a prominent feature in the grounds under my care, I am anxious to possess correct data respecting these. *Crofton*.

Orchids, Culture of.—I will with pleasure be glad to hear from you respecting the merits of the two kinds of *Calceolaria*, viz. shrubby or perennial, and the herbaceous or annual kinds. Some five or six years ago I was induced to commence growing *Calceolaria*, and I am anxious to know how much you will wear out in the several selected ones of your herbaceous or shrubby kinds to commence on, more particularly *angustifolia*, and a variety called *Kayii*, having proved them both to be healthy parents, and the result of my first batch was General Harrold, Emperor, &c. My object always has been to get distinct and characteristic forms, and to see what was the result. I have seen seedlings that I raised in 1857, and they measured when in perfection last season 4 feet through, and I am in hopes of sowing them for each season. I quite agree with your Correspondent respecting the duration of the *Calceolaria*. It is not a very long-lived plant, but I have seen *Chilopsis* 30 years old, and they are a beautiful variety, and why should they not now, as any one can have my strain of shrubby kinds in bloom from May to October. My seeds are equally valuable for the border or flower garden, which makes them doubly so, and they are not only very handsome, and blighted, equally as rich in colour as the herbaceous kinds. *James Barley, Longfield, Surrey*.

Vines in Pots.—I exhibited on Thursday last three Grape Vines in pots at Wexham exhibition; they were arranged to be very superior in any way at the show, and averaged 18 bunches each. To my surprise on entering the tent, after the judges had made their awards, I found a card containing these words placed on my Vines—"Disqualified—grown in open border." Now I have scores of witnesses who could prove that they were trained in pots, and that they were not in open borders, although they had partly rooted from the bottom or crack hole into some old tin on which they stood. These Vines were taken to Wexham and back in an open van, remained there all night in a crowded tent, the exhibition not having closed until 11 o'clock, and they were not in any way affected. They will still be exhibited again. I had a large tin filled with soil to fit the Vines on in order that they might travel safely, and had also a large forked iron placed inside the pots to steady them. This caused me in order to balance the Vines to drop them into larger pots; and I was very anxious to know how they were to be taken from drying, knowing that they had to remain until the second day. I believe that I have stated all particulars in full. The schedule states only those words—"For the best three Vines in pots." Mine were decidedly the best. Can they withhold the prize or not? Edward B. Jones, 34, St. John's Street, London, E.C.

Orchard House.—Allow me to make a few remarks in answer to your very indulgent notice of my little pamphlet. I know you will pardon my taking exception to what you have said on fertilization of French bushes; believing it to be a matter of necessity in many cases, I have not been able to do otherwise than to point out to lessen the idea of its importance. I am aware that some kinds will, when well ripened, set their flowers

without assistance, but I have proved by experiment that it is unsafe to trust to others. The partially ripened state of the wood and almost total absence of buds, of course tend much to aggravate the consequences of neglect this season, but I have the most positive proof that manual fertilization does make the difference between a good and a bad season. I have several orchards. There are four houses in this immediate neighborhood which were all furnished from our nurseries with plants which had all been cultivated together. Two of these houses are under the care of good gardeners, and they are entirely in possession of the fruiting season, and are now in full bearing. The other two have been neglected since they did not think it necessary to follow the advice they had received. The third house, erected by the same builder, and of the same size as the others, 60 x 20, is managed by a man who was a labourer a few years ago. Putting in want of information, he has had a general idea of how to manage his orchard, but he has not followed it. His house has been full of very fine fruit, and his master says he has had to give much of it to his friends. The fourth one is still more striking; after seeing all our best plants well set, and what were left are nearly full grown, we had full crops of fruit, but just before the end of the year. Of course most of the trees were inferior to those supplied in the former cases. With the exception of being most tastefully painted and paved, this house was exactly built as the others, and by the same person. Being the only one of the sort, it is a great curiosity. The body of the building, and took it into her own hands, and managed it entirely, and did not think it unnecessary to follow directions. Most of the plants fruited; some were full, and I will venture to say, far well ripened well grown trees, and perfectly clean foliage, she might challenge the country. For one or two years she has had a full crop of fruit, but without fruit (though it had been covered by sale trees the previous season); many have from 30 to 40 Peaches of the finest quality, some few of which remain. From the last of August to the present date we have seen our house trees in full bearing, and it is not to be wondered at that a number of stones reserved for sowing and the seedlings of the two last years you would be more than ever convinced that Rivers' orchard houses are a great fact. One thing is certain—what has been done for years and years, will not be done again. I have seen a man who has a nobleman's garden come and offered his dozen for my Peaches only a few days ago. His Grapes are amongst the finest in England, but he has no Peaches this season nor any worth having left; and as the best walls are now occupied with Peaches and strawberries, and the garden is full of Peaches, and his wife is in the house, he has no time to spare. Mr. Ingram, at Belvoir Castle, and seeing the magnificent specimens of Peaches grown on the walls, I could not help thinking how foolish it was to cover a south wall with glass for Peaches instead of building an orchard house, and planting the wall with Peaches.

Peaches.—It may be important to many of your readers to know that Vetch's Perfection Peas will withstand drought and mildew better than most, perhaps any Peas, in cultivation. When either Peas can scarcely be sown, and the ground is so dry that it continues to produce abundance of tender Peas of excellent favour. So convinced am I of its excellence that in future I will sow only it and Daniel O'Rourke, the latter for early gathering. *R. Cross, Wexham*.

Roots.—Will any of your readers give their experience as to the two plagues which are now afflicting the Rose tree—mildew and thrips? The Rose has made excellent growth with me this year, and the show of buds for the autumnal bloom of Hybrid Perpetuals is most promising, but mildew attacks the new shoots, and roots are affected, and the foliage is so dry that it is so dry that it escapes the fate open for a day or two, and so goes off as though they had been scathed, and are found to be infested with myriads of thrips. Does the same cause produce the two plagues, and are they to be attributed to the long drought we have had here? And what is the best remedy? I have tried a variety of remedies of sulphur all the improved parts of the trees, and in many cases have arrested the progress of the disease, but one class of Hybrid Perpetuals—the *Giant*, *Lord Raglan*, *Cardinal Patini*, and *General Jacquemont*—some completely overpowered by the mildew. The thrips are a pest which has been very common here for many years, and the plants out in the open air are as much affected as those which are under the shrubby trees, and many kinds are not touched at all, while the next tree is covered with mildew. *Chitra Ross* are free, and then the *climbers*, but *Gloire de Dijon* is slightly affected and I have had to give up the idea of sowing it. I have constant attention. Would you advise cutting in the trees that are most affected? Benzene sprays appear likely to mildew. *Conestoga*.

Pleasant.—A writer in your columns (p. 620) states that he caused *Vaccin* vines to seed at the Royal Horticultural Society, and he has succeeded in sowing his seeds, as I had succeeded with the common *Periwinkle*. By implication I may be pre-

