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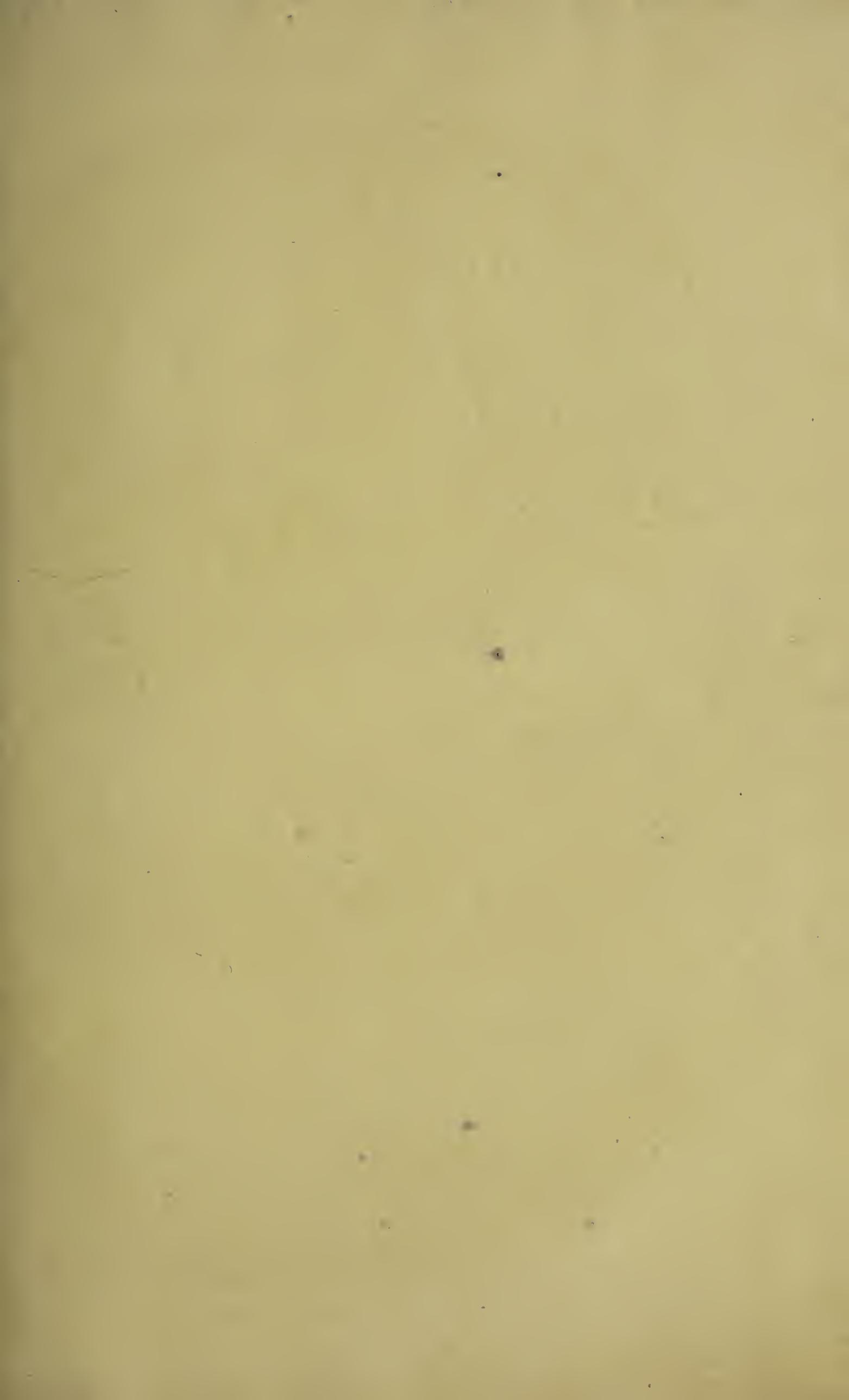
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OF THE

GRAY HERBARIUM

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Received 26 Oct. 1912.



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THE  
FLORIST, FRUITIST,

AND

GARDEN MISCELLANY.

1861.

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Suffolk Lane, City

THE  
FLORIST, FRUITIST, AND GARDEN  
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L'ENVOI.

IN looking back at the announcement we made at the beginning of last year with regard to our intentions, we can, with some degree of confidence, say that the promises we then made have been fulfilled; during a season of almost unexampled severity, as far as floriculture is concerned, we have endeavoured to keep alive the interest of our readers in the ever enticing field to which our attention has been devoted. This has been no easy matter when flowers were draggled and torn, and fruit tasteless and scarce; but we held on our way steadily, and owing to the kindness of our various contributors, we have been enabled to place before our friends, from time to time, various items of interest, and to give correct and pleasing portraits of either new favourites, or older ones revived. And now we desire to say a word or two for the future. The year 1861 will be memorable in the annals of horticulture, inasmuch as it will witness the revival of the Horticultural Society in more than its former vigour. It has at last escaped from the trammels of red-tapism and exclusiveness, with which it was so long bound, and has acknowledged the just claim of florists to a share in its favours and rewards. The statement of its intended proceedings at Kensington Gore fully attest this. A grand flower show is announced for June; a Rose show for July; a fruit and cut flower show in September: and a Chrysanthemum show in November: that they will be a great success we have little doubt, and we hope to chronicle them in due course;\* and as the Floral and Fruit

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\* The following plan of arrangements, &c., is given by the *Gardeners' Chronicle* on authority:—

In the grand general exhibition in June, when the garden will be formally opened, in addition to prizes varying in value from £1 to £20 for Orchids, Rhododendrons, Azaleas, Roses, general collections, fruit, and other usual subjects of competition, we find the following new classes: Dracænas and

Committees are now acknowledged to be THE court of appeal on all novelties, we shall endeavour to give reports of their meetings as they occur. Our old friend, the Royal Botanic Society, will not be forgotten amidst the flourish of trumpets and burning of blue lights with which the Horticultural Society will be ushered in. Its voice must be heard. Any other exhibitions of real interest—not forgetting our own child, the National Rose Show—will also be recorded.

We have to thank our various kind friends and contributors for the manner in which they have assisted our humble endeavours, and while soliciting a renewal of their labours on our behalf, we beg to express a hope that others will give us the benefit of their experience. Let none think any item of intelligence too common-place; even lists of flowers which bloom well in various localities would be a desideratum, and perhaps help to soften down many a hard word levelled against those who have raised them. There is one part of our serial in which we have been most anxious to attain to eminence, viz., our Calendar. The departments pertaining to greenhouse and stove culture, and those of the fruit and kitchen garden, will still fall to the share of the same able hands who conducted them during the past season, and we fear not to appeal to our readers as to whether they have not given general satisfaction. In the department of florists' flowers an alteration will take place: Mr. Charles Turner, of the Royal Nurseries, Slough, will duly record, from month to month, the necessary treatment of florists' flowers intended for EXHIBITION, and his

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Cordylines, Sikkim or Bhotan Rhododendrons, Begonias, Tree Ferns, tuberous Tropæolums, and Wardian cases filled with plants effectively arranged. Moreover, "Special prizes for the best group of three baskets of fruit and flowers, for the decoration of the dinner tables, are offered by C. Wentworth Dilke, Esq., V.P.H.S. : first prize, £10; second, £5; third, £3; fourth, £2. Beautiful arrangement will be the test of merit in this exhibition; valuable flowers or fruit are therefore not demanded. Each set must consist of three baskets. Ladies are invited to join in the competition. The prizes will be awarded by a jury of ladies." Here we have a very important new feature, and artistic skill may now distinguish itself as well as skill in cultivation. Extremely liberal arrangements are made for the issue of passes and breakfast tickets to exhibitors, but "no exhibitor can take more than eight passes or eight breakfast tickets." At the grand Rose show, in July, 14 classes are formed, with prizes varying from £1 to £7. Three classes for Roses in pots, one for a basket or vase, and the remainder are to be cut. The September Dahlia show also admits Roses, Hollyhocks, German and French Asters, Gladioli, and Phloxes; the prizes vary from 10s. to £10. Finally, the Chrysanthemum and fruit exhibition, in the beginning of November, which will last for two days, is to consist of 14 classes of Chrysanthemums and about 40 of fruit. Among the former the prizes run from 5s. to £6; among the latter the highest is £6, the lowest 10s. In addition to the ordinary arrangements for a fruit show, prizes are offered for stewed Pears, Pommes tapes, and Oranges and Lemons, we presume of home growth.





44.  
Auricula  
North Star  
Plate 173

success as an exhibitor will be a guarantee of the value and accuracy of his directions. To the humble individual who conducted that department last year will be assigned a corner in the calendar for "what small gardeners should do each month;"—his own SQUARE INCH, which has caused many a smile on the countenances of those who have seen it, will be taken as a sample of many others, and it is hoped that those similarly circumstanced will derive some little instruction from what he may detail.

Having thus spoken of the past, and detailed our plans for the future, we have nought now to do but to wish our many readers, according to good old English custom, "A Happy New Year." It may be true, if our weather-wise folks be correct, that we are to anticipate another wet and stormy season, that they may have difficulties to contend with, but we doubt not that they will recollect that, in the pursuit of floriculture, as well as of every other object of man's desire, heavenly or earthly, the word is true which says—

"Amor omnia vincit."

Deal, December 18.

D.

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## AURICULAS.

WITH AN ILLUSTRATION OF RICHMOND'S NORTH STAR.

(PLATE 172.)

"REVENONS à nous moutons," the "moutons" in this case being Auriculas; and though it be the cold and dormant month of December, and our frames with four inches of snow on them, the sight of this new and apparently handsome variety awakens many a pleasing reminiscence, and kindles many a bright expectation. Already we fancy we see the frames opened to the morning sun, the plants under the influence of its rays, and the good and careful top-dressing they have received expanding their leaves, which come up from some unknown region, the truss pushing its way up, and even the whole stud in the full vigour of bloom. This is, however, but fancy's sketch, and we must come down to sober realities, and say a few words on self-coloured Auriculas in general, and of this North Star in particular.

I have very little doubt that to the *οι πολλοι* this class has more attractions than any other, and the amateur knows very well that his frame would have an appearance of great sameness were it not for the sprinkling of the many beautiful varieties of them that he is enabled to intersperse amongst them, and considering how many of them come from every pan

of seedlings, it is rather a matter of astonishment that more first-rate varieties have not been obtained. Indeed, this whole subject of Auricula seedlings has been in a most unsatisfactory state; the number of persons who have taken honours in them has been very small, and even they have been satisfied with a lower standard of excellence than they ought to have been, and consequently, for want of better, some have been admitted into the list of stage Auriculas which are doomed sooner or later to be expunged from it. I use the expression "have been," because I see symptoms of a great revolution coming on, at present somewhat like the mysterious movements of Garibaldi at Genoa, when whispered intimations were all that could be obtained of that mighty band which has, though small in numbers, swept away an ancient monarchy, and, as usual, the earliest note is from our canny and persevering friends north of the Tweed. Already we have received an instalment of what they mean to do; Lightbody, Campbell, and others have added some most desirable varieties to our lists, while the former gentleman tells me that "some astonishing flowers in greens, whites, and selfs have been raised there lately—one green which beats all others." This is not the opinion of a young and inexperienced cultivator, seeing in his own children nothing but perfection, but of a veteran in the service, who, comparing the progeny of his neighbours with perhaps the best collection in the kingdom, thus deliberately pronounces his dictum. And can any one tell me how it is that the Scotch florists, with climate against them, do thus succeed? In Ranunculuses and Pansies they have long been ahead of us, and now they seem determined to get before us in Auriculas also, although some southern growers are earnestly trying what they can do (indeed, I know of one instance in which a variety has been lent, for the purpose of cross-breeding, a hundred miles off), and there is some comfort in thinking that, canny though the northerns be, it will be some time before they can beat Chapman's Maria. Well, there is room enough for all, and it would be a shame if, with all our advantages, we allow ourselves to be beaten.

With regard to the illustration, Richmond's North Star, I know nothing of the flower, save from hearsay and the plate, and I know some say you cannot trust plates, and instance the figures given in the FLORIST of Oxonian and Maria. In looking at the former again, I do not hesitate to say it is a correct representation of the flower; it exhibits just that defect which is fatal to it—the muddiness of the paste; and when to that is added the statement that it was raised from Fair Rosamond, I wonder that any one should have expected a first-rate variety from it. Then as to Maria, I am somewhat to blame

in the faultiness of that, which I own fails on the side not generally where failure takes place, in not being at all equal to the original—but the fault is not Mr. Andrews's. I did not know his exact address, and finding a Mr. Andrews, an artist, in the directory, sent my truss there, and when I found out my mistake could only send him a pip from a second bloom, and this doubtless was not at all as good as it ought to have been. I can say nothing about North Star; the colour is lovely, reminding one of Headly's Apollo, but better in shape. I should feel inclined to say, from its appearance, that it has too many petals, and would perhaps CUP. But if the drawing be a correct portrait, it will be well worthy of a place in every collection. The following notes of a few of the best SELFS out I have added from personal observation this year:—

**BLACKBIRD** (Spalding's).—A remarkably fine-looking flower, having a fine bold pip of a dark maroon colour, paste good, eye bright orange—having, however, one fault, the anthers project too much above the eye, making it what we call thrum-eyed; the foliage is long and smooth, and the plant vigorous.

**BESSY BELL** (Spalding's). Another good flower by the same raiser. I had but a small plant; it was not with me so vigorous in growth, or so large a plant, but promised well.

**HANNIBAL** (Faulkner's).—There is a good deal of discussion about this flower, which it owes to my having re-introduced it from Ireland—some asserting it is the same as Squire Munday; this I cannot determine, not having that flower. Hannibal is a fine foliaged plant, with meal on the midrib; the pip is large, rather flimsy, bright maroon, eye orange; a good constitutioned plant, and always ready for an exhibition table.

**METEOR FLAG** (Lightbody).—The plant is mealy throughout, the leaves long and serrated, pip circular, and the colour a lively blue; it has, however, the appearance of being divided into segments, which gives it a curious appearance, not adding to its beauty.

**OTHELLO** (Netherwood).—A robust green-foliaged plant, the flower-stem too long, the pips of a dark maroon colour, very pretty when it first opens, but has the defect of throwing back the petals after a few days.

**MRS. STURROCK** (Martin).—Foliage mealy and pointed, increases well, pips round, colour almost a crimson, very striking on a stage; eye would be better if a little deeper.

**METROPOLITAN** (Parker's).—Foliage very small; indeed, in the winter the plant looks as if it were vanishing altogether, but it revives wonderfully in the spring, and always throws up a large truss of a beautiful plum colour, somewhat shaded, as if it had an Alpine parentage on one side; the eye is orange. I have never met Redmayne's Metropolitan, which this is often sold as.

**MRS. SMITH** (Smith's).—Strong-habited plant, colour deep indigo blue, eye light, a tolerably good trusser, and generally speaking a very desirable variety.

**ECLIPSE** (Martin).—Foliage smooth and mealy, the pip somewhat undersized, a good colour, dark plum; were the flower larger it would be a first-rate variety.

**CHAPMAN'S SQUIRE SMITH** was very poor with me this year. **HEADLY'S AURORA** too small; others I cannot speak much about, but hope to take notes of them another year.

*Deal, Dec. 24.*

D.

## THE ORANGE.

THE Orange—by which I mean large Orange-trees, such as may be seen in the Crystal Palace at the present time—has not been very successfully treated in Britain, although from time to time many fine specimens have been imported from the continent. I cannot help thinking that the great drawback to the culture of the Orange in Britain (both great and small) is chiefly owing to the bad winter treatment which it receives. Gentlemen who visit France are shown the “Orangerie” at Versailles and other places where the Orange is grown, and they conclude that, because the magnificent trees they see there have been wintered for generations in the basement stories of their palaces, all they require in this country are similar places, and that any dark building which will exclude frost is all that is necessary to winter them in. That this treatment has killed a large number of trees we have good evidence. Two noblemen whom we knew, and who imported large trees into their gardens, were of another opinion. One erected a costly edifice for their reception, with an opaque roof, which in time was the death of all his trees; this we venture to say would not have been the case if a building had been provided with a glass roof. In France, where the climate is warmer and much drier than with us, the Orange-tree commences to grow soon after it is placed out of doors, and as the trees are pruned into very symmetrical shapes they are gone over two or three times during the summer season, and all the shoots stopped back, to produce the formal shaped heads so invariably seen in France. This species of pruning has the effect of inducing an early maturation of the wood, by admitting the sun and air to the whole surface of the tree, and by the time they are housed (generally the middle of October) the summer’s wood is well ripened and the trees are nearly in a state of rest, and do not therefore suffer during their hybernation, if the ventilation of the buildings is attended to, and frost is excluded. Owing to the long rest they get, and the well-ripened state of their wood, the trees commence blooming early in the spring; as the bloom is all picked off for commercial purposes, the trees soon recover themselves and commence their summer growth. In Britain, the trees bloom at a later period, and of course make their growth correspondingly later than in France; and as they rarely, if ever, get any of the close stopping practised on the continent, no assistance is given to the ripening process, and the trees are placed in their winter quarters with their wood imperfectly ripened, and even in late seasons like the present without having completed it, and it frequently happens that during winter these immaturely formed leaves drop off.

It is therefore obvious that if the Orange is to be kept in health in our climate, the natural heat of the season required to ripen the current year’s shoots must be supplied by artificial means, and this can only be accomplished by wintering the trees under a glass roof, where the light they will receive, aided by a little sun-heat and a dry atmosphere, for the six weeks following their being placed in their winter-quarters, will produce the same effect as the generally warm, dry autumns of the

continent, and we see no reason why, with these precautions, large Orange-trees may not be cultivated in England. It is generally thought that growing them under glass forces the trees too much. We have not found such to be the case. The trees will bloom probably in March and April, and will commence growing directly afterwards, or about the time they are removed to the open air, as we attach considerable importance to the growth being made out of doors. When we find that the wood has become ripened, which it will be by the beginning of December, the house is kept no warmer than merely to exclude frost, and a large share of ventilation is given daily, keeping the air of the house at the same time as dry as is practicable. It is very desirable that the heads of the trees stand clear of each other, for each tree must be considered as a specimen, whose form and symmetry it is of the utmost importance to keep perfect, and this can only be done by taking care no injury befalls the leaves by overcrowding. When the summer shoots have made some progress, they should be gone over and all the strong ones pinched back, to encourage the weaker ones; and at this time, which will generally be about the middle of July, a few of the shoots, where they are too thick, may probably require thinning out; in September the trees must be gone over again, and each shoot not previously stopped have its point pinched out. This practice assists the Orange-tree in two ways; it increases the size of the leaves left, and permits the wood to ripen much better than it otherwise would. In fact, we should treat them as Mr. Rivers does his Apricots and Cherries in pots, to keep the trees furnished equally all over with bloom-buds, and also within a limited space as to size. It is impossible here to enumerate all the advantages which would follow a more frequent system of thumb-and-finger pruning; but, having paid considerable attention to gardening in France, I am convinced that they understand this principle better than we do, and that by carrying it out very completely, with the assistance of the climate, it gives them alone all the advantages they assuredly possess in some branches of cultivation over ourselves. But to return to the Orange: we must add something about compost, in which respect French gardeners are even more fastidious than ourselves. With their very old trees, which require a considerable amount of nourishment to keep them in health, old and completely decomposed nightsoil, loam, and lime rubbish are the principal ingredients in their composts; to this is sometimes added peat. After the trees are fully grown, and it is not convenient to increase the size of their boxes, the soil round each side of the ball of roots is picked away with a sharp iron pin, and fresh compost is well worked in among the roots, to which it supplies food for half a dozen years. In this country, the greatest care should be taken in the preparation of a compost, for when once the trees (if they are at all large) have been newly tubbed, or put in fresh cases, disturbing them afterwards is attended with great risk to the tree, and therefore both the composition and mechanical properties of the soil should be carefully considered. The loam, which should be the top spit, and rather strong in texture than otherwise, should be quite mellow, and have been well exposed to the atmosphere; to this should be added one quarter in bulk of old mortar and bone-dust, and

the remainder may consist of one part of thoroughly decomposed horse-dung and decayed night-soil ; the dung should be in a dry pulverised state, and should be mixed with an equal proportion of loam which has been thoroughly charred by being burnt over an iron plate. We have thus a compost consisting of one half strong loam, and the other half old mortar, dry pulverised manure, and charred earth. We do not recommend peat, except for small trees, as after it has been in the tubs or boxes for a short time only, it becomes sour and holds the wet too much. This compost is more open than that generally used in France, but the rains of our climate require, that when so large a body of soil is placed together as that required for Orange-trees, it should be so composed that it will allow both rain-water and the usual supplies given them to pass freely away, for which purpose the drainage must be deep, and carefully placed over the bottom of the case, and of a material which of itself will not absorb water too readily, for in that case the lower roots would always be damp, and consequently cold. There is nothing better for the upper layer than broken flints, or gravel drift and charcoal ; and for tubs three feet or upwards in depth, from eight to twelve inches of drainage is not too much.

During the growing season the Orange requires a large quantity of water, which should be poured gently and evenly over the surface of the soil, so as to penetrate it regularly ; and when it does not do so, bore holes with a small iron rod into the parts which do not admit the water to pass through, as it is of the greatest importance that *all* the roots are equally supplied with water, for I have seen fine trees greatly injured by the water missing the ball, and escaping down the sides of the tubs. Should liquid manure ever be given—and its application produces the best results when the roots are healthy and numerous—it should be clear and perfectly liquid ; that made with guano, soot, or pigeon's dung is preferable to all others. We consider thick manure water highly objectionable, as it chokes up the drainage powers of the soil, and creates a kind of sourness in the compost, which should be avoided by all means ; and for this reason I exclude sheep, cow, and pig manure from all composts for the Orange tribe.

During very wet weather, trees standing out of doors, which have recently been reshifted, should have the surface of the boxes protected, so as to throw off the rain. There is nothing better for this than a piece of tarpauling, cut so as to cover the box and made to tie round the stem of the tree, which will effectually preserve the roots from becoming saturated to excess, which if continued for a short time only, will cause them great injury, and most probably entirely destroy those newly formed. There is nothing in the management of the Orange-tree which requires such constant care as attention to the supply of water ; for if overdone with it, especially towards the end of the season, or during winter, the soil becomes close and sour, and the young roots, which are very sensitive of cold and damp, quickly become rotten—when scarcely anything will recover the tree but a fresh shift, and this with large or even small specimens is most injurious to their growth. We therefore advise protecting the roots from heavy rains after August, when out of doors, and more particularly newly shifted trees. During winter the quantity

of water they will require will depend mainly on the state of their roots, if in compost such as we recommended above, and the tubs or pots are well filled, we water whenever the soil appears quite dry. The foliage will soon indicate when they require water, and is the best criterion to judge by. Newly shifted or sickly trees should be kept as dry as possible short of absolute flagging. As the days lengthen and solar heat increases, the supply of water must be increased in proportion, and the heads of the trees washed over three or four times a week from the middle of March till they are placed out of doors. This should be done with water slightly tepid, and pretty early in the afternoon, for the foliage to dry before night; towards the end of April, it should be done later in the afternoon, as at that season the foliage will be rather benefited by being kept damp; and when out of doors in dry hot weather a good washing overhead, between 6 and 7 in the afternoon, will produce good results by keeping the foliage clean and healthy.

Next to the material of which common garden pots are manufactured, wooden boxes are the best and most congenial for the roots of the Orange to grow in, and Oak or Teak the best wood for the purpose. Slate is, we consider, too good a conductor of heat for placing in the sun, and iron the same, though we saw the other day that some of the trees in the Crystal Palace have been placed in iron cases. Whether these have an inner casing of wood we know not, but, if not, we have no opinion of iron being found a good material, though, as the trees are always in the building, it is not there so objectionable as it would be out of doors. The boxes should stand clear 4, 5, or 6 inches above the ground, according to their size, for it is of great importance to the roots that all contact with a damp soil or floor should be cut off; and if grown in pots these should have a false bottom or be placed on wood, to preserve them in the same way. In placing the trees out of doors, choose a sheltered situation open to the south or south east, but protected from the west and north, and also from currents of air coming in any direction; they will stand the full sun and be benefited by it, but they should not be exposed to rough winds, which are extremely injurious.

R. B.

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### NEW WINTER FLOWERING PLANTS.

FULLY one-half of our winter flowering stove plants belong to one Natural Order—Acanthaceæ—and if they be most of them somewhat inclined to become what we call *leggy*—to be, in fact, rather weedy in their habit, they have at least good qualities enough to outweigh that one fault. They are easily propagated, grow freely, flower profusely, and are remarkable for the brilliancy of their colours. They are the weeds of the tropics; but as among our own weeds there are many gems, and from the group which has already been introduced to our gardens we could but ill afford to lose such plants as *Justicia*, *Thunbergia*, *Hexacentris*, *Meyenia*, *Ruellia*, *Goldfussia*, *Aphelandra*, and *Eranthemum*. Among these genera we find many of our most useful plants, without which our stoves would look rather bare of flower in the dull months,

and our bouquets lose much of that variety which is their greatest charm. We need offer no apology, therefore, for introducing to our readers three more plants belonging to this order ; and if they have to a certain extent the fault we have attributed to their allies, they have also all the good qualities we have pointed out.

*Beloperone violacea* produces dense heads of flowers at the points of the shoots and in the axils of the upper leaves. It only opens two or three flowers at a time, and so the plant continues in bloom for a considerable time. The individual flowers are not much unlike those of *Justicia speciosa* ; they are gaping with a broad three-lobed lip, which is of a violet purple colour with a double row of minute pure white lines along the centre. This plant is a native of tropical America, and was introduced by M. Linden, the enterprising Director of the Royal Zoological and Horticultural Garden of Brussels, to whom we are indebted for so many valuable new plants.

*Stephanophysum Baikiei* flowers most profusely. It produces large panicles of rich crimson inflated tubular flowers, each more than an inch in length, at the points of the branches ; when these are cut the upper leaves produce panicles almost as large, and it will continue in flower in this way down almost to the surface of the soil. This plant was discovered by the Niger Expedition, and was one of the last things sent to this country by poor Barter, the Botanist, who fell a victim to the climate ; it is named after the Commander of the Expedition, Dr. Baikie. It is a most useful and desirable plant ; we have few such bright coloured, free flowering things in winter. Old plants flower much better than young ones.

*Dipteracanthus Herbstii* has foliage prettily marked with white along the principal veins (as in *Aphelandra citrina squarrosa*) while in a young state, but it generally loses this charm before it is large enough to bloom. The flowers have a long slender tube, which makes a sharp bend and then the upper portion becomes suddenly inflated. They are sessile and produced in dense terminal and axillary fascicles. The colour is a very delicate pink outside, while the inside of the tube is almost white with a distinct pink line up each division of the limb. It was named in honour of M. Herbst, of the firm of Herbst and Rossiter, Nurserymen, of Rio de Janeiro, by whom we believe it was first sent to the Royal Botanic Gardens, Kew. All three of these plants are very easy of cultivation, and will soon become general favourites.

DELTA.

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### PLUMBAGO ROSEA AND ITS BRETHREN.

As a class gardeners must be acknowledged to be most ungrateful. Without the slightest compunction they show the cold shoulder to our oldest and best of vegetable friends, although they may have served well and truly for years, as soon as a new acquaintance springs up, which is (or, what is too often the same thing, is said to be) a little better looking than our old ones. And these, in like manner, we throw on one side, to be replaced by the next new comers. Sometimes, it is true,

a pang of conscience induces us to seek out an old acquaintance, and try to do it justice at the eleventh hour.

This was the case with myself in regard to *Plumbago rosea*, a short time since, and I had to search a dozen metropolitan and provincial nurseries before I could find this plant. Fifteen years ago we most of us went half mad about a plant which Mr. Fortune had found growing on the old ramparts of Shanghai. Messrs. Knight & Perry, who then had the nursery which Mr. Veitch now carries on with such energy in the King's Road, Chelsea, possessed the stock of this wonderful *Plumbago Larpentæ*.\* The houses in which it was grown were kept constantly locked, and only a few favoured individuals were allowed a sight of the plant which created so much enthusiasm, which was to be a fine bedder, a beautiful specimen plant, and everything that is good. As soon as we could get hold of a little plant—for which, by-the-by, we had to pay in bright gold—to work we went, and every scrap of root or shoot had to make a cutting. And what did they prove to be? A weed—a mere weed. While we had been cruelly neglecting a good and useful free blooming plant, with flowers of the colour of the Cerise Unique Geranium, which had been introduced nearly sixty years before, we had been driven half crazy to obtain this upstart.

Well let us, now that we are cooled down again, go back a little, and do justice to an ill-used genus. *Plumbago capensis* holds its ground as a pillar or trellis plant, and well it deserves to do so, for it would be a difficult matter to find a rival to it for these purposes. It is almost half the year in flower, and we have nothing exactly like it in colour. *P. rosea* is, as I have said before, quite equal to it in general usefulness. I have a plant now almost covered with its clear rosy flowers, and it has been in bloom for the last six weeks or more. *P. zeylanica* looks like *capensis* with white flowers. *P. aphylla*, I am told by a friend living at Calcutta, is one mass of flowers in his garden every season, and yet we never see it in bloom in this country. *P. rhomboidea* has rather small blossoms of a dark purplish blue, but the habit of the plant is not good. Who can tell us what *P. tristis* is like? And is *P. mexicana* a better white than *zeylanica*?

And now, having catechised the reader so far, let me ask a third question. Who will be the first to try what hybridisation will do among *Plumbagos*? Here we have a family some members of which have a decidedly good habit; we have various shades of colour, from pale blue to dark purple, clear rosy pink, and pure white; and further, the materials are, or may be, in the hands of every one. So far as we can tell, *Plumbago* may become as plastic in our hands as *Tydæa*, *Passiflora*, or even *Begonia* itself. We too often allow our continental brethren to carry off the palm in these things; let us see if we cannot take the lead ourselves for once. Few men will have the courage, in these days of progress, to deny that before the next three years are gone, we shall have a coloured figure of a hybrid *Plumbago* as a frontispiece to our periodical.

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\* This plant has since been placed in another genus, and is now only occasionally met with under the new title of *Valoradia plumbaginoides*.

## ADDITION OF LEAVES TO ROSES.

As one of the censors at the National Rose Show—a post which I have very unworthily occupied at each of the tournaments held in honour of the Queen of Flowers—I may perhaps be considered as competent to speak, if not quite *ex cathedra*, still with some little weight, on the matter mooted by Mr. Radclyffe, in the December number of the *Florist*, as to whether the addition of leaves to Roses ought to be a disqualification; and I venture to do so, the rather, as I believe the greater number of those that I held to be delinquents in the matter were in that portion of the exhibition which fell under our censorship—(I say *our*, for there was associated with me a gentleman whose name is well known in the floricultural world)—and *we* never had the least hesitation in the matter. I may therefore state the grounds on which we held them to be disqualified:—

1. It was distinctly stated in the schedule of prizes furnished to each exhibitor, that they were to be shown as in their growing state, or words to that effect; and on discovering that some were thus (as we believed) disfigured, an appeal to the hon. secretary settled the matter as we had already decided—it was a clear breach of rule.

2. We considered that the Rose, of all flowers, ought not to have any meretricious ornament—that no tricks should be played with it. While saying this, I do not for a moment mean to impute anything of the kind as intentional on the part of the exhibitors; their doing it arose either from inadvertence or misapprehension of the meaning of the rule.

3. We considered that the object in making that rule was, to enable a good idea to be formed of the habit of the variety, at least as much so as could be gained from a cut flower at any time. This, it is needless to say, would be entirely frustrated by addition of foliage, and I trust that any one considering the subject will come to the same conclusion that we did.

As a loyal subject of Her Majesty, I do hope all exhibitors will endeavour to leave her in her unadorned beauty for the future. Let no *tweezers* attempt to give her greater symmetry than she already possesses, or false leaves be used to set her off. Were we to see some grand beauty sailing into a room in the consciousness of her power, and knew at the same time that there were would-be admirers who suggested that a little rouge to her cheeks, or a false curl or two, would be an improvement, should we not be ready to hurl the vile insinuator—were he a man—out of the room; or—if a lady—to set it down to envy? So, I hold him to be devoid of true devotion to her queenly beauty, who would resort to any of the plans by which flowers undergo a metamorphosis as queer as any that Ovid records. I think, too, that the same objection applies, though not in so strong a degree, to the dis-budding. Surely it will be better to allow them to be shown in their natural state.

While on this subject, I think it well to notice another practice which ought to be prohibited, viz., flowers being *plugged down* into the tubes;

and for this simple reason, that it is quite impossible to determine whether they are shown in their natural state, or not. The exhibitor may be honest, but then his honesty ought to be capable of being tested, and no judge can know the character of those whose productions he is called upon to decide on; and, if he be dishonest, he may say that the act of taking them out of the tubes by force has disengaged the foliage from the bud. I hope, therefore, that at the next National—which I have no doubt will even surpass its predecessors—this practice will be equally a disqualification as the other. I hope to visit “the *Lion* in his den” ere that takes place, and to talk over this and other matters with him about the fair *Una* whom he protects, and acts—

. . . . . “as a strong guard  
Of her chaste person, and a faithful mate  
Of her sad troubles and misfortunes hard.  
Still when she slept he kept both watch and ward,  
And when she waked he worketh diligent  
With humble service to be prepared.  
From her fair eyes he took commandment.”

For now, when winter throws his mantle over her, he scans her closely, and prepares to welcome her opening *eyes*, when the warm days of spring bid her once more awake. May she reward him with many a gracious smile, next year, and he drink her health out of other silver goblets, won by the prowess of his brawny arms!

D.

Deal, Dec. 8.

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## 1860.

THE year which has just passed away will be long remembered as the wettest and coldest of the present century, the effects of which will be felt for years to come. It is useless speculating on the causes which have produced the continued rains and low temperature which have characterised the year 1860, from February to December inclusive; but without placing much faith in any of the weather prognostics hitherto propounded, we are not insensible to the great importance of the subject—one above all others interesting to cultivators, who have to contend against the influences of adverse seasons in a hundred ways; and if any reliable data could be established whereby the forthcoming seasons could be anticipated, we should hail it as an invaluable boon to the gardener.

In reference to the effects of the season, we have only space to notice a few facts bearing upon the subject; and first, we may take the Peach, which appears to have suffered in some degree everywhere, and to have been entirely killed in many places. To explain the matter fully, we must go back to the autumn of 1859, which, up to the third week of October, was characterised by a moist and high temperature, inducing a vigorous autumnal growth in the Peach as well as other fruit trees. The frost which followed at the end of that month was very severe, and at once arrested the action of the foliage and left no means of escape for

the fluids with which every part of the plant's system was surcharged. The severe frosts which followed in the early part of the present year consequently produced a fatal effect on the unripe wood of the Peach. Dark blotches began to show themselves on the young shoots, which, when cut into and examined under the microscope, shewed that the cells and their contents were entirely decomposed, and undergoing a species of mortification, and this was rapidly extending itself to the surrounding parts. Still, however, when vegetation commenced, and the trees burst into leaf, the system was so far relieved by it that the functions of blooming and setting fruit were perfected; and probably had a warm dry May occurred many trees would have overcome the attack, but directly the cold wet weather of May commenced all the previous symptoms of gum and gangrene became intensely aggravated. The young wood and foliage became affected simultaneously and died off, commencing from the lower part of the tree where vitality was weakest, and progressing upwards until only a few leaves were left on the topmost shoots; the young fruit was attacked in the same way and fell off shortly after the leaves. The above presents a true picture of hundreds of trees which we examined; and where death did not follow at once, a serious check has been given to the trees which it will take some time to overcome. The fact that Peaches and Nectarines on east walls suffered less than those on south aspects is well established, and can only be attributed to the trees in the spring having been sheltered from the cold westerly winds and rains, which so greatly increased the bad effects of the previous October's frost on trees on south walls, to which they were more exposed than those on east aspects.

Unfortunately, owing to the unfavourable nature of the season for ripening the wood, the prospect for the next year's Peach crop is a slender one unless we get a dry backward spring. At the present time, many Peach trees have not yet shed their leaves, and the wood is still quite green—a state of things which the severe frost we are now experiencing will not at all mend. We have, therefore, great doubts that unless a dry spring follows (to harden and ripen the wood), the trees which survived 1860 are doomed to perish in 1861.

The progress which horticulture and floriculture have made this last year is suggestive of a widely increasing interest in all that pertains to gardening and gardeners. The Horticultural Society has now fairly got into work, and is doing that work well. The Fruit and Vegetable Committee on the one hand, and the Floricultural Committee on the other, have been established on a sound practical system, and are taking every means to ascertain the comparative merits of every new production placed before them; and their published reports bear the highest value as references to the properties and merits of horticultural products.

The Fruit Committee is organising a local committee for separate districts, where many fruits doubtless exist of which little is now known beyond their own localities. By-and-by we shall have reports on garden engineering, including heating apparatus, horticultural buildings, ventilation, &c.; and with the splendid garden at Kensington Gore completed and the experimental garden at Chiswick in full working order, a considerable portion of those bright visions of usefulness which

we once hoped almost against hope would eventually crown the labours of the Council of the Horticultural Society with success, will have become realised. May it long continue its now prosperous course, and prove the great agent for improving and elevating the national taste for horticultural pursuits.

It is also gratifying to learn that the public taste is year by year leading itself to the enjoyment of gardens, in preference to other sources of recreation or means of pastime. That a growing feeling for the pleasures and enjoyments of garden scenery is fast spreading among the masses, the published reports of the numbers who annually visit the Royal Gardens at Kew and those of the Crystal Palace at Sydenham, afford conclusive evidence, and show how necessary such places are becoming, and the manner in which they are appreciated by the public. And as we know that it is impossible for any one to visit either of those gardens without receiving some useful or instructive impression, we should like to see public gardens attached to every large town as a necessary means of promoting and improving a taste for gardening and rural improvement generally.

#### NEW PLANTS OF 1860.

THE following list, abridged from "Hogg's Year Book for 1861," enumerates some of the more important new plants which have come particularly under notice during the past year:—

**ALOCASIA METALLICA.** (*Bot. Mag.* t. 5190.) Araceæ. The corrected name of a strikingly beautiful Caladium-like stove plant, with lustrous, bronzy, ovate-oblong, peltate leaves, noticed in our last year's list as *Gonotathus cupreus*. Borneo. *Messrs. Low and Co.*

**AMYGDALUS PERSICA v. VERSICOLOR FL. PLENO.** (*Flore* 1319.) Drupaceæ. A handsome, early-flowering, hardy shrub, with neat double flowers, which are sometimes white, sometimes rose-coloured, and sometimes white and rose variegated. Japan. *M. Van Houtte.*

**APOROCACTUS FLAGELLIFORMIS.** (*L'Illustr. Hort.* vii. 68.) A new name for the well-known favourite window plant, called *Cereus flagelliformis*, or the Creeping *Cereus*.

**AQUILEGIA VULGARIS v. CARYOPHYLLOIDES.** (*Flor. Mag.* t. 17.) Ranunculaceæ. A fine double-flowered variety of the common Columbine, the flowers white, striped and flaked with dull reddish crimson and reddish purple. An English variety. *Messrs. Carter and Co.*

**ARALIA SIEBOLDII.** Araliaceæ. A fine, ornamental, greenhouse shrub, having glossy leaves, palmately divided into about nine elliptic-lanceolate acuminate, coarsely-serrated lobes. The inflorescence forms a large branched, terminal panicle; the flowers small, pale-greenish, produced in umbels resembling those of the Ivy. Japan. *Messrs. Veitch and Son.*

**ASTELIA CUNNINGHAMIA.** (*Bot. Mag.* t. 5175.) Juncaceæ. A curious half-hardy or greenhouse perennial, with long, narrowish, silky leaves, and large panicles of deep green flowers. New Zealand. *Kew.*

**AZARA GILLESII.** (*Bot. Mag.* t. 5178.) Flacourtiaceæ. A handsome and peculiar cool greenhouse shrub, bearing leaves of two kinds,—the larger rigid, elliptic-ovate, serrated; the smaller, which are very deciduous, roundish. The flowers are small, yellow, numerous, in dense catkin-like elliptical heads from the axils of the leaves. Chili. *Kew.*

**BEGONIA EXIMIA.** (*L'Illustr. Hort.* t. 233.) A pretty dwarf, variegated, stove hybrid, having the leaves moderate-sized, red beneath, and silvery upon the upper surface, the course of the principal veins marked by reddish lines. A Belgian variety. *M. Verschaffelt.*

**BERBERIS INTERMEDIA.** (*Gard. Chron.* 1860, 143.) Berberidaceæ. A supposed new Berberry of the pinnate or Mahonia section, but apparently very near to *B. fascicularis*, though reported to be more hardy. *French Gardens.*

**BESCHORNERIA YUCCOIDES.** (*Bot. Mag.* t. 5203.) Amaryllidaceæ. A beautiful dwarf Aloe-like plant, with narrow, glaucous leaves, and a slender, coral-coloured scape, 3—4 feet high, gracefully curving to one side, and bearing slender drooping racemes of large pendant green flowers, tinged with red, resembling in shape those of some long-flowered Fuchsia. Mexico. *W. W. Saunders, Esq.*

**CALCEOLARIA FLEXUOSA.** (*Bot. Mag.* t. 5154.) Scrophulariaceæ. A useful free-blooming decorative plant; vigorous in habit; the leaves stalked, cordate-ovate, deeply-toothed; the flowers forming large compound panicles, large, inflated, deep yellow, somewhat downy, and seated in large yellow-green calyces. Peru. *Messrs. Veitch and Son.*

**CALLIANDRA HÆMATOCEPHALA.** (*Bot. Mag.* t. 5181.) Leguminosæ. A lovely hothouse shrub, with the leaves dividing into a pair of pinnæ, which are pinnate, the filaments of the stamens forming balls of bright crimson threads. Native country uncertain: Eastern. *Kew.*

**CALLIXENE POLYPHYLLA.** (*Bot. Mag.* t. 5192.) Smilacæ. A dwarf, bushy, cool greenhouse plant, with numerous small oval or oblong leaves, glaucous beneath, the flowers very copious, one from each axil, gracefully drooping, six-leaved, pure white. Chili. *Mr. Standish.*

**CALONYCTION DIVERSIFOLIUM v. SULPHUREUM.** (*Flore* 1328.) Convolvulaceæ. A pretty climbing stove plant, which may be planted out in summer in hot situations. It has pinnately palmatifid leaves, and smallish sulphur-coloured flowers, stained with purple in the centre. Java. *Continental Gardens.*

**CAMPANULA ARRECTA.** Campanulaceæ. A rather effective border plant, apparently biennial, raised from *C. primulæfolia*. The whole plant very hairy, with oblong, spathulate, Primrose-like leaves, and numerous erect stems, erectly branched, rising in succession, and bearing flowers about the size and shape of those of the chimney Campanula, but of a deep blue purple. An English variety. *Mr. Young.*

**CAMPYLOBOTRYS REGALIS.** Cinchonaceæ. An ornamental stove sub-shrub. The leaves stalked, broadly-elliptic, narrowing both to the base and apex, the surface somewhat bullate, but with a satiny lustre, bronzy green, the main rib and principal side veins of a pale greyish colour. Chiapas. *M. Linden.*

**CAMPYLOBOTRYS SMARAGDINA.** A dwarf stove plant, with oblong-obovate sessile leaves, of a satiny shaded green, the numerous principal side veins being sunk so as to produce a ridgy and somewhat bullate surface; the young leaves tinged with brown. Chiapas. *M. Linden.*

**CEANOTHUS OREGANUS.** (*Bot. Mag.* t. 5177.) Rhamnaceæ. A hardy evergreen shrub, with elliptic-obtuse leaves, and panicles of greenish-white flowers. Oregon. *Messrs. Veitch and Son.*

**CEANOTHUS VELUTINUS.** (*Bot. Mag.* t. 5165.) A very handsome evergreen hardy shrub, growing 8—10 feet high, with dark green varnished orbicular-elliptic leaves, hoary beneath, and three-nerved. The flowers are white, in erect dense thyrses, in early winter. Oregon. *Messrs. Veitch and Son.*

**CENTROSTEMMA MULTIFLORUM.** (*Bot. Mag.* t. 5173.) The name preferred by botanists for the stove shrub known in gardens as *Cyrtoceras reflexum*.

**CEREUS CLAUDIANUS.** (*Flor. Mag.* t. 20.) Cactaceæ. A handsome warm greenhouse succulent, with the habit of *speciosissimus*; the flowers smaller, very compactly formed, bright purplish rose with a crimson bar, the outer petals entirely crimson. An English variety. *Mr. Fry.*

**CHAMÆBATIA FOLIOLOSA.** (*Bot. Mag.* t. 5171.) Rosaceæ. A beautiful-leaved dwarf evergreen bush with white rosaceous flowers, and finely cut tri-pinnatisected foliage. California. *Messrs. Veitch and Son.*

**CISSUS (?) PORPHYROPHYLLUS.** Vitaceæ. A handsome-leaved free-growing climber, with slender stems, rooting at the joints, and producing heart-shaped leaves about five inches long, of a rich emerald green in the younger stages, changing as they become older to a deep purplish green. The leaves are convex, and being also longitudinally ribbed with the rib depressed, the satiny richly shaded surface is shown to much advantage; the under surface is purple, and

along the course of the veins on the upper surface are scattered irregular angular livid or pale purplish flecks or blotches. India. *Messrs. Veitch and Son.*

*CISSUS VELUTINUS.* (*Bot. Mag.* t. 5207.) A climbing stove shrub, with red stems, and having the leaves red beneath, groved above, silvery along the course of the principal veins. It is inferior to *C. discolor*. Probably Malayan. *M. Linden.*

*CLARKIA PULCHELLA v. NANA.* A dwarf bushy-habited variety, called Tom Thumb; the plants form a compactly branched mass, about eight inches in height and as much in diameter, profusely flowered, the flowers rich purplish-rose colour. An English variety. *Messrs. Carter and Co.*

*CLARKIA PULCHELLA v. STRIATA.* A very pretty variety, with the flowers white, streaked and flaked with rosy-purple in a very elegant manner. An English variety. *Messrs. Carter and Co.*

*CLEMATIS CÆRULEA v. VIOLACEA.* (*L' Illust. Hort.* t. 254.) Ranunculaceæ. The flowers of this fine hardy creeper are represented to be yellow, edged with reddish violet. A Belgian variety. *M. Spæe.*

*CLERODENDRON CRUENTUM.* (*Gard. Chron.* 1860, 456.) Verbenaceæ. A noble-habited hothouse plant, with erect stems, large smooth oblong stalked leaves a foot long, and a large dense oblong terminal panicle of rich orange-red flowers. India. *Messrs. Veitch and Son.*

*COLUMNEA ERYTHROPHÆA.* (*Hort. Lind.* t. 9.) Gesneraceæ. A tall fleshy-stemmed stove plant, with broad lanceolate leaves, and axillary long-tubed two-lipped scarlet flowers, the large leafy calyx stained with red at the base. Mexico. *M. Linden.*

*CORDYLINÉ BANKSII.* (*Gard. Chron.* 1860, 792.) Liliaceæ. A slender-growing subarboreous greenhouse plant, of elegant character, with long linear lanceolate leaves contracted below into a long petiole. The flowers are white. New Zealand. *Mr. Standish.* [For information on this and other Cordylines in cultivation, see *Gard. Chron.* as above quoted.]

*CORDYLINÉ BANKSII v. ERYTHROCHÆSIS.* A very handsome variety of the foregoing, in which the central rib of the long narrow leaves is of a deep crimson-red colour, the upper surface being also marked with a few slightly divergent pale reddish or orange-coloured lines formed by the principal side veins. New Zealand. *Messrs. Veitch and Son* and *Mr. Standish.*

*CORYDALIS SPECIOSA.* (*Gard. Chron.* 1860, 336.) Fumariaceæ. A very handsome dwarf, herbaceous spring-flowering plant, with bipinnatifid leaves, and dense spikes of large golden yellow flowers, stained with bright brown towards the point. Mantchuria. *Glasnevin Bot. Garden.*

*COSMIDIUM BURRIDGEANUM v. ATROPURPUREUM.* (*Flore* 1321.) Compositæ. A fine variety of a very handsome annual, in which the dark-coloured (Coreopsis-like) spots, at the base of the orange-yellow florets, are enlarged, so as to leave but a small border of yellow. A Belgian variety.

*COTONEASTER SYMONDSII.* Rosaceæ. A beautiful dwarf erect hardy evergreen shrub, with ovate elliptic leaves and bright orange-scarlet flowers. An English variety. *Mr. Standish.*

*CYDONIA JAPONICA, varieties.* (*L' Illust. Hort.* t. 260.) Rosaceæ. The varieties here represented, obtained in the Belgian gardens, are—*Gaujardii*, described as having the flowers bright rose, but represented a light red; *Papeleuii*, very pale citron, with a faint rosy border; *Princess Emilie Soutzoe*, a deep crimson, rather dull in tint, as represented. *M. Verschaffelt.*

*CYRTODEIRA CUPREATA v. VIRIDIFOLIA.* (*Bot. Mag.* t. 5195.) Gesneraceæ. This is the very elegant and showy-flowered trailing stove plant, known in gardens as *Tapina*, or *Achimenes splendens*.

*DELPHINIUM FORMOSUM v. BEAUTY.* (*Flor. Mag.* ined.) Ranunculaceæ. A remarkably beautiful variety, having the sepals of the richest blue, and the petals pure white, with a small tuft of yellow hairs near the base. The contrast of the two colours is very striking. An English variety. *Messrs. Fraser.*

*DEUTZIA GRACILIS VARIEGATA.* Philadelphaceæ. A neatly-variegated sport of the well-known *Deutzia gracilis*. An English variety. *Mr. G. McIntosh.*

*DIANTHUS HYBRIDUS* (Captain Clarke's). Caryophyllaceæ. A very handsome, fragrant, semi-double, bright, rose-coloured Mule Pink, the produce of a florist's Carnation crossed with an Indian Pink; leaves resembling those of a

Carnation, but rather broader, and of a deep green; flower-stem growing 12 to 15 inches high, numerous, bearing a profusion of blossoms. An English variety. *Captain Trevor Clarke.*

DIANTHUS HYBRIDUS MULTIFLORUS. A handsome hybrid Pink, of continental origin, having dark green Carnation-like leaves; of vigorous habit, being from 12 to 18 inches high; freely producing sweet-scented rose-coloured flowers, which are rather more than an inch in diameter. The flowers-stems are robust, and yield a succession of bloom from June till October or November. A continental variety. *Messrs. E. G. Henderson and Son.*

DIPTERACANTHUS HERBSTII. (*Bot. Mag. t. 5156.*) Acanthaceæ. An elegant soft-stemmed stove shrub, with broad lance-shaped leaves, and many flowers, crowded into a kind of panicle at the ends of the shoots, and having a long, slender, graceful tube, swelling out to a trumpet shape, and curved towards the end, rose-coloured, with a white, spreading limb. Brazil. *Kew.*

EPACRIS MULTIFLORA. Epacridaceæ. A very handsome greenhouse shrub, with something the habit and aspect of *E. grandiflora*, having downy stems, ovate acuminate leaves, and very numerous flowers, with crimson tubes, and rounded erect white segments, crowding the flowering branches. New South Wales. *Messrs. Rollisson & Sons.*

ERICA ARISTATA, v. BARNESII. (*Flor. Mag. t. 5.*) Ericaceæ. A very beautiful greenhouse shrub, with large, pinkish salmon-coloured, ventricose flowers, remarkable for the breadth of the square-ended white limb segments, and the deep sanguineous mouth. An English variety. *Messrs. Low & Co.*

ERICA ARISTATA, v. LOWII. A handsome form of the awned Heath, having the flowers of a fine varnished red, with an inflated tube, and dark contracted mouth; the segments of the limb small and ovate. An English variety. *Messrs. Low & Co.*

ERICA ARISTATA, v. VIRENS. (*Flor. Mag. t. 5.*) A fine, showy variety, with large whorls of bright, varnished, red flowers, slightly ventricose, the mouth sanguineous, and the limb-segments small blush-white. An English variety. *Messrs. Low & Co.*

ERODIUM PELARGONIIFLORUM. Geraniaceæ. (*Bot. Mag. t. 5206.*) A pretty half-hardy perennial, with ovate-cordate radical leaves, and umbels of 8—10 white Pelargonium-like flowers, the two upper petals stained with red. Anatolia. *W. W. Saunders, Esq.*

EUCCHARIDIUM GRANDIFLORUM, v. ALBUM. Onagraceæ. A neat dwarf-growing blush white variety, which may probably be useful where light colours are in request. An English variety. *Messrs. Carter & Co.*

EUCCHARIDIUM GRANDIFLORUM, v. ROSEUM. A blush-coloured variety, rather larger than the foregoing, but more flushed with rose-colour. An English variety. *Messrs. Carter & Co.*

GARDENIA RADICANS, v. FOL. VARIEGATIS. Cinchonaceæ. An interesting dwarf, free-blooming shrub, with narrow lance-shaped leaves, almost Willow-like in character, irregularly edged with white; flowers white and, like the allied forms, deliciously fragrant. Japan. *Messrs. Veitch & Son.*

GESNERA GLOXINIÆFLORA. Gesneraceæ. A handsome erect-growing hybrid, producing large ovate hairy dark-coloured leaves, and numerous axillary flowers, as large as those of a Gloxinia, deep rich rose-colour, with a paler tube and deeper throat. It is a fine ornamental variety, of Continental origin. *Messrs. E. G. Henderson & Son.*

GILIA ACHILLEÆFOLIA, v. ALBA. Polemoniaceæ. A pretty variety of this useful species, having the flowers pure white. An English variety. *Messrs. Carter & Co.*

GUTIERREZIA GYMNOSPERMOIDES. (*Bot. Mag. t. 5155.*) Compositæ. A hardy perennial three to four feet high, with spathulate lower leaves, and heads of orange-yellow florets which form a ray an inch or more across. New Mexico. *Kew.*

HEMEROCALLIS DISTICHA, v. FLORE PLENO. (*Flor. Mag. t. 13.*) Liliaceæ. A very fine herbaceous perennial, probably requiring greenhouse treatment. It has the habit of the common day Lilies, but narrower leaves, and large double tawny yellow flowers marked with a blotch of deep brownish crimson on each segment. Brought from Madagascar. *Messrs. Veitch & Son.*

**HETEROCENTRON MEXICANUM.** (*Bot. Mag.* t. 5166.) Melastomaceæ. A really handsome cool stove dwarfish suffruticose autumn and winter-flowering plant, with small elliptic feather-nerved leaves, and large leafy terminal panicles of very numerous rosy purple flowers of the usual four-petaled form found in this order. Mexico. *Messrs. Low & Co.*

**IMATOPHYLLUM CYRTANTHIFLORUM.** Amaryllidaceæ. A fine plant, having distichous lorate bluntish leaves, and an erect flower-scape, bearing numerous drooping Clivia-like flowers, of a pale flame colour, very like Clivia (or Imatophyllum) nobilis, but paler coloured. A Belgian variety.

**IXORA JUCUNDA.** (*Bot. Mag.* t. 5197.) Cinchonaceæ. A fine stove shrub, with smooth lanceolate or ovate-lanceolate leaves, and terminal corymbs of white flowers. Ceylon. *Kew.*

**LASIANDRA FONTANESIANA.** (*Hort. Lind.* t. 11.) Melastomaceæ. A shrubby stove plant, with broad, hairy leaves, and large purple, five-petaled flowers. Brazil. *M. Linden.*

**LINARIA BIPARTITA, v. SPLENDIDA.** Scrophulariaceæ. A very fine and richly-coloured annual, flowering profusely; the habit erect; the flowers large, of a very deep purple. This species is often grown under the false name of macrourea. An English variety. *Messrs. Carter & Co.*

**LONICERA JAPONICA HYBRIDA.** A desirable, hardy, evergreen, free-flowering, climbing shrub, raised between *L. japonica* and *L. flexuosa*. The foliage and flowers are much like those of *japonica*, from which it differs in its greater hardiness, and more profuse flowers. The leaves are ovate, acute; the flowers have a downy tube, and are white, changing to yellow, remarkably sweet, and literally loading the branches. An English variety. *Mr. Ingram.*

**LONICERA STANDISHII.** (*Flore* 2 ser. iii. 63.) A much-branched, hardy, ornamental shrub, with deciduous, oval-lanceolate, acuminate, hairy leaves, and geminate flowers, white inside, reddish, or violaceous outside, and in form resembling those of *L. fragrantissima*. China.

**MARANTA ARGYRÆA.** Marantaceæ. An elegant dwarf, stove perennial, with oblong, lanceolate, acute leaves, which are purplish beneath, and pale green on the upper surface, marked with broad, oblique bands of grey. Brazil. *M. Linden.*

**METHONICA GRANDIFLORA.** (*Bot. Mag.* t. 5216.) Uvulariaceæ. A fine hot-house climber, of vigorous habit, with broad lance-shaped leaves, lengthened out into a tendril, and large, clear, pale-yellow flowers, with reflexed narrow-lanceolate, wavy petals. Fernando Po. *Kew.*

**NEMOPHILA ATOMARIA, v. OCLATA.** Hydrophyllaceæ. A very pretty variety, in which the flowers are greyish blue, with a black spot at the base of each petal. It agrees, in other respects, with the plant known as *N. atomaria cœlestis*. An English variety. *Mr. W. Thompson.*

**ŒNOTHERA GRANDIFLORA.** Onagraceæ. A fine showy hardy border flower, having the habit of *Œ. biennis*, with the flowers of *Œ. macrocarpa*; the upper part of the stems crowded with large bright-yellow flowers, of a very showy character. It is sometimes called *Œ. Lamarckiana*. N. America. *Messrs. Carter and Co.*

**ŒNOTHERA RIPARIO-GLAUCA.** A very handsome decorative plant, of branching habit, with lance-shaped leaves, and flowers nearly or quite two inches in diameter, rich deep yellow. An English variety, raised by crossing *Œ. riparia* with *Œ. glauca*, and well suited for bedding purposes. *Mr. J. Young.*

**PÆONIA MOUTAN, v. ALEXANDER II.** (*L'Illust. Hort.* t. 237.) Ranunculaceæ. A fine large-flowered variety, full double, deep rosy crimson shaded with salmon-colour, becoming pale rose towards the margins of the petals, which are lacerately-fringed. A Belgian variety. *M. Verschaffelt.*

**PÆONIA MOUTAN, v. ELIZABETH.** (*Illust. Bouq.* t. 35.) A fine variety with immense flowers, 9—12 inches in diameter, double rosy-crimson in the centre, shading off to a lighter rose towards the margin. It is very handsome. Of continental garden origin. *Messrs. E. G. Henderson and Son.*

**PENTAPTERYGIUM RUGOSUM.** (*Bot. Mag.* t. 5198.) Vacciniaceæ. A curious greenhouse shrub, with lanceolate serrate leaves, and producing from the old wood pendulous corymbs of pentagonal tubular flowers, which are transparent waxy white, and transversely marked by distant red wavy lines. It has been called *Vaccinium rugosum*. Mountains of India. *Messrs. Veitch and Son.*

PETUNIA NYCTAGENIFLORA, *v.* ECLIPSE. (*Flor. Mag.* t. 30.) Solanaceæ. A handsome variety, of which the flowers are very large, 3 inches across, with broad overlapping wavy segments, and very effectively marked; the colour is mauve purple, forming sometimes five broad bars radiating from the centre, two or three of these being at other times confluent into a large purple blotch, while the rest of the surface is veined with mauve on a white ground. An English variety. *Mr. G. Smith.*

PINUS LOPHOSPERMA. (*Gard. Chron.* 1860, 46.) Pinaceæ. A new Pine tree, which it is said for beauty of foliage is unsurpassed by any other kind. Leaves in fives, rigid, 8—10 inches long. The cones resemble those of the Stone Pine, but are larger, and the ends of the scales more erect and two-edged. Lower California. *Messrs. Low and Co.*

PRIMULA FORTUNII. (*Flor. Mag.* t. 7.) Primulaceæ. A fine dwarf hardy or half-hardy perennial, with Primrose-like leaves, and large dense heads of pale lilac yellow-eyed flowers. Probably Indian. *Messrs. E. G. Henderson and Son.*

PRIMULA PRÆNITENS (SINENSIS), *v.* ATROROSEA PLENA. (*Flor. Mag.* t. 2.) A beautiful variety of the Chinese Primrose, of vigorous habit, producing umbels of numerous large double flowers, fully 1½ inch in diameter; deep rose-colour, fringed on the margins as in fimbriata, of which this is a double-flowered form, accidentally produced. An English variety. *Mr. Turner.*

PRIMULA PRÆNITENS, *v.* CARMINATA. A very desirable new form of the fringed Chinese Primrose, the flowers being of an entirely new strain of colour, a kind of salmony-rose, likely to render the variety not only useful as an ornamental plant, but also as a breeder. A German variety. *M. Benary.*

PRIMULA PRÆNITENS, *v.* FOL. VARIEGATIS. A variegated-leaved form of the fringed variety of the Chinese Primrose, with the variegations well marked. An English variety. *Mr. W. Lee.*

PYRETHRUM ROSEUM, *v.* ATROSANGUINEUM. (*Illust. Bouq.* t. 33.) Compositæ. A fine new variety, with the flower heads nearly 3 inches across, the rays violet crimson. Of continental origin. *Messrs. E. G. Henderson and Son.*

QUERCUS BAMBUSÆFOLIA. (*Gard. Chron.* 1860, 170.) Corylaceæ. A fine, evergreen Oak, supposed to be hardy and of an ornamental character. The leaves are linear-lanceolate and leathery. China. *Mr. Fortune.*

RICHARDIA HASTATA. (*Bot. Mag.* t. 5176.) Araceæ. This is the pretty yellow-flowered species noticed in our last year's list under the prior name of *R. oculata.*

ROSA SERICEA. (*Bot. Mag.* t. 5200.) Rosaceæ. A hardy bush, of moderate size, producing single, white, four-petaled flowers. India. *Kew.*

SAPONARIA CALABRICA, *v.* ROSEO-ALBA. A pretty, free-flowering variety, with blush-white flowers, forming a pretty contrast with the rose-coloured form of this useful annual species. An English variety. *Messrs. Carter and Co.*

SPHÆROSTEMA MARMORATUM. (*Illust. Bouq.* t. 40.) Schizandraceæ. A fine hothouse climber, with bold, acuminate, heart-shaped leaves, beautifully marked with silvery fleece-like spots or clouds on the green surface. Borneo. *Messrs. Low and Co.*

SPIRÆA FORTUNII. (*Bot. Mag.* t. 5164.) Rosaceæ. A very handsome hardy shrub, commonly known in gardens as *S. callosa.* Its large cymes of deep rose-coloured flowers are very ornamental. China and Japan.

SPIRÆA NOBLEANA. (*Bot. Mag.* t. 5169.) A very fine, hardy shrub, intermediate in character between *S. Douglasii*, and *S. callosa* (*Fortunii*), having oblong lance-shaped sharply toothed leaves, and short, dense panicles of purplish-rose-coloured flowers. A garden sport or hybrid. *Mr. C. Noble, and others.*

STOKESIA CYANEA. (*Illust. Bouq.* t. 42.) Compositæ. A fine, long-lost, re-introduced, half-hardy perennial, with lance-shaped leaves, and large, purplish-blue Aster-like flower-heads, 3-5 inches in diameter. North America. *Messrs. E. G. Henderson & Son.*

TAXUS BACCATA, *v.* ERECTA. Taxaceæ. A distinct and elegant form of the common Yew tree, remarkable for the regular and compact pyramidal or cone-shaped figure of the plants, which taper upwards to a slender point; the branches being erect, close and regular, clothed with shortish recurved dark-coloured bluntish leaves. An English variety. *Mr. W. Crowder.* Under the same

name there exists a similar or perhaps identical variety obtained from France. It is the most elegant of all the pyramidal Yews.

*TORENIA HIRSUTA.* (*Bot. Mag.* t. 5167.) Scrophulariaceæ. A very handsome diffuse-growing stove plant, with slender quadrangular stems, ovate serrated leaves, and large highly coloured purple flowers, of which the lower segment bears a large, white blotch, and the side ones are marked with a spot of deep purple. It is very similar to, if not identical with, that called *T. asiatica* v. *pulcherrima*. India. *Messrs. Low and Co.*

*WEIGELA AMABILIS*, v. *GROENEWEGENI*. A variety of this fine hardy shrub, in which the changeable, rose-coloured flowers are sometimes streaked with deeper rose-red. A continental variety. *Messrs. E. G. Henderson and Son.*

*YUCCA GIGANTEA.* (*L'Illust. Hort.* vi. 91.) This is described as a noble arborescent plant, with very long, acuminate, channeled leaves, having a whitish membranaceous margin, and a very robust, tall, much-branched, flowing panicle, bearing white flowers. Supposed to be Mexican. *J. Verschaffelt.*

*ZINNIA ELEGANS*, v. *FLORE-PLENO*. A new and very handsome form of this fine annual, in which the yellow centre or disc is transformed into florets like those of the ray, forming rosettes of from two to three inches in diameter, of various shades of colour, embracing purple, deep-rose, light-rose, mottled-rose, red, orange, and buff. The flower-heads are full, double, perfectly regular in form, and are said to be produced as true, from seeds, as China Asters. A French variety. *M. M. Vilmorin, and Messrs. Carter and Co.*

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### FLOWER POTS.

I WAS delighted to see your article on this subject in the November number of the *Florist*, page 292, though I do not entirely agree in all you say.

There is, as you remark, great room for improvement in the form of flower pots, and I would add in the colour; but I think it is not those who can give ten guineas for a shrub that have any difficulty in finding suitable pots for their expensive plants, but those who are obliged to study economy in this as in every other branch of their expenditure. The former may purchase from Ransome, Austen, and others, very elegant vases; but what is really wanted is a cheap article for general use, which in form and colour shall be such as a person of taste would not find fault with. The real cause of this I believe to be that from the general want of taste there is not a demand for elegant flower pots, and not the difficulty of supplying them.

I mentioned to you some time since, and recommended through your columns, two flower pots of a superior form, one for Verbenas and similar low-growing plants, and one for Geraniums, &c., the former costing 4s. and the latter 6s. per dozen; these, as I mentioned, were of the common clay, the colour of which is to my eye intolerable. I have lately persuaded a potter to try to make me some of the former of fire clay, which I expect will look exceedingly well, if I may judge from the appearance of some of the common form which he has lately been making of the same material; these are of a nice warm stone colour and very unobjectionable, and have a simple ornament impressed on them, which has a very good effect; these may be had for 3s. 4d. a dozen—7½ inches in diameter and 8 inches high. I believe if they were brought into general use they might be sold for little more than the common detestably ugly pots.

If Mr. Wiston and Mr. Blashfield would publish an illustrated catalogue of their manufactures I think they would find it answer, only let them beware of fancying that they can charge any price they like for their wares. This is the rock on which most introducers of novelties split, and it is that which has prevented several manufacturers in this neighbourhood from succeeding. Let them aim at first at something *simple* in form but yet elegant, and not attempt elaborate designs, which are less beautiful and necessarily more costly.

*Leeds.*

C. H.

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### REVIEW.

*The Rose Annual for 1860-61.* By WILLIAM PAUL, F.H.S.  
*The Rose Annual for 1859-60.*                    "            "  
*The Rose Annual for 1858-59.*                    "            "

WE have placed these three issues of this tempting periodical in the same notice, although our remarks will be principally confined to that for the current season, for the simple reason, that we do not think we can confer a greater benefit on any lover of the Queen of Flowers than that of bringing under his or her notice so handsome a tribute to her queenly Majesty. You are an amateur, my good reader, and you have fair friends who admire the Rose—why, there is our good contributor, the President of the "Six of Spades," who, if he speak the truth (far be it from me to question it), either in his amusing papers, or in his "Little Tour in Ireland," has a peculiarly susceptible portion of his heart, on which long eyelashes, and bright eyes beneath them, are ever making their impression—what can you do better than get these three parts daintily clothed in morocco binding (*couleur de Rose*, if you will), and present it to the fair one? Such sweetly coloured portraits, executed in Andrews's best style, and so much really useful information, will win for you everlasting gratitude. The number for the present year contains portraits of H. P. Empereur de Maroc, Victor Verdier, Comtesse Cecile de Chabillant, and Tea Duc de Magenta, with descriptions. As these have been previously described in the *Florist*, it will be sufficient to say, that they have many striking points about them, and that the first of the four is an eminently attractive Rose, in the style of Prince de la Moskowa, but more double, and of better shape; I hear, however, that it is of delicate habit. The letter-press pertains to four points of interest:—1. The Current Year; 2. The Favourites of 1859-60; 3. The Exhibitions of the Season; 4. The Forthcoming Brood. In the first of these divisions Mr. Paul gives a review of the weather, as it affected the Rose, from the end of September, 1859, to the same period of the current year. He concludes his review by the declaration, "The bloom was late but not indifferent. There was but little aphid, mildew, or maggot, and no spring frosts to injure or destroy. There was frost in June and July, and many flower shows were postponed; but although later by weeks than usual, the Roses blossomed, and blossomed well at last." In alluding to the favourites of 1859-60,

he says, "There are many beautiful novelties, far surpassing the kinds previously existing; but when we come to particularise, it is not altogether so easy to draw the boundary lines between good, bad, and indifferent." Of these he gives full descriptions, though, of course, not pledging himself until he has a better opportunity of forming an opinion. In the portion devoted to the exhibitions of the season, there is a great deal of very interesting information, both to the exhibitor and the amateur. After giving detailed accounts of each of the great shows, a very useful table is given of the various sorts exhibited and the number of times shown; from it we learn how largely Hybrid Perpetuals enter into the field of competition, and how prominently some kinds come out. Thus, General Jacqueminot was shown in 20 stands; Jules Margottin in 17; Lord Raglan in 18; Madame de Cambaceres in 12; Madame Knorr in 14; Madame Vidot in 16; Caroline de Sansal in 14; Mathurin Regnier in 10; Géant des Batailles in 12; Souvenir de Malmaison in 14; Prince Leon in 14; William Griffith in 14; Cecile de Chabillant in 12; Evéque de Nimes in 10; Gloire de Dijon in 17; Devoniensis in 11. &c. In the last division—"The Forthcoming Brood"—Mr. Paul remarks, "We are most struck with the number of dark Hybrid Perpetuals offered for sale this year. Good dark autumnal Roses are still a desideratum, and there appears good reason to hope that something superior to what we possess will gladden us with their flowers next summer." The whole of this section, with its list and descriptions, is full of promise and bright anticipations—whether ever destined to be realised, is another question; but, what with a Tea Rose as yellow as a Jonquil, and a Hybrid Perpetual striped like a Carnation, he will indeed be a "dainty fellow" who will not be satisfied with the bill of fare presented to him; and if he be fond of hard and absurd names, what with General Zachargosky, and Prairie de Terre Noire! (Meadow of Black Earth), he may satisfy the most greedy appetite, I think.

This brief notice will show the varied information that the Annual contains; and, in fact, whoever wishes to be kept *au courant* in Roseology will hardly think himself up to the mark without it. Amongst my own bright thoughts of the future, is the hope of seeing these new gems of Flora, under Mr. Paul's own hands, at his new nurseries at Waltham Cross, some time in the course of the ensuing summer.

D.

Deal, Dec. 17.

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## THE SIX OF SPADES.

### CHAPTER XIII.

#### MR. OLDACRE'S STORY—THE LADY ALICE.

MR. President and Friends, said Mr. Oldacre, you must "pity the sorrows of a poor old man, whose trembling limbs," and here he glanced complacently at his well-filled gaiters, "have borne him to your" excellent gin and water, and must not look for anything remark-

able in pippins from a decaying and exhausted Apple-tree. As for lecturing you upon the culture of a garden, or haranguing you scientifically at all, I should no more think of it than of seeking horticultural information for myself in the books of those who wrote a century ago of the subject; and I have no shame in the conviction, that some to whom I now speak, beginning at a point where I have all but stopped, and having opportunities and resources, developed since my manhood waned, know more about gardening than I do. It is sufficient for me to have been in my day with the foremost, and to have fought my way to many victories. But were I to "shoulder my crutch and show how fields were won" to you of this generation, to you who have such an improved artillery as leads one to expect that England will soon be able to pepper her enemies, however distant, from batteries fixed upon her shores, to you who are blessed with a thousand facilities, unknown to your ancestors, of smashing and ripping up your fellow-creatures—how would you forbear to smile? No; as old Mr. Whippy, the huntsman, or rather the ex-huntsman, for he has been, as you know, a pensioner for years of my noble master's, trots after the hounds on his pony through the gaps and the gates, which he once despised, so must I now be content to look on from afar, travelling easily by quiet lanes and by-ways, and leaving the bravery and the honours of the chase to you.

So I will tell you, if you please, a simple story, a mere incident, in fact, which occurred many years ago in the family I serve, but which made at the time a great excitement among us, and may still I hope prove interesting to you.

Through the solemn avenue of cedars, which leads to our Mausoleum, I have followed three Dukes to the grave. The second of these at one period of his life was most austere and haughty. I may speak of his faults, although he is dead, because he lived to hate them, and to cast them from him; and I have no hesitation in enlarging upon them, as the circumstances of my story prompt. Well, then, he was just the proudest, coldest, most disagreeable Duke that ever stalked ("stalk, to walk with high and superb steps," says Dr. Johnson) over the earth. It was a positive insult to the English language to call such an ungracious ungentleman "your Grace." We gardeners used to declare that the thermometers fell twenty degrees, whenever he walked through the houses, and that the water froze in the tanks and cisterns. We were prepared to affirm that when he put on his coronet, the strawberry leaves turned into ice-plants. Indeed, we all of us found a relief and comfort in this harmless kind of ridicule, just as schoolboys most delight to mimic the master, who rules the most unkindly over them. It was a natural and pleasant rebound from the constraint and awful abasement to which his presence reduced us; and as for the propriety of our conduct, why if men in high places are not high-minded, as they ought to be, and, for the most part, are, they only become the more conspicuously assailable, and the homage which is offered to them is as unreal and worthless, as the sham silver and the sham gold which the Chinese offer to their gods. So the Duke played at being an Idol, and we performed the

worshipping. He thought himself something more than human, I am sure, and received our most lowly obeisance as though he were upon a golden throne. His demeanour was calculated to give us the idea, that we had no claim, strictly speaking, to existence in any form, but that he tolerated us. He sent for us, kept us waiting for hours, and then either dismissed us without an interview, or gave us his orders, as though he gave out oakum to convicts. In my subordinate capacity, I was only honoured with two brief conversations, during which he was pleased to address me, for he never remembered names, as "Mr. Cutts" and "Rowbottom," appellations which belonged respectively to the stud-groom and to an under-keeper, but which were as unlike Oldacres, as, I dare say, he wished them to be.

We servants were not the only ones who shivered in his icy presence, and winked and capured with exuberant joy as soon as we were fairly out of it. Living at that time in one of the lodges, I frequently witnessed the arrival and departure of certain county families, who were annually distinguished by an invitation to the Castle. To open the gate for these favoured guests, and to look upon their expression of complete despair, was like being hall-porter at a dentist's. They might have been blue-bottles, who had just set foot within the meshes of a spider's net, or rabbits, helplessly mesmerised by a weasel, and drawing nearer to their doom. One footman, I remember, was wont to weep in the rumble, and to assume for my edification such an aspect of pretended woe, pointing the while with his thumb to the unconscious tenantry of the chariot below, that at last I dared not go out to meet him, and he was compelled to dismount, and clear the way for himself.

But there was an entire change of performance, I can tell you, when these visitors came forth on their journey homeward, as distinct an alteration and improvement of countenance, as may be observed in the features of that gentleman, who appears from time to time in the pictorial advertisement, as now enduring the agonies of toothache, and now "Ha! ha! cured in an instant!" The tragedy, with its tyrant and dungeon-chains, was over; and, as the lamps blazed out once more, the orchestra, which had been executing Dead March and dirge underneath the darkened stage, emerged to play "Garryowen." They who had come to us so silently and sadly, laughed and sang as they drove down the Park. They could not have been in a happier frame of mind, if they had been poachers coming out of jail in the shooting season. Hurra! they were going home! home to have beer at dinner, and to turn to the fire at dessert! Home, to astonish the Browns, to fill the mouths of the Walkers with the waters of envy, and to awe the Bumbies with fancy statements about their "delightful visit at the Castle." Well, I could bear truthful witness that the latter part of the proceeding had been delightful enough. As Robert Hall said to the pert young preacher, who asked what he thought of his sermon, "There was one very admirable passage, the passage from the pulpit to the vestry," so it might be affirmed with confidence that these guests had been especially happy in the last act and deed of—departure.

Now this Iron Duke, you will be surprised to hear, had actually

condescended to marry. Of course, if Cupid had not been blindfold, he would no more have thought of taking aim at him than a schoolboy of shooting his favorite arrow against the wall of a fives-court, and how that promiscuous young archer made his dart to stick in the ducal granite must remain for ever among the "things not generally known." Never since Eve had the world seen such a proof of Love's omnipotence, as when he sent our grim Lord a-courting. No weaker influence ever could have taught that cold pale face to smile, to smile and to beam with a happy brightness, as the snow sparkles in the sun. But how he ever remembered her name, or brought himself to proffer those little tendernesses, which are usual upon these occasions, those touches of nature which make the whole world kin, is to me a complete perplexity, an unreality as astonishing as though I were to see the ghost of Hamlet's father with his arm round the waist of Jessica.

Poor Jessica! she came to us as joyous as a thrush in summer, and she sang awhile blithely and sweetly in the tomb of Hamlet's father. But when he resumed, as he shortly did, his old sepulchral ways, a chill struck the heart of our singing-bird, and all her mirthful music was changed into a plaint and wail. She had come from a home of love and cheerfulness, and she drooped in his Arctic atmosphere, as an Orchid would droop in an ice-house.

" For a trouble weighed upon her,  
And perplexed her night and morn,  
With the burden of an honour,  
Unto which she was not born."

Six years after her marriage-day, they bore her slowly through the dark avenue of Cedars, and the chaplain came in his white surplice to welcome her with words of hope and peace.

Three children were born to them. The Marquis, who soon showed himself to be a true "chip of the old (ice) block," and a ghostling of amazing promise; Lord Evelyn and the Lady Alice, who, happily for us all, resembled their mother. Never were two brothers so unlike each other. I doubt whether the elder ever broke out of a walk or into a laugh in his life, whereas the younger would be scampering all over the place, with his little sister breathless behind, and his merry voice making our hearts glad. Now they were in the conservatory, changing the tallies, and sticking the fallen flowers of the Camellia upon the Euphorbia's thorns; now turning out a lot of sparrows, which they had caught in traps, and adorned with appendages of brilliant worsted, red, green, and yellow, in the immediate neighbourhood of the aviary, and so essaying to impose upon us the idea of a general escape and dispersion of all our feathered curiosities; and now "drawing" the shrubberies, with Lord Evelyn at one end as a master of foxhounds (the foxhounds by an Irish retriever), and Lady Alice at the other as an under-whip, waiting, watchful and silent, for the fox to break, which he generally did in the guise of a blackbird; and then announcing his exit with the promptest and shrillest of "tally-hos." Our Marquis the while was indoors at his books, having, it was reported, a precocious relish for algebra, and an insight into the science of political economy not often to be found (thank Heaven) in young gentlemen of fourteen.

Years passed. There was some misunderstanding between the Marquis and the Cambridge examiners on the subject of his being Senior Wrangler, and the Duke, after hearing his son's statement, was pleased to pronounce that the Dons were "offal." Lord Evelyn went into the Guards, and I shall never forget him on his first return from London, after an absence of six months from the Castle. I was at tea in the Lodge when his mail-phaeton drove up, and was hardly out of the porch, when his hearty "How are you, Oldacres?" drew my eyes to the handsomest, merriest, kindest face that ever wore a moustache. And sitting by him was a brother officer, just the man you would have expected that my Lord would choose for his friend, looking as though he would go at anything from a rat to a Redan, and yet would do no wilful hurt, as though his heart, like Tom Bowling's, was brave yet soft, and he was, in the full beauty of its meaning, a gentle *man*. I went back to my wife, who had Frank Chiswick's wife, a baby, on her knee, and I said to her, "Susan, my Lord's come, and has brought home a husband for Lady Alice." "I'll believe it," she answered, "when I see his wings! for the Duke must have something more than mortal to suit his fancy in son-in-laws."

And now, gentlemen, let the old horse catch his wind, if you please, dip his nose in the refreshing waters of the trough, and then trot on to the end of his journey.

S. R. H.

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#### CALENDAR FOR THE MONTH.

*Azaleas and Camellias*.—If not already done, lose no time in getting the stock of Azaleas neatly trained, removing all or as many of the weak shoots which have not set for bloom as may not be required for filling up the plant. The stock intended for blooming next May should be kept as quiet as possible, giving air on every favourable opportunity, and using fire-heat only to prevent the temperature sinking below 38°; and if actual frost is excluded, plants which have matured their growth will take no harm. If flowers are in demand, plants which are well set, and have been some time at rest, may be placed in a warm house or pit, where they will soon expand their blooms. *Amœna*, *Bealii*, and *Narcissiflora* are excellent varieties for forcing, but any of the strong growing kinds will answer very well, if they have been properly prepared. Moisten the plants in heat overhead morning and evening with the syringe, and carefully supply them with water at the root. Attend carefully to the watering of Camellias, as any excess either way is injurious; and see that the foliage is bright and clean. Plants in bloom, and those about opening their flowers, should be afforded a temperature of from 45° to 50°, guarding against drip or condensed moisture settling on the blooms, which would speedily ruin them; but when fire-heat has to be used care will be necessary, to prevent the atmosphere becoming too dry, and it may be advisable to sprinkle the

borders, &c., occasionally. *Conservatory*.—If not yet done, prune the twiners, cutting back freely and reducing the dimensions of everything which obstructs the light, as far as can consistently be done; at the same time thoroughly cleaning the glass and woodwork. Do not allow plants growing in the borders which bloom at this season to feel the want of moisture at the root, but those in a dormant state, especially such as are scarcely hardy in the winter temperature of this house, can scarcely be kept too dry. Use every exertion to make the best possible display in this house at present, and until flowers become plentiful in the open garden, for they will be much more esteemed during the winter and early spring than when they become plentiful out-of-doors; therefore introduce into heat at intervals of about three weeks Hyacinths and other bulbs, hardy scarlet and other hybrid Rhododendrons, selecting the early blooming kinds for the first lot, also Ghent and other hardy Azaleas, *Kalmia latifolia*, *Deutzia gracilis*, Roses, and any other suitable things of which there may be a stock. But, useful as these things are, we greatly prefer Camellias, Epacrises, Acacias, Daphnes, and other greenhouse winter blooming plants; and where flowers are in demand at this season, a good stock of these should be provided, especially of Camellias, and the beautiful and deliciously scented *Luculia gratissima* should occupy a portion of every conservatory which has to be kept gay in winter. Keep everything about the house as trim and clean as possible, and occasionally rearrange the plants, which will greatly add to their interest. In case much fire-heat is necessary, see that the atmosphere is not allowed to become too dry, but avoid excess of moisture, which would be liable to injure the blooms of many things, in the event of the temperature falling too low at night. The temperature must be regulated according to the class of plants which occupy the house, but in most cases it may range from 45° to 55°, allowing it to sink to 40° on severe nights. Give a little air on the sheltered side of the house, whenever this can safely be done. *Cold Frames*.—In the event of severe and continuous frost, it will be difficult to winter anything here uninjured, save such as are nearly hardy, unless the frames or pits are fitted with pipes, so as to allow of removing the covering during the day, &c.; and the expense of a two-inch flow and return pipe would be very trifling, and would render the pits equally suitable for the winter as for the summer accommodation of greenhouse stock of all kinds. But if fire-heat is at command use it sparingly, and do not dispense with covering on frosty nights. Give a little air on every favourable opportunity. Attend carefully to *Cinerarias* and *Calceolarias*, and see that they are not infested with *Aphis*, and keep them rather close, to induce free growth, and do not allow them to feel the want of pot room until they are in their blooming pots. Tie out the shoots of the former, and plants for late blooming, if not already done, should be stopped at the fourth or fifth joint, to induce them to form fine bushes. Peg down the shoots of *Calceolarias*, so that they can root into the soil. Examine hard-wooded plants and other things frequently for mildew, and apply sulphur on the first appearance of this pest. Water carefully, and keep hard-wooded plants rather on the side of dryness at the root. *Greenhouse*.—Take advantage of every

hour which can be spared from other work, to get the plants nicely tied, first repotting *Ericas* and other things which can safely be shifted at this season, if they require more pot-room. *Leschenaultias*, *Pimelea Hendersoni*, and some other hard-wooded things, are liable to be attacked by aphid in winter, and, except they are carefully looked after, to be greatly injured before it is perceived that they are infested, therefore carefully examine these and everything likely to be attacked by this pest frequently, and smoke any plant immediately it is observed to require it. Use fire-heat as sparingly as possible, but do not allow the temperature to sink much below 40°. Give air whenever this can safely be done, but do not allow cold frosty winds to blow through the plants. The whole stock should be kept rather on the side of dryness at the root, but when a plant is considered to require water, give sufficient to moisten the ball throughout, watering in the morning; and if necessary to expel superfluous moisture use a little fire-heat, with back air. *Flower Garden*.—If not already done, get the beds and borders neatly trimmed up, and if any spring-flowering bulbs have been left out until now, get these planted out as soon as possible. Keep the walks and Grass frequently rolled. If there is a short stock of any of the bedding-out plants these should be placed near the glass, in a moist warm house, to encourage growth and secure early cuttings; but things not wanted to furnish cuttings at present should be kept as hard as possible, giving air freely on mild days, but protecting them securely against frost. *Stove*.—Prune and repot *Echites* or *Dipladenias* and *Allamandas*, shaking away as much of the old soil as can be done without injuring the tubers or principal roots; also cut back *Ixoras*, and repot such as require more pot-room, and see that everything is perfectly free from insects. Plants of either of these wanted for early blooming should be placed in the warmest part of the house, sprinkling them overhead with the syringe morning and evening, but such as have been partially disrooted must be very carefully watered until they start into free growth. Also prune and thoroughly clean *Stephanotis*, and *Clerodendron splendens*, and repot if necessary; but these bloom more freely when rather pot-bound. Towards the end of the month a lot of *Gloxinias*, *Achimenes*, *Clerodendrons*, &c., if wanted for early blooming, may be repotted and placed in the cool end of the house. Temperature 60° to 70°, keeping the atmosphere in a healthy state as to moisture.

*Hardy Fruit*.—Proceed with the pruning and nailing of wall fruit-trees, such as Pears, Plums, Cherries, and Apricots; every favourable opportunity should be taken to forward this work, more especially if the weather is wet, so that the ground work in the kitchen garden cannot be carried on. All standard fruit-trees may be pruned, and if they are infested with Moss the stems and large branches should be scraped or scrubbed with a broom, and afterwards dressed with a mixture of lime-water, soot, and urine. Root prune dwarf standard Apple and Pear trees, if they are unfruitful or growing too strong; this is done by digging a trench round the tree, two or three feet from the stem, according to the size of the tree, and cutting the large roots. It is also a good plan to lift small *bush* trees every alternate year, to keep them

dwarf and in a fruitful condition. Examine the labels of fruit trees, and prepare new ones when the weather is unfit for out-door operations; also cut shreds and clean old wall nails—this may be done by heating them in an iron vessel, and stirring a little coal-tar among them while hot. Still pay attention to the fruit-room, and remove every decayed fruit. Any Pears that will not soften as they may be required for use should be placed in a warm room or vinery.

*Forcing Ground.*—A succession of Rhubarb and Asparagus roots should be placed in the forcing-pits; the Asparagus should be covered six inches deep with light soil or leaf mould, and afterwards well watered; give air in fine weather to heads coming through the soil; those being forced in the open air should have the linings renewed, so that a regular heat may be maintained. Place pots over Seakale in the open ground, and cover with leaves or dung; a succession of roots should be placed in the forcing-pits, as before advised. Sow succession crops of French Beans in pots, and keep a good heat, with air in fine weather, to those coming into bearing. Place a succession of Chives, Mint, and Tarragon in heat, according to the supply required. Also sow Basil occasionally, and small salad every few days. Prepare a slight hotbed with dung and leaves for sowing Early Horn Carrot and Wood's Early Frame Radish. Place some Ashleaf Potatoes in a gentle heat to spear for planting in pits next month; some also may be put into pots half filled with soil and placed on the Peach-house borders. Sow Royal Dwarf Peas in cold pits, near the glass, and draw the lights off every fine day as soon as they are up; these may also be grown in pots. Cucumbers still require a good heat; a night temperature of 70° should be maintained, with an increase of 10° through the day, with air in fine weather, taking every advantage of sun heat by closing the house early. Sow a little seed about the middle of the month; also some early Melons for planting in pits and frames next month. Prepare dung for linings, and mix a heap of dung and leaves, to be in readiness for filling pits and making beds when required.

*Cherries.*—(See last month's directions).

*Pines.*—Any plants now started into fruit should be watered, and maintain the temperature previously advised. Keep a moist atmosphere if much fire heat is used. Those plants intended for starting next month should be kept dry, and the temperature increased. Keep a steady heat, from 65° to 70°, to the succession plants in dung-pits, and guard against sudden changes in the weather by regulating the covering at night and attending to the linings. Give a little air in fine weather, avoiding a draft in the pit. Collect plenty of leaves to be in readiness for renewing the beds when required, for no better material can possibly be had than a good bed of leaves for the successful cultivation of the Pine.

*Peaches and Nectarines.*—Attend to previous directions, and maintain a moist atmosphere by syringing till such time as the trees are in bloom, when it must be discontinued till the fruit is set. Give abundance of air when the blossoms expand; at this stage the night temperature must not exceed 55°, or a lower temperature is preferable to so much fire heat. Disbud sparingly at first, and fumigate at the first appearance of green-fly. Bring the succession-house forward as before directed.

*Strawberries.*—Keep the pots near the glass in an

airy part of the house ; do not give much water at the commencement of forcing, for keeping them *dry* at first is the best means of getting up the fruit-spikes in *early* forcing, before the plants make so much foliage. Give plenty of air every day, especially when the blossoms expand. Bring in more plants under glass by the end of the month. Keep all plants intended for later work sheltered from frost and drenching rains.

*Vinery*.—Keep up a steady night temperature of 60° in the early house, with a moist atmosphere, till such time as the Vines are in flower, when syringing must cease for a time, and the temperature raised 10° by night and to 80° during sunshine. Give air every fine day; indeed, the house should always be ventilated every day, when the weather will permit of the sashes being let down. Commence thinning the berries at an early stage after the fruit is set, and keep the borders protected from frost. Maintain a moist atmosphere in the succession-house, and raise the night temperature to 50°, increasing the temperature gradually according to the stage of growth. Pot Vines should be supplied liberally with manure water as soon as the fruit is set. Remove all lateral shoots and other useless growth. *Kitchen Garden*.—Owing to so much wet the slugs have made sad havoc among the winter plants in many gardens, and where this is the case sow some seed of Lettuce, early Cauliflower, and Cabbage under glass at the end of the month, to have the plants forward for spring planting. It is not advisable, in heavy wet soils, to be in a hurry in sowing the succession crops of Beans and Peas; nothing will be gained by so doing. In light soils, Mazagan and Long-pod Beans and early Peas may be sown, about the middle of the month, in a warm situation; also Wood's Frame Radish, on a warm border. Embrace every opportunity in frosty weather to wheel manure on all vacant ground. Dig and trench in dry weather, to have the soil in a proper condition to receive the spring crops. Give air every fine day to Cauliflowers and other plants under glass.

#### PLANTS FOR EXHIBITION.

*Pelargoniums*.—This season being dull and damp, Pelargoniums are somewhat late, therefore those wishing specimens for early exhibition should lose no time in making a selection from the early-flowering sorts, giving them a little fire-heat, the temperature at night ranging about 45° Fahr. Tying should be commenced at once, with a view to the ultimate formation of nice round compact plants; by it the air and light will be more freely admitted, and it will greatly tend to prevent their becoming drawn. All the room that is possible should be given the plants. Water should be administered carefully, and only to such as need it; the plants must be kept free from insects, and air should be given abundantly when the weather will permit. Such is the treatment suggested both for the show and fancy kinds; the latter, however, should be of the two most carefully tended, very especial care being taken that the decayed foliage should be speedily removed. Of the show kinds for early flowering, among the very best are Desdemona, Fairest of the Fair, Etna, Leviathan, Governor-General, Carlos, The Bride, Sanspareil, Admirable, Festus, Vestal, Viola, Rose Celestial, Prince of Wales, Candidate, Sir Colin Campbell, Fair Ellen, The Belle. Of Fancies, we should recommend Cloth of Silver, Princess Royal,

Acme, Captivator, Modestum, Clemanthe, Countess of Craven, Musjid, Celestial, Circle, Queen of the Valley, Formosum, Madame Rougiere. *Cinerarias*—We will suppose these gay spring plants to have now had their final shift into their blooming pots, which for exhibition should be eight-inch ones. Should they not, it ought to be set about forthwith, taking care to select vigorous dwarf plants; such as have been stopped would be preferable. The soil best suited for them is two parts good friable turfy loam and one of each of well decomposed stable manure and leaf mould. Add silver sand freely, and well drain by filling one-third of the pots with broken potsherds and loose turfy loam. When properly treated, the *Cineraria* forms a beautiful object for the conservatory, and is required among the first plants on our exhibition tables, and to such as are unacquainted with their general treatment a few words may be acceptable. Those that are now established will require great care in thinning out all the small leaves and suckers. When this is done, have small pegs and peg out all the largest of the leaves and the longest of the shoots, to admit air freely. Keep them as near the glass as possible, to prevent their drawing. Use the syringe frequently, to clean and invigorate them; this must be done only on bright days. Watch closely for greenfly, and fumigate immediately on its appearance, and apply sulphur wherever you see a spot of mildew. As they grow, stake and tie out as wide as possible. Such as are intended for early exhibition should be kept a little closer, but not forced unless thoroughly established. Give a little liquid manure to such as are well furnished with roots.

#### WHAT SMALL GARDENERS SHOULD DO IN JANUARY.

*Auriculas*.—If the weather be as it is at present, we ought, according to "A. J. C." in "Gossip," to have a first-rate bloom, but the idea of so confounding the *post hoc* and *propter hoc*, as to suppose that frost is good for *Auriculas*, *will not do*. We say, rather, keep them well covered up; *frigi domo* is a capital covering; and then, quite at the latter end of the month, get all ready for top-dressing; this ought to be done with well-rotted cow-dung and silver sand—others add leaf mould and loam, and prefer all *good stuff*. *Pansies and Carnations* may remain as they are for this month, but get the stuff ready for potting the former. *Greenhouse*.—Primulas, *Cinerarias*, and *Camellias* will now help to give a little life here. *Pelargoniums* may be repotted (as we are not talking of exhibitions), they will bloom later, but well; and through next month you may be removing bedding-stuff elsewhere; give more room for them to grow. *Japan Lilies*.—These will probably begin to spear at the end of the month; repot them, planting the bulbs tolerably deep. Light compost suits them, with some well rotted manure; they are very useful for autumn decoration, and are now to be had very cheap. *Tulips*.—Keep these covered up from severe frost; after so much wet, they will suffer if not so done. *Pinks*.—See, when frost gives way, that these are pressed into the ground, as it is apt to dislodge them. *General Work*.—Get sticks made and painted, labels prepared, and tied up in bundles for use. Turn over beds intended for *Ranunculuses*, &c., that they may be sweetened by the frost. Protect tender *Roses*, and keep a sharp look-out for slugs and other vermin. D.





Pompones. — (Seedlings)

1 *Calliope* (Salter) — 2. *The Little Gem*. (Ingram)  
 3. *Diana*. (Salter)

## POMPONE CHRYSANTHEMUMS.

(PLATE 173.)

THE exceptional character of the year 1860, influenced not only out-of-door productions, but also the more sheltered inmates of greenhouses, and even stoves; not only had wall-fruit no flavour, and Verbenas no character, but even Chrysanthemums were very different from what they usually are; the shows were, comparatively speaking, failures, and even the winter garden of Mr. Salter was shorn of some of its splendour. This was to be attributed in a great measure to the absence of sunlight; it was impossible to hope that flowers would expand, or that colours would be vivid, when day after day a cold and leaden sky hung overhead, or the rain descended in torrents. One might naturally have expected, considering how fond this flower is of moisture, that those planted out-of-doors would have flourished; but here again, there was disappointment, they were so late in coming into flower, and when they did, the weather was so unfavourable, that they were quite below the mark; and even the Temple Gardens made but a poor display, compared with what they have done in previous years; yet we see, despite of all this, that Mr. Salter has contrived to introduce a few novelties to our notice, and I have notes taken at his nursery in December, which I hope to give in a future number; with those who are not exhibitors, Pompones generally are greater favourites than the large varieties, they are so much more compact in growth, and copious in their blooming. They will not do, however, for that tremendous operation called dressing; generally speaking, they are much too compact for that, but the extent to which this is carried in large flowers, may be judged from the fact that one flower (which shall be nameless) which the raiser was anxious to dispose of, took THREE days to dress, and then was brought to such a state of PERFECTION as to completely take in the experienced foreman of a London nursery, who was sent to look at it. Two out of the flowers selected for illustration this month may be considered as novelties, one especially so, and coming from the same raiser who has already given us so many valuable varieties, they may be regarded as an indication that he does not mean to stop where he is. The thirst for new things is as insatiable as ever, and though the last season was not favourable generally for the raising of them, yet the growers of Chrysanthemums will not be disappointed, and we must only hope that the year 1861 will be an improvement on its predecessor; we have just had a winter that has

slaughtered its myriads of our dearest productions: may we not hope for a summer of corresponding brilliancy. Of the three productions figured we can just say the following:—

*CALLIOPE* is a flower of very compact habit and free-blooming character, the colour a bright ruby, and the centre exceedingly well filled up; it is quite an addition to the Pompone Anemone class.

*THE LITTLE GEM*, raised by that zealous hybridiser, Mr. Ingram, is really a gem; it is of a pretty rose colour, the margin of each petal distinctly marked with white; the flower is full and well up in the centre; quite a novelty.

*DIANA*, a white Pompone, very pure in colour, and a good petal; not unlike Mrs. Turner. This, too, is compact in growth and very free-flowering.

*Deal, Jan. 28.*

D.

### A FEW THINGS WORTH FORCING MORE EXTENSIVELY.

Do we not overlook many good things, when providing for the drawing-room or conservatory decoration at this season? At least I think so; for although I have seen most of the plants and shrubs I here recommend for forcing in a few places, they certainly are not employed so generally as they deserve to be; for when brought into flower and arranged with other plants, they are most pleasing, reminding one more completely of spring than the plants usually got up for such occasions, and which are mostly evergreen, such as Rhododendrons, Azaleas, Kalmias, with forced greenhouse plants.

First let us take the common and scarlet Thorn, of which there are several varieties; to get Thorns or Hawthorns into a blooming state they should be potted at least one year before forcing, and a year or two previously should have been root-pruned once or twice, according to their age. The best shape to have them in is either conical or globular-headed bushes, from two to three feet high, or low standards, that is, with a stem a foot in height, and with a moderately sized head; mind, that to be effective, the wood should be composed almost entirely of bloom spurs; and this habit will be obtained in the first place by root pruning and pinching back the wood, when growing in the open ground, and by fully exposing the plants, the year they are in pots, to the full sun, and keeping the roots rather dry, to prevent any growth, beyond the conversion of every twig into a blooming spur; by this treatment you will get a good head of bloom, than which nothing is more pleasing and grateful at this season. The *Pyrus spectabilis* and *sinensis* adapt themselves to the same course of treatment. To have these latter suitable as dwarf bushes for pots, they should be grafted or budded on the common Thorn. These plants form such charming bushes when grown in the way described, and slightly forced into bloom, that I hope nurserymen will be induced to bud and prepare all the above on the Thorn stock for forcing, as I think they would be in great demand, if obtainable in the market. Those I have grown I have budded myself, as I could not procure the two *Pyrus*'s except on

the Crab stock, which makes them grow too strong for pots. There are also three or four sorts of Apple with rose-tinted blooms, which if dwarfed and got into bloom early would be a great acquisition to collections of forced flowers. I have not tried them myself, but intend doing so. The beautiful Carnation Peaches must not be omitted, especially those introduced by Mr. Glendinning, and of which you gave us capital figures in the *Florist* some months ago.

I must next notice *Ribes sanguineum*, and *R. aureum præcox* and *flavum*; these may be grown in the open ground and trained into form until large enough for forcing. In August I cut with a sharp spade all round the plants, and leave a ball no larger than will go into a suitable sized pot. This treatment checks the plants, and by the first week in October they may be lifted and potted, placing them in the shade for a fortnight, and then in an open place; a warm greenhouse is all these require to bring them into bloom. The common mock Orange, or *Syringa*, is another plant which merits forcing more extensively, for the fragrance which a plant or two in blossom imparts to the conservatory. The double Cherry, double Sloe, double Plum, and Almond must also be included, as showy and very desirable plants; these should be budded on the common Sloe, of which also I beg to give the trade a hint, as it would materially dwarf them, and make them more accommodating as pot plants, and more prolific of bloom. *Magnolia conspicua*, *Soulangiana*, and *speciosa* are grand plants, when well done; and when once grown into a good blooming state will keep so for several years with care. *Weigela rosea* and *amabilis* are more commonly used than many others I have named; but nevertheless my list would be incomplete without them—they are both valuable. As are also the Belgian dwarf Honeysuckle and *Lonicera flexuosa* and *floribunda*.—The former is readily trained into the shape of low standard bushes, and very easily forced. The two latter are also manageable by training them to a low trellis in the first place, and then spurring in the shoots and allowing them to grow naturally, they will form globular bushes; all are fragrant and useful as forced plants.

*Daphne Mezereon* is an old but well-known favourite; the large-flowered variety is the best. The common and Scotch Laburnums are not good plants to dwarf; if they could be worked on some of the weaker growing *Cytisus*, more might be done with them in this way. The white and cream-coloured Brooms are useful later in the season; but for this class the greenhouse *Genistas* afford good substitutes. Then we have *Deutzia gracilis* and *scabra*, particularly the former, which is one of the most really beautiful plants for our purpose, when trained so as to form low standards, with stems 6 or 9 inches high and globular heads, which when covered with their snow-white flowers, are particularly graceful. Nor must I omit the old double and single *Cydonia*, a few bushes of which will warm up a good collection; to grow these well in pots, they require free cultivation and well stopping back to throw all the growth into flower buds. I have tried no experiments with budding these, but I do not see why some stock could not be found for them, so that we might have them in the shape of nice standards; on their own roots they are rather difficult to manage for any length of time.

*Cercis siliquastrum* can be dwarfed, and bears pot culture well; and very interesting it is in this form. I need scarcely allude to the *Chimonanthus*, as it is already a general favourite, as are the Sweetbriar and Lilac; but of the latter there are several French varieties, which appear much more worthy of cultivation than our Persian or Siberian. Having seen them in the Paris markets I can speak of their superiority. I believe some of our nurserymen have the best French varieties; they are worth growing extensively, and the culture they get in France may perhaps form the subject of another article; this I fear you will find already too long, but I think the subject one worth your noticing.

M. A. S.

[We think so too; and shall be pleased to insert our correspondent's notes on French Lilac culture.—ED. *Florist*, &c.]

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### Obituary.

EDWARD BECK, WORTON COTTAGE, ISLEWORTH.

WE LITTLE thought, when urging on our valued friend the Vicar of Alford, a request that he would once more give to the *Florist* some of his excellent aid, that his response should take the form of an obituary notice of one whom we know he so highly esteemed, as the subject of the present notice. It would ill become us to add anything to the very interesting account that he has given of the life and character of our deceased friend; all who knew him will appreciate the justice and truth of his observations; but we may say that which his modesty forbids him saying himself, that the pages of the *Florist* in those days to which he refers owed a great portion of their attractiveness to his own writing; page after page bears the evidence of his clear and graphic pen, even where his signature appears not, and we very much hope that he will, during the present year, give us many communications. No one is better able to do so, especially on anything bearing on the science and philosophy of gardening.

*Deal.*

D.

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We are sure of the sympathy of the earlier readers of this periodical, when with deep sorrow we announce that it has pleased God to take to himself, on January 15th of this year, at the age of fifty-seven, EDWARD BECK, of Isleworth. He was most extensively known to the world as a slate merchant and dealer in building materials; and the great waterworks at Hampton, which under three companies supply so much of the purest water to the metropolis, were of his construction. But the horticultural world owes him a debt of gratitude, not only as one of the most successful raisers of *Pelargoniums* in the kingdom, and long unrivalled as an exhibitor, but for higher deeds, as one who at a very considerable pecuniary sacrifice to himself, which he had counted

beforehand and determined on, from high moral and religious motives, became in 1848 the regenerator of the *Florist*, and therein a leader in the present improved tone of piety, of science, and of gentlemanly feeling in horticultural publications. Any one who will take the trouble to compare the difference of spirit and language characteristic of the two periods, before and since that date, will see what is meant, and how much in this respect the public has gained by the labours of the deceased, and of those who wrought in a like spirit. Of course, it is not implied that all is due to one man, nor even that the chief place is due to the periodical of which he was nominally the superintendent really the proprietor. This is willingly admitted, to belong to that Titan, the *Gardeners' Chronicle*, which, like another Hercules, could have strangled serpents even when it was in its cradle. But it is affirmed, that the time, labour, and expense were deliberately undertaken with that fixed purpose, and the *Florist* having been placed at the head of its class, was effectively carried on until the close of 1850, when the concern was transferred, with all its high purposes, to those able and more practised hands, which, under brighter auspices, and in a higher state of social requirement, are now so worthily fulfilling its mission.

Edward Beck was no common man. Commencing life as a sailor, and passing long afterwards from the command of a merchant ship to that of a merchant's counting-house, he showed an aptitude for business, which was general and not merely special. Indeed, in intuitive sagacity, and in perception of character as well as of circumstance, some anecdotes of him recall to mind the doings of higher personages, who produced greater results in the world. For instance; his gardening establishment was large and expensive, his glass houses being numerous, much more so than they have been of late years. His head gardener did not give satisfaction, not for want of honest desire to please, but his heart was not in his work, and therefore that work did not prosper as it ought. The master did not want to dismiss the man, but things must be altered. He had seen in his groom an interest in garden matters, little things that would have escaped the notice of a more ordinary observer; and to their own surprise the men were retained, their offices were exchanged. And the consequence was eventually seen in an improvement in both departments. And the so-made gardener, after a faithful and brilliant service of some years, became, and is now, a leading florist and seedsman in the neighbourhood of London. Moreover, the facts of his establishment in that position, honourable alike to master and man, are a practical lesson of the way to secure faithful and willing service. Yet he was a strict, almost a stern, disciplinarian and inspector, as all really good managers of men are. But those who were connected with him quickly felt that they had to deal with a man of high sterling principle, who carried a sense of duty equally into comprehensive commercial speculations, and the minutest matters of detail.

No doubt much of this arose from natural disposition. But the true force of his character was due to the pervading principle of religion, which in him was in the best sense that of the Bible. He was a thorough disciple of his crucified Saviour. Though he belonged to the Society

of Friends, and the writer is a clergyman of the Established Church, there existed between them the closest sympathy, and a real unanimity of creed and of feeling in the all-important matter of religion. A long and truly christian letter illustrative of this, written only on the fourth of last month, is lying before us, and strongly tempting us to make extracts, showing a Christian's way of meeting the anxieties of a family man, and God's practical way of answering the prayer, He puts into the heart of such an one to use. May his family follow in his steps. Would we all resembled him in this; for he was a living proof that a man of business, and a leading florist, can at the same time be a consistent Christian.

It was floriculture that brought us together, but the gospel of Christ that cemented the acquaintance into friendship. It was at his instance and for his sake the writer made his first appearance under the signature of "Iota," and with his departure that signature shall be laid down. Henceforth, any articles that come from the same pen, shall bear the signature of

GEORGE JEANS.

*Alford Vicarage, Jan. 18.*

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MR. EDMONDS.

THE severity of this winter has been manifest, not only in its effects on the gardener's productions, but on gardeners themselves. A notice of one eminent raiser of florist flowers appears above, and we have to record also the death of another, very eminent as a raiser of Verbenas. Mr. Edmonds was gardener to the Dowager Lady Lacon, at Great Ormsby, Norfolk, and in that capacity not only won the respect of his employer, but became well known, by name at least, to the floricultural world, in connection with a flower so universally grown as the Verbena.

The aim of Mr. Edmonds was to grow the seedlings in the open air, so that it might be seen which were fit for out-door purposes; consequently, except in a very young state, they never bloomed under glass; and out of many thousand seedlings which he annually grew, not more than one or two dozen ever came up to his idea of what was required. In the year 1852, Ormsby Beauty was distributed, and annually, since then, the lists of new Verbenas have borne evidence to his industry and great skill in hybridizing; Leviathan, Mrs. Moore, Lord Shaftesbury, Mrs. Spencer, and other well known and esteemed flowers were of his raising; and it is a melancholy instance of the "Vanitas vanitatum," to see his name affixed to new varieties now coming out, and the raiser himself among us no more; he died suddenly on the 4th inst., respected by all who knew him.

*Deal, Jan. 22.*

D.

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## MELONS IN POTS.

VINES are now grown in pots yearly by the hundred, and so are Peaches, Nectarines, Plums, Apricots, Cherries, and Figs; for several years past I have grown my early and late Melons in pots, by which plan I can secure the crop earlier and with less risk than by the planting out system, which is that generally practised; for when one or two plants are turned out under a light, should any accident happen during their growth, you can hardly replace them; and the difficulty of keeping up a uniform bottom heat early in the season, unless by hot-water pipes (which are not at every gardener's command) is a serious objection to early Melon culture, and even had I hot water for bottom heat, I would grow the *first* and the *last* crops in pots.

It is considered by some gardeners that to grow the Melon to a first-rate size, a large border for the roots and space for the Vines to ramble in are necessary; my experience does not confirm this, for I can produce more and finer fruit per light when my plants are in pots than when growing in a border the size of the pit or frame, as I have repeatedly proved. The crop usually taken from each ordinary frame or pit light is from four to six fruits, according to the size of the sash, which generally runs from 6 to 8 feet long by 3 feet 6 inches wide. Now under each sash as above I plunge from five to eight pots, each to contain one plant. I train the Vines to a trellis, 12 inches clear from the glass, for the first crop, and 18 inches for the latter. The pots I use are deep 14-inch pots, and the soil pure loam from well-rotted top spit earth, as heavy as I can procure, and made tolerably firm. I allow a distance of 12 inches between the surface of the pots and the trellis, so that the bed of leaves in which the pots are plunged is 2 feet from the glass; or rather we make it so that it will settle down to that distance, which will be the case by the time the plants have grown sufficiently high to take to the trellis, which being moveable is not placed in the frame till the plants have grown 12 or 14 inches.

After the holes are made to receive the pots, three or four spades full of loam are placed in the bottom of the hole on which the pots are to stand. To prevent the soil from choking up the drainage, I place each pot on two brick-bats. I find the supply of loam below the pots of the greatest use, it quickly becomes filled with roots, which penetrate through the drainage holes of the pots, and as it is always of a uniform warmth, it materially assists the swelling fruits. When the soil in the pots has become warmed, the plants are transferred to them, and tied up, without stopping, to the height of 12 or 14 inches (as above noticed); by having the pots plunged, the bottom heat can be nicely regulated. I have, at times, removed a portion of it when the plants have grown considerably, and replaced it with hot leaves, mixed with tan. I find also, that by having a clear two feet inside, I can maintain a higher top heat, even with dung linings, than when the bed is made up near the glass—no small advantage during the cold weather of April, when working with dung.

When the trellis is placed in the frame, and the plants are tied to it, they are stopped, and will break at two or three joints, each lateral showing fruit at the third or fourth joint; when these appear, the Vine

is again stopped at the joint above the embryo fruit; and when these are set and commence to swell, the best is reserved, and the other two removed; the one left only being allowed to ripen. The other Vines are shortened back one or two joints, according to the size and condition of their foliage, as a certain number of full-sized healthy leaves must be retained as indispensable to the due swelling and flavour of the fruit; all further growths are pinched out as they appear, unless a second crop is desirable from the same plants; when, about the period that the growing fruit is half swelled, one or more lateral shoots may be allowed to grow from the disfruited Vines, and the first to show fruit retained to produce a second crop, which the plants will carry, if due care has been taken with the leaves. I water very freely—indeed, nearly every day; and the surface of the leaves in the bed is frequently stirred and sprinkled, to maintain a moist growing atmosphere in the frame or pot. I manage this in frames, by leaving a hole under the frame, to enable me to introduce a fork; and in pits, an opening is left in the front wall for the same purpose. The plants produce numerous roots, running throughout the body of leaves below the pots; when the pots become full of roots, slates or tiles are placed over them to prevent evaporation; the plants form large foliage, and I find the fruit swell on the whole to a larger size, than the same kinds when grown in an open bed; each fruit is suspended in a piece of old netting to the trellis. I have occasionally left two fruits on each plant, and when the fruit is a small variety, as the Victory of Bath and Scarlet Gem, this may be done, when a little more room must be given. For a late crop I prefer Trentham Hybrid and Beechwood; for early work, the two former, Golden Perfection, and Egyptian Green-flesh.

S. T.

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#### DECORATED CLIMBING ROSES.\*

A STRANGE term, for can a Rose-tree be decorated? Yes, and I must at once tell how it has been done with these evergreen Roses—the most vigorous and the most tractable of Rose-stocks—and how it may be easily practised.

A few years since, a friend, living at Weycliffe, near Guildford, found the heavily-built brick bridge leading over the railway to his house (this is, however, in his grounds, so as to be private), conspicuously ugly, and he wished it to be hidden by evergreen climbing plants. As the carriage-road ran over the bridge, the gravel, of which it was made, did not seem to offer very happy quarters for any plant but Ivy, which was objected to, as being too heavy. I then proposed planting it with varieties of *Rosa sempervirens*, or, as we ought always to call them, Evergreen Roses. They were with some difficulty planted, the gravel being loosened by the pick, and some manure mixed with it. In my annual visits to my friend living in this charming district—for no part of England is more so—I watched with some interest my

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\* Extracted from a new edition (the seventh), just published, of Rivers' Rose Amateur's Guide, a most valuable instructor on all matters relating to Rose growing, and one which we can heartily recommend.

bridge Roses. They grew with great rapidity, and soon covered every brick; but when they bloomed in large beautiful masses, some disappointment was expressed at the monotony of colour. I was prepared for this, and told my friend that they must be decorated. A good-natured incredulous smile met me with "how?" I called the gardener, for this was in July, the budding season, went with him to the Rose-garden, and thence took buds of some of the most beautiful of the dark Hybrid Perpetual Roses, not forgetting some of the bright rose-coloured tints, such as Colonel de Rougemont, La Reine, General Simpson, and some others. Our great "horse" was, I remember, General Jacqueminot. My budding hand had not forgotten its cunning, for did I not consider myself at twenty as the most dexterous and rapid budder of Roses that ever lived and was likely to live? So I and the gardener proceeded to place buds here and there in shoots favourable for the purpose. The day was warm and the thorns much sharper than they used to be forty years ago, so I have a misty idea that my friend Jackman the gardener put many more buds in than I did. To use the common phrase, nearly all the buds "took," *i. e.*, lived, and many of them put forth fine clusters of bloom the following August and September. I paid my annual visit to my friend in June of the next year, just eleven months after my budding exploit. As I approached the bridge I felt full of interest about my buds. What a glorious sight met my eye! Amid the masses of flowers of pale climbing Roses shone forth large clusters of the Géant, General Jacqueminot, Triomphe des Beaux Arts, Prince Noir, Comte Bobinsky, Louise Peyronney, Colonel de Rougemont, Jules Margottin, and others; the bridge was a fairy avenue, so charming was the effect.

I have a full and fervent belief that ere long banks and avenues of decorated Roses will be in every Rose garden, and that their culture will be carried to an extent we at present scarcely dream of. I have one Rose friend who has formed his Rose-walk with network of iron wire, fastened to upright iron rods; the meshes formed by crossing the wire occasionally, are twelve or fifteen inches in diameter, so as effectually to support the shoots of the climbing Roses. This walk, in the course of a year or two, will be between two upright walls of "decorated Roses," and I can scarcely imagine anything in Rose culture more beautiful. It must be borne in mind that no arches, unless some fifteen feet apart, and no arched coverings must be placed over a Rose-walk or avenue of this description, for the finer kinds of Roses require all the light and air they can have.

For pillars, banks, coverings for walks, and every fancy that can enter into the mind of a Rose-lover, these budded climbing Roses are adapted, and they will well repay the ingenuity of a clever Rose gardener; in many cases superseding the use of standards, which are for a great portion of the year so very ugly.

The "how to do" these Roses is very simple. If very rapid growth be required, the place in which they are to be planted should be stirred to a depth of two feet, some manure mixed with the earth, and climbing Roses such sorts as as Félicité, Princesse Louise, Princesse Marie, and spectabile (all varieties of *Rosa sempervirens*) should be planted

in November; if they have strong shoots, they may be tied or fastened up to nearly their full length; if not with long and strong shoots, they may be cut down to within five inches of their bases; they will in the following season make shoots from ten to twelve or fifteen feet in length. The first shoots that will be fit to bud will be the old shoots that were left at full length when they were planted; these may be budded in June, and the young shoots that are made during the whole of the summer may be budded weekly till the end of September; the position of each bud must be thought of, so as to make a picture really artistic and beautiful. As soon as a bud is inserted, or if two or three buds are placed in the same shoot, the end of the shoot must be cut off to within two buds of the topmost inserted bud; the buds may be untied about three weeks after insertion, and all the young shoots that break out below the inserted buds must be rubbed off; this is all that need be done the first season. The next season the buds will bloom abundantly, and it will only be necessary to destroy all the young shoots that break out of the budded branch below the buds; those shoots that break out above the inserted buds may be pinched in frequently, the budded branch will not then become rigid and starved like the stem of a standard rose.

In decorating climbing roses the buds should be dotted over the whole surface of the plant, two or three buds in one branch will be found enough, and care must be taken not to bud every branch of the climbing rose; some must be left to grow in their natural, graceful, vigorous manner, so that the decorated wall or walk has not a stumpy appearance like an avenue of standard roses.

Evergreen roses, trained to tall pillars or suffered to hang in festoons, are capable of most fanciful decoration, as buds of choice kinds may be inserted at different points of view so as to have a charming effect.

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#### FLORAL COMMITTEE OF THE ROYAL HORTICULTURAL SOCIETY.

As the Committee has now bid a long farewell to the dear, dirty, dingy room in which its deliberations have been hitherto held, the opportunity seems a good one to say a few words as to its constitution and method of conducting its proceedings, while giving a short account of its last meeting in St. Martin's Place on December 13. Imagine yourselves, then, in the most unfavourable spot for horticultural deliberations, in the very heart of bustling London, overlooking Charing Cross and its everflowing tide of human life—its 'busses, cabs, &c.—and in a room some 16 or 18 feet long by about 14 wide, in the centre a large green table, and around, in about as good order as confined space will permit, on tables, bookshelves, and boards, are arranged the various objects which have been sent in for the opinion of the Committee. Seated at the table may be, on ordinary meeting days, some twelve or fourteen members, representing every branch of the floricultural world—nurserymen, whose estimate of a flower is perhaps rather more commercial than otherwise—gentlemen, whose eyes are ever keen for novelties, and who

have purses, perhaps, corresponding thereto—amateurs who, in their little boats, keep nearer shore—and editors of gardening periodicals, sharply on the look-out for some pabulum for their next number; a goodly medley, and yet, from that very circumstance, the most suitable court of appeal. Were all nurserymen and growers for sale, it could not but be that there would be the same sort of collusion that ruined the National Floricultural Society; and were all amateurs, it would be more likely that they would pass encomiums on some flowers which had already been out in the trade, and so injury be done; but men of long experience in business will at once say whether a thing is so or not. A case occurred at this very meeting, when that lovely *Thibaudia* was placed on the table; the exclamation of every amateur would be at once to honour it; but then came the cautious question, has it ever been let out? And though it was ultimately decided in its favour, yet the question being started shows the value of such a counterpoise. These members, be it observed, are not necessarily Fellows of the Horticultural Society, the Council having thought it wise to obtain what aid they could from those who knew the science, whoever they were. In fact, I believe seventeen out of the thirty, exclusive of President, &c., alone are entitled to add F.R.H.S. to their name. Thus seated around their table, the Chairman announces that the proceedings are to commence, the minutes of the last meeting are read, and now the members look round to see what is to be brought on the tapis first. Alas! on an unlucky day (nay, we must not call it so) last summer, the Committee had met at Chiswick, and there had an inspection of various things sent in to them to test the merits of, and the Secretary announces that he has a long paper to read on the merits of Stocks, Heliotropes, &c., very ably drawn up, and likely to be very useful; but whoever can exhibit any degree of patience under the reading of a report, be it religious, political, or floricultural, especially when you know you are about to read it in print in a short time? The first object for exhibition is now placed on the table; incontinently one of the members takes up his hat and walks out of the room. Have any of his co-censors insulted him? Is the plant produced of so contemptible a character that he can only express his disgust by this summary mode of proceeding? No such thing; the plant produced is his own child, and by the rules of the Committee he is not allowed to remain while its merits or demerits, as the case may be, are discussed. In the case of plants forwarded from a distance, a detailed account of them is expected. At the meeting on the 13th ult., an interesting discussion arose as to the Erect Yew, forwarded by Mr. Crowder, of Horn-castle, it being by some considered very similar to others already in cultivation. However, the previous award of the Committee was confirmed. By the Messrs. Veitch & Co. was exhibited a specimen of *Thibaudia macrantha*, a most lovely but comparatively little known greenhouse shrub, producing clusters of large handsome pendant blossoms, three or four in a bunch, from the woody part of the branches. Each flower is about two inches in length and an inch in diameter, angular, narrowed at the base and point of the flower; the general colour white, with beautiful wavy lines of mauve or rosy red colour.

As we have said, a first-class certificate was awarded to this, although not a new flower. Messrs. Maule & Son, of Bristol, exhibited a very fine and well-grown specimen of *Cypripedium insigne*; this also received a first-class certificate.

Mr. Salter, of Hammersmith, exhibited some striking varieties of *Chrysanthemums*, amongst them "Little Harry," to which on a former occasion a first-class certificate had been awarded, and which proved now that it had deserved the award; it was a medium sized golden yellow incurved flower, quite a ball in shape. The following, from the same raiser, were commended:—Canary Bird, Caractacus, and Golden Hermione; of these we shall have more to say by and by. Messrs. E. G. Henderson & Son had a very nice collection of Tree Carnations, well grown and in good bloom, forming a pleasing adjunct to the conservatory at a season of the year when flowers are scarce; for these a special certificate was awarded. Nothing else of any moment was brought before the Committee, the season of the year being of course unfavourable to the production of novelties.

Such, then, is an ordinary meeting, in the dull season, of this Committee of Taste; and now the scene shifts, and when the curtain rises next, we shall find ourselves in our new room at Kensington Gore, the full, true, and particular account of which we shall hope to give on some future occasion, satisfied if now it has been demonstrated that this Committee is so constituted, that the public may with confidence look to its awards, and believe that they will be given with judgment, wisdom and impartiality.

*Deal, Jan. 16.*

D.

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## REPORT ON ANNUALS GROWN FOR TRIAL AT CHISWICK, 1860.

BY MR. MOORE, *Secretary to the Floral Committee.*

No. I.

THE experimental trials of annual flowers made during the past summer at the Garden at Chiswick, have doubtless, like those of other plants, been influenced in some degree by the unpropitious nature of the season, and therefore the opinions pronounced on the respective subjects may not be regarded as altogether final. Nevertheless, it was found that the majority of the plants belonging to this class acquired a very fair state of development, and some may even have preferred the moisture and comparative coolness which were prevalent, to the more heated and parching conditions of soil and climate which are the concomitants of ordinary summer weather.

The observations embodied in this Report were made from time to time during the summer, the plants having been examined by the Committee, as they reached the flowering state.

*Acroclinium roseum.* (Van Houtte.)—This pretty Swan River Everlasting, raised in gentle heat, and afterwards planted out, came into flower early, and continued for a considerable period in blossom

It grew about a foot or rather more in height, forming a tuft of erect stems, which were unbranched, bearing narrow leaves, and each terminated by a single showy flower-head, which in most cases was pink, becoming paler in age, but was sometimes white, the centre or disk always yellow, and the ray of coloured involucral scales somewhat dry and membranous in texture, like what are known as Everlasting flowers. It proved to be a distinct and pretty border plant, for early summer flowering.

*Ageratum mexicanum nanum*. (Thompson.)—A good dwarf variety of *Ageratum*, with a diffusely branched habit, the leaves almost deltoid in outline, coarsely toothed, and the stems bearing large heads of clear pale or grayish-blue flowers. Useful as a dwarf pale-blue bushy annual summer flower.

*Alonsoa Warczewicsii compacta*. (Turner.)—A very pretty border plant, of erect habit, growing about 2 feet or rather more in height, branching, furnished with small ovate toothed leaves, and clear scarlet flowers, resembling those of *A. incisifolia*, the old *Celsia urticæfolia* of gardens, but without the black central spot which occurs in that plant; the leaves are also less deeply cut. This variety proved to be rather dwarfer in habit than the ordinary form, and like it may be treated as a suffrutescent greenhouse perennial.

*Amblyolepis setigera*. (Thompson.)—A dwarf procumbent branching plant, somewhat like *Gaillardia* in habit, but of weedy character, producing poor yellow composite flowers, which however have a fragrance resembling new hay, and are said to retain it when dry.

*Anagallis grandiflora Napoleon III.* (Van Houtte.) } These were  
*Anagallis grandiflora Eugenie.* (Van Houtte.) } not well developed, owing to accidental circumstances of position. They were however remarkable for their fine large flowers, which were varied in colour, including dull purplish-red, orange, and blush-white with purple eye, and were regarded as very useful plants for rockwork. These belong to a large-flowered race obtained from A. Monelli, and like it are half-hardy perennials.

*Antirrhinum majus Brilliant.* (Benary.)—A very showy and attractive variety, remarkably true as to colour. The flowers had a white tube, a crimson upper lip, and a yellow palate, the colour of which becoming blended with the crimson of the lower lip produced there a rich bronzy hue.

*Antirrhinum majus striatum.* (Carter & Co.)—Under the names of *striatum eximium* and *striatum nanum* was received a very fine strain of Snapdragons, the seedlings of which produced many beautiful striped varieties, as well as numerous richly coloured selfs. From amongst them several first-rate sorts might have been selected.

*Argemone Hunnemanni.* (Carter & Co.)—This proved the same as *A. mexicana*, a tall branching plant, with glaucous pinnatifid soft-prickly thistle-like leaves marked with rich veins, and having Poppy-like yellow flowers, which are not very showy.

*Argemone platyceras.* (Carter & Co.)—This proved to be *A. grandiflora*, a plant similar in habit to the foregoing, but with large white flowers.

*Browallia Czerwiakowski.* { Van Houtte. } This plant, introduced  
 { Carter & Co. } through the Belgian gardens, proved to be the same as *B. elata*, a pretty old-fashioned annual for pot culture, and in this case succeeding tolerably well in the open air. The flowers were blue, numerous, and showy.

*Calliopsis bicolor nana.* (Carter & Co.)—A dwarf-growing variety, forming a compact bush, about 15 inches high. The plants were not fixed in character.

*Calliopsis bicolor speciosa.* Syn. *C. bicolor nigra speciosa.* (Carter & Co.)—A good dark form of garden *Coreopsis*, the florets being of a dark crimson or maroon-crimson, very rich and effective.

*Calliopsis bicolor tubulosa.* Syn. *Coreopsis, new quilled.* (Turner.)—The flower-heads were yellow and crimson, the florets rolled up into a tube. It was very inferior to the usual forms, as regarded its ornamental qualities.

*Callistephus chinensis.*—Of the very beautiful family of China Asters a large collection was grown, but the season proved so unfavourable, that no detailed report could be drawn up. Seeds were furnished by Messrs. Carter & Co., Messrs. Fraser, Messrs. E. G. Henderson & Son, Mr. W. Thompson, Mr. Turner, Mr. Veitch, and MM. Vilmorin-Andrieux & Cie. The few varieties enumerated below were the only ones that proved really fine:—

#### § 1. Dwarf *Chrysanthemum*-flowered.

These, which belong to the series called French Asters, grew 4 to 6 inches high, producing large flat double flower-heads, arranged so that the central head and from 5 to 7 laterals form a flat-topped bouquet. Some of the more perfectly formed plants were very handsome; and this group seems adapted to furnish beautiful pot plants. The varieties of this habit are sometimes called "Dwarf Perfection."

"Rose" (Fraser), light rose or pink.

"Carmine and White" (Carter), light rose with white centre.

"Lilac" (Fraser), light blue purple.

"Dark Blue" (Carter), dark purple.

#### § 2. *Pomponé.*

These grew about 1 foot high, the plants moderately and compactly branched, with close ranunculus-like flower-heads, formed of crowded flat florets, the whole mass constituting each "flower" having an even convex outline:—

"Indigo" (Henderson, Vilmorin), very deep purple.

"Rose foncé" (Henderson), deep rose.

"Pomponé blanc" (Henderson, Vilmorin), pure white.

"Rouge foncé" (Vilmorin), rose colour.

#### § 3. Large-flowered French.

These were of the ordinary stature, the plants being moderately branched, and producing flower-heads of large size, consisting of flat expanded florets, arranged so as to form a flat-faced "flower":—

"Rose carne" (Henderson), flesh colour, or very pale rose.

"Lilas" (Henderson), bluish lilac.

"Rose liséré blanc" (Vilmorin), light rose, white striped centre.

"Snow White" (Veitch), pure white.

There were many other beautifully coloured variations and some of distinct habit, but not sufficiently perfect for description.

*Chrysanthemum carinatum*. Syn: *C. tricolor*. (Carter & Co.)—A good old-fashioned showy annual for large flower-borders and the front part of shrubberies. It has bipinnatifid leaves with distant spreading narrow acute segments; the involucral scales are keeled; the ray florets are white, marked with yellow at the base, the disk being dark brown. *C. carinatum flavum*, sent as “*C. tricolor yellow*,” is the same in all respects, except that the ray florets are entirely yellow. These species were grown for comparison with some handsome modern varieties noticed below.

*Chrysanthemum carinatum Burridgeanum*. Syn: *C. tricolor Burridgeanum* (Vilmorin); *C. tricolor, Burridge's* (Carter & Co.)—This proved a very handsome variety when in its best or true state; but it was open to the same objection as the next, being wanting in fixity of character. When perfect, the ray florets were white, with a zone of yellow forming a circle around the dark-coloured disk, and next to this on the outer side was a zone of purplish-crimson, forming a second circle exterior to the yellow. It was the most beautiful of the several forms of this showy species, and deserving of every effort to render it permanent by careful selection of the seed-bearing plants.

*Chrysanthemum carinatum venustum*. Syn: *C. tricolor venustum* (Thompson); *C. tricolor, Beautiful* (Carter & Co.)—The true plants of this variety were of a very pleasing character, but the greater part were sportive and not sufficiently distinct or decided in colour. The ray florets were yellow at the base, forming a ring around the disk, and in the best forms, rosy-purple in the upper part; or they were whitish, more or less stained with rosy-purple: these latter having an indistinct appearance. If the deeper-coloured forms produced more or less freely in every batch of plants can be perpetuated and fixed, this will form a very showy border flower.

*Chrysanthemum coronarium albo-flavum*. Syn: *Chrysanthemum white and yellow*. (Carter and Co.)—This resembled the following in habit, but the florets were flatter and less quilled, and in some plants were wholly yellow, in other yellow below and creamy-white at the tips.

*Chrysanthemum coronarium albo-plenum*. Syn: *Chrysanthemum white double-quilled*. (Carter and Co.)—This and the preceding, being free-flowering, strong-growing annuals, were determined to be useful for the ornamentation of large shrubbery borders. They were tall-growing plants, of densely branched habit, and distinguished from the former series (*C. carinatum*) by having smaller and more closely-lobed tripinnatifid leaves, the lobes of which were spatulate; and also by having smaller flower heads,  $1\frac{1}{2}$  inch in diameter, of which the involucral scales were not keeled. The ray florets were incurved at the edges so as to be more or less quilled or tubulose, yellow at the base, paler and creamy-white at the tips, multiplied so as to form a semi-double “flower,” the disk deep orange-yellow.

*Clarkia pulchella integripetala*. { Turner. } This variety proved  
 { Vilmorin. } to be a fine and  
 showy plant when true, but seems scarcely to have become fixed in

character, some of the specimens being intermediate between it and the old type form of species. It grew  $1\frac{1}{2}$  foot high, and in general habit and foliage resembled the common sort; the flowers were also of the same rosy-purple colour, but the petals were flabellate, forming a segment of a circle, without indentations on the outer margin, and clawed at the base. The immediate plants had the petals slightly indented. If the entire-petaled character can be rendered permanent, this will be a very desirable flower.

*Clarkia pulchella marginata*. (Turner.)—In this variety the petals were deeply three-lobed, as in the parent; rosy-purple at the base, the lobes more or less deeply tipped with white. The plants proved to be individually pretty when in their best condition, but sportive, and ineffective in a mass. On the whole, the variety was considered to be too dull and indistinct for general cultivation, though when well marked interesting as a fancy flower.

*Clarkia pulchella pulcherrima*. {Turner. } This was considered  
 {Thompson. } as a very much improved form of the species, the flowers being large and of a deep bright crimson-tinted rose colour, quite distinct from the purplish tint of the common sort. The plant was similar, both in habit and foliage, to the older form, but on account of its larger flowers and brighter colour was much more rich and effective, and had a very fine appearance in a mass.

*Collinsia bartsicefolia alba*. (Parker & Co.)—This was determined to be a useful plant as a very dwarf-growing white annual, but the flowers were not quite pure in colour. The plants were not more than 6 to 8 inches high, with minutely glandular pubescent stems, branched from the base; the leaves ovate oblong, sessile, crenately toothed; the flowers numerous, white, slightly tinged with blush.

*Collinsia bicolor alba*. {Parker & Co. } This was decidedly inferior  
 {Carter & Co. } to *C. bicolor candidissima*. The plants were 15 inches high, with loosely branched stems, smooth below and pubescent above; the leaves ovate-lanceolate, crenately toothed, the flowers large, greenish-white. The plants were taller and looser than those of *candidissima*, and the flowers much less pure in colour.

*Collinsia bicolor atrorubens*. (Carter & Co.)—This, which is said to be a deeper-coloured variety of *C. bicolor*, did not prove at all different in colour from well-grown samples of the species, with which it was compared.

*Collinsia bicolor candidissima*. {Parker & Co. } A first-class white  
 {Turner. } annual, of showy character and good habit. The stems were 1 foot high, sparingly pubescent, compactly branched from the base; the leaves ovate-lanceolate or oblong-lanceolate, obscurely toothed; the flowers of large size, pure white. The plants were dwarfer and more compact than in *C. bicolor alba*, and the flowers of a much purer white.

*Collinsia multicolor marmorata*. (Turner.) Syn: *C. bicolor marmorata nova*. (Carter & Co.)—A pale variety of *C. multicolor*, which is itself perhaps only a form of *C. bicolor*. The variety was too dull

and indistinct in colour to be effective, and very much inferior in this respect to multicolor, which is a handsome plant.

*Cosmidium Burridgeanum*. (Turner.)—A very handsome Coreopsis-like plant, growing about 2 feet high, of branched habit, the leaves pinnatisected, with long filiform or subulate leaflets. The flowers were on long stalks, deep orange-yellow, with a broad dark maroon-crimson spot at the base of the florets, which were truncately obovate, much broader than in the well-known *Calliopsis bicolor*. The flower buds were 8-furrowed, not smooth as in *Calliopsis*.

*Delphinium consolida tricolor elegans*. (Carter & Co.)—A tall form of branching Larkspur, producing single and double flowers of richly varied colours, many of them elegantly striped. These latter, which were very handsome, were of various shades of rosy-pink, striped with blue. Others were of a rich purple.

*Dianthus atrorubens*. (Carter & Co.)—A very handsome and brilliant mule Pink, having dark stems, with broad leaves at the base, and terminating in an open branched head of flowers; the flowers nearly  $1\frac{1}{2}$  inch in diameter, produced continuously through the summer, single, vivid glowing crimson of slightly varying shades. It was a bright-coloured and beautiful border flower.

*Dianthus chinensis Heddewigii*. (Carter & Co.)—A beautiful form of Indian Pink, of dwarf sturdy habit, with very large flowers, richly varied in colour: crimson and rose in various shades, and variously mottled in darker and lighter tints, being predominant. The best formed and most richly-coloured flowers are exceedingly beautiful additions to the flower-garden, and these only should be perpetuated, the many inferior ones being discarded. They are charming plants, both for the garden and for pot-culture, for the greenhouse and conservatory.

*Dianthus chinensis laciniatus*. (Carter & Co.)—This, though perhaps not permanently distinct from *Heddewigii*, differed more or less obviously in being of taller and more slender habit, with the flowers more deeply jagged at the edge: it was also more varied in colour; in some of the varieties the flowers were very well formed, while in others they were narrow and loose. It was, however, inferior to *Heddewigii*, on account of its loose habit, and narrower-petaled flowers.

*Dianthus chinensis imperialis*. { Carter & Co. } A very handsome  
 { Turner. } ordinary form of Indian Pink; the flowers moderately large, mostly double, and beautifully variegated, the colours being chiefly rose and rosy-purple, with darker markings.

*Dianthus hybridus corymbosus*. (Van Houtte.)—A broad-leaved mule Pink, not very attractive in colour, the flowers being single, and for the most part of a dullish purple or rosy-purple colour.

*Dianthus hybridus Laxtoni*. (Carter & Co.)—A mule Pink, of mixed character, and, like the last, not very attractive, compared with others of similar habit.

*Erysimum arkansanum*. (Carter & Co.) Syn: *E. asperum*. (Thompson.)—A vigorous and showy species, growing 2 feet high and upwards, sparingly branched, the branches erect, with sinuately toothed

leaves, and fine bright smooth-petaled yellow fragrant flowers, as large as those of the common Wallflower. The flowers at first formed a closed head, but the inflorescence afterwards became elongated. It was considered as a first-class bright yellow annual.

*Fenzlia dianthiflora.* (Carter & Co.)—A beautiful little dwarf annual, not more than 2 or 3 inches high, forming a small compact tuft, with narrow leaves, and handsome light rose-coloured Gilia-like flowers, paler towards the centre, with a dark spot in the throat, the segments of the limb evenly toothed at the ends.

*Gaillardia, new dwarf scarlet.* (Van Houtte.)—Not distinguishable from the ordinary form of *G. picta*.

*Gypsophila muralis.* (Carter & Co.)—A dwarf and very slender, much branched, divaricately diffuse plant, forming a mass about 1 foot in diameter, with long linear leaves, and small blush or pale pinkish flowers. It is a neat plant for rock-work, pretty, but ineffective as a mass.

*Helianthus annuus californicus.* (Thompson.)—A large-flowered deep golden-yellow double Sunflower.

*Helichrysum bracteatum incurvum.* Syn: *H. bracteatum nanum ferrugineum* (Turner); *H. compactum maximum* (Turner); *H. compositum maximum* (Carter & Co.); *H. macranthum compositum maximum* (Thompson); *H. macranthum nanum* (Turner).—This plant (of which the older forms, bearing the scientific name of *Helichrysum bracteatum*, are the yellow and white Everlastings, long known as popular annuals), has, by admixture with *H. macranthum*—another exotic form, undeserving of specific distinction, having rosy-tipped flowers—given rise to a beautiful race, which is distinguished by the large size of the flower-heads, and the more numerous as well as smaller coloured involucral scales which compose them, and which are gracefully incurved so as to cover the disk. This incurving gives them a much richer effect than is seen in the older kinds, where the scales are larger, and spread out so as to expose the disk wholly to view. The species, in its various forms, is to be recommended for its property of blooming late in the year, unaffected by the earlier frosts of autumn. The forms here collected were improved variations of the old *H. bracteatum*, with larger and more varied-coloured flowers; some of the plants acquiring also a dwarfer habit, but none being apparently of fixed character, either as to habit or colour. The plants grew 3 feet high, branched, with lanceolate leaves, and large flower-heads upwards of 2 inches in diameter; the coloured involucral scales surrounding them were very numerous, ranging in several series, smaller than in the common forms, the innermost ones incurving neatly over the disk, and they were various in colour, including yellow, sulphur, white, pink, crimson, and copper-colour in various shades. The plant seems to have a sportive tendency with respect to colour.

*Helichrysum bracteatum nanum.* {Thompson.} The flowers in this  
 {Turner.} variety resembled those of the ordinary form of the species, but the plants had a tendency to assume a dwarfer habit, being from 15 to 18 inches in height, but not very uniform in this particular.

*Hibiscus hispidus.* Syn: *H. calisureus.* { Veitch.  
Carter & Co. } A hand-  
*H. Humboldtii.* Parker & Co. } some,  
large-  
flowered species, distinguished by its dark-coloured stems. The leaves were three-parted, their divisions lobed. The flowers were large, cream-coloured, with an intense black spot at the base of the petals, and having the scales of the involucre recurved at the point. It is a very showy and desirable plant.

*Hibiscus Trionum.* Carter & Co. } This resembled the last, but  
Syn: *H. africanus.* { Carter & Co. } had smaller flowers, and the  
Veitch. } stems were pale-coloured;  
the leaves were three-parted and lobed; and the scales of the involucre were incurved. It is the Bladder Ketmia, long known in cultivation, and not the true *H. africanus*.

*Iberis umbellata atropurpurea.* } This variety, which  
Syn: *Fine Dark Candytuft.* { Carter & Co. } had the habit of  
Turner. } the common Candytuft, growing about 1 foot high, and branching from the base, had flowers of a tolerably uniform rich deep rosy-purple. Some few were, however, of a deeper and richer colour than the rest, and these were considered very fine: quite first-class amongst annuals.—*Horticultural Society's Proceedings.*

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### PYRAMIDAL HYBRID PERPETUALS.

STANDARD ROSES, inartistic and unpicturesque as they are, have "held their own" for some years. It is time that some new Rose idea was originated, and I hope, ere long, to have standard Roses spoken of as things of the past—like stage coaches and road waggons. The culture of Pyramidal Roses will require more care and time than the culture of standards, which we all know is very simple; but the Rose gardener will be amply compensated by such glorious effects as have never yet been seen in our roseries.

Like all really good gardening ideas, the culture of Rose pyramids, although requiring more time and care than the culture of standard and dwarf Roses, is still very simple, and may be carried out as follows:—Some strong two years old stocks of the Manetti Rose should be planted in November, in a piece of ground well exposed to sun and air. The soil should have dressings of manure, and be stirred to nearly two feet in depth. In the months of July and August of the following year they will be in a fit state to bud. They should have one bud inserted in each stock close to the ground. The sort to be chosen for this preliminary budding is a very old Hybrid China Rose, called Madame Pisaroni, a Rose with a most vigorous and robust habit, which, budded in strong Manetti stocks, will often make shoots from six to seven feet in length, and stout and robust in proportion. In the month of February following, the stocks in which are live buds should all be cut down to within six inches of the bud. In May the buds will begin to shoot vigorously; if there are more shoots than one from each bud they

must be removed, leaving only one, which in June should be supported with a slight stake, or the wind may displace it. By the end of August this shoot ought to be from five to six feet in height, and is then in a proper state for budding to form a pyramid. Some of the most free-growing and beautiful of the Hybrid Perpetual Roses should be selected and budded on these stems in the following manner:—Commence about nine inches from the ground, inserting one bud; then on the opposite side of the stock, and at the same distance from the lower bud, insert another; and then at the same distance another and another, so that buds are on all sides of the tree up to about five feet in height, which in the aggregate will amount to seven buds. You will thus have formed the foundation of a pyramid.

I need scarcely add that the shoots from the stock must be carefully removed during the growing season, so as to throw all its strength into the buds. It will also be advisable to pinch in the three topmost buds rather severely the first season, or they will, to use a common expression, draw up the sap too rapidly, and thus weaken the lower buds. The terminal shoot must be cut off early in June. In the course of a year or two magnificent pyramids may thus be formed, their stems completely covered with foliage, and far surpassing anything yet seen in Rose culture. I have as yet found no Rose equal in vigour to Madame Pizaroni, although when attention is turned to the subject other varieties may perhaps be found. If extra strong growth be desired, the stem may be suffered to grow two seasons before it is budded.

The most free-growing kinds, such as Jules Margottin, General Jacqueminot, Colonel de Rougemont, Triomphe des Beaux Arts, Lord Raglan, Souvenir de la Reine d'Angleterre, Triomphe de l'Exposition, and other kinds of vigorous habit, these will form grand pyramids from six to seven feet in height. For smaller pyramids those of more moderate growth may be selected. It will scarcely be advisable to bud more than one sort on a stem, as no two kinds will be found equal in growth, but as a matter of fancy varieties of different colours may be inserted, so as to make a variegated pyramid. Vigorous growing Bourbon Roses may be employed for pyramids, and Tea-scented and Noisette Roses, as the stock is highly favourable to their growth, but they should be protected in winter by Fern or branches of evergreens tied round them.—*Rivers' New Rose Amateur's Guide.*

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### THE LATE SEVERE WEATHER.

THE low temperature of the past month, which, according to our own observations and the records of the frost which have reached us from various quarters, is found to be lower than has been experienced within the present century, appears to have given way to-day (22d); for, although the day has been clear, and the barometer is still very high, the frost seems gradually breaking up, having lasted in this neighbourhood, with the exception of two days of a thaw, about 32 days. The

greatest degree of cold experienced here was zero on the morning of the 25th December, a day which will be long remembered; for very many years may elapse before we experience another Christmas-day so intensely cold as that of 1860. The greatest degree of cold, as recorded in the columns of our contemporary, the *Gardeners' Chronicle*, appears to have been felt in the midland and north midland counties and the east coast, or north of an imaginary line drawn from London to Gloucester, excluding some parts of Wales, and the estuaries of the Dee and Mersey, and a few other favoured localities; while the frost of 1838 was most severe in Surrey, Kent, Middlesex, Berks, and Wilts. We believe the rapid fall of the thermometer, from the 24th of December to the 25th, to be without a parallel in the records of meteorology, and produced the remarkable phenomena observable on the morning of Christmas-day. Every atom of vapour in the atmosphere was condensed by the extreme cold, and deposited on the branches of trees, which were covered with myriads of brilliant crystals, which, when lighted up by the sun, reflected every colour of the prismatic spectrum, producing an almost indescribable effect.

It is too early yet to form a correct idea of the mischief which will follow the late frost, but even now its effects are clearly visible on many trees and shrubs; common Laurels, in exposed places, have all their young wood killed. Laurustinus, Phillyreas, Arbutus, Chinese Privet, Euonymus, have all the appearance of being scalded, and the foliage and young wood are quite killed. Scarlet and many other Hybrid Rhododendrons, are either dead or irrecoverably injured. The Exmouth Magnolia is in the same state; indeed, wherever there was the least disposition to tenderness in evergreen shrubs, they have suffered, in most places beyond recovery. In the Pinus way, insignis and radiata have been struck very hard in some situations; while in others they appear unhurt; and even where growing close together, some appear to suffer much more than others. P. Hartwegii, apulcencis, ayacahuite, Sabiniana, Lindleyana, Montezumæ, all trees from 15 to 25 feet in height, are much injured, many beyond recovery, but we must wait a month before passing a final opinion. The low temperature of the preceding season, in connection with the great quantity of rain which fell nearly up to the end of the year, prevented the wood of trees from ripening, and they are therefore much more liable to injury than if they had had the benefit of a drier and warmer summer, to prepare them for the rigours of the present winter. How fruit-trees will fare it is yet too soon also to give an opinion. February will show us better how far they have suffered, in common with so many other things. We hear of almost ruinous losses in some of our great nurseries; dormant buds of Apricots, Peaches, and Nectarines, being killed by thousands. And the same may be stated of Roses; Teas, Noisettes, and yellow Roses, being entirely killed, both in bud, and marketable plants. The destruction to kitchen garden crops is yet more on a wholesale scale, in many situations, the out-door vegetable crop having been quite swept away.

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## USEFUL GENERAL INFORMATION.

I HAVE often thought that if horticulturists and florists would write their experience of plants, fruits, and vegetables, distinguishing experience from hearsay and reading, they would greatly advance the public interests; and I have further thought that it is the duty of those who take in publications that are good to recommend them to others. If each subscriber would enlist one more the publication would be doubled. I hope I have enlisted at least one for the *Florist* for the year 1861; and, if it is the duty of readers to do this, it is still more the duty of contributors to its pages to do so.

*A new Rose stock.*—Some new standard Roses from Belgium have been sent to me by my friend Mr. John Milne, of Hull, which he purchased of the Belgian agent at Hull. The standards, rather over four feet, are six in number, and they are, for heads and roots, the best that I have ever planted. The Roses sent are two each of the following: Gloire de Dijon, Duchesse de Nemours, and Baronne Prevost. Mr. Milne in his letter says:—"I beg to present you with some Roses on the new unknown stock. It is quite a mystery about here, and quite a curiosity. I saw the agent who brings it from Belgium: he will not tell what stock it is, consequently we shall be in the dark. I wish you may discern what the stock really is. I think it must be a rapid grower." I cannot determine yet what it is for certainty. I am not quite clear that it is not Manetti; if it is, I shall be able to discover it by brood or branch. The roots are like a "wig," and approach nearer to Manetti roots than to any I have seen. If it is Manetti, it will require "special culture and special management;" the bark must be kept open with a knife, the head sealed, and the whole stock bandaged with something that will retain moisture during the droughty season of the year. For lack of this, Manetti standards have failed; the moisture is drawn from the skin, which is very thick, and then it dries and cracks, but does not expand sufficiently for the expansion of the inner part of the stock. I hope, however, it may be some other stock. At present I cannot determine what it is; but this is certain, that, if it is Manetti, I shall be sure to know it when the time of growth sets in. The stock itself is not so smooth as the Briar, being rougher and more knotty; the skin of the stock is azure grey. The specimens presented have three good points, viz., good roots, good heads, and the Rose is budded into the main stock instead of the side branches. I have also here Mathurin Regnier, budded on the main stock of the Briar, and it succeeds admirably. With regard to this stock, I can now only wait for summer, saying "we shall see what we shall see." I spoke of it in a preceding *Florist*, adding "we shall all bite and be bit." At present I am "not bit," and hope my friend who has so kindly sent them to me may not find that he has suffered from Belgian teeth. Since writing to the above I have reviewed the stock again, and my present impression is that it is not Manetti. It is, I think, Cinnamon Rose much used by the Dutch.

*Roses of 1859.*—Anna Alexieff and Eugene Appert for general cultivation and for most good qualities, as to plant, habit, and flower,

are the two best. Anna Diesbach, Marie Thierry, Chabrillan, and Armide, are all beautiful and can be recommended. François Arago, very dark plum, large, good, and of good habit, is the best dark Rose of its year.

*Bourbon*.—George Peabody is a beautiful rich crimson purple, apparently dwarf habited on Manetti, but a free grower on its own roots; it is a continual bloomer and a free bloomer. Its raiser has not said one word too much in its praise. A bed of it on the Manetti stock would be very gratifying.

*Roses of 1860*.—Victor Verdier (now out) will stand for many a year in the catalogues; it is Jules Margottin better shaped and far deeper in colour; its colour is deep rose of carmine; its habit appears to be good. Triomphe de Lyon (six plants) is now blooming on three plants; the colour is very rich dark crimson, and the shape appears to be good. Madame Charles Crapelet is a rich rosy scarlet, well shaped, and well folded, and with petals of very thick substance, a virtue too much overlooked. Celine Forestier is a deep golden yellow rose, of the finest habit, very hardy, and will give great satisfaction. At present, I stick by Triomphe de Rennes, which for shape and quality and general excellence I consider to be the best yellow Rose that I have ever yet seen. Gloire de Dijon is also most excellent, and both, when well shaded for exhibition, are of a deep golden yellow. Louis the Fourteenth, very dark crimson, of good outline and series of petal—was the best new dark rose of any size at the Floral Hall. None of these Roses of 1859 and 1860 will, I think, disappoint the purchaser.

*Roses for 1861*.—Two celebrated English professionals and a most distinguished French professional all agree in this, viz., that the yellow Tea Rose, La Boule d'Or, and the Hybrid Perpetuals Madame Furtado and La Reine des Violettes are to be the charms of 1861.

*Manetti Roses*.—I have made one convert in Berkshire, well known, who has bought 50. He says, "If they go on as well as I see them now, I shall henceforth swear by Manetti." With regard to them here, I am more enamoured of them than ever. I am persuaded that my Manetti article will be one day appreciated. I am highly gratified by the *Gardeners' Chronicle*, the Dorset paper, and the *Hull Advertiser's* publication from your *Florist* of my Briar article. I see nothing at present to retract.

*Fruits*.—Marie Louise is the best Pear that I have ever tasted. Angouleme is the finest I ever saw. This Beurre d'Anjou and Gloriton Morceau (alias Delices des Hardenpont), brought here by Mr. Gloede from his garden in France, are all good Pears. Beurre Diel, grown here, is also very good and a good cropper. The Ribston Pippin is the best Apple that I ever have yet tasted; the trees (three) are given to canker and American blight. The best baking and boiling Apples that I have ever yet tasted (both grown here) are the old White Lion and the Hawthornden. The best red Raspberry to crop here and to produce strong canes to go on with is the "Beepot." The Fastolff here has no chance with it. The richest Gooseberries here are the Red and White Champagne.

*Vegetables*.—The Dalmahoy Potatoes are great croppers and admir-

able in every respect. The French Cabbage Lettuce affords an immense quantity of food, and it does not go to seed as all others do here. The Ipswich Standard Cucumber is good in quality, and the plant maintained its health and vigour while two others, tried by its side, sickened and turned yellow.

In conclusion, I bid all fragrarians and rosarians welcome to Rushton. I shall be able to show about 70 sorts of Strawberries in fruit in the season, and from 1450 to 1500 well-selected Roses, the rubbish having been cast aside; and I hope that "D." will not again visit these parts without coming to see me. As he likes Strawberries and cream, I think that I shall be able to suit his palate. Belle Bordelaise, which cropped early and heavily and then gave me runners, is now in still heavier crop, which, were it under glass, would ripen; it is the only Strawberry known that will perform this wonder. Does not this performance speak loudly in the ears of those who have forcing houses?

*Rushton, Nov. 28.*

W. F. RADCLYFFE.

### SAPONARIA CALABRICA.

As a bedding plant, this has long been a favourite with many, and in localities where it does well I should say that it is the best plant that could be employed for a circular bed on Grass, or for rows of circular beds. Sowing it in September, however, does not answer; but any one wanting spring beds of the same colour has only to sow *Silene pendula* and transplant it into the blooming beds, when the autumn occupants are removed; it is quite as effective during April and May as *Saponaria* is in July and August. Last season I saw, at Strawberry Hill, in the month of May, on the side of a walk leading from the drawing-room, a long row of circular beds, in which the blue *Myosotis* alternated with *Silene*, and a more pleasing effect I never witnessed. I should, however, have had every third row white *Myosotis*, but that has not yet become common as a bedding plant.

F.

### ROSES IN DORSETSHIRE.

IN July 1859, I sent you some particulars, which you published, of a visit I made to the Rev. W. F. Radclyffe, at Rushton. Having made a similar visit last year, I venture to send you some account of it, in the hope that my observations may not be uninteresting to your readers.

After a journey of above three hundred miles I reached my destination, and received the heartiest of welcomes from my reverend friend. We were soon engrossed respecting the beauties of "England's proud Rose;" and happy was I to review his fine collection once again. From the long continued wet and boisterous weather which we had experienced in the north, and the unfavourable accounts which I had received of the weather in the south, I did not expect to see Roses in

the fine condition they were really in. At home our blooms were only in the first stage of development; at Rushton I was agreeably surprised to find them in full beauty and in prime order; the foliage too was in excellent condition, which rather astonished me, as the hurricane of the 28th May last, which was felt so severely here, and which entirely stripped some of my Rose trees, appeared to have spent itself before reaching Dorset, for but few of the trees of my host's exposed collection seemed to be the worse for the storm.

I had arranged that, during my visit to Rushton, I should see the great National Show held in London, but in this I was disappointed: I will refer therefore to the Exhibition which took place at Salisbury, after describing a few Roses new, or at least so to me. *Altessi Imperial* is, without doubt, a very dark fine crimson; *Comtesse Cecile Chabrillant*, a rich salmon-pink of perfect form, and decidedly the best of the light coloured novelties; *Marie Thierry* is a good Rose; *Anna Alexieff* is of good habit, honest rose colour, and an abundant bloomer; *Beaute de Royghem* exhibits fine shape, tinted with carmine, it is of good habit and an abundant bloomer; *Beaux Arts* is very dark, but not full enough; *De la Motte* is nicely shaped and clear crimson, free from stain; *Marie Portemner*, 4 plants, rich deep crimson, is of good habit, and possesses lovely broad Bourbon foliage; *George Peabody*, from Baltimore, 4 plants on their own roots, is of very vigorous growth, of deep crimson-purple, with very thick petals, three blooms were taken to Salisbury, had been rained upon, more or less, for a week, and yet wore well, and were in the winning pan; this will be one of the greatest of favourites when better known; *Tea Cornella* exhibited beautiful clean creamy buds, but had not expanded, this was a present from Mr. George Pentland, of Baltimore; *Beauty of Greenmoint* is a pretty Rose for a pot, but too small for show, its colour is like *Fellenberg*, the foliage small, thick, and of a dense green; *Edith de Murat*, strong grower, is a pretty white Bourbon; *Octavie Fontaine*, pure white, and *Celine Forestier*, yellow, are strong growers, but their buds were not expanded—the former will be a good pole or wall Rose; *Verschaffelt* is a large Rose, of crimson-purple, but was stained by the weather; *L'Oriflamme* is a fine scarlet, an abundant bloomer, and very vigorous. The blooms of the *General* (its parent) were exceedingly large, and remarkably full. I never saw them so full before nor so large. There were two other American Seedlings, not in flower, which were on their own roots, viz., *Midland Margaret* and *Dr. Kane*, committed to Mr. Radclyffe to introduce; they appeared to be nice plants, but their buds were not sufficiently forward to judge of them, even at a hazard. The other novelties were on *Manetti*, with the exception of the *Portemners* which were on *Briars*. I regret that the fine buds of *M. Vigneron*, *Montigny*, *Anna Diesbach*, *Armide*, *Ardoisee de Lyons*, did not expand during my week's stay, and that *Lord Elgin* and *Beaufort* had bloomed out before my arrival. Mr. Radclyffe says in his letter, "Anna Diesbach has produced two large Roses (Flanders mares like), but superior in quality to *Angleterre*, and liable to show her eye. *M. Vigneron* has proved to be a splendid show Rose, measures  $4\frac{1}{2}$  inches in diameter, circular, flat, of good substance, and calculated to satisfy

the amateur, and judges too, who are more led by size than substance; centre, form and quality excellent."

Let us now advert to the Salisbury Show, where Mr. Radclyffe took a second prize for 24 clusters of three, viz., Cardinal Patrizzi, Duchess of Sutherland, Géant des Batailles, Madame Place, Madame Knorr, Mrs. Elliot, Chenedole, Bachmeteff, Caroline de Sansal, Lord Raglan, Devonienis, Wm. Griffiths, General Jacqueminot, Princesse Clementine, Leon des Combats, Comte Odart, Paul Ricaut, George Peabody, Mathurin Regnier, Duchess of Norfolk, Madame Phelip, Baronne Prevost, Malmaison, Madeline: also the second prize for 24 single blooms, viz., Marie Portemner, Felicite Parmentier, Prince Noir, Madam Knorr, Triomphe de Paris, Gloire de Dijon, Marie Thierry, Colonel Rougemont, Eliza Sauvage, Jules Margottin, Sir Joseph Paxton, Comte de Paris, Madame Campbell, Pauline Lansezeur, General Brea, Gloire de Mousseuses, Anna Alexieff, Comtesse Cecile de Chabillant, Géant des Batailles, Madeline, Malmaison, Baronne Prevost, Louise Odier, Comtesse de Murinais, a nice white moss Rose.

We cut the above and many others between four and six o'clock on the morning before the show day; this was done in order to save them from another day's soaking rain, so they were actually cut thirty hours before they were judged, and had to travel twenty-two miles in a waggon, and yet they were declared on all sides to be really good, though not as large as we left behind on account of their having been wetted. Every Rose was exhibited with its own foliage attached to it, just as it was cut from the tree.

Among the lighter Roses that were shown, I took the greatest interest in Comtesse de Chabillant (a gem): there is no mistake about this being a first-class variety that will maintain a high place. Mr. Tiley's pans contained a fine collection, indeed there were two new blooms which I must especially notice, viz., Triomphe de Lyons, very dark, and good; and Sophie Coquerelle, which appeared to be an improved Sidonie.

In conclusion, let me say that it has seldom fallen to my lot to experience such pleasure as my week's sojourn at Rushton afforded me; to my reverend entertainer, therefore, allow me publicly to tender my most sincere thanks.

JNO. MILNE.

*Derringham, Spring Bank, Hull.*

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#### CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—Look over and attend to last month's directions for the management of the general stock of the former, giving air on every favourable opportunity; and while the plants are comparatively inactive, carefully avoid overwatering at the root. Young plants, which it may be desirable to increase in size as much as possible during the season, if they have had a moderate rest, should be placed in a moist warm house to encourage early growth, and allow time for their

making two growths during the season, and setting for bloom. See that such are not in want of pot room, keep them free from insects, and use every care in watering, &c., so as to encourage a free vigorous growth. Camellias which have done blooming, and have their wood buds well up, if wanted for blooming in autumn, should be placed in a general heat as soon as convenient—a house where the Vines are being started will be an excellent situation—but first thoroughly clean their foliage, &c., cutting back any shoots which incline to overgrow the rest of the plant, and repotting any that may be found to require this; but plants of these, intended for very early blooming, should be kept rather short of pot room, otherwise they will be apt to make a second growth after having set for bloom, and plants which do this seldom bloom finely; hence avoid repotting only when necessary to secure a moderate growth, &c. *Conservatory.*—Since our last monthly directions were written, the weather has been very unfavourable for the preservation of flowers here, and also for forcing plants into bloom; and those who have had to preserve plants, forced into flower in heat, in houses insufficiently provided with means for heating, need not be surprised if they find their supply of bloom very limited at present; but if the experience of the recent very severe frosts should serve to convince persons entrusted with the arrangements of houses for plant culture of the propriety of making ample provision for the frequent occurrence of similar trials of the efficiency of heating apparatus, &c., it will at least have taught a valuable lesson, and one which cannot be too long remembered. If flowers are scarce as compared with the demand, and a supply of plants suitable for forcing at command—such as recommended for this purpose last month—a quantity of these, sufficient to furnish a good display, should at once be placed in a house or pit, where a moist temperature of from  $55^{\circ}$  to  $65^{\circ}$  can be maintained, syringing the plants overhead morning and evening, and carefully attending to them with water at the root. These, if in proper condition for forcing and well attended to, will be in full beauty, and will greatly assist in keeping up a display until the plants, which furnish the usual spring display, can be got into bloom. Maintain a steady temperature of about  $45^{\circ}$  by fire heat, allowing it to rise  $10^{\circ}$  by sun heat before giving air, and then opening the ventilators on the sheltered side of the house only, and these just sufficient to prevent its rising higher. See that every thing is perfectly clean, and endeavour by means of effective arrangement to make the most of the plants in bloom. Acacias, Camellias, and other things planted in the borders, which bloom at this season, must be freely supplied with water at the root, and unless this is done, the plants need not be expected to bloom in anything like perfection; water at a lower temperature than the atmosphere of the house should not be used; and when a plant is watered, care should be exercised to ensure the whole of the soil about its roots being thoroughly moistened. *Cold Frames.*—Hard-wooded plants here must be carefully supplied with water, keeping them rather on the side of dryness at the root; and, when possible, watering should be done on the morning of a bright day, and the plants should also be very carefully watched

for mildew, applying sulphur immediately this is perceived. Give air on a sheltered side whenever this can be done, but do not expose the plants to currents of cold air. Get all young plants intended to form specimens tied into form as soon as possible. The stock of bedding plants, as Verbenas, Lobelias, Petunias, variegated Geraniums, &c., should be carefully examined, and those of which a large increase may be required, placed at once in a warm moist temperature of from  $60^{\circ}$  to  $70^{\circ}$ , placing them close to the glass, repotting such as may require this, and using every means to secure an ample stock of strong cuttings as early as possible. And unless some better convenience for propagating such things is at command, a dung bed should be prepared, so as to be in readiness to receive the cuttings as soon as these can be procured. Early propagation is the only certain way to ensure strong well-prepared plants at planting-out time, and furnish a good display in the flower garden early in the season. Keep every thing perfectly free from green-fly, by gentle fumigations as often as may be necessary.

*Greenhouse.*—A rather dry atmosphere, with a free admission of air on every favourable opportunity, should be aimed at here for the present, carefully avoiding overwatering; but when a plant is watered, enough should be given to thoroughly moisten the ball. Towards the end of the month, young stock of New Holland and other plants, which it may be desirable to increase in size as fast as possible, should be collected and placed where they can be kept rather closer, and afforded a somewhat moister atmosphere than the general stock, giving air against them very sparingly. Such plants should, however, first be cut back and tied out as may be necessary, to secure a well shaped foundation for the future specimen, and those that require more pot room should be shifted. But such things, when repotted at this season, must be very carefully attended to with water until the roots strike into the fresh soil, for any excess will be dangerous. See that every thing is perfectly clear of aphis and mildew, and apply the proper remedy immediately either of these pests make their appearance.

*Stove.*—If not already done, prune and repot Dipladenias and Allamandas, shaking away as much of the old soil as can be done, without injuring the principal roots; also Stephanotis, Clerodendron splendens, and similar plants. Plants that have been partially disrooted must be very sparingly supplied with water at the root until they start into growth, but they should be lightly sprinkled overhead with the syringe morning and evening. Proceed with repotting the general stock as fast as circumstances will permit, and endeavour to get everything infested with scale or mealy bug thoroughly cleaned, as there is little chance that time for this sort of work will be more easily commanded as the season advances, and plants will be much less trouble to clean now than after they have made fresh growth. Attend to potting a batch of Gloxinias, Achimenes, Clerodendrons, &c., according to the time when they will be most valued in bloom. Maintain a steady temperature of from  $60^{\circ}$  to  $65^{\circ}$  at night, raising it to  $70^{\circ}$  or  $75^{\circ}$  during the day, and maintain a moist atmosphere.

*Hardy Fruit.*—The frosty weather during the last month offered a good opportunity to get manure on the quarters and other places occupied by small fruit; and when the weather is open, no time should be lost in getting it forked in about the trees, and ground trenched, if it is necessary, to make new plantations of Gooseberries, Currants, and Raspberries, all of which should now be planted. Strawberries, when they are growing thickly together, should have the dead leaves cleared away, the beds cleaned from weeds, and dressed over with short manure or leaf mould; this should be done by the end of the month. New plantations may now be made, choosing a time when the soil is in a fit condition to receive the plants. Finish the planting of all hardy fruit-trees before the month is out, and mulch the surface round the trees with rotten manure; secure all newly-planted trees to stakes, as well as others that may require it in exposed situations—also those whose stems are not perpendicular. Proceed with the pruning, &c., of all sorts of fruit-trees. Apricots should be nailed at once, if not already done, and the covering material got in readiness to protect the trees when necessary; and it will be well to bear in mind that whatever covering is used for protecting the blossoms from frost, it should be so arranged that it may be easily removed in the day time, otherwise more harm than good will be done by covering. Nothing answers the purpose better than thin canvas fixed on rollers, so that it may be easily drawn up or let down at any time with comparatively little trouble. Orchard houses, and walls covered with glass, or any other glass structure not artificially heated, should have abundance of air in bright weather, to prevent the trees being excited too early in the spring. The trees should be all pruned, and those in pots top-dressed with fresh loam and dung. Plunge the pots if convenient; much advantage will be gained by so doing. *Forcing Ground.*—Prepare pits or frames for planting Ash-leaf Kidney Potatoes; those speared last month should be planted on a slight hotbed at once; give plenty of air in fine weather as soon as they come into leaf. Remove those in pots to a place where they will have the advantage of air and light; fill up the pots with light soil; prepare succession beds for sowing early Horn Carrot and Wood's Frame Radish, and give plenty of air to those that are up. Make a sowing of Basil and Knotted Marjoram, and small Salad occasionally; place a few more roots of Mint, Chives, and Tarragon in heat to keep up the supply according to the demand; sow succession crops of French Beans, in pots, of the early dwarf kinds, and keep a moist heat to those in bearing, using the syringe frequently in order to check red spider. Give all the air possible to Peas in pots every day when the weather permits. Bring in a succession of Rhubarb, Seakale, and Asparagus roots, and place them in the forcing pits, and attend to the linings of those forced in the open ground. Collect horse droppings, and place them in a heap under cover in preparation for making new Mushroom beds. Those already made should be spawned when the temperature of the bed is about 65°. Give air every favourable opportunity to Cucumbers and Melons, and maintain a night temperature of 70°, allowing a rise of 10° or 15° through the day during sunshine, and close early. Plant

out those sown last month. It is a good plan to place a thick turf under the hillock in dung beds, to prevent burning the roots of the plants; sow more Cucumbers and Beechwood or other Melons for succession crops. Prepare a heap of fresh manure and leaves to be in readiness for making new beds, renewing linings, &c. *Cherries and Plums*.—These will not admit of rapid forcing, especially in the early stages of the process. Keep a moist atmosphere till the trees come into bloom, and plenty of air every bright day. Water sparingly at the root at present. *Peaches and Nectarines*.—As soon as the fruit is properly set in the early house, use the syringe freely, and raise the night temperature from  $5^{\circ}$  to  $10^{\circ}$ , according to the state of the weather, and in like proportion through the day, especially if the weather is bright, at the same time giving plenty of air. Attend to the disbudding, and remove or pinch back all strong or foreright shoots, that are not wanted to furnish the tree with bearing wood for the following season. Keep the trees, at all times, free from green-fly, by fumigating with tobacco. See previous directions for the management of those not so far advanced. *Pines*.—Prepare soil and keep it moderately dry, to be in readiness for shifting the plants by the end of the month. Keep up a moist heat in the fruiting house, syringing the plants occasionally if much fire-heat is used. Those starting into fruit should be watered as soon as the fruit spike is visible. Collect plenty of leaves or tan to be in readiness for renewing the beds when required. Fruiting plants, either before or after they are started, may now be planted out on ridges of free porous loam, mixed with rotten manure. Leaves are the best material to form the bed on which they are to be planted, as it will ensure a steady bottom heat for some months, and will at no time be too violent. Attend to last month's directions in regard to succession plants in dung pits. *Strawberries*.—Attend to previous instructions, and place those coming into bloom in a situation where they will have the advantage of plenty of air and light, water with liquid manure as soon as the fruit is set. Bring in a succession of plants by the end of the month. *Vinery*.—See directions last month, and as soon as the fruit is set use the syringe and keep up a moist atmosphere; commence thinning the berries at an early stage of growth. Thin on, tie in the shoots, and stop all laterals down to the last bud. The temperature should be increased in the succession house as the days lengthen, in accordance with their stage of growth. Plunge pot Vines, if convenient so to do, otherwise place the pots on rotten manure or turf, and supply them liberally with liquid manure. After the fruit is set, remove all useless growth. Propagate Vines by eyes, cut them about  $1\frac{1}{2}$ -inch long, and place them in pots or striking pans about  $\frac{1}{2}$ -inch below the surface, and plunge the pots in a brisk bottom heat. *Kitchen Garden*.—We may look forward for a busy month in this department, on account of the severe frost during the past month, which, as, of course, retarded many operations. Therefore, should open weather set in, no time should be lost in getting the ground prepared to receive the spring crops. Make sowings of early Peas, such as Emperor, Early Warwick, and Scimitar, at the same time to follow them in succession; the New Dwarf Marrow Peas may also be sown toward the end of

the month. Sow Longpod Beans, and plant a warm border with Ash-leaf Potatoes about the middle of the month. Some may be also planted in the open quarter. Sow Early Horn Carrot, Round Spinach, Turnips, Parsley, Radishes, Brown Cos and Cabbage Lettuce, and a little Onion on a warm border; get the ground well prepared in dry weather to receive the principal crops of Carrots, Onions and Parsnips, some of the latter may be sown the end of this month. Make new plantations of Mint, Chives, Tarragon, and all kinds of herbs; plant Garlic and Shallots, and prick out autumn sown Onions in rich soil; probably these may be injured by the severe frost, if so, some seed of the Tripoli should be sown at once on a slight hotbed to get them forwarded for planting in the open ground. In all probability, nearly all the Brassica tribe will be killed by the severity of this winter.

#### WHAT SMALL GARDENERS SHOULD DO IN FEBRUARY.

According to present appearances, we should say this would be whatever Master Jack Frost will allow; while fairs and fêtes are being held on the Serpentine, and women set fire to by way of amusement with fireworks; while hunters are reposing ignominiously in their stalls, and hounds baying the moon in their kennels, and the thermometer below zero, without apparently a prospect of a change, it seems rather a farce to give directions for out-of-door work; and yet it must be done, and we must live in hope that ere February opens we may have an opportunity of getting through what there is to be done; but at present to dig up Celery and Leeks with a pickaxe is the most lively operation in our calendar; as to flowers, they are indeed blushing unseen; Auriculas, Pansies, and Carnations covered up with mats and frigi domo, and to keep the thief out of the house is the great problem for solution. If it breaks up there will be plenty to do. *Auriculas* must be top-dressed, as advised last month, and the frames turned round to the south; at present compost, as well as everything else, is frozen hard, and this severe weather will teach the necessity of always having some under cover for all emergencies. We shall see what effect this severe frost will have on the blooms, as well as on the constitution of the plants. *Pansies*.—Those in pots should now be potted. Be careful not to *overpot*, and use about one-third loam, one-third leaf-mould, one-third well rotted manure, with the addition of some silver sand. Do not leave more than two stems, indeed some of the prettiest plants are those with a single stem. *Pinks*.—Be careful to fasten these in the ground, as they are apt to be loosened by the frost; it is probable there will be losses, too, which will have to be repaired. Carnations and Picotees will only require to be looked over, decaying leaves removed, and water given sparingly, if the weather is open. *Ranunculus*.—The ground ought to be in good condition, as frost has so thoroughly got into it. Let the bed be carefully dug over, all worms picked out, and then carefully raked. About the 12th of the month is a good time for planting; make drills one inch and a half in depth and five inches apart; fill the bottom of the drills with silver sand; any fine sand will do as well. Plant the tubers firmly in the drills about four or five inches apart, then cover in the drills, and rake all over

smoothly. One of the greatest annoyances in a *Ranunculus* bed is the throwing of the bulbs out of their proper position by the worms; therefore it cannot be too carefully handpicked. *Roses*.—Alas, alas! this cruel, nipping frost has made sad havoc. Here we have had nothing lower than  $13^{\circ}$ ; but in some places it has been even  $-6^{\circ}$  and  $8^{\circ}$ ; in the midland counties, especially, it has been very trying, and I hear that half the Hybrid Perpetuals in those regions are killed. Those who have moved their *Roses* late, will I fancy be best off, as the drier the stock the less likelihood of frost laying hold of them. Those who like top-dressing at this time of the year can do so when the weather changes. Nightsoil, mixed with drainings of the dunghill, is, Mr. Rivers assures us, very good; and unfortunatly, the grosser the food the sweeter the perfume. *Tulips*.—The bed, which should have been protected during the severe frost, will, as soon as the thaw begins, require to be uncovered and looked over, as the bulbs will soon begin to push their way up. *Greenhouse*.—*Cinerarias*, *Cyclamens*, Early *Tulips*, *Hyacinths*, and *Tropæolums* will now give to this a gay appearance. *Azaleas* will be pushing on their way. Give air in fine weather, and if fire-heat be needed take care that the edges of the *Cineraria* leaves are not burned up, a sprinkling of the floor, and syringing occasionally, when you can rely on keeping off frost, will be of much service. Give more room to growing things, if possible, and fumigate, to keep down greenfly. Those who have conveniences for striking will now think of increasing bedding plants, but those who have not had better wait another month, when a hotbed may be made for the purpose.

Deal, Jan. 17.

D.

#### PLANTS FOR EXHIBITION.

*Cinerarias*.—Little can be done with these other than the treatment given last month; but as they will now be very succulent, owing to being kept close through the severe frost, great care must be taken not to let them have any strong currents of cold air until they become firm, as it is likely to curl the leaves and disfigure them. Still continue to remove any superfluous woods and small leaves with suckers from such as are intended for show, keep them as thin and near the glass as possible; as strong established plants are now getting forward, remove them to the forcing house for early flowers. When well established, a little weak liquid manure is very beneficial, giving size and colour to the flowers. Look to seedlings, and select the gayest and best for stock. *Pelargoniums*.—Continue the course recommended last month, but increase the heat a little as the season advances; avail yourself of every favourable opportunity to give air, and that freely; close however early in the afternoon to retain a little of the sun heat which is so desirable. Plants which have been wintered in small pots should now be finally repotted; attend regularly to the tying and training of the shoots as they progress, and apply water freely when necessary. If you intend to have fine specimens, it is an indispensable condition that they have ample growing space, and therefore every thing like crowding plants should be studiously avoided.





3A

Licaste Skinneri

*Fine Variety.*

Plate 174.

## LYCASTE SKINNERI VAR.

[PLATE 174.]

WE this month furnish our readers with a faithful representation of a remarkably fine variety of this beautiful species of Orchidaceous plant, which, under good management, is justly considered one of the handsomest of the valuable tribe to which it belongs. Of *L. Skinneri* itself we have seen specimens flowered with a vigour and beauty that could not be exceeded even in their native haunts. On some of them the flowers have actually measured upwards of five inches across from the tips of the lateral sepals, while the latter were nearly an inch and a half wide in the broadest part. As regards the colours of the flowers, nothing could be more delicate or pretty, the sepals being white faintly tinged with crimson at the base; the petals of a more rosy hue, while the lip exhibited all the charming spottings and markings peculiar to this species.

The present excellent variety was sent, we are informed, along with several other distinct forms, from Guatemala, by G. U. Skinner, Esq., to Messrs. Veitch, Royal Exotic Nursery, King's Road, Chelsea, with whom it has bloomed in beautiful condition. The habit of the plant, like that of the species, is stately, and its growth free and vigorous. It has oblong-ovate compressed pseudo bulbs, from the base of which spring the flower scapes, each terminated by a single large showy flower, of a thick fleshy texture. The leaves, which are large and plaited, grow from the top of the pseudo bulbs. The flowers are remarkably beautiful, being of large size and attractive colouring; the sepals are of a delicate rose tinted with deep blush; the petals of a brilliant rosy crimson; and the lip white, producing a contrast at once rich and striking.

With respect to culture, the plants should be grown in well drained pots or shallow pans, in turfy peat, sphagnum, and broken charcoal; as, however, they do not root deeply, pans are perhaps preferable. The cool division of the Orchid house suits them best, *i.e.*, where the temperature is kept at, on an average, about 60°.

The soil used should be elevated above the level of the rim of the pot or pan, and the plants secured to it by means of pegs until they have become established. After having made their growth in the temperature just indicated, they should be rested in a cooler and drier place, or they will not flower so finely; with vigorous growth, however, such as the conditions named above will ensure, and that followed by a period of rest, flowers may be expected to be developed in abundance.

We have also seen varieties of Skinner's *Lycaste* grown with success in open baskets filled with Moss and leaf-mould ; and treated in this way they have a very pretty appearance.

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### ROYAL HORTICULTURAL SOCIETY'S NEW GARDEN.

THE new gardens at Kensington Gore have made greater progress than we expected to find, considering the severe weather we have experienced ; this, however, the indefatigable superintendent appears to have turned to account by proceeding with the substratum operations, so that most of the walks are bottomed, and the heavy earthwork is principally completed. There is yet, however, a vast amount of surface work to finish, as well as the masonry for the waterworks and the balustrading, steps, &c., not yet begun. Two of the large patterns in Box embroidery, as shown on the plan, are completed, and the ground levelled for the circular one which forms the centre of the design, as are also the two designs on the glacis of the slope flanking the canals, and which represent a union of the Rose, Thistle, Shamrock, and Leek. A great number of specimen Limes, Chesnuts, Poplars, and Deodars is already planted, including some large trees of the latter, removed from the Society's Garden at Chiswick ; these were planted in the autumn, and most successfully managed, if we may judge by the active condition of their buds, which are already in a forward state, and ready to cover the branches with verdure on the first gush of spring. It would be quite unfair to attempt a criticism on the gardens in their present state, we must therefore wait and see the plan fully completed before doing so. The arcades are now being pushed on vigorously, and will form a grand feature in the plan when finished. The conservatory, also, is being proceeded with rapidly, but the building department will require most unremitting attention, if all is to be completed by the 1st of June. Behind the arcades, and near what we presume will be the entrance from the Kensington road, the residence for the superintendent is now being built. We confess to a strong feeling of disappointment and mortification at the shed-like unmeaning character of what is to be the residence of the Society's principal officer, who will occupy a position of great trust and responsibility ; and for whom, out of the large funds the Society is expending in forming one of the grandest gardens in Europe, surely something more befitting his position, and more worthy of the place, could have been erected. The interior arrangements are altogether paltry and deficient ; and we cannot but express our surprise that the Council of the Society did not interfere, and insist upon something at least respectable being provided for their Superintendent, when the plans were under discussion.

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### THE BLUE LESCHENAULTIA.

ALTHOUGH this is one of the finest and most generally admired of greenhouse plants, and one which, when well managed, remains in

beauty longer than most of our greenhouse favourites, yet it rarely happens that we see it in anything like perfection. It is a first-class plant for decorative purposes, as well as one of the most effective for exhibition; and no plant with which I am acquainted better repays the trouble necessary to manage it properly. There are two varieties of it in cultivation, the best of which is known in the trade as *biloba major* (Hunt's variety); and I would advise persons commencing its culture to procure that kind in preference to the others, for its blooms are larger and produced more freely under similar treatment; both, however, are beautiful plants, well deserving a place in every collection.

In commencing the culture of this plant, procure nice young specimens from the nursery now ready for starting, for the earlier this month the plants are placed in growing circumstances the better chance there will be of getting them to make satisfactory progress during the season; and, in selecting young plants, choose such as have a clean healthy appearance, and are strong and stocky and not overpotted. As soon as the plants can be procured, they should be repotted and placed in an intermediate house where a temperature of from  $50^{\circ}$  to  $60^{\circ}$  is maintained, placing them near the glass and encouraging growth; giving air on the sheltered side of the house on every favourable opportunity, but avoid ventilating so as to cause dry cold currents. As they progress, attend to stopping the stronger shoots and tying out the branches as may be necessary to secure a compact regular growth. Plants which do well will be ready for a second shift by the end of June or early in July, and they should be afforded this as soon as they may be found to require it. If all goes well, the plants will have taken to their second shift by the middle of August, and will then be nice half specimens.

To prepare these to stand a damp and sunless winter must now be attended to. They should be gradually exposed to a free circulation of air, removing them to a cool dry house for a week, and then placing them out of doors for a fortnight or three weeks, which will ripen and harden the wood and render them much less liable to suffer from damp during the winter; while out of doors they must be laid on their sides if heavy rains occur, and be carefully watched, so as to guard against the soil getting saturated, and, if wet weather should set in, the plants had better be placed under glass, allowing them all the air possible. During winter they should be placed in a cool house where the temperature will not exceed  $40^{\circ}$ , keeping them near the glass and giving air whenever the weather will permit; but this should not be done so as to cause currents of cold air to rush through the plants. Except on very mild days air should be given on the sheltered side of the house only; drip, too, must not be allowed to fall on the plants. If, during damp weather, the foliage shows any tendency to fog off, a little fire-heat should be applied, giving air at the same time to dry the leaves.

Treat the plants the second season exactly as has just been recommended, taking care to stop any over luxuriant shoots, and to put them nicely into form before starting into growth in March. By the end of the second season they will be fair-sized specimens, and should be placed out of doors early in August; for, unless the young wood is ripened, there will be little chance of their blooming. - In my opinion,

it is better to have a moderate-sized plant covered with bloom than one twice as large with only a few straggling flowers on it.

The soil in which I have found this plant to do best in is good fibrous peat, nicely broken up, mixed liberally with silver sand. Care should be taken to have the ball in a properly moist state, and also the fresh soil in as nearly as possible the same condition as to moisture; the new soil should be regularly and rather (but not over) firmly pressed about the ball. Care should also be exercised to secure perfect drainage, and this should be done by nicely arranging a moderate quantity of thin crocks and covering them, so as to effectually prevent the fine soil from stopping up the drainage.

I have said nothing about watering, but the proper application of this is a very important point with respect to securing success in the culture of this plant. When in an active growing state, a liberal supply is required, but the soil must never be saturated; and, when the season's growth is completed, the plant should be very sparingly supplied with water; and, in winter, I find it good practice when the plants are dry to place them for an hour in a pan filled with water, so that the crocks may be covered. This feeds the active roots and moistens the bottom soil without saturating the mould towards the surface where the thick fleshy roots are, and which are liable to suffer from excess of moisture at any season, particularly in winter. I have also said nothing about shading during summer, but I suppose that now-a-days I need not say that it would be hopeless to expect vigorous growth from a plant exposed to the full influence of the sun's rays in a dry atmosphere deprived of the health-giving influence of night dews. I need hardly state, likewise, that if free rapid growth is expected shading must be applied as early in the season as the weather, &c., may render this advisable, and constant care must be exercised to maintain a moist atmosphere during dry weather. This should be done by sprinkling the passages and not by syringing the plants overhead, which ought only to be done during the summer months, and then only in the evening and when the weather is very bright and dry; and neither shading nor moisture should be used in excess unless large plants without bloom should be desirable.

WM. MAY.

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## REPORT ON ANNUALS GROWN FOR TRIAL AT CHISWICK, 1860.

BY MR. MOORE, *Secretary to the Floral Committee.*

### No. II.

*Leptosiphon hybridus* (Vilmorin).—This was a very interesting hybrid, the result, doubtless, of a cross between *L. luteus* and *L. androsaceus*, the peculiarities of these two species being evident amongst the varied progeny. The plants were dwarf and compact in habit, generally about 4 inches high, the flowers of several distinct colours, and for the most part larger than in *L. luteus*. Some were of a clear rosy-lilac colour, and very ornamental in character; others were more rosy,

some of a coppery red, some buff or chamois, and a few identical with *L. luteus* and *luteus aureus*. In its present state, this hybrid is too mixed and uncertain in character, but if some of the brighter-coloured of the forms can be perpetuated, they will become elegant additions to a very ornamental genus.

*Lobelia bicolor*. Syn: *L. gracilis* (Carter & Co.); *L. Erinus oculata* (Thompson); *L. Erinus oculata alba* (Carter & Co.); *L. Erinus maxima* (Carter & Co.); *L. Erinus* (Van Houtte); *L. Erinus compacta* (Carter & Co.); *L. Erinus grandiflora* (Carter & Co.); *L. Erinus ramosoides* (Carter & Co.); *L. erinoides* (Van Houtte); *L. campanulata* (Veitch); *L. arguta*.—This is the pale blue *Lobelia* so extensively cultivated under the name of *L. gracilis*; to which species, however, it has very slight resemblance. The plants were of diffuse habit, with angular, prostrate, smoothish or hairy stems; the lower leaves obovate, sinuately-toothed; the upper ones lanceolate, becoming more and more entire upwards; the flowers pale or grayish-blue, with a white blotch at the base of the lower lip, this white blotch varying in size, and more or less spotted with black. This sort was distinguishable from the rest by its diffuse habit and pale-coloured flowers, and is of no importance in decorative gardening.

*Lobelia bicolor albida*. Syn: *L. erinoides alba* (Van Houtte).—This variety had the habit of *L. bicolor*, the flowers having a pale blue tube, and a white or grayish-white limb.

*Lobelia bicolor lilacina*. Syn: *L. gracilis alba* (Van Houtte); *L. erinoides rosea* (Van Houtte); *L. erinus lilacinus* (Van Houtte).—This had the habit of *L. bicolor*, and the flowers had a pale lilac tube, and a blush-white limb.

*Lobelia bicolor rosea*. Syn: *L. gracilis rosea*.—(Thompson and Van Houtte); *L. Erinus Lindleyana* (Thompson); *L. Lindleyana* (Van Houtte).—This had the habit of *L. bicolor*, being diffusely branched and prostrate, but the flowers were of a rosy-lilac colour. Some plants, producing deeper-coloured flowers than usual, were handsome objects; and these forms were considered to be useful as rosy-flowered dwarf plants, adapted either for beds or pot culture.

*Lobelia Erinus?* Syn: *L. densa multiflora* (Veitch).—The plant received from Mr. Veitch, under the name of *L. densa multiflora*, resembled very closely in habit the old *Lobelia Erinus*, the genuine form of which has probably long disappeared from gardens, having been modified by seeding and admixture with other sorts. That now described formed a small compact tuft of slender hairy stems; the leaves hairy, oblong, obscurely toothed, the very lowermost small and obovate; the flowers small, deep blue, with acutish segments and a conspicuous white eye. It was of little value as a decorative plant.

*Lobelia Erinus compacta*. Syn: *L. gracilis erecta* (Thompson); *L. gracilis compacta* (Carter & Co.)—This was a dwarf, slender, and very compact, dense-growing form, with crowded stems forming a cushion-like tuft; the lower leaves were obovate, and, as well as the upper ones, obscurely toothed; the flowers pale blue. This form appeared to be useful for small pots, and for edgings to very small beds.

*Lobelia Erinus speciosa* (Carter & Co.) Syn: *Lobelia speciosa*

(Turner); *Crystal Palace Lobelia* (of Gardens).—This was decidedly the best for flower-garden purposes of the dwarf *Lobelias* here collected, the habit being neat and compact, and the flowers large and deep blue; but being raised from seed, it presented a slight amount of variation. Like other plants employed for special purposes, however, the best forms of these *Lobelias*, when required for artistic gardening, should be perpetuated by means of cuttings, so as to secure thorough uniformity of character. The best of those grown on this occasion was that known as the *Crystal Palace Lobelia*, the plants of which, having been raised from seeds, showed some diversity of habit. This form had the deepest blue flowers, with a smaller white spot or eye; the upper part of the stems had a dark brownish tinge, and the plants formed compact open-branched tufts, with the lower leaves oblong-obovate, deeply and irregularly toothed, and the upper ones fewer, lanceolate, toothed. The others, contributed under the name of *speciosa* (seeds), quite agreed with the foregoing in habit, but differed in having the tips of the branches green instead of brownish, and the flowers of a rather lighter shade of deep blue; the stems were hairy, the lower leaves obovate, dentate, the upper ones lanceolate, less toothed, and the flowers marked with a white spot or eye at the base of the lower lip, this spot being sometimes large and rather conspicuous.

*Lobelia ramosa* (Veitch). Syn: *L. formosa* (Carter & Co.)—A very handsome species, better adapted for pot-culture for the decoration of the greenhouse and conservatory than for the open air. It was of erect, openly-branched habit, with the lower leaves pinnatisected, and the upper ones linear-lanceolate; the flowers were bright deep blue, larger than in any of the foregoing species, and remarkable for the dimidiate or halved appearance of the lateral lobes of the lower lip, as well as for its large size as compared with the minute divisions of the upper lip. It is very nearly related to the true *L. gracilis* of botanists.

*Lobelia triquetra* (Thompson).—A slender erect thinly-branched plant, with narrow lanceolate toothed leaves, and small pale blue unattractive flowers.

*Lupinus Dunnettii superbus* (Veitch).—A very showy and effective plant, with the habit of *L. hybridus insignis*, but having light-coloured stems, and nearly smooth branches. The flowers in the young state were white, becoming lilac with age, the standard deep purple. The plant was dwarfish in habit, and produced its parti-coloured flower-spikes very freely.

*Lupinus Hartwegii albus* (Veitch).—A very good form of *Lupin* with hairy branches, producing long and abundant racemes of large white flowers. This variety, together with the original blue form of the species, and the var. *cœlestinus*, are handsome border plants.

*Lupinus Hartwegii cœlestinus* (Veitch).—In this variety, which was a very pretty one, the flowers were of a very pale or grayish-blue.

*Lupinus hybridus insignis* (Veitch).—A plant of dwarfish habit, having dark-coloured stems, and smooth branches, producing a fine central spike of bloom. The flowers were deep purplish-lilac.

*Lupinus Menziesii*. Syn: *L. sulphureus* (Vilmorin).—A plant of dwarf tree-like habit, producing, at about a foot from the ground, a

whorl of spreading branches; these bore pedunculated spikes of handsome pale-yellow flowers. It proved to be a good border species.

*Lupinus mutabilis variicolor* (Carter & Co.)—A sportive form of *L. mutabilis*, various in colour. The plants were of tall branching habit, with smooth branches; the flowers in short racemes, of different shades of blue with a darker standard, or white with a purplish-lilac standard. A suitable and ornamental plant for shrubbery borders.

*Lupinus nanus lilacinus* (Van Houtte).—A variety of this dwarf species, with pale or grayish flowers, dingy in appearance, and far less effective than the ordinary blue form, which is a very elegant dwarf, spreading, diffusely-branched plant, with longish racemes of clear blue flowers, the standard of which is marked throughout the centre with white.

*Lupinus subcarnosus*. Syn: *L. subramosus* (Van Houtte).—A fine dwarf, spreading, compactly-branched species, with light green foliage, producing numerous short racemes of deep-blue flowers marked on the standard with a conspicuous white spot. It was a showy, high-coloured species, but did not produce its flowers so freely as usual during the present season.

*Lupinus tricolor elegans* (Veitch).—An ornamental variety, of branched and spreading habit, the stems finely downy,  $2\frac{1}{2}$  feet high, bearing abundantly racemes of moderate size; the flowers white, with the standard deep lilac changing to puce-purple. The flowers were very effective, the colours being finely contrasted.

*Lychnis Haageana* { Benary } The plants of this handsome  
 { Carter & Co. } hybrid *Lychnis* did not  
 succeed very well in the open ground, owing to accidental adverse conditions of soil. They were about a foot high, and unbranched, bearing a few flowers opening in succession on the upper part of the stems. The flowers were various in colour, including vivid scarlet, light orange-scarlet, light and dark crimson, dull reddish-crimson, and white; and their petals had a conspicuous single tooth at the side. In pots of good soil, the plants were taller, and more branched; and those with bright scarlet flowers were very handsome. The stems were sometimes dark-coloured, sometimes pale green, according as the plants produced lighter or darker coloured flowers, and they were clothed with reversed hairs; the leaves were oblong-ovate, acute, downy and ciliated; the calyces clothed with long cobwebby hairs, and the flowers varying from 2 inches to  $2\frac{1}{2}$  inches in diameter.

*Malcomia maritima alba*. Syn: *Cheiranthus maritimus* (Van Houtte).—An early-blooming, white-flowered Virginian Stock.

*Nemophila discoidalis marmorata* (Vilmorin).—A poor looking annual, with small dark mottled flowers.

*Nycterinia selaginoides* (Veitch).—This plant formed dwarf compact tufts, furnished with small narrow or oblong spatulate leaves, which were toothed towards the blunt apex, and clothed like the stem with soft hairs. The flowers grew in flattish terminal corymbs, elongating with age, and were pretty, star-shaped, white or lilac, with a bright orange centre. The calyx was adnate for half its length with the mid-rib of the leaf or bract in whose axil the flower was placed; the corolla

consisted of a very slender tube,  $\frac{5}{4}$  of an inch long, and a spreading five-lobed limb, the lobes obovate, and deeply two-parted with divergent divisions. The spaces between the bases of the lobes, and between the notches, when seen against the dark background of the leaves, appeared to give a third colour to the flowers. It is a pretty dwarf plant for rockwork, and has succeeded well during the present moist cool season. The plants, however, sometimes die off unequally.

*Enothera bistorta Veitchiana* (Veitch).—A showy yellow-flowered annual, dwarfish, but irregular in growth, the stems decumbent, rising at the points to a foot or more in height; the leaves lanceolate, attenuate at the point, wavy-margined; the flowers solitary from the leaf axils, abundant, about 1 inch in diameter, four-petaled, forming a compact circular corolla of a bright yellow, with a small crimson spot at the base of each petal. The flowers were apparently stalked, the stalk-like part being in reality the slender ovary an inch or more in length, which becomes a twisted capsule. The flowers were individually bright coloured and attractive, but the plant had rather a straggling appearance, and in the present season the demerit of dying off early and irregularly.

*Enothera Drummondii nana* (Vilmorin; Truffaut; Carter & Co.).—The plants raised from seed sent under this name were diffuse-growing showy annuals, forming a mass of branches over a foot in height, the taller ones rising to a foot and a half; the lower leaves were downy, sinuately or somewhat lyrate pinnatifid, the upper ones very slightly toothed. The flowers were large, pale yellow, and showy. It was considered as a good bold-flowered dwarfish plant for the front parts of shrubbery borders.

*Enothera salicifolia*. Syn: *E. biennis hirsutissima* (Carter & Co.); *E. versicolor* (Of some).—A tall-growing plant with the habit of *E. biennis*. The leaves were long lanceolate, wavy, strongly-nerved; the flowers small, dull reddish, or copper-coloured, having a faded appearance. It was of weedy unattractive character, the plants being coarse, and the flowers dingy.

*Papaver somniferum monstrosum* (Van Houtte).—A curious rather than ornamental plant, of tall growth, like the common Opium Poppy, and with similar large dull purplish black-spotted flowers. The flower-heads were remarkable for producing a number of small ovaries around the base of the principal one, after the manner of the Hen and Chickens Daisy.

*Phacelia tanacetifolia alba* (Vilmorin).—This had the habit of the well-known species itself, and bore dull grayish-white flowers. It was of weedy character.

*Portulaca*.—Several varieties of this genus were grown, but all proved inferior to the old *P. Thellusonii* and *P. splendens*, which were the only ones having rich and decided colours in their flowers.

*Pyrethrum Parthenium eximium*. Syn: *Matricaria eximia* (Turner).—A fine late-flowering double quilled white Feverfew, of free compact habit, growing  $1\frac{1}{2}$  to 2 feet high, and forming a handsome border plant. The centre of the flower-heads was closely filled with tubular or quilled florets, and the flower-heads were very numerous, pure white, forming an attractive mass.

*Ricinus*.—Of these fine-foliaged plants several kinds were planted out, but the unpropitious season did not enable them to come to perfection.

*Schizanthus chilensis* (Veitch).—This species grew 2 feet or more in height, and was more erect in habit than the better known *S. pinnatus*. The flowers were also smaller than in that species, narrow, deep lilac with a smaller white blotch on the central upper segments, where they were dotted with black. It was an inferior sort.

*Schizanthus grandiflorus oculatus* (Van Houtte).—A very handsome form of *S. pinnatus*, growing about 1½ foot high, branching, the stems clothed with glandular hairs; the leaves pinnate, with pinnatifid segments. The flowers were bright rosy lilac, the upper lip divided into five obtuse bipartite lobes, whitish, heavily tipped with rose, and having a large black central spot; the lower lip rosy. The bold conspicuous eye rendered this a very showy plant of its kind. In some of the plants, the flowers were dotted with black instead of having the bolder blotch which rendered the best form so attractive.

*Spraguea umbellata* (Veitch).—A dwarf succulent-looking herb, with a rosulate tuft of spatulate leaves, and numerous scapes supporting the umbellate heads of rosy-coloured flowers, which issued from among crowded whitish or scarious bracts, and were arranged in short recurved scorpioid spikes three or four together at the ends of the branches of the primary umbel. It was considered a neat and pretty plant, of very distinct aspect, adapted for rockwork.

*Tagetes patula aurantiaca* (Carter & Co.)—The true plants of this Marigold were very gay, somewhat intermediate in character between the French and African races; the flower-heads were clear light orange colour, and 2½ inches in diameter. Though marked Dwarf French Orange Marigold, it could hardly be classed as a dwarf.

*Tagetes patula nanissima* (Carter & Co.). Syn: *New Miniature French Marigold* (Veitch).—This was the very dwarf early-flowering French Marigold, a neat variety for the margins of flower-borders, and mostly producing dark orange-brown flowers.

*Tropæolum majus, Tom Thumb* (Carter & Co.)—A fine compact-growing bright orange-scarlet-flowered Nasturtium, well adapted for beds and borders. It proved also very handsome as a pot plant.

*Tropæolum majus, Yellow Tom Thumb* (Carter & Co.)—The same habit as in Tom Thumb, but the flowers of a clear yellow. This also was very showy as a pot plant. These two varieties were exceedingly gay, and decidedly the best of the kinds belonging to the common Nasturtium series.

*Veronica syriaca* (Thompson).—This was an early-flowering plant, out of bloom by the end of June. It formed a neat dwarf early annual, of compact habit, pretty when seen in masses or lines. The plants were 3—4 inches high, and had roundish ovate-toothed leaves, and abundant small starry flowers, about half the flower being blue and half white.

*Viscaria cœli rosa nana* (Carter & Co.)—A dwarf-habited variety, growing 12—15 inches high, and uniform in habit. It did not prove sufficiently enduring, being soon out of flower. The flowers were rose-

coloured with a paler centre, as in the taller form, the petals narrowish and bi-lobed, and the corona  $\frac{1}{4}$  of an inch long, deeply two-lobed, with narrow almost subulate lobes—in all these particulars agreeing with the taller common form.

*Viscaria cœli rosa alba*. Syn: *Agrostemma cœli rosa alba* (Thompson); *Agrostemma*, *New White* (Turner).—A variety of diffusely-branched habit. The flowers were white with deeply two-lobed petals, having an interval between them. The plants were too diffuse in habit, and the flowers too narrow petaled to be effective.

*Viscaria oculata*, var. *splendida*. Syn: *Agrostemma cœli rosa* (Vilmorin).—This was by some error sent from Paris under the name of *cœli rosa*. It proved to be a large-flowered and highly-coloured variety of *oculata*, the flowers being of a very rich rose colour, remarkable for its brilliancy in some of the selected plants. In this species the petals are broadly obovate-emarginate or even obcordate, often over-lapping, and the corona is very short, one-eighth of an inch long, and obtusely bifid.

*Viscaria oculata nana* (Carter & Co.).—This was pronounced a first-class annual, being dwarf and compact in habit, and uniform in character. The plants were about 15 inches high (growing up to 18 inches later in the season), erect, and compactly branched. The flowers were of the lively rose colour with rich deep crimson eye, proper to the species, and had also the same broad obovate petals, forming a full circular flower.

*Viscaria oculata Dunnettii* (Parker & Co). Syn: *V. Dunnettii* (Vilmorin; Truffaut).—A pale blush-coloured variety of *V. oculata*, too indistinct in colour to be an effective plant for decorative purposes, but forming a pretty variety in a border of annual flowers.

*Viscaria oculata Burridgii* (Parker & Co.).—A large-flowered variety, with the flowers of a very pale slate colour or pale bluish lilac, almost white. Like the last, the colour is not distinctive enough to be effective for masses, but the plants form very desirable and rather attractive annuals for mixed borders.—*Royal Horticultural Society's Proceedings*.

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### PHILIBERTIA GRACILIS.

THE delicious fragrance of this plant must always render it an agreeable addition to any collection. Its beauty, however, is not of the most conspicuous kind, and unless the plants when in flower occupy a position which will enable the observer to see the interior of the blossoms with their singular markings, the appearance of the finest grown specimens will be anything but attractive or pleasing. The plant is a most profuse bloomer, producing from the axils of every leaf on the bearing wood a cluster of about five flowers, which are suspended by feeble peduncles, and invariably assume a drooping position. In the culture of pot specimens, this natural defect is easily obviated by training to a flat trellis placed in the pot, so as to stand at an angle of some 30° from the point of observation. Like most plants which are profuse bloomers, this is rather a shy grower, and every encourage-

ment should be afforded young plants early in the season, otherwise it will be difficult to induce vigorous growth, or to obtain good-sized flowering specimens.

Propagation is readily effected by cuttings, provided they are selected at the proper season, viz., when the plants are making free growth, but if deferred until flowers begin to be produced, suitable bits for this purpose will hardly be obtained, and they should be put in as early in the season as possible, so as to get the plants some size and well established previous to winter. Short jointed shoots, when about half ripe, if planted in sandy peaty soil, covered with a bell glass, and afforded a bottom heat of from  $70^{\circ}$  to  $80^{\circ}$ , will be found to root freely, but the glasses must be wiped as frequently as is necessary to prevent injury from damp, to which the cuttings are liable, particularly if rather soft. Pot off into 4-inch pots as soon as they are sufficiently rooted to allow of their being handled. Place them in a close moist warm situation, and if they can be afforded a gentle bottom heat it will be all the better, until the plants are well established. The most careful attention during the summer, in addition to early propagation, will be necessary to get them sufficiently large to be useful the second season as flowering specimens. The best situation for them during summer will be a rather warm close pit, where they will be screened from the midday sun, and where a moist atmosphere is maintained. Attend to shifting, so as to afford plenty of pot room, but take care that the pots are tolerably full of roots by the end of the growing season; and as the plant is rather a weakly grower, large shifts should be avoided. The leading shoot should be stopped occasionally, in order to secure compact bushy plants, and the support of a stake will be necessary from the time when the plants are potted singly. About the end of September they should be removed to a situation near the glass in a rather warm, dry atmosphere, and be but sparingly supplied with water at the root; this will check growth and ripen the wood previous to the dull sunless days of winter, and unless the shoots of this plant are in a firm state, then they will be very likely to damp off, especially in the hands of amateurs. A temperature of from  $50^{\circ}$  to  $60^{\circ}$ , with a situation near the glass, and a sparing supply of water to the soil, is the safest treatment during the winter months. I have wintered the plant successfully in a temperature of from  $45^{\circ}$  to  $55^{\circ}$ , but I would not advise beginners to risk their stock of this plant in so low a heat, at least until they have had a year's acquaintance of it.

Early in February, or as soon after as circumstances will admit, remove the plants to a brisk, moist, growing temperature, and a gentle bottom heat of  $75^{\circ}$  or  $80^{\circ}$  will greatly assist in promoting active growth. It will be advisable to examine the state of the roots at once, and if the drainage is defective, or the soil sour or uncongenial, remedy the evil by reducing the ball so as to clear away the bad soil; but except in the case of plants, the roots of which are abundant and healthy, re-potting will be better deferred for a fortnight, or until the plants start into growth. A rather small shift may be given as soon as more pot room is required, and the shoots trained to two or three stakes, and stopped occasionally; and when the plants are well rooted after the

first move they should be shifted into their flowering pots, 10-inch ones being sufficiently large for this season. The trellis should be applied at once, and the shoots neatly tied to it, taking care to cover the lower part of the trellis first. As the sun becomes powerful in spring, a slight shade during the forenoons of bright days will be of advantage to the plants, and they should be syringed night and morning, and every means used to encourage active growth, so as to obtain specimens of considerable size early in the season, for when once flowers begin to appear it will be nearly impossible to obtain rapid growth. The best situation for the plants, after they commence flowering, will be a rather shady position in a house, where the temperature may range from 60° to 80°, and if properly supplied with water and kept clear of insects (this plant not being particularly liable to any), they will continue growing and blossoming for two or three months. After flowering the specimens should be wintered as directed for last season, and in spring they may be turned out of their pots, the balls reduced if the soil is found to be unhealthy, and repotted in smaller pots, and treated much as they were last season. It will of course be necessary to cut back and prune the plants, but the winter will probably do the great portion of this work; the stronger shoots should be shortened, so as to secure a supply of young wood at the bottom of the trellis, and the weaker pieces should be altogether cut out; carefully managed, the plants will make good sized specimens in 12-inch pots, but it will be unsafe to depend upon them after this season, and a stock of young plants should therefore be kept up.

Rich light sandy turfy loam and good turfy peat, in the proportion of three parts of the latter to one of the former, with a liberal quantity of sharp silver sand, which should be regulated according to the nature of the loam and peat, and a slight admixture of broken potsherds, or lumpy bits of charcoal, will form an excellent compost for this plant. Care should be observed in potting to secure perfect drainage, by using plenty of potsherds; and when used, the soil ought to be in a proper state, as respects moisture.

CHEADLE.

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### BOUQUET FERNS.

THE following is a list of twenty Ferns for growing in pots and suitable for cutting for bouquets. They are easily grown, and will succeed even in a pit heated by a common brick flue. They should however be kept from sun during summer; and if grown in a pit heated by a common brick flue they will require more moisture at the roots than if cultivated in a more suitable Fernery, as the heat from the flue will dry them a good deal. Ferns should never be allowed to get dry at the root; if so, they will most likely die or lose all their young fronds, which would disfigure them for some time.

The soil that I find most suitable for Ferns is turf, loam, peat, and leaf-mould, in equal parts, mixed with a portion of silver sand, all chopped well together. The more vigorous growing kinds require the soil to be a little rough, but the more delicate kinds like it finer, and with

more sand intermixed with it; this induces them to root more freely. In potting give good drainage, mixing some small pieces of potsherds with the soil; place some broken crocks in the bottoms of the pots, then a layer of rough peat or moss; for it is of great importance to their successful growth to keep the soil open and porous and the drainage active. Let the plant be set level with the rim of the pot, fill up with the soil, press firmly round the roots, and give a good watering with a rosed water-pot, to settle the soil.

Ferns require a good supply of water at their roots during the summer season, but in winter they should have but little—only just enough to keep the soil moist; and, as I have said before, they should never on any account be allowed to get dry. A pit or small greenhouse will suit the following perfectly:—

*Adiantum capillus veneris*, a desirable species for small bouquets; grows about 8 inches high. This is a British species, but to grow it in perfection it requires to be kept under glass.

*Adiantum cuneatum*. This is one of the prettiest of the *Adiantums*; it grows a foot high, and is one of the best for bouquets. It has a beautiful drooping habit, and light green foliage, which makes it very attractive among flowers.

*Adiantum formosum*.—This fine Fern grows about 2 feet high, and is very useful for bouquets.

*Adiantum assimile*.—A very pretty species, which grows about 12 inches high, and is a good kind for small bouquets.

*Adiantum setulosum*.—A small growing Fern, suitable for growing in a basket or pot.

*Adiantum pedatum*.—A graceful kind, and hardy, but all the better for being grown under glass. It is some 12 inches high, sometimes more, when the plant is growing strongly.

*Acrophorus chærophyllus*, an elegant deciduous Fern, which grows 10 inches high.

*Acrophorus immersus*.—A pretty Fern, which grows about 12 inches high.

*Asplenium Adiantum acutum*.—An elegant variety, and hardy. It is a native of Ireland, but does best under glass.

*Cheilanthes alabamensis*.—A very pretty dwarf species, growing about 8 inches high. This is a good variety for small bouquets; it should be placed at the warmest end of the pit, and great care should be taken that no water is allowed to get on the fronds, as on this depends, in a great measure, the successful growth of all the *Cheilanthes*; if allowed to get wet, they turn brown and sometimes die.

*Cheilanthes elegans*, a handsome small Fern, growing a foot or more high. This ought to be in every collection, as it is one of the most beautiful of all; it requires the same treatment as *alabamensis*.

*Lastrea glabella*.—A very pretty distinct species, growing 10 inches high; a useful kind for bouquets, and one which lasts a long time in water.

*Lastrea pubescens*.—A very distinct Fern, growing about 10 inches high.

*Lastrea canariensis*.—A particularly useful kind for bouquets.

*Nothochlæna Eckloniana*.—A charming little Fern, very suitable for small bouquets. These, like the *Cheilanthes*, do not like water on the fronds.

*Nothochlæna maranta*.—A pretty variety, 10 inches or so in height.

*Onychium auritum*.—An elegant Fern, 12 inches or more high; very useful for bouquets.

*Onychium lucidum*, a useful hardy Fern, which grows 12 inches high.

*Pteris scaberula*.—One of the most elegant of all small Ferns, growing about 10 inches high.

*Pteris serrulata*.—A common Fern, very useful for bouquets; it grows 10 inches in height.

B. S. WILLIAMS.

*Paradise Nursery, Hornsey.*

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### THE CHIRONIA.

SOME of the species of this genus, as *grandiflora*, *glutinosa*, and *decussata*, form excellent subjects for the decoration of the greenhouse during the summer and autumn months, when the greater number of such structures are not overfilled with handsome plants. All the sorts are easily induced to form compact, large-sized specimens; and when well managed, they become literally covered with bright-coloured flowers, which keep gay for months together.

Young plants will be found to form the finest specimens, and therefore a good stock of them should be kept up by annual propagation. For cuttings, select strong, short-jointed, rather firm bits of young wood, as early in the season as they can be obtained. Plant in light, sandy soil, under the protection of a bell-glass, and plunge the pot in a mild bottom heat. As soon as the cuttings make a little growth, they will be sufficiently rooted to bear potting singly in 4-inch pots. After potting, place them in a rather warm, moist situation, till they have become established in their pots. After this, the best situation during the remainder of the growing season will be a pit which can be kept sufficiently close and moist to promote rapid growth, and where light and air can be afforded to prevent the production of weakly shoots. Shift into larger pots as may be necessary, and keep the plants regularly pinched back, and pegged down, or tied out, so as to secure a compact bushy habit; and maintain a moist atmosphere till about the middle of September, when they should be prepared for winter by full exposure to sunshine, and a free circulation of air on every favourable occasion. When the weather becomes cold and damp remove the young specimens to an airy situation near the glass in the greenhouse. Give no more water to the soil during winter than may be required to maintain it in a healthy condition, and admit air freely during mild days, but avoid cold drying currents. By propagating early, keeping the plants growing as rapidly as possible till late in autumn, and starting them into growth early the following spring, they will form nice moderate sized specimens for flowering late in summer and autumn;

but if very large examples are wanted, it will be expedient to grow plants a second season before allowing them to flower, and in this case it will not be necessary to start them into growth so early in spring as when they are intended to form flowering specimens the same season. With good management from the first, and an early start, nice plants in 10-inch pots may be obtained in time for flowering the second season. To effect this, place them in a light airy situation, close to the glass, early in February, or as soon after as circumstances will admit of a moist temperature of about 50° or 55° being maintained. When growth commences give a liberal shift, and, as I have already stated, attend to the formation of well-shaped specimens by stopping and training the shoots, as may be required. Water must be carefully administered for some time after potting, but when the roots strike into the fresh soil, and the plants commence to push vigorously, a liberal supply will be necessary, and clear manure water from the stable or farm-yard tank, diluted with an equal quantity of clean water, may be given frequently. Stopping should not be practised after the middle of May, or the plants will be late in flowering, as blossoms are not freely produced till the wood becomes rather firm. And when the shoots produced, after the final stopping, are from 4 to 6 inches long, the plants should be removed to the warm end of the greenhouse, or to a cold frame, and gradually accustomed to a free circulation of air, full exposure to sunshine, and a rather dry atmosphere, which will check growth and hasten the production of flowers. While in blossom give a liberal supply of water to the soil, and avoid exposing the plants to cold drying currents of air. When the beauty of the specimens is over for the season, they may be rather closely pruned and removed to a light airy part of the greenhouse for the winter; and if repotted in the spring, and treated the following season as just directed for last, they will form very large specimens, and this in time to be in full beauty in June or early in July. But after flowering this time it is hardly advisable to retain the plants in hope of their being further useful, for they seldom prove of much further value, and unless watered with great care during the autumn and winter they become a certain source of disappointment. This, however, need be the cause of no regret, inasmuch as young plants are easily propagated, requiring but little care; and as these form nice useful sized specimens, the plants that have flowered in large pots may be thrown to the rubbish heap as soon as their beauty is over.

A rich light porous soil is essential for the successful culture of the *Chironia*. I use rich turfy peat and turfy sandy loam in about equal proportions, with a liberal mixture of silver sand; and for plants to be thrown away after flowering, I add a sprinkling of thoroughly decomposed cow-dung. For young plants a quantity of broken potsherds, broken bones, or charcoal, is useful in securing perfect drainage. Let the soils be well broken up and intimately mixed before use, and see that they are in a proper state as regards moisture.

J. S.

## VARIEGATION IN PELARGONIUMS.

THERE are few subjects more deserving of notice than this, and perhaps few are less thought of by the generality of gardeners. Various physiologists have, from time to time, done much towards solving the mystery; still the cause lies in comparative obscurity. That there are fixed laws, which govern the cause as well as the effect, no one can doubt, and a thorough acquaintance with these must be acquired before we can satisfactorily investigate the matter. It is poor logic to say that the effect is produced without a cause; there is no such thing in nature as chance; on the contrary, order and perfection are everywhere observable. Some may inquire when a change which results in variegation takes place. I say, at the moment the cellular tissue is generated, which afterwards furnishes a seed or bud. Although at this early stage no perceptible alteration is discernible, still a chemical change must have taken place. I can see no difference in the arrangement of the tissue in a full-grown leaf, whether the parts be white or green, and there may be none, except the presence or absence of green matter. If the tissue in the buds of *Pelargonium Annie* (*variegated*), and *Compactum Superb* (*Green Horseshoe*), the former a sport from the latter, be examined, no difference will be observed between the two, as regards colour, until light begins to play its important part: still, this does not alter my opinion as to when the change takes place. It is probable that all the cells generated at that juncture were, to a certain degree, deprived of the power to become green, and that the green patch in the middle of a leaf is an effort of nature to regain a lost position. As to the primary cause, I consider it to be water absorbed by the roots while in a state of decomposition. A plant such as a *Pelargonium* will live for a time without the aid of rootlets; indeed, when they perish no callus is formed between the dead and living portions. The same result follows, in some cases, when dead or decaying branches are allowed to remain on a plant; in the first case, the putrid matter may be carried upwards, and in the second, downwards: be that as it may, matter in a state of decomposition assuredly does enter. If the power to form green material in a seed were partially destroyed, the future plant would doubtless become variegated, but if wholly destroyed, no germination could take place; yet we often see white shoots start from a healthy-looking plant, growing as vigorously as any of the others, but deprive them of the aid of the green portion, and they would soon die. I have never been able to get a variegated plant from seed, although I believe *Flower of the Day* was so obtained; nor do I see that any practical means can be employed whereby dependence may be placed in seeds to furnish variegated results; the case is, however, otherwise with buds.

Having found that in good soil variegated plants indicated a tendency to become green, and that, in wet mould badly drained, green sorts had a tendency to throw up white shoots, I was led to try a few experiments. The first was in 1857. A plant of *Cerise Unique*, which had been very unmercifully cut for cuttings, was selected for the purpose. It was pretty well furnished for snags—in fact, a good specimen of bad

cultivation. It was planted out in June, deep enough to hide all defects. As autumn drew on my doubts began to rise, for not a vestige of white could be seen about it. I therefore took it up, potted it, and cut the head off it. In a few weeks afterwards I was encouraged on seeing by five or six buds that had started that some were green, some white, and one beautifully variegated; this I preserved and propagated. Next year two or three plants of the same (C. Unique), which had been bedded out, were taken up and potted after the frost had killed their tops. Keeping bad treatment still in view, I would have nothing cut off them, and here again I got a sport similar to one which I obtained the previous year. I next took Tom Thumb in hand, and from it I was surprised to get Brilliant. I tried it again, and now I have got what I think is identical with Silver King! I believe, therefore, that all the so-called scarlet Pelargoniums may be changed in this manner. Whether this alteration in appearance be a disease or not there is one very remarkable fact connected with it worthy of Mr. Darwin's notice; that is, I have never got a green sport from a variegated plant like the green parent of the variegated variety. From Annie the sport is like old Compactum; from Brilliant it has an upright habit and becomes red with cold; and the variegated plant I raised myself, alluded to above, resembles Cerise Unique in nothing but the flower.

20th Feb.

AN OLD SHOWMAN.

### THE CLOTH OF GOLD AND THE BRITISH QUEEN STRAWBERRY.

THIS is a curious combination; but there is something still more curious, viz., I never remember seeing a good Cloth of Gold on a south wall, or a successful bed of British Queens under a south wall. I believe the grand key, however, to both of them to be suitability of soil, viz., strongish land, but friable enough for good Barley and Turnips, with gravelly subsoil. All the good Cloths of Gold that I know are in such soil and are all east aspect, or open to all four winds. I tried to grow the Queen under my south wall, but she was worse there than in the centre of the garden. 100 feet above the top of my chimneys, in strongish land, and blown upon by all four winds, she is healthy and strong, and has been these three years. I cannot grow her in my home garden—west aspect. I have tried her under a south wall, a north wall, and in the centre—fully open to the bluff of the west winds, north-west, and south-west; there she was best. I have her now in stronger soil in a garden open to north and east, and there she is as green and strong as Trollope's Victoria. I sent her first runners this year to France to my friend Mr. Gloede, and he has sent for her second runners now on her strings. The first sent were beautiful, and these are better; both were self-pegged. I can only account for this, and what I have said about the Cloth of Gold, by "radiation," which is so destructive of vegetables, fruits, and flowers. It is radiation that makes it so necessary to protect things on or under a south wall.

I have lost no Roses under my north wall, but I have lost four or five under my south wall. It is the worst place to winter tender Roses, such as Teas; and for this further reason, that while the heavy rains are driven by the south-west wind over the north wall, and so miss the plants, they are driven into the plants under the south wall. A south wall is the most insidious wall in every garden. The sun comes out sometimes in winter and often powerfully in March, dew falls in the forepart of the night, hoar frost comes on at the turn of the night, and from radiation or transition from heat to cold, plants or trees, easily excited, suffer much unless they are of robust constitution. I believe that these are the two reasons why I have never seen the Cloth of Gold good, or good for any length of time, or the British Queen good at any time, under a south wall; while I have seen them both flourish in places where the aspect is severe. If any of your readers should have experienced different results, they would much oblige me by stating them in the *Florist*.

As regards the British Queen, I am certain that burying her crowns or muffling them up in winter is destructive of her welfare. The robust Queens in my other garden were two-years old plants half dead with the winter of 1859. I simply opened a hole, trod her in tight, and ordered my groom to put a little fresh cow manure round her roots; they will be in the same place all next summer, where they may be seen. My home Queens are canary birds: did the cow-dung make the difference?

W. F. RADCLYFFE.

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#### MANETTI ROSE STOCK VERSUS DOG ROSE.

ADVERTING to an article in one of your former numbers, "Rosa spinosa," the writer of it puts me very much in mind of the man in Æsop's fables, who blew hot and cold in the same breath. Had he simply given your readers a description of the soil in which the Manetti flourishes best, and instanced the success which Mr. Francis has had in growing it in poor soil, it would have been all very well; and I for one should have been glad to hear that that gentleman had succeeded in making a beautiful Rose garden out of a piece of barren land. But he then goes on to endeavour to make your readers believe that Mr. Paul, from having a prejudice against it, has sacrificed a fortune, and thrown the trade into the hands of his neighbour. He draws another breath, and then candidly informs us that the Dog Rose is more suitable for strong land, and gives it some excellent recommendations, viz., that it is durable, produces larger flowers, and that it will remove at almost any age. He then gives an instance where the Manetti did not succeed with Mr. Lane, who is known to be a large Rose-grower; and he then winds quietly up by informing us that the Dog Rose succeeded so well with him that he did not require it. But his worst argument in favour of his pet stock is, that he tells us of one place where he thinks it would have answered, but the workmen did not like it, and so gave it a "sly kick."

He appears very anxious to know why the two ii's are used ; all I can say is, that it would require two eyes to see the drift of his argument. I am not wishing to recommend either one stock or the other ; but my ground being naturally heavy, if I must have a worked Rose at all, give me the Dog Rose ; though I much prefer Roses upon their own roots, especially with vigorous growing sorts. For instance, I bought a worked Coupé de Hébé ; and though it has flowered pretty well, you would scarcely believe it to be the same sort as a cutting I took from it, which now occupies a wall of about twelve square yards, and when in bloom is the admiration of every one who sees it.

CLAY SOIL.

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### PERENNIAL HERBACEOUS PLANTS ADAPTED FOR GROUPS, BEDDING, &c., IN THE FLOWER GARDEN.

THE following descriptive list is offered as a "remembrancer," at least as regards the flower garden, bringing into view, as I trust it may, a series of plants whose average character, colour, &c., well adapt them for producing a gay effect previous to the bedding out of more permanent varieties. Amongst them will be found some whose merits for the object described are not generally known or appreciated. As the greater part of them are of strictly perennial character, it should be remembered by those who grow them that all the earlier flowering kinds should be succeeded by later blooming plants of similar colours, &c., where desired, and also that the amount of bloom and general effect will be just in proportion to the amount of the previous year's growth. Therefore, as a general rule, it is important to secure vigorous growth one year previous to that in which a fine display is desired. The exception to this rule will, of course, depend upon the opportunity of procuring strong plants the previous autumn, and the number equal to the amount of bloom sought for. Let no plant, however, be condemned until its average excellencies and capabilities have been correctly ascertained, and the most favourable conditions for producing such, carried out.

1. *Alyssum saxatile*.—Very ornamental in spring ; grows from nine to twelve inches high, compact in growth, with hoary leaves, and conspicuous densely-flowered racemes of bright yellow blossoms, produced from the latter end of April until June.

2. *Linum flavum*.—Equally dwarf, compact, and ornamental as the preceding, producing racemes of comparatively large bright yellow, compact, salver-shaped blossoms at the same period.

3. *Viola palmensis* (*syn. V. stricta*).—A neat dwarf plant, which bears a profusion of bluish lilac Violet-like flowers during April and May.

4. *Iberis sempervirens* (Evergreen Candytuft).—An ornamental, dwarf, compact, and densely branched evergreen spring flowering plant, six to nine inches high, forming *en masse* quite a carpet of snow white blossoms upon a dark green ground, and forming a conspicuous object in the shape of single groups in flower borders or the foreground of shrubberies, or in relieving the darker background of massive rockwork.

5. *Iberis saxatilis* } Of smaller habit than *I. sempervirens*, being  
 6. „ *cordifolia* } a very neat, compact evergreen species, four to  
 six inches high, and producing an equally fine effect as the foregoing  
 species, and, with it, blooming from the last week in April until June.

7. *Scilla nutans*.—A neat early spring flowering bulbous-rooted  
 plant, twelve inches high, with numerous terminal spikes of rich dark  
 blue pendent bell-shaped Hyacinth-like flowers in April and May,  
 forming a conspicuous object for small groups or parterres.

8. *Scilla campanulata alba*.—An ornamental early spring flowering  
 bulbous plant, twelve to sixteen inches high, of slender upright Hyacinth-  
 like habit, with dark green flaccid lanceolate leaves, and numerous erect  
 flower scapes, bearing a profusion of conspicuous snow-white open-lobed  
 bell-shaped blossoms. A beautiful plant for early effect in small or  
 large groups throughout the borders, or in the foreground of select  
 shrubberies, or in prominent positions, *en masse*, of the flower garden.

9. *Cheiranthus alpinus* (*syn.* *Erysimum diffusum*).—A gay early-  
 flowering biennial plant, of dwarf compact habit, six inches high, with  
 narrow leaves and short stems, terminating with massive corymb-like  
 clusters of remarkably bright brimstone-coloured flowers, forming a  
 conspicuous and enlivening object for small groups in April and May.

10. *Veronica teucrium* } These may be classed amongst the most  
 11. „ *patens* } desirable species of this genus for early  
 12. „ *nana* } summer effect in small beds or groups in  
 flower borders. They are ornamental perennial herbaceous plants, the  
 first named about eighteen inches high, and the latter from nine to  
 twelve inches, of a compact bushy habit, producing numerous terminal  
 and axillary spikes of very rich ultramarine blue blossoms in May and  
 June.

13. *Mimulus rivularis pardinus*.—A rare and highly ornamental  
 spring and summer flowering perennial herbaceous plant, six to nine  
 inches high, perfectly hardy, distinguished from most other allied  
 varieties by a less luxuriant growth, and producing, when grown in  
 fully exposed situations, and in soils not over stimulated by vegetable  
 matter, a profusion of comparatively large golden yellow flowers,  $1\frac{1}{2}$  to  
 2 inches wide, each picturesquely marked with five remarkably rich  
 crimson cloud-like blotches on the marginal lobes. Well adapted for  
 early summer effect in full south aspects, and for a successive bloom on  
 north or north-east borders.

14. *Cheiranthus Marshalli*.—A highly interesting spring-flowering  
 biennial plant, of compact habit, with neat dark green leaves, and  
 terminal racemes of brilliant orange, close lobed, salver-like blossoms,  
 each nearly three-quarters of an inch wide, and imparting a delightful  
 odour. Well adapted for distant effect in single groups or small  
 parterres.

15. *Scilla campanulata intermedia*.—This plant is similar in its  
 growth to *S. campanulata alba* (No. 8), as a perennial spring flowering  
 herbaceous bulbous-rooted plant, twelve inches high, with conspicuous  
 spikes of porcelain blue, open bell-shaped flowers, suitable for varied  
 effect among early blooming objects.

16. *Narcissus tenuifolia* (*Corbularia tenuifolia*) } Two of the most  
 17. „ *bulbocodium* (*C. bulbocodium*) } beautiful species

of their respective section and type of growth—the second named kind well known to all lovers of spring flowers as the “Hoop Petticoat Narcissus.” They are remarkably neat, dwarf, and compact, spring-flowering bulbous-rooted plants, four to six inches high, with slender dark green rush-like leaves, and comparatively large and conspicuously beautiful orange yellow Narcissus-like flowers, differing from many other species in having a much smaller outer frill-like belt, from which, at a distance, the blossoms appear like rich golden flower tubes gracefully reclining from the centre of the grass-like foliage, with which they are finely contrasted. The first named species is readily distinguished by its erect and more slender herbage.

18. *Veronica caucasica*.—A neat dwarf spring-flowering herbaceous plant, six to nine inches high, with numerous racemes or spikes of pale azure-blue blossoms from the second week in May until the middle of June.

19. *Anemone Scarlet Soldier* } Highly ornamental compact perennial  
20. „ *Josephine* } varieties, six inches high, with brilliant double scarlet flowers, nearly two inches wide, yielding a successive bloom throughout the summer season by repeated plantings about 10 weeks previous to the required periods of display.

21. *Campanula rostita?* (*C. hostis*, of nurseries).—A remarkably neat, dwarf, compact, summer flowering, hardy perennial herbaceous plant, 12 inches high, with smooth narrow lanceolate dark-green leaves, and numerous terminal spike-like racemes of conspicuously rich purplish blue bell-shaped flowers, in July and August. This valuable species is perhaps the best of its extensive genus for effect, *en masse*, during its season.

22. *Campanula rotundifolia alba*.—Much similar in habit and growth to the preceding species but somewhat taller, producing at the same period many terminal graceful spike-like racemes of pendent white bell-shaped flowers upon slender upright stems twelve to sixteen inches high.

23. *Genista tinctoria pleno*.—A very neat and ornamental hardy perennial half-shrubby plant of dwarf compact habit, with small dark-green narrow leaves, and numerous terminal branch-like racemes or spikes of golden-yellow blossoms, from July until September.

24. *Campanula carpatica*.—A hardy summer and autumn flowering perennial herbaceous plant, of neat erect compact bushy habit, twelve inches high, producing a profusion of comparatively large expanded blue bell-shaped flowers, upwards of an inch wide, from July until October.

25. *Campanula carpatica nivea*.—Like the foregoing species, a dwarf and compact summer and autumn-flowering variety, producing a profusion of comparatively large and conspicuous snow-white bell-shaped blossoms, nearly  $1\frac{1}{2}$  inches wide, from July until September. A late bloom for early autumn effect may be obtained from the two last ornamental plants by cutting off about one-third or more in length of the advancing flower stems about the latter end of June or early in July.

26. *Oenothera macrocarpa*.—A neat and hardy ornamental herba-

ceous plant, with decumbent or partially trailing stems, six to nine inches high; lanceolate leaves and numerous remarkably large close lobed salver-shaped yellow blossoms, four to six inches wide.

27. *Campanula pumila*.—A diminutive and interesting small dwarf hardy summer-flowering perennial herbaceous plant, from two to four inches high, with slender erect stems, each tipped with one or more conspicuously clear blue pendent bell-shaped flowers, in July and August. Well adapted for small groups or parterres, or for marginal effect in larger beds; preferring a situation partially screened from the hot sunlight.

28. *Campanula pumila alba*.—Equally neat and interesting in habit as the preceding species, the tiny slender stems tipped with elegant clear white drooping bell-shaped flowers, forming a pleasing and conspicuous contrast to the blue-coloured one.

29. *Calceolaria sulphurea splendens*.—A highly ornamental and desirable hardy perennial, summer-flowering, herbaceous plant, of remarkably dwarf and compact habit. This very interesting variety forms its entire growth upon the ground, its central stems not rising more than six to nine inches, yet so vigorous and free in its herbage as to attain occasionally a diameter of twelve and eighteen inches. Its ample green lanceolate leaves and numerous flower-scapes crowned with finely formed and comparatively large golden-yellow pouch-shaped blossoms, seldom attaining an elevation beyond twelve to sixteen inches, form a very beautiful object, either as single groups or in small parterres. Its short and densely-leaved tufted growth renders it slow to increase.

WILLIAM WOOD.

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### A SOUTHERN AURICULA SOCIETY.

THE following letter has been forwarded to us, and we do not think that we could do better than insert it as we have received it, and ask for the attention of all Auricula growers.

“Why not?—the Tulip, the Carnation, and other favourites, have their local and national societies and associations; then why not the few—if few they be—Auricula growers in the south make a move on behalf of their favourite?”

“I had hoped ‘D., Deal,’ would have again this season agitated the question of a National Auricula Show; but there may be—I do not say there are (I believe, as far as the flower is concerned, not)—impracticabilities in connexion with that subject, but something would be gained, as a preliminary step, if we could establish a Southern, Midland, and Northern Society for this special flower. Will ‘D., Deal,’ ‘Iota,’ and Mr. Turner, as a nucleus, seriously consider what may be done to establish a Southern Auricula Society? I think I can promise three members, with a hundred plants each, from this place; a few more threes, and the thing will be done. Perhaps, if the three gentlemen before alluded to will ventilate the subject among their Auricula-growing friends, they might probably present something

tangible in the March number of the *Florist*, in the shape of a meeting *this* spring, whilst April would be time enough for the final arrangements.

“ Cheltenham, Feb. 4.

“ A. J. C.”

The subject is one surrounded by difficulties which we shall endeavour to submit. In the first place, the Auricula is totally unlike any of those other florists' flowers which are honoured by national exhibitions; they are shown as cut blooms, while it has ever been the custom to show the Auricula in pots; and while a grower could easily send up a box of cut blooms of Tulips or Pansies, he would be unwilling to trust a dozen of his best Auriculas to the tender mercies (we will say) of the Eastern Counties Railway, or indeed to the care of any one, however experienced, in London, where the show would have to be held. Then there is a difficulty as to fixing the time; for instance, I am writing this at the house of my friend, the Rev. George Jeans, Alford Vicarage; his plants will not be in bloom, I see, nearly so early as mine, and though the 18th or the 20th of April might suit me, it would not him; and then, unless we could tack it on to some of the spring shows of the Royal Botanic Society, it would hardly answer, we could not expect to take any money by visitors, and to hire a room would be expensive. These reasons seem rather like fatal to the project, but still some ideas may suggest themselves to the growers of the flower, if these matters are put before them. I can say that Mr. Turner will gladly fall into it and give two guineas; Mr. Chapman, the father of Maria and Sophia, one guinea; “Iota” and myself, one each; and doubtless others would be willing to contribute also; but, after all, the great question is, can the flowers be brought together? As I have mentioned the subject in the “Cottage Gardener,” as well as here, it is just possible some plan may be hit upon. If so, any communications, addressed to me at the *Florist* office, will be acceptable; and should failure altogether ensue, it will, I hope, be attributed, not to any lukewarmness on my part, but to the difficulties inseparable from the subject. That an interest in this flower is being excited, I have very little doubt, from all that I hear on every side, and the difficulty of obtaining plants of any scarce variety becomes greater every day. If the growers increase in number, the day cannot be far distant when we must meet together for mutual profit.

Feb. 18.

D.

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### PINKS.

HAVING been a florist just forty-three years, and having been a cultivator of Pinks and Carnations and other florists' flowers, I think I may fairly be permitted to have a voice and to give my opinion on the progress of improvement, at least as respects our two former favourites. When first I commenced, Pinks were just beginning to be well cultivated, and shows were established in various parts of England, when, besides those exhibited for the first, second, and third prizes, seedlings were also exhibited, and Davy's Eclipse, Davy's Duchess of Devon-

shire, Davy's Venus and Countess of Bridgewater, as well as Salter's Lord Nelson, were fine and decided good rose-leaf flowers; and the second-class flowers, the large-leaved ones, then produced, were Dakins's Burdett, Sutton's Duke of Wellington, Dry's Earl of Uxbridge, and Bexley Hero. These constituted the gems of the different stands. In some sense the kinds have increased in quality, as to Pinks, but not in the others; gems are of essential quality, but they can be too small, so no flower ought to be classed first-rate unless it can attain to a certain size. There are many nice Pinks of a fair size, and large enough, yet there is not so much merit in blooming them as in former times, for the pods now are so well formed that a Pink can bloom itself without the aid of the art of tying, to prevent the pod from bursting. I see no Pink now so handsome as Dry's Earl of Uxbridge.

As to Carnations, they are exquisite in colour as to flakes and purity of white ground, but their size is so diminished that they have lost their grandeur in my estimation. The greatest improvement is in Picotees, which are as large as they used to be, and some are exquisite in every point, as may be seen in the plants exhibited and in the plates of the *Florist*—no specks on the petals, clean edging, clear broad and narrow lacing. What Carnation bloom can now be grown to the size of a quart mug? The best Carnations are but little larger than first-class Pinks, and, like the march of the present day, nothing is now grown that gives any trouble. By watching, once I turned a blighted and deformed Pink-pod quite straight. Who will do that now, and who can find the time, which is a much more sensible argument to use? None but amateurs who have spare time can attempt it; but what a reward, to see a fine bloom produced from a pod which many would have picked off and thrown away as useless. Mr. Turner has exhibited some splendid specimens of Pinks, of new kinds, well worthy of cultivation. At Winchester, formerly, the Messrs. Hopkins and Mr. Mann were three good cultivators of Pinks, and raised seedlings, some of which were useful flowers. Mann's Village Maid and Duchesse d'Angoulême, Corbett's Leopold, and latterly Mr. Young, of Twyford, has raised good seedlings, including Lady Mildmay and Double X, &c., and the best bloom of Earl of Uxbridge I ever saw was produced by him; but, unfortunately for that flower, it has so weak a stem and small grass, that it requires high cultivation and a peculiar season to bloom it, and that is the reason it has been less grown of late, yet it is one of the finest Pinks I ever saw. Mr. Keynes also used to exhibit good flowers. Norbury Buck is still a great favourite of mine; so are Hector and Jupiter. The red and scarlet laced flowers are evidently the most tender, and in some positions will not live, especially in wet soils. In damp soils the Delphiniums, also, will not enjoy themselves; nor will *Liatris spicata*, or *Spigelia marylandica*; but where you find those or any other delicate plants that cannot live in damp soil, thrive, you may grow Pinks and Carnations in perfection, if well managed.

*Reading.*

AN OLD FLORIST.

[If Earl of Uxbridge was a favourite with our correspondent, surely Maclean's Miss Nightingale and Napoleon would indeed please him.—  
EDITOR.]

## VIOLETS IN POTS.

I HAVE that most beautiful and best of all the lovely tribe of Violets, the old double blue, now in full bloom, each plant having upwards of a hundred flowers on it, and that in a 24-sized pot. In order to obtain this I split the roots up into pieces and plant them in May on a warm south border of good soil, in rows one foot asunder, placing the plants six inches apart in the row. In August I take them up and put them into large pots filled with good rich soil. I then place them in a frame on a south border, after filling it with cinders to within six inches of the top. When that is done I plunge the pots, and in that condition I leave them until frost sets in, when the lights are put on and kept on, tilting them about an inch every day, and covering at night with mats. Violets love a dry bed of cinders, a cold frame, and a situation as near as possible to the glass.

DELTA.

## REVIEW.

*The Floral Magazine, comprising Figures and Descriptions of Popular Garden Flowers.* By THOMAS MOORE, F.L.S., F.H.S., Secretary to the Floral Committee of the Horticultural Society of London; the Drawings by WALTER FITCH, F.L.S. Nos. I.—X. London: Lovell Reeve, 5, Henrietta Street, Covent Garden.

WE hold that to be a very narrow mind, in which envy lurks, carping at the success of others, and considering that nothing really good can come out of anything that in any way crosses their path; and he is a generous soul who welcomes excellence wherever it is, and gives credit to endeavours honestly and faithfully done, although they may trench on his own peculiar province. That was a generous saying of Thackeray's, when announcing that one of the ablest contributors to the "Cornhill Magazine" had seceded, and, like South Carolina, set up on his own account, as the Editor of "Temple Bar:" "Our course has been so prosperous, that it was to be expected other adventurers would sail on it, and accordingly I heard with no surprise that one of our esteemed companions was about to hoist his flag and take command of a ship of his own; the wide ocean has room enough for us all; at home, and over our own immense dominions there are markets enough for all our wares; the old days of enmity and exclusiveness are over, and it is to be hoped buyers and authors will alike profit by free trade, friendly courtesy, and fair play." And shall we not gladly welcome a new candidate for public favour in our line, even though it may seem to claim some of that which belongs to ourselves? But in truth it occupies different ground; it is more a biographical gallery of Flora's beauties, holding to the floricultural world something of the same position that the "Botanical Magazine" does to the more scientific botanist; and when we see the worthy trio whose names are interested in keeping it up to the mark, we may be quite sure that the floricultural knowledge of Mr. Moore and the artistic skill of Mr. Fitch will be exerted to

produce a work which shall be worthy of the repertoire of the publisher of so many beautiful works emanating from the Royal Gardens at Kew. The work has now reached its tenth number, and certainly has improved as it has gone on; and although there must ever be, in a work of this kind, different degrees of merit, yet the plates are, with few exceptions, admirably executed. What can be more beautiful than the plate of Zinnias, or more carefully worked out than that most difficult of all flowers to figure, the Hyacinth; while in our own peculiar line, florists' flowers, there are some very beautiful illustrations; the plate in the last number of the new Picotees raised by Messrs. Kirtland and Keynes is admirably executed; and the same may be said of that of Volunteer Auricula, another of Mr. Richards' seedlings we presume; not that it seems to us to have properties entitling it to a first-class certificate; we are simply speaking of the execution of the plate; again, there is a very fine group of some of the new Pelargoniums of last season (wrongly marked as to figures), not displaying, indeed, a great deal of novelty, but withal very striking. Short cultural directions, as well as biographical notices, are given with each plate, and are characterised by sound sense and wisdom. The editor's position as secretary of the floral committee of the Royal Horticultural Society, of course gives him facilities for obtaining the newest and best flowers to figure, and we have no doubt, if the favour of the public is given to it, it will greatly benefit floriculture. We ourselves can trace up many of our *first loves* in the floral world to the sight of drawings rather than to that of the flowers themselves; and there are thousands who, seeing a good drawing, will exclaim at once, "Oh, I must have that!" And the appetite of the lover of flowers is really insatiable. Hence we wish every success to this new candidate; we trust its course will be long and prosperous, and that all alike interested in it, publisher and the public, may be great gainers by its course of usefulness.

*Deal, Feb. 18.*

D.

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#### CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—Plants of new or other kinds of which it may be desirable to increase the size as much as possible during the season should at once be placed near the glass in a moist warm house, so as to secure early growth; and healthy vigorous plants started now, with proper attention and convenience, make two good growths during the season. See, however, that the plants are not in want of pot room before placing them in heat, and also that the shoots are nicely distributed, so as to secure the desired form of plant. Also attend very carefully to watering, and moisten them overhead with a fine rosed syringe morning and evening, and keep them free from black thrip. Specimens intended for exhibition purposes or late blooming had better be removed to a north house wherever this can be done, giving air freely unless when the temperature is below 36°, and where a north house is not at command, the plants intended for late blooming should be placed in the shadiest part of the coolest house; and, if the weather should prove

mild and bright, it will be advisable to shade before the end of the month, for we have always found that unless the wood was well matured in autumn, the plants were peculiarly excitable in spring, pushing their wood buds on the occurrence of a few mild bright days; and, it is to be feared that, as a rule, the wood was not as well ripened last autumn as it should have been, hence every care should be exercised to avoid prematurely starting the plants into growth. Camellias which have done blooming should be placed in a gentle heat at once if they are likely to be wanted for early blooming next season; but such as have bloomed very heavily, or from other causes are not pushing their wood buds, should be allowed a further rest, and those only which had their wood well up and promise to break freely should be placed in heat at present. See that the foliage is perfectly clear of insects and dust, &c., and also that the plants are in proper condition, as to pot room, &c., before placing them in heat; but those intended for early blooming should be rather under than over potted, otherwise they will be liable to make a second growth after setting their bloom buds, and either drop their buds or bloom very imperfectly. *Conservatory*.—Make every effort to keep up a good display of bloom here, and also to preserve the beauty of plants in bloom as long as possible. The temperature should be regulated so as to make it as suitable as can be done for the more important plants in the house; in most cases,  $45^{\circ}$  at night and  $5^{\circ}$  to  $15^{\circ}$  higher during the day, according to the state of the weather, will be proper. If the weather proves bright and frosty, care must be used to prevent the plants being injured through want of moisture in the atmosphere, and the beds and borders and other available surfaces must be sprinkled sufficiently often to secure a healthy moist atmosphere; and this attention will be especially necessary where there are many things in the house which have been forced into bloom in a damp warm house. Acacias, Camellias, &c., planted in the beds or borders must be freely supplied with water at the root while in bloom, and those which have done blooming should be cut back as much as may be necessary to secure a close bushy growth; and if the soil about their roots is exhausted, as much should be removed from the surface as can be done without injuring the roots, replacing it with fresh compost mixed with bone-dust, small bones, or any other safe fertiliser. See that the permanent plants are not injured by aphid, which frequently makes its appearance upon the young wood; and as it is generally inconvenient to smoke here and troublesome to use any other efficient means, they are sometimes allowed to do considerable injury, and every day they are left unmolested adds to the difficulty of extermination, as well as exposes the plants to injury. By carefully applying a moderate dose of tobacco smoke when the plants are perfectly dry, and repeating this the following morning, the most delicate plant in bloom will hardly be injured, and the pest will easily be eradicated if taken immediately it is perceived. *Cold Frames*.—Keep stock plants from which cuttings are wanted close and moist to encourage growth, and be careful to keep them free from green-fly. Rush on the propagation of bedding-out stock with the the greatest possible dispatch; also get autumn-rooted cuttings which have been wintered in pans or

boxes potted off or planted in beds of light soil under glass, so as to secure strong vigorous plants by early planting-out time, and without having to place them in a close warm temperature. Sow seeds of choice half-hardy annuals wanted to bloom early; also Maurandyas and Lophospermums, and endeavour to have the whole stock of bedding-out plants rooted before the month is out, or at all events to have the cuttings put in. *Flower Garden.*—Any alterations in progress should be finished with the greatest possible dispatch, and the routine work pushed forward so as to have the garden neat and trim. Shrubs which have been greatly injured by the frost may be cut back so as to remove the unsightly and certain dead portions; but it would be useless to attempt to finally cut back such as are partially killed until it can be seen by the swelling of the buds what is really dead. Those who were fortunate enough to have a stock of Roses in pots under glass should make the most of these in the way of getting grafts off such as were not pruned, and cuttings from those forced for early blooming, for the stock of Roses has been very seriously reduced in many parts of the country; and as these are unquestionably the most beautiful of out-door plants, every effort should be used to get up a good stock. Here Roses on their own roots, or worked so low that the stock is buried in the soil, are alive; but as to standards, and all which were not covered with the snow, nearly all are dead; and I shall not again depend to any extent upon plants which are not upon their own roots, or worked so low that the point of union can be protected by being covered with the soil when planted. *Greenhouse.*—Those who wish to excel in the culture of what are termed greenhouse plants should after this time be able to find two houses for the accommodation of their stock; for young plants of such things as Boronias, Gompholobiums, Leschenaultias, &c., should now be encouraged by an amount of warmth and moisture which would be ruinous to specimen Ericas, &c. It may be true that good specimens of the more delicate New Holland plants are grown without the aid of an intermediate house, but this is generally done by keeping the plants growing in damp close pits late in autumn and when they should be ripening their wood; and plants got up in this manner are exceedingly liable to mildew, &c., during the winter. By starting young stock early a long season for growth is secured, and time left for getting the young wood well ripened up before winter. But where the convenience of an intermediate house is not at command the young stock should be placed together at one end of the house, and encouraged by being kept close and rather moist. For the general management of these—as also of the specimens, &c.—look at last month's directions. Do not allow the plants to suffer through the want of moisture in the atmosphere, but sprinkle the floors on the forenoons of bright drying days, and give air so as to save the plants from cold drying winds. *Stove.*—Plants which were started early, such as Ixoras, Dipladenias, &c., will now be growing vigorously, and must be carefully tended with water at the root and kept free from insects. Such things as Dipladenias should have a few stakes placed for the shoots to run up; for if these are left to twine amongst each other, it is a very troublesome job to get them separated. See that all young growing

stock is properly supplied with pot room, and endeavour to provide a good supply of plants for blooming in summer and autumn. The temperature may now range from  $70^{\circ}$  to  $80^{\circ}$ , giving air very sparingly during the prevalence of cold winds and shutting up early. Keep the atmosphere moist by frequently sprinkling the passages, &c., and syringing the plants gently overhead in the afternoons, giving extra attention to such as are known to be liable to be attacked by red spider.

*Hardy Fruit.*—Attend to the protection of Peach and Apricot trees, as before advised; but where no proper covering material is at hand, evergreen branches may be used for this purpose. Where this mode of covering is adopted, it should be partially removed through the day, when the blossoms expand, recovering again at night, if frosty. If any work recommended to be done last month at this time remains unfinished, it should now be proceeded with immediately. The pruning, nailing, and planting of all fruit trees should be brought to a close without delay. Top dress all newly planted trees, as well as those in a weakly condition. Prune Filbert trees as soon as the blossoms are visible; shorten or cut out all small shoots that do not show for fruit. Keep the main branches thin and the centre of the trees open, similar in form to a goblet. Plant Strawberries, as before advised, and use the hoe frequently in dry weather round the plants in the fruiting beds. Graft Plums, Cherries, and other fruit the beginning of the month, and head down large Apple and Pear trees intended to be grafted late in the season. Give air daily during sunshine to orchard-houses and glass cases; but close early if any appearance of frost at night. Syringe the trees occasionally in the morning, but be sparing of water on the floor of the house, as it is injurious to the blossoms during a low temperature. *Forcing Ground.*—Give plenty of air to Carrots, Radishes, Rhubarb, Peas, and other things under glass. Bring in fresh roots of Asparagus and Seakale to follow in succession. Ash-leaf Potatoes should be planted in frames early in the month; earth up those in a forward state. Sow Capsicums, Tomatoes, and Egg-plants; the French purple variety of the latter is a very good vegetable. Plant succession crops of French Beans, and this is now a good time to plant a warm pit to come into use about the time the crops in the forcing houses are cleared. Keep up a good heat to those in bearing, and syringe frequently, to check red spider. Attend to the linings of Cucumber and Melon frames, by adding fresh stable litter and turning the whole together; a top heat of  $70^{\circ}$  should be maintained in the beds. Pinch out the points of the leading shoots as soon as they begin to spread, and keep the rest moderately thin. Stop all the shoots above the show for fruit. Earth up the plants as they advance in growth, adding a little by degrees, so as not to chill the beds. Water Melons very sparingly, plant out those sown last month, as soon as the beds are in a fit state to receive the plants. Sow again for succession. Sow Basil and Knotted Marjoram on a slight hotbed, to get forward for planting in the open ground. Continue to make fresh Mushroom beds, and spawn them when the heat of the bed is about  $65^{\circ}$  or  $70^{\circ}$ . Keep the house more humid as the season advances. *Peaches and Nectarines.*—Attend

to previous directions in regard to temperature, &c. Water the inside borders of the early house, if the crop is set and swelling; thin the fruit, but be careful in leaving sufficient to allow for dropping during the process of stoning. Thin the shoots, and select those required for fruiting next year. Use the syringe freely, to keep the foliage in a healthy state. Towards the end of the month, as heat and light increases, the temperature may range a little higher, especially through the day in clear weather. *Cherries* require a moist atmosphere till they come into bloom; therefore use the syringe to keep up the necessary moisture. When the trees are in flower the atmosphere should be less humid, abundance of air admitted, and a night temperature of about  $60^{\circ}$ , rising from  $10^{\circ}$  to  $15^{\circ}$  through the day during sunheat. Plums require similar treatment to the Peach, commencing with a low temperature and increasing it gradually by degrees. Give plenty of air when the trees are in bloom, and water freely at the root. These require more water than *Cherries*. *Strawberries*.—During the time the fruit is swelling, the plants should be liberally supplied with liquid manure, and be careful not to let them at any time suffer from drought; if so, it will greatly deteriorate the flavour of the fruit. Use the syringe, to check red spider, and give plenty of air to those in flower, and place more plants in late Vineries or pits, to succeed those in the forcing houses. Should the demand for this fruit be large and the stock of plants in pots limited, some strong young plants from the open ground may now be taken up with a ball of earth, potted, and placed under glass at once; these, if taken up carefully and potted in rich light earth, usually produce a very good crop. *Pines*.—If the succession plants requiring a shift were not done the end of last month, they should now be potted, and in so doing use free porous turfy loam mixed with a little rotten manure; do not press the soil too hard in the pots. Turn or renew the beds before the plants are replaced in the pits. Avoid strong bottom-heat, and keep the plants rather close till they begin to grow, when more air may be admitted. Keep a moist atmosphere to those where fire-heat is applied, and give the fruiting plants a soaking of water, as soon as the fruit spike is visible. All other plants that are dry will also require water. Pot suckers and attend to the linings of those in dung pits. Admit air according to the state of the weather. *Vinery*.—Now that we have more solar heat and light, the temperature in the succession houses may range higher, from  $65^{\circ}$  to  $70^{\circ}$  is a good average night temperature. Muscats require strong heat, with plenty of air, to ensure their setting properly. Keep a moist atmosphere in the early house till such time as the fruit begins to colour. Vines intended to be grown for fruiting in pots next season should now be started. See last month's directions for other Vines in pots. *Kitchen Garden*.—If our previous directions for working the land have been attended to during the past favourable month of open weather, the soil will now be in good condition to receive the principal crops requiring to be sown during this month. Therefore choose the earliest opportunity to get in the principal crop of Parsnips, Leeks, Onions, and Early Horn Carrots. Make sowings of Peas, such as the Champion of England and Scimeter, and at the same time make the last sowing of Warwick

Peas, to succeed the previous sowing; also any of Dr. M'Lean's new dwarf Marrows may be sown during the month; they are excellent Peas, and very suitable for small gardens, on account of their dwarf habit. Plant Windsor and Longpod Beans, and draw earth to the early crop; also Ash-leaf and other early Potatoes; second early Potatoes, such as Early Oxford and Dalmahoy, at the end of the month, the latter is an excellent sort. Sow early Turnip, Spinach, Lettuce, and Radishes of sorts, to follow in succession; also make sowings of early Cabbage, Cottager's Kale, Green Curled Savoy, Walcheren and other Cauliflower, Brussels Sprouts, and Celery on a slight hotbed. Plant out Cauliflower, Cabbage, and Lettuce, and prick out those sown last month under glass. Make new plantations of Rhubarb, Seakale, Asparagus, and Globe Artichokes. The ground for the latter should be well manured and trenched, as the roots will remain some years in the ground. Protect Rhubarb from frost with pots or litter, and cover Seakale in the open ground, to get it blanched for the last cutting.

#### WORK FOR SMALL GARDENS IN MARCH.

AYE! work, indeed; now comes on a busy time, and much of the future beauty of the flower garden will depend on the operations of this month; therefore, make the best use of the time that you can, for, what with vegetables, sowing seed, &c., it will be hard work to overtake all there is to do.

*Auriculas*.—These will now require a more constant supply of water, and especially towards the end of the month, when they will be showing room. Give plenty of air on all favourable days, but avoid the sharp cutting easterly winds—a calico wing to the frame acts as an excellent break; still cover up well at night, as frost greatly injures the bloom. *Bedding Plants*.—You must now calculate your supply and demand, and get up a hotbed for Verbenas if you have no other convenience. The old plants will now throw off cuttings, and these readily strike and must be potted off singly as soon as struck. Calceolarias should also be potted off so as to make bushy plants, which they will soon do. I say this presuming that the cuttings put in in the autumn are still in store pots. *Gazania splendens* must be treated in the same way, and seed of *Lobelia speciosa* be sown, or cuttings taken off old plants. *Verbena venosa*, if it has survived the frost, may be taken up and cut up for plants; they do admirably planted in amongst variegated Geraniums. *Carnations and Picotees*.—The compost for these must now be got under cover, so as to be ready for use in the beginning of April; carefully go over it and *hand pick* it, one wire worm being quite sufficient to destroy your best plants; good loam, old hotbed dung, and leaf-mould, form a good mixture, with some road grit to keep it open. *Greenhouse*.—This ought now to be somewhat gay—Cinerarias, Tropæolums, Primulas, Hyacinths, and Cyclamens, now being in bloom. Watch carefully against greenfly and fumigate with tobacco or tobacco paper, and give as much room as you can to growing plants. *Pansies*.—Give plenty of air. Keep the pots clear of weeds, and water according to the state of the weather. *Pinks* require nothing at present but stirring the surface of the beds occa-

sionally. And now comes a word I almost dread to write, *Roses*.— I very much fear that we can form no idea of the destruction to our favourites as yet. Many have looked over and counted so many dead. How many more will never push again remains to be seen. I have seen plenty with apparently vigorous young shoots, and yet dying at the neck of the plant. Thus I am almost inclined to think that very few standard *Roses* in the country will be worth anything after this winter; they may live to all appearance, but a *Rose* once checked is, I think, done for. However, we shall see; and I am rather inclined to think that we are on the eve of a revolution in *Rose* growing. Standards will be given up largely, and *Roses* on their own roots, or on some stock which roots more freely than the common *Briar*, will have to be used instead. However, this month, the pruning knife must go to work, and I fear the spade must be used very extensively. One word of advice I would give, do not buy standards now; they will only bring grief to both buyer and seller. *Tulips*.—These must be protected from heavy rains, and the surface of the bed kept stirred, and of course all weeds taken away. In general work, get the beds dug over and ground prepared for planting out; keep the walks tidy and look after slugs, it being quite a myth, I fear, that a hard winter kills them.

*Deal, Feb. 18.*

D.

#### PLANTS FOR EXHIBITION.

*Cinerarias*.—Great care must be taken in giving air this month to such of these as are very succulent, as the winds are frequently very nipping, and an hour may undo the work of a season. Syringe frequently in warm open weather, as this tends much to the elongation of the shoots and the colour of the foliage. Continue to tie out as wide as possible, removing at the same time all intruding suckers and spindling shoots. Give weak liquid manure occasionally, and shade when they flag too much, though it is necessary that they should flag a little at times, to harden the wood. Where there are seedlings they should be looked to, to see if there are any new and desirable for the following season. Fumigate slightly every now and then to prevent their becoming infested with the green-fly. *Pelargoniums*.—If the directions previously given have been acted upon, the *May* plants will be now assuming the shape they will take for the exhibitions; their growth should now be encouraged by giving them a little stimulant three or four times in the course of a week. For such purpose, guano water will be most safe and effective, of which half a thumb pot of the *Peruvian* will make four gallons. The plants will now require frequently watering, as their roots must be kept thoroughly moist. Everything like forcing should be carefully avoided. The temperature of the house at night should now range about 50°. Each plant should enjoy air, light, and space in abundance. As the *June* plants progress, let them be well tied out. Let them be kept thoroughly clean by frequent fumigation. Stop the shoots of such as are thin, to induce dwarf and bushy growth, and also of those intended for late flowering. In the tying out of the plants fail not to let the form they are ultimately to take be kept clearly in view.





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JA

Chrysanthemum

Riflemar. (Clark) — 2. Pandora (Smith)

## CHRYSANTHEMUMS RIFLEMAN AND PANDORA

(PLATE 175.)

“ARE those Dahlias?” was the question of one who shall be nameless, when I opened out the plate to view; with a half derisive laugh, I said, “Oh, dear no,” and yet bethought myself, after all it was not such an absurd question; for, as far as size goes, they might very well be regarded as such; and an unpractised eye would hardly mark the difference of petal, which makes an incurved Chrysanthemum so very unlike a Dahlia; and very marvellous it certainly is, to see how every year seems to be increasing those properties which, in a florist’s eyes, stamp the value on a flower. As I have oftentimes said, and as Mr. Salter repeats again in his Catalogue this year, it is quite misleading to suppose that such blooms as those from which this drawing was taken are those that ordinarily are to be had in growing such kinds; they cannot be obtained but by very careful management—by disbudding the plant, and watching it in all stages of its progress; in fact, taking all that trouble with it which only a grower for exhibition will care to do; for its capability for that purpose does not make such a variety equally desirable for those who only wish to see large masses of bloom, and well filled up flowers, not caring whether they ever appear on an exhibition table or not, exhibition flowers rarely blooming well enough for specimen plants.

The Channel Islands have long been famous as a region specially favoured by Flora and Pomona; Guernsey Lilies are well known. I have heard that they were originally wrecked on its shores, forming part of a cargo from distant Cathay or Japan; that they were thrown into a heap as rubbish, but in the following spring the heap was all covered with bloom, and then *Nerine sarniensis* was well taken care of, but that all the care will not make it flourish in even the neighbouring island of Jersey; while every year tens of thousands are imported to this country, only to bloom for once, and then be thrown away. In the more favoured island of Jersey the melting Chaumontel, Louise Bonne, and other Pears, acquire a flavour unknown here; and all Flora’s productions flourish in proportion. To one of these islands (Jersey, I believe) the floral world is now indebted for the large proportion of the additions to new and excellent varieties of Chrysanthemum, Messrs. Smith and Clarke both living there; and a reference to Mr. Salter’s Catalogue will show how largely they contribute to them. Their cultivation there is materially aided by the nature of the climate; they mature their seed better than in

our more chilly regions, and the experience of the last two seasons has shown us how disappointed we may be in the prospect of a bloom.

Nothing has been added to our knowledge of the culture of this flower during the past year or two, and we are dependent more on climatic influences than on any difficulty in soil. A sunless summer and a cold dull autumn baffle even the most experienced cultivators; and we have to lament too often failures, even after all our care. The grower for exhibition still pursues his plans, and gets up most astonishing flowers, the parents of which would never know their own offspring. But may we, who are amongst the "profanum vulgus," not be wise to save ourselves some trouble in the method at present generally adopted of shifting two or three times. The Chinese, we are told, adopt an entirely different plan, and at once pot from the cutting pot into those they are to bloom in; and that by this means they acquire well-feathered plants, and not tall gawky things. We all know that if we plant a cutting in the open ground, how very soon it outstrips its companion whose energies have been cramped in a small pot, and the next best thing we can do is to imitate this, and give it plenty of room. By growing them on the one-shift system, potting them from the small forties or sixties into 11-inch pots at once, lateral shoots will at once start out, and without the care and fuss of tying out, will soon furnish the plant. To those whose time is limited, and who grow only for their own pleasure, this surely is preferable to that stunting and starving they too often have to endure at that early stage of their growth. It is a mistake, I fancy, to grow them in too rich stuff, that stimulus to their growth, which arises from gross feeding, being better supplied in the shape of liquid manure afterwards. Two-thirds loam and one-third rotted frame-dung is as good a mixture as we can give them. During the summer months they should be kept perfectly cool, and it is a good plan to place on the top of the pots something that will retain moisture well. Moss, rotted cocoa-nut fibre, or spent hops, are used by various persons for this purpose. When the blooming buds appear, then liquid manure may be applied, but not profusely, the practice of the Chinese not being quite adapted for us, with our colder and damper climate.

And now as to new sorts. I carefully went over Mr. Salter's collection, when in bloom, and noted those which seemed to me worthy of cultivation, and from those notes I now give the following list; some of the varieties (those figured were amongst them) had not then been named, but a reference to the numbers they bore, which Mr. S. has obligingly given me, has set that matter right. The cream of the collection has

been transferred to paper, and the portraits of Little Harry and Lady Harding, in the "Floral Magazine," and of Rifleman and Pandora in our present number, will express better than my words can do, what exquisite varieties they are. Of others I have also notes against, and give in order those that seemed to me most deserving of notice.

ARIADNE, cream and buff. There was an air of novelty about this, and it promised to be free in growth.

CARACTACUS, rosy carmine, blush tips; large and fine flower; will probably *do* better as an exhibition flower than as a specimen.

GOLDEN HERMINE. Those who value the older one will gladly recognise in this a valuable sport; the flowers are orange, tipped, as its parent, with carmine.

LITTLE HARRY, a beautiful bright yellow, most perfectly incurved, never needing to be dressed, and one of the most profuse bloomers possible; the plant, too, is easily grown. Ex. ex.

LADY HARDING, a pretty rosy pink, equally abundant in bloom to the last, though larger, and beautifully incurved. Ex. ex.

LORD ELGIN, that indescribable colour, *bronzy* rose, finely incurved.

PANDORA, deep nankeen, with yellow centre; fine show flower. Ex. ex.

PHŒBUS, bright orange, not very large, but very free in blooming; later in flower than some of the kinds previously named.

QUEEN OF WHITES, large white, and well incurved.

RIFLEMAN, dark ruby red; a very noble looking flower, beautifully incurved and early flowering. This plate is taken from a very fine specimen. Ex. ex.

*Deal, March 23.*

D.

### PRUNING PEACHES AND NECTARINES.

Too much is done with the knife and too little with the thumb and finger, in managing these as well as many other fruit trees. It is considered a very clever thing by many fast gardeners to use the knife freely, and well thin out their wall trees. Now, having suffered many years by allowing my gardener too much license with *Saynor*, I cannot do less than caution my fellow-sufferers in this way (and I know we are a numerous class) not to allow their gardeners a knife at all, except it be to prune Gooseberry bushes. In fact, I wish the Chancellor of the Exchequer would put a tax upon pruning knives; it would yield a good sum to the revenue, and save hundreds of Peach trees every year. The way I found out that the knife had caused all the evils my trees had been subject to for the last 14 years (during which time two series of trees had been "used up," and a third set were going in the same direction), was this:—My gardener left me two years ago, and wishing to bring a sharp young fellow who had worked with him for some time into his place, I took to the management of my wall trees *pro. tem.*; and being a subscriber to the *Florist*, took lessons from your back numbers, wherein thumb pruning is strongly insisted on; and strictly following the plan laid down, I shortly discarded the knife altogether. I began my work in April, 1859. My principal Peach trees were then four years old, and were already getting naked in the centre and

lower part of the tree, owing, as I soon found, to the buds not wanted for wood having been cut away with the knife, by which practice, in two or three years, the lower parts of the main branches were left without young wood on them, and what was still worse, without the power of forming even adventitious buds. My plan is to cut nothing away; every bud is allowed to grow a few joints in length, when I pinch out the point, leaving two or three leaves at the base, which includes as many joints. Those intended for filling up are selected and laid in when grown sufficiently long, but I am more sparing of this wood than many, depending on my spurs. The shoots pinched back may again push during the summer, when they are again closely stopped and result in fruit spurs, which have also generally latent wood buds at their base, which prevents the wood ever becoming naked and unproductive, which it otherwise would. By this simple method, my trees are now covered with short spurs and small wood in place of the long coarse shoots which used to run up to the top of the wall in a season, and naked wood is now impossible. My trees have escaped this severe winter without suffering any bad effects that I can see, whereas my neighbours all tell me the wood of their trees is blackened or dead. My spurs ripen sooner than the wood on longer shoots, as they become brown and lose their leaves earlier, hence the superiority of the plan in seasons like the last. My man is now getting into his work, and I shall in some measure place the trees in his care this season, allowing him *no knife*, except to shorten back a few long shoots when they have fairly broken. Yes! gardeners must learn to dispense with the knife in tree management, just as we have done with the lancet in our medical practice.

A M.R.C.S.

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### LARGE CAMELLIAS.

FOREMOST among these stands the fine specimen of *C. reticulata* at Bank Grove, near Kingston-on-Thames, the residence of Byam Martin, Esq. This cannot measure less than 20 feet in height, and 50 feet in circumference. It was planted out in a house devoted to itself some 25 years ago, and is supposed to be one of the first trees of the kind planted out in England. Some years as many as 4000 flowers are said to have been produced by this plant. The back walls of the various plant houses here are covered with Camellias planted in slate boxes, and the effect which they produce is excellent, though they are considerably shaded by plants on stages in front. Here also may be seen some fine specimens, planted out, of Monarch, Eclipse, Double Red and White, and many others. The next specimen remarkable for size to which I would direct attention is one of old Double White, at Sundridge Park, near Bromley, in Kent. This would make a good companion to the *reticulata* just noticed. Though a very old tree, it is still in excellent health, and flowers well every year. Here, also, may be seen some magnificent specimens of Double Red, Double Striped, Lady Hume's Blush, and many other choice sorts.

T.

## HORTICULTURAL SOCIETY'S NEW GARDENS.

FOR three days the members of the Horticultural Society—which begins to be very much the same as saying the London public—have been admitted to see the new gardens at South Kensington, and very beautiful they have found them. These Gardens are included within the quadrangle composed by the Kensington Road on the north—where was originally Gore House, belonging to the Countess of Blessington—the new Cromwell Road to the south—Prince Albert's Road on the west—and, at the east, Exhibition Road. The whole of the space within this quadrilateral is not occupied by the Horticultural Society—a portion of land on the north being left unoccupied, with a frontage towards the Kensington Road, while on the south, several hundred feet in depth, and the entire width from east to west, with a section at the south-west angle, is devoted to the International Exhibition of 1862. To this the Gardens, with their waters, vast plats of level turfing and innumerable flowers, will be a delightful and appropriate adjunct. The whole space occupied by the Horticultural Society is about 1200 by 800 feet, the longest measurement being from north to south. In the same direction, the gradient of the land, or its natural slope, is about thirty feet incline, that being the difference between the levels of the Cromwell and the Kensington Roads. This affords an ample fall for the water, and, most conveniently, the introduction of a series of slopes, turfed terraces, and grassy banks, which, with the shallow flights of steps employed at intervals, will add greatly to the variety of the aspect presented by the whole. The soil is a well-drained gravel.

We will introduce the reader as he may enter those Gardens on the 4th of June next, with, we hope, Her Majesty, for that is the day which the Committee, accustomed to do great things in extraordinary circumstances, have announced for the opening. The entrance is to the south-east, from Exhibition Road, within 100 yards of the South Kensington Museum. We pass through the narrow belt of exterior garden, that is to be tastefully laid out for the benefit of the public in general. The front of the entrance-building is as yet but a plain piece of brick-work; but it is to assume architectural proportions and pretensions when the other works are completed. Between piers which are closed by shutters, or may be made open by sinking them completely out of sight, we may go into the vestibule, an elegantly-designed hall, lighted from the roof by a flat skylight, oblong in form, decorated with pilasters and mirrors, and kept very simple in colour and pure in design. Traversing this, we cross a corridor, and, by a flight of steps, come upon the level of the garden itself at the centre walk of the ante-garden, which occupies the entire width and about three hundred feet of the length of the grounds: to the right and left are to be pedestals with statues, a gravel path thirty feet wide in front, which is, some day, we believe, to have in the centre a large octagonal tank filled with water, wherein are to be placed various Nymphææ and water plants of the like description; a statue will probably stand in the middle of this, upon a circular pedestal. Here the main central walk, which traverses the grounds from north to south, ascending from one level to the other,

is met with. Before going any further, we look round upon the domain thus entered. Without much difficulty, as the works now stand, we can conceive their completed state—the whole boundary of the garden, north, south, east, and west, is inclosed by an arcade of considerable height, judiciously varied in its design, so that on the south and east ends runs a highly beautiful belt of columns, to be glazed in the openings. To the north, much above our level as standing here, is a bold colonnade of Ionic pillars, sweeping its curved ends inwards, so as to inclose the head of the grounds. In the centre of this will arise a conservatory nearly two hundred and fifty feet long. The colonnade will be a covered way, or sheltered promenade, decorated with statues, climbing plants, and, may be, wall-painting, so that the visitors may take exercise under shelter. On the roof is to be a balustraded balcony, some twenty-four feet above the highest level of the grounds, and, consequently, about fifty feet higher than our present post. Hence will be gained a complete view of the grounds, with their gay groups of promenaders and sparkling waters, within convenient hearing of the bands which are to be stationed below, just within the returning horns of the colonnade. This balcony, or upper promenade, is, we believe, when there are sufficient funds, to be carried along the two sides of the garden as well as on the north. Now turning to look at the south arcade, there is visible what we consider the most beautiful, as it is certainly the most novel, section of the architectural part of the design. Between the piers, set apart about twenty feet, are openings, in which are introduced round-headed arches, three in each division, of a very elegant order. The arches spring from the heads of slender shaftings, with spiral mouldings in relief running round them; these are doubled, have pretty bands of flowers midway in their height, upon a flat belt, their capitals delicate and graceful to a high degree with similar ornamentation. The lightness and graceful appearance of this arcade, even in its present state, must strike and delight every spectator; but its agreeable disposition and true beauty will hardly be developed until the roof which shall convert its interior face into a corridor, and the glass which is to close it in, have been added. The shaftings, caps and belts for the arcades are moulded in terra-cotta, of several designs, so made that, by fitting one segment to another, great diversity, the very essence of romantic art, is readily obtained. The result of this experiment will be accepted as a hint by architects in designing windows for modern buildings, such shaftings being durable beyond conception, strong, capable of infinite adaptation, and cheaper, we opine, than the brick-and-stucco mullions which intercept the light of a window-opening without adding to its beauty. They may be used with square or round heads, can be made to fit for sashes or fixed frames, with a discharging arch above, and the tympan, open with glass or closed with brickwork at pleasure. These shaftings alone would give a beautiful architectural character to the cheapest of buildings; they might be glazed of any vitrifiable colour, when they would endure for ever.

The extreme southern side of the grounds it is proposed to leave for the present partly unoccupied, in case it be wanted for the Floral

Exhibitions: a part of it is, however, to be appropriated to Ferns and Rock plants. Belts of evergreen shrubs, trees, and statuary are to be disposed around us here; looking northwards on the left is a maze of Holly and Hornbeam, about a quarter of an acre in extent; surrounded by trees may be an aviary for song birds, standing upon turf and within a mass of shrubs. The compartment for American plants is on our right, secluded by a belt of evergreens, and surrounded by Grass alleys; near the centre walk, and as a companion to the aviary, may stand a pheasantry, 50 feet by 30 feet. Quitting the station beside the basin for *Nymphææ*, we advance beyond the limits of the ante-garden, marked by a turfed slope to right and left, and ascend by a shallow flight of steps to the garden proper, having before us some splendid Deodars and other trees, which, when time matures them, will be highly picturesque; a circular basin on either hand is to mark the intersection of the next wing pathway, going parallel to that by which we entered, called the south cross-walk of the principal garden. The view obtainable here is to be enhanced by a bridge, which, ascended by steps, traverses the sides of the garden, marked again by banks of turf and beds of flowers,—ramps giving access to higher levels with ease, as well as diversifying the aspect of the whole,—producing light and shade and variety of colour. These turf ramps are disposed in geometrical order over various parts of the garden, and form boundaries for the different terraces.

A further progress along this centre walk will give us another station for looking around, and place us in what may be styled the heart of the garden, which, from its superior level, is preferable to that last quitted. Here the path divides to right and left. Hence we get a notion of the whole, and shall be near enough to examine one of the marked features of the design; this is, the employment of beds of coloured earth, formed by use of pounded stones and other durable substances, which, when Nature no longer furnishes flowers, will, as well as may be, add colour to the landscape. Some of these beds have their surfaces inclining inwards towards the centre of the garden, so as to catch the spectator's eye fully, and occupy more space to the sight. To the north is a great rectangular basin, into which pours a cascade 18 feet wide and 11 feet high, from the base of a pedestal to be surmounted by a memorial sculpture of the Great Exhibition of 1851. Immediately to the right and left are to be standard Portugal Laurels on the verges, which latter are 15 inches above the surfaces of the compartments and promenades. An alley of these evergreens will stand on either side of the centre walk, flanked by low ramps, backed over the Grass plats by masses of divers shrubs and taller trees. At the east and west of our station are basins with jets of water, the background to which will be flights of steps ascending to the terraces and corridors. We will now go further on, and stand by the site of the cascade above the principal basin. It will be remembered that the great colonnade, with its horns curving inwards, has been in front of us all this time; in the centre will rise the glittering mass of the conservatory, disposed to an appropriate architectural design, with its balcony on the roof, to be filled with gay crowds, the dark masses of the

Deodars ever present. As we look from this new station, four canals, supplied by cascades—whose course is traversed by the pathway in which stand the basins with jets and the flights of steps whereby we reach the level of the side terraces, are discernible, for we are now above them, and look over ramps of earth supporting the paths that surround them and the stairways giving access from one grade to another. Each of these canals is about 180 feet long and 25 wide; they are four in number, two on each side, reaching from our present standing-point to the pathway at whose intersection with the centre walk we stood with the circular basins on either hand,—the south cross-walk of the principal garden. One hundred and eighty feet from the pedestal of the sculpture which it is proposed to place above the great central cascade, is the last flight of steps, which brings us to a level with the band platforms, and only just below the conservatory; we are now inclosed by the great colonnade, whose horns advance with a grand sweep 250 feet, spanning 700 feet. From the lowest level of the steps just ascended goes to either side a long ramp of turf, encircling half the band-houses and platforms, so that large accommodation for auditors is provided. From the highest level the path runs in front of the conservatory, sweeps round the ramps last mentioned, and by a brief ascent brings us to the colonnade itself,—standing under or upon the roof of which we can see the whole domain, with its many levels, flights of steps, belts of trees, evergreens and dwarf shrubs, its embroidered beds, canals of running water and many-shaped basins, its jets, cascades, the multitudinous-hued flowers, large spaces of Grass and ramps in long lines from side to side, with their curving faces here and there as they stretch beneath us; the rich diversity of greens from the plats and shrubs, statues, band houses, and dark Deodars, all inclosed with the diverse corridors to the east, south, and west. Beyond the south side will be the Exhibition building. With great judgment the employment of fountains has been restricted to two simple and lofty streams, which under shelter of the corridors and colonnades can play at all times and in all winds. Hence it will be seen that the error of the Crystal Palace decorators has been avoided. We have had occasion to speak of many flights of steps; but it will be seen that these are in easy gradients, from the fact that the total ascent, thirty feet, is overcome by no less than seven shallow flights.

Such, we hope, will be nearly the state of the gardens on the 4th of June; but the long-continued wet and frost lead us to doubt if the gardens can be quite finished by that day.—*Athencæum*.

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#### CRASSANE D'HIVER (BRUNNEAU).

THIS is a late French Pear, which is worthy of further trial. I find it to be a very handsome fruit, nearly round, yellow, slightly tinged with red, when ripe, and keeps till April and May. In 1855 my dwarf trees on Quince stocks bore abundantly, but the fruit did not ripen so kindly as heretofore. I am inclined to recommend this high-flavoured Pear to be planted against a south or south-east wall, and I have no doubt that it would ripen well and prove a valuable late Pear.

T. R.

## HINTS ON GARDENING.

Do not be in a hurry to pull up or even cut back such of your trees and shrubs as may appear killed by the frost. During the spring of 1838, numbers of good evergreens were needlessly destroyed by being pulled up as apparently dead, whereas others of the same kind which were left to take their chance ultimately recovered; and I have now very fine plants which, to all appearance, were dead in 1838 and are so now, but which I am in hopes will break again vigorously after midsummer, if not before. The vitality of some plants is truly wonderful, the Thuja and Cypress tribes more especially, as well as many others. My plan is to allow everything to stand as they are, where there is any chance of a recovery, until it is seen whether they will break again or not; and I don't even prune them before they commence growing, for supposing the shoots are dead half way down, as we may conclude the roots are uninjured, they will make a vigorous start when they commence growing. Roses, where there is any doubt about their state, should be left unpruned for two or three weeks yet; Magnolias and other plants, which have been protected, should have this protection continued for some time, for if removed, the dry winds of March may do the trees more injury in their present state than the frost. It is a mistake to suppose the true Pines will not make a new leader when the primary one dies. I have now growing a *Pinus insignis* and *P. ayacahuite*, which were killed back by the frost (I think in the spring of 1853 or 1854), all except the lower tier of branches, which were uninjured. The strongest branch in each tree was selected and tied up to the dead stem as nearly vertical as we could get it, and as the whole flow of sap was thrown into these branches, they soon changed their character, and after two years no difference could be detected between them and a natural leader, except by examining the stump; both are now trees from 12 to 15 feet high, and, though browned, have I think escaped this winter without serious injury.

We are likely to have an early vegetation this spring, for the sap of plants is more easily excited by warmth after very severe weather than when the temperature has been uniformly low, but not so intensely cold as during the past winter. Those who have deciduous trees to plant should therefore set about it at once, as those who have trees to fell should cut them immediately for the same reason.

So far as our observations extend, the escape from injury to plants during the past season is in direct ratio to the dryness of the soil and elevation, the exceptions being where the plants were exposed to the east wind. In moist, although sheltered valleys, plants have suffered more than when fully exposed on dry elevated ground, facts which planters should bear in mind. The graceful Pampas Grass seems killed everywhere, as does the Chusan Palm; we regret this, as two more decorative out-door plants did not exist, but I fear the last winter has given a blow to their future culture.

We hear of great things from Japan in the tree and plant way, and are asked to give an opinion as to their hardiness: at all times a difficult question with respect to new plants, but more so from an

entirely new country like Japan. We know some to be hardy, others again are not so, as this last season has demonstrated. As a general rule, we may take it for granted that Japan plants, which grow at a higher elevation than 1500 feet above the sea level will prove hardy, and we can say of the others for ourselves, that we shall try all we can get.

G. F.

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#### VISITS TO NURSERIES.—No. IV.

##### MESSRS. SPARY AND CAMPBELL, QUEEN'S GRAPERIES AND NURSERY, BRIGHTON.

HAVING been in Brighton some time ago in the "hoighth of the sayson," I bethought me of paying a visit to the above establishment, to see whether, amidst all the evil influences under which floriculture must labour in that miniature edition of London, it were possible for skill and enterprise to surmount them. We knew, of course, that we were not to expect the freshness and trim neatness of Slough, or the large and luxurious growth of Bagshot; but had no doubt but that something would be gained, and perhaps some information useful to the public in general elicited. There *are* great difficulties in the way, the biting east wind, the chalky soil, the quantity of dust, the descent of blacks, the burning sun in summer, and sou' westers and sea-fogs at times, make a nurseryman's time no sinecure. Then *the season* is from October to February—the most unfavourable time in the year for flowers—when there is, nevertheless, a constant demand for cut flowers and plants for decorative purposes every day. However, there is a wonderful adaptiveness in our Anglo-Saxon nature. We find it very hard at first, with our angularities, to fit into a round hole, but, after a trial or two, we settle down; so here, Messrs. Spary and Campbell have found out the way to satisfy the demands of a craving public with profit to themselves.

As the name implies, their establishment is well known for its Grapes, which are grown in twelve large Vineries (mostly heated with flues), and supply that delicious fruit nearly all the year round, the cutting commencing in March and the main crop being gathered from August to January. These Vineries are used in the autumn for housing the greenhouse plants, which are required more particularly for sale in the spring and summer. At the same season, the plant houses are occupied with plants approaching a flowering state, in order to meet the demand during "the season," both for drawing-room plants and for cut flowers; and as these are sold out, their place is supplied by others from the Vineries, and thus the plant houses are always full; and at the time of year when in most nurseries stock is going to sleep for the winter, in this nursery they are all growing fast and rapidly advancing for bloom. Necessity is said to be the mother of invention—she is certainly the mother of *discovery*—and hence Messrs. S. & C. have found out what suits them best for the bouquet part of their business; some plants of single Primulas were grown to a monster size, and they had furnished immense quantities of bloom for this purpose. Various sorts of *flowering* Begonias also come in, and the very pretty Heterocentrum

roseum is extensively used for the same purpose. Very dwarf plants of the gorgeous *Poinsettia pulcherrima* are grown in quantity, and make a great display during November and December, and at the same time *Linum trigynum*, with its rich golden flowers, similar in size and shape to a *Convolvulus*; this is rarely seen in a satisfactory condition, it being so subject to red spider, and certainly is not usually grown in numbers to sell as a flowering plant, and would not be here if it could not be made to bloom at the dullest time of the year, and with healthy clean foliage too. There is also a dwarf growing variety of scarlet *Geranium*, which they have found out to be an incessant winter-flowering one; it is called Queen. All the winter months it is continually sending up bloom, and hence large quantities of it are grown; Christina also produces its rosy pink flowers all the winter. I found also that they have a kind of yellow *Calceolaria* which is admirably adapted for the hot soil and glaring sun of Brighton; this they call Brighton Yellow, is very free flowering and easily propagated. This may be interesting to those who have found their *Calceolarias* going off in large numbers during the hot weather. From what I have said it will be easily gathered that the greater portion of the stock is sold in a flowering state; and as they are carefully looked after and well grown, the *Geraniums* are not crammed full of sticks, but short and stubby, and deserve a better fate than that which they too often meet with—to be at first praised and petted, and then drawn and excited by a dry atmosphere and crowded rooms, to pine away and die.

But Messrs. Spary and Campbell are also raisers of seedlings. I find in Mr. Turner's catalogue a *Petunia* called Peerless, described as a rich glossy crimson—an improvement on Phaeton—with dwarf habit, an excellent self variety; this was raised by them, and there is also another of their's, which is to be let out by Messrs. E. G. Henderson & Son, a fine bold dark one, called British Lion. They will also send out shortly a seedling early forcing *Geranium*—a cross between album multiflorum and Gauntlet—of a bright lively salmon pink colour, called Valentine, and it promises to be a useful acquisition. They have also a seedling show *Pelargonium*, with variegated foliage; the plant at present is small, but if the marking continues permanent, it will be the first instance of variegation occurring in that tribe of our popular favourites. Although my visit was paid at a time of the year when nearly everything in flower was sold out, and when consequently the houses were at their worst, yet I felt that one gained an insight into the manner in which we may adapt ourselves to circumstances; and as I pursue gardening under difficulties myself, am always glad when I see anyone successfully surmounting the difficulties which *they* have to contend with. I quite forgot to mention that Mr. Spary has patented a new fumigator, which promises to be useful where Vines are cultivated, it appearing to be excellently suited for the use of sulphur, &c. The energy which has enabled the proprietors to surmount their private difficulties has also been made available in a more public capacity, and the success of the Brighton Horticultural exhibitions—one of the most prosperous of the large provincial shows—is mainly owing to their indefatigable perseverance.

Deal, March 21.

D.

## GIGANTIC CACTI.

THIS day—says M. Mollhausen, in his “Diary of a Journey from the Mississippi to the Coasts of the Pacific”—we saw, for the first time, the giant Cactus (*Cereus giganteus*), specimens of which stood at first rather widely apart, like straight pillars ranged along the sides of the valley, but afterwards, more closely together, and in a different form—namely, that of gigantic candelabras of six-and-thirty feet high, which had taken root among stones and in clefts of the rocks, and rose in solitary state at various points.

This *Cereus giganteus*, the queen of the Cactus tribe, is known in California and New Mexico under the name of Petahaya. The missionaries who visited the country between the Colorado and the Gila, more than a hundred years ago, speak of the fruit of the Petahaya, and of the natives of the country using it for food; and they also mention a remarkable tree that had branches, but no leaves, though it reached the height of sixty feet, and was of considerable girth. We touched, on our journey, the northern limit of this peculiar kind of Cactus, which from there extends far to the south across the Gila, and is also frequently found in the State of Sonora, and in Southern California. The wildest and most inhospitable regions appear to be the peculiar home of this plant, and its fleshy shoots will strike root, and grow to a surprising size, in chasms and heaps of stones, where the closest examination can scarcely discover a particle of vegetable soil. Its form is various, and mostly dependent on its age; the first shape it assumes is that of an immense club standing upright in the ground, and of double the circumference of the lower part at the top. This form is very striking while the plant is still only from two to six feet high, but as it grows taller, the thickness becomes more equal, and when it attains the height of twenty-five feet, it looks like a regular pillar; after this it begins to throw out its branches. These come out at first in a globular shape, but turn upward as they elongate, and then grow parallel to the trunk, and at a certain distance from it, so that a *Cereus* with many branches looks exactly like an immense candelabra, especially as the branches are mostly symmetrically arranged round the trunk, of which the diameter is not usually more than a foot and a half, or in some rare instances a foot more. They vary much in height; the highest we saw at Bill Williams' Fork measured from thirty-six to forty feet; but south of the Gila they are said to reach sixty; and when you see them rising from the extreme point of a rock, where a surface of a few inches square forms their sole support, you cannot help wondering that the first storm does not tear them from their airy elevation.

Inside the fleshy column, however, it is provided with a circle of ribs, each from an inch to an inch and a half in diameter, reaching to the summit, and of as close and firm a texture as the wood of the Cactus usually is; and these enable it to defy the storm. When the plant dies, the flesh falls off from the woody fibres, and leaves the skeleton of the giant standing sometimes for years, before it too becomes the prey of corruption. The trunk of the *Cereus*, as well as its

branches, is notched from the root to the tip, at regular distances, and the structure of the outer surface gives it a certain resemblance to an organ. The edges are closely set with tufts of grey prickles, at equal distances between which gleams out the bright green colour of the plant itself; in May or June, the tops of both branches and trunk are adorned with large white blossoms, which are replaced by pleasantly tasting fruit in July and August. When dried, this fruit strongly resembles a fig, and is a favourite kind of food with the Indians, who also prepare a syrup from it by boiling it in earthen vessels.

If the smaller specimens of the *Cereus giganteus* that we had seen in the morning, excited our astonishment, the feeling was greatly augmented, when, on our further journey, we beheld this stately plant in all its magnificence. The absence of every other vegetation enabled us to distinguish these Cacti columns from a great distance, as they stood symmetrically arranged on the heights and declivities of the mountains, to which they imparted a most peculiar aspect, though certainly not a beautiful one. Wonderful as each plant is, when regarded singly, as a grand specimen of vegetable life, these solemn, silent forms, which stand motionless even in a hurricane, give a somewhat dreary character to the landscape. Some look like petrified giants, stretching out their arms in speechless pain, and others stand like lonely sentinels, keeping their dreary watch on the edge of precipices, and gazing into the abyss, or over into the pleasant valley of the Bill Williams' Fork, at the flocks of birds that do not venture to rest on the thorny arms of the Petahaya; though the wasp, and the gaily variegated woodpecker, may be seen taking up their abode in the old wounds and scars of sickly or damaged specimens of this singular plant. The hedges of Organ Cactus are a feature in the landscape of Mexican plains, and we first saw them in perfection on the road between Mexico and Pachuca. This plant, the *Cereus hexagonus*, grows in Italy in the open air, but seems not to be turned to account anywhere except in Mexico for the purpose to which it is particularly suited. In its wild state it grows like a candelabrum, with a thick trunk a few feet high, from the top of which it sends out shoots, which, as soon as they have room, rise straight upwards in fluted pillars 15 or 20 feet in height. Such a plant, with pillars rising side by side and almost touching one another, has a curious resemblance to an organ with its pipes, and thence its name "organo."

To make a fence, they break off the straight lateral shoots, of the height required, and plant them closely side by side, in a trench, sufficiently deep to ensure their standing firmly; and it is a curious sight to see a labourer bearing on his shoulder one of these vegetable pillars, as high as himself, and carefully guarding himself against its spines. A hedge perfectly impassable is obtained at once; the Cactus rooting so readily that it is rare to see a gap where one has died. The villagers surround their gardens with these fences of Cactus, which often line the road for miles together. Foreigners used to point out such villages to us, and remark that they seemed "well organised," a small joke which unfortunately bears translation into all European languages, and was inflicted without mercy upon us as new comers.

## RADIATION.

RADIATION is one of the greatest enemies of vegetation ; it takes place with great effect in March, April, and May, when the days are hot and the nights cloudless and cold. The heat taken in by the plant by day radiates or goes forth by night, when the temperature is often only 4° or 5° above freezing point. Thus the plant loses the day heat, amounting to some degrees, when the night is clear, owing to the absence of clouds, which are not only the anti-radiators of the world, but are also radiators of heat towards the earth. The greatest radiation, therefore, takes place when the sky is clear and the wind is N. or N.E. Hence the moon, which is an opaque body, having no atmosphere of its own, gets the discredit of ruining vegetation, whereas it is perfectly harmless ; it has no atmosphere of its own, neither does it exercise any influence on our atmosphere, nor cause changes in the weather. The weather is as variable at other times as at the quarterings of the moon—the difference being simply this, that at the quarterings we observe changes of the weather, and at other times we observe them not. At the spring of the year, when the moon is full and the sky is clear, radiation, after a hot day, takes place, more or less frost ensues, and the moon gets the blame. It is not, therefore, the moon in April that destroys vegetation, but frost that follows excessive radiation, when the sky is cloudless and the air is keen. Certain it is that many tender plants and flowers need protection both in winter and spring, to prevent their giving off the heat received during the day, hence a south wall is a more dangerous place in winter and spring than a north wall ; the plants under the latter lie in a state of death-like abeyance till the dangers are past. Fruit blossoms under a north wall often escape without protection, when the unprotected, under a south wall, are destroyed. The espalier Apple blossoms in my garden often suffer from their early appearance, when the high standards in the orchard close by escape, because they have little day heat to give out when the night comes on ; in a word, they come out when the danger is over, or, being fully exposed, take in less heat by day. This leads me to return to an old topic, the necessity of covering our south fruit walls in spring, especially our Peach blossoms.

There are of course many ways of covering or rather *pretending* to cover our wall trees ; some of the *coverings* used (rabbit nets !) might as well be discarded. The three most successful that I have ever seen are the following : First.—Wheat straws hung by the neck close to each other, and fixed by driving nails through a long stick against the wall ; this I saw succeed last year at the lower end of my parish ; it is, however, fair to say that it was a favourable year for trial. Secondly, glass cases which are so abused that I fancy the trees, if they could speak, would say, “ I would rather be without you.” The cases should be totally removed after the crop is safe, otherwise the wood is drawn, weak, and soft, and people are tempted to overcrop the trees, a fault that I fear attaches to me ; however, in common life, we do not argue against the use of a thing from its abuse. Thirdly, sheets which are more like clouds than other coverings are : this is my “ cloud.” They

are put on, as described before in the *Florist*, at four o'clock in the afternoon, and are taken off at ten o'clock in the morning (unless the day is wet, very windy, or sleety), thus allowing the walls to cool *gradually* and heat *gradually*, quick transition being most baleful. This is my mode of covering, and very successful has it been for some years. As regards Peaches, in 1858, we brought to table or gave away 1024, off three trees in a foggy valley close to the rivulet; in 1859 we took 197, in 1860 we landed 755; thus taking in three years off three trees 1976 Peaches.

The benefits of a sheet are at least threefold; it keeps the blossoms dry, prevents in some measure radiation, and also saves the foliage from curl. The foliage here is always as good as the crop. Now, go into the gardens of England, and I believe I may say into many glassed houses, and you will see that the foliage of Peach and Nectarine trees is a disgrace to science. This will lead me to say one word about curl. What is it? I believe it to be occasioned by some insect that inserts, by its forceps, an egg between the first and second cuticle of the leaf. In due time it is hatched and crawls between the cuticles, disorganising the functions of the leaf, till it (the leaf), being resinously bloated, falls off. The sheet certainly stops its development and glass does not, neither do the Wheat straws prevent it. The only appreciable curl that I ever see here is just where the sheets do not meet, and also between the sheets and the tiles. I cannot account for this, and probably I may be wrong altogether about the theory of curl. Curl seems to be most developed during hot days and easterly winds, but as I often, during such weather, keep on the sheets all day, to prevent the walls from being overheated, previous to certain morning frosts, it may be that the sheets prevent the hatching of the egg till the cuticles are too hard for the insect to travel between them, or it may be that the sheets prevent the hatching altogether. Mr. Worthington, Mr. Hilyar, Mr. Leach (Lord Portman's gardener) saw the fruit and the leaves, and greatly admired the latter as well as the former. Indeed, the greatest and best foliage here last summer were the Peach leaves.

I should feel much obliged to any of the readers of the *Florist* who would kindly correct me if I am wrong about the origin of curl. The sheets last year were put on the 7th of March, and finally removed the 7th of May. I want to know what chance the Peach blossoms would have had, during two months of such weather as your readers will not easily forget, without the solid protection of the sheets. The following was the disfruiting of the three trees—May 17, 6488; June 11, 663; and some time in July, at the recommendation of Mr. Leach, I took off 538 more, leaving on 755. He said that the crop would otherwise be too much for the trees; there is, however, plenty of wood, though I fear the wood here and everywhere else will be found to be inferior to preceding years. I depend chiefly on fan fashion, but also grow the fruit on little spurs, which after cropping are removed.

*Rushton.*

W. F. RADCLYFFE.

*March 22.*—The trees are now in bloom, and the blooms are sufficient all over the trees, but they are not so thick as last year.

W. F. R.

## ORNAMENTAL BULBOUS AND TUBEROUS PLANTS.

*Crocus*.—Messrs. E. G. Henderson state that this favourite genus yields to none in its season for effect and special adaptation to flower-garden decoration. Its habit of growth renders it suitable to positions where it may be allowed to grow undisturbed without being removed to make way for plants of later bloom; and its small size will allow of its being placed in close contiguity with the extreme outer margin of flower-beds or borders. Hence the suitability of the *Crocus* for forming ribbon-like lines or belts. It may also, like other bulbs, be planted in larger inner groups or masses, which can be removed before the summer bedding stock is planted. Besides this, it may be grown in pots to any extent in the form of portable specimens for conservatory and greenhouse decoration. For pot-culture the corms should be planted in successive batches, from six to ten or twelve being placed in each pot or vase, and using ordinary rich soil to a full inch in depth above the crowns; the pots are to be placed along with those of the potted Hyacinths, for the purpose of encouraging preparatory root-growth before their exposure for bloom. The *Crocus* differs, however, materially from the Hyacinth in its after treatment, inasmuch that after the formation of root-growth, the latter are benefited by a genial surface or bottom-heat to mature the bloom, whilst the *Crocus*, Snowdrop, Aconite, and Dog's-tooth Violet only require the aid of a cold frame or pit, with due ventilation in mild weather, which preparation admits of their removal to the conservatory or drawing-room flower-basket. For extensive border decoration in large gardens, and where large quantities are required, the various colours, yellow, white, blue, violet, variegated, and Scotch are selected as the most appropriate. All the varieties under the above colours are well adapted for early forcing in pots; and amongst the large extra-fine hybrid varieties especially suited for this latter purpose, are those named Aletta Wilhelmine, Dorville, La Majestueuse, Lilaceus superbus, Mont Blanc, Pluto, Pride of Albion, Prince of Wales, Queen Victoria, and Sir Walter Scott. Of the distinct species and rarer kinds, *C. medius*, *C. nudiflorus*, *C. odoratus*, *C. pulchellus*, *C. serotinus*, *C. speciosus*, and *C. sativus* are the best and most desirable autumn-flowering kinds; and amongst the earliest spring-blooming species, *C. biflorus*, *C. imperatorius*, *C. nivalis*, and *C. multipetalus* are select and desirable.

*Cyclamen*.—The species and varieties of this genus are very pretty half-hardy and greenhouse tuberous plants, blooming through the winter and spring months. The species may be separated into two sections, pertaining respectively to *C. persicum* and to *C. coum*. The former are somewhat less hardy than the latter, and therefore better adapted for the greenhouse and conservatory; the latter are manageable through the winter with protection from frost by the aid of a good cradle-bed or pit. After the early spring-bloom the leaf-growth is encouraged for a few weeks longer, and then they are allowed to cease from growth, and are placed upon a dry border until late summer and autumn, and then during the latter period they are repotted or resurfaced as may be required. One half good loam, and the remaining

half equal portions of sandy peat and well decomposed leaf-mould, form a compost suitable for their growth. When potted they are protected in frames or pits until severe weather comes on, when those of the persicum section require to be housed for the winter, and those of the coum section to be plunged in ashes or dry tan within the cradle-bed or frame. The Persian varieties are adapted for blooming throughout the early winter months by being repotted at an earlier period, and after the root-growth is formed in autumn, the varieties in either section may be stimulated to bloom successively by the gentle heat of a greenhouse or early forcing-pit. Amongst the most desirable varieties for early and successive bloom are *C. persicum* and its varieties *album*, *rubrum*, and *roseum*; and *C. africanum*. Of the coum section, the most elegant are *C. Atkinsi*, *C. Atkinsi roseum*, *C. ibericum*, *C. ibericum album*, *C. coum*, *C. coum carneum*, and *C. vernum*. The hardy autumn-flowering kinds are *C. neapolitanum* and *neapolitanum album*, whilst *C. europæum* is also a late summer-blooming species with richly fragrant blossoms.

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#### ON LIME AS A SOIL IMPROVER.

OLD gardens are frequently unproductive through being manured year after year with the same kind of manure and growing the same crops. In such cases, the vegetables are rank in growth and ill flavoured, Potatoes and other roots watery and liable to disease, and Peas and Beans unproductive, and Cauliflowers and Cabbages subject to club disease. When such is the case, use no manure for a couple of years. The first spare ground you get trench it two spits deep, if the ground will allow of it, and thoroughly mix with the earth, as you turn it over, a good dressing of fresh slaked lime, the fresher the better. My plan is, when the top spit is thrown to the bottom of the trench, to throw over the hot lime and to fork it in, and to repeat the dose of lime over the lower spit thrown to the surface. Employed in this way, lime acts as a complete renovator of old and over-manured soils, as the produce afterwards will show. The second year I repeat the lime dressing (about half the quantity of the first year), forking it in instead of digging the ground, as by that means the lime becomes more completely mixed with the soil. I add also to the lime a surfacing of road scrapings if the ground is heavy or inclined to be so. By these means, giving up manure for two years, I have succeeded in bringing an old garden soil, which would positively grow nothing well, into a first-class soil, producing good crops and of the best quality.

R. M.

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#### GOMPHOLOBIUM POLYMORPHUM GRANDIFLORUM.

ALTHOUGH this is one of the most beautiful of greenhouse climbers, and a plant which, when properly managed, remains in beauty longer than most things, and is equally valuable for exhibition or decorative purposes, yet it is rarely seen in anything like perfection. The

first time I saw a well-done plant of it was at the Horticultural Society's exhibition at Chiswick in May, 1847; this was exhibited by the late Mr. Hunt, then gardener to Miss Traill, and was trained upon a half-round wire trellis, 4 feet in diameter, which was clothed from top to bottom with delicate foliage and bright red pea-shaped flowers, together with multitudes of buds in all stages of forwardness; it was awarded (and justly) an extra first prize or gold medal. I, as well as other plant growers who saw it, admired it greatly, and considered it well deserving the high award it received; but I thought that if it could be trained upon slender stakes in the bush form, it would look more natural, have a more graceful appearance, and correspond better with the other plants when staged among them in a collection; for much as I admired the plant shown by Mr. Hunt, I could not help thinking that, trained as it was, it had an appearance of stiffness and formality which greatly detracted from its beauty. When I went to Ealing Park, as plant grower, I had an opportunity of trying what could be done in growing a specimen of this without the assistance of a wire trellis, and succeeded to my own satisfaction; and as the plant which I exhibited, trained upon slender green stakes in the bush form, was the first which had been seen grown in that way, it was admired by plant growers generally, and noticed by the reporters of the various exhibitions at which it was shown that season.

Persons intending to commence the culture of this *Gompholobium* should procure young plants as soon as possible, choosing those that are clean, strong, and healthy looking, and which appear to be well rooted and firm about the collar. In choosing young plants to be grown into specimens, it will be found to repay the trouble to see that they have their stems or collar strong in proportion to the size and strength of the rest of the plant, which is often delicate; and if plants which are not perfectly sound in the stem are selected, their progress will never be satisfactory, and the chances are they will not live to attain any useful size. Directly the young plants are received, they should be repotted and placed in an intermediate house where a nice moist temperature of about  $55^{\circ}$  is maintained. In potting young stock for starting, I prefer giving a liberal shift, say from a 3-inch pot to an 8-inch one, which allows more space for placing the stakes for training shoots upon. A few slender green stakes, according to the size of the plant, should be placed in the soil at once, and the shoots trained round them, taking care to cover the bottom with the likeliest shoots for breaking strongly. In potting now, and on all future occasions, care must be exercised to have the ball of the plant in a healthy state as to moisture and also the new soil; great care must also be used in watering, especially until the roots can strike into the fresh soil; and the atmosphere should be kept rather closer and moister at this time, so as to avoid as much as possible the necessity of frequent waterings, and encourage active growth. Keep the plants near the glass, and as soon as the sun becomes powerful, a thin shade must be used, for this variety is impatient of exposure to bright sunshine, and anything approaching free vigorous growth need not be expected, unless it is

shaded; and although air should be admitted whenever this can be done without cooling the temperature below  $55^{\circ}$  or  $60^{\circ}$ , yet this should be done very cautiously at all seasons, and especially during the prevalence of drying winds, so as to avoid draughts—for a current of cold drying air always to play upon a plant for a few hours when in free growth would sadly check its progress or probably ruin it. Hence, while air should be admitted freely on every favourable opportunity, this must be done so as to avoid draughts or cause cold currents to pass through the plants; during bright warm weather, however, sufficient ventilation must be given to prevent weakly growth, and the plants should be moistened overhead two or three times a day, and the atmosphere kept damp by frequently sprinkling the passages, &c.

If the plants do well the first season, they will form nice little bushes, and will fill their pots with roots; but they must have frequent attention in the way of training their shoots, for if these are allowed to twine upon each other, neither the wood nor the foliage will be properly developed; and although training may prove a rather tedious part of the attention required to grow this plant properly, it must be attended to, and this is a formidable job enough; but when the young growths are not allowed to become entangled, it will not occupy much time if done, as it should be, at short intervals, adding extra stakes as may be required. I generally remove my young plants to the hardening greenhouse in August, placing them where they will not be exposed to through draughts of dry air, and by gradually reducing the moisture in the atmosphere, &c., the wood will get sufficiently ripened to stand the winter, and the plants will continue growing slowly until November, when they may be safely wintered in an ordinary greenhouse, but they must not be exposed to cold frosty winds, and drip should not be allowed to fall upon them; and as the plants, too, during the winter, will be in a comparatively inactive state, they must be carefully watered at the root, keeping them rather on the side of dryness than otherwise, but when water is applied enough should be given to moisten the whole of the ball.

The treatment during the second season should be similar to what has been recommended for the first, repotting early in March, giving a rather liberal shift, restaking and training, placing them in an intermediate house, and attending to them throughout the season as recommended above; if very large specimens are desired, a third season's growth will probably be necessary to produce them. When the plants have reached the desired size, if they are wanted for purposes of exhibition, it will be necessary to use means to secure having them in the greatest possible beauty at the proper time; to be successful, you must not only be able to grow handsome specimens, but also to have them in full beauty on a given day. As a rule, I leave specimens of those which I intend for exhibition in the greenhouse until April, and then remove them to the intermediate house, earlier or later in the month, according to the state of the plants and the time when they may be required. But as to the time at which a plant can be brought into beauty, this can be easily learned by careful observation for a season or two—and by that means only—for a healthy plant, with its pot well

filled with active roots, will be in full bloom before another with imperfectly ripened wood, and not over healthy or active roots, will show any symptoms of having felt the excitement, which, if it had been in perfect health, would have been sufficient to have induced it to put on its best appearance. For plants in a sound healthy state, with well ripened wood, from a fortnight to a month in the intermediate house will be sufficient to bring them into full beauty; but others, with imperfectly matured roots, may require longer. I can, however, only say that there can be no mistake in having the plants early enough, for a vigorous plant of this *Gompholobium* will be in full beauty for a month at a time at least.

The soil which I find to be most suitable is the light fibrous kind of peat found in Kent; this, broken up moderately fine, and cleared from excess of fibre and strong decayed roots, and mixed with about one-fourth its bulk of Reigate sand, is the compost I use. In potting, care should be exercised to have the soil in a proper state as to dampness. I use soil just moist enough to bear compressing in the hand without sticking together or readily falling in pieces; and in potting, the fresh soil should be pressed about the ball, so as to make it as nearly as possible in the same state as to water as the ball of the plant.

There are two other twining varieties of *Gompholobium* well deserving of a place in every collection, viz., *G. splendens*, which, when grown in the form of a bush, and clothed with its clear bright yellow blossoms, is one of the most charming plants I know of, and *G. versicolor*, the blossoms of which are of a buff colour, large, and remarkably striking. This variety is somewhat difficult to procure, but it is well worth any trouble that may be necessary to obtain it true.

*Hawkesyard Park, Rugeley, Staffordshire.*

WM. MAY.

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### HOT WALLS FOR FRUIT TREES.

BEFORE glass coverings to walls or orchard houses were thought of, hot walls were very generally employed to facilitate the ripening of the wood in the autumn, and protect the blooms from frost and wet windy weather, which appear to act more injuriously on the constitutions of the Peach and Nectarine than even frost, as the results of late seasons have taught us. Hot walls are simply ordinary walls built with a flue or flues making three or four returns in the middle of the wall before the smoke escapes at the top. One flue will heat about 30 or 35 feet of a wall 12 or 14 feet high. Fires are lighted only when the bloom is about opening, and continued till the fruit is securely set, and even up to the middle of May, when cold or wet weather intervened, which affords great protection to the trees, by being in close contact with dry warm material; for when once the walls had become slightly heated, the trees would resist frosts when not too severe without further protection. Indeed, we well remember, when we had charge of a large extent of hot walls, that a single net in front was ample when once the wall had become warm, to keep the bloom safe from

external influences and ensure a crop of fruit. But as the success of the Peach crop depends mainly on the well ripened state of the preceding season's wood, hot walls offer great advantages in this respect—advantages even superior to orchard houses or glass walls; for, by warming the walls during the latter part of September and October, the wood of the Peach growing against them becomes ripened and changes to a dark brown colour more quickly than does the Peach wood in orchard houses; and if means could be secured to keep the roots tolerably dry at that season, I believe nearly all the difficulties attending the culture of the Peach in the open air would be removed. In the northern and midland counties, flued walls are tolerably common, and much appreciated; and the experience of the last season confirms their value, of which I noticed a case the other day. A friend of mine has two south-east walls, against both of which Peaches are planted: one of the divisions is flued, and is regularly heated in unfavourable seasons, and of course was so during the spring and autumn of 1860—the result was a good crop of fruit borne by healthy trees. The other division had the protection of a woollen net, and although a good crop of fruit set they afterwards fell off, and the trees have fully one-half of the wood dead, and that remaining is greatly affected with canker; while the others are sound and healthy, and showing an abundance of bloom already. My friend tells me he always fires his wall in October, and continues the fires until the leaves on the trees change colour, and that he has never missed having a crop of fruit since the trees were planted; but, on the other hand, he has rarely averaged a crop on alternate seasons on the wall not heated, and is now going to take up his Peach trees and plant Apricots in their place.

When we consider that it incurs little more additional (or a very trifling one, indeed) expense to build walls with hollow flues, than solid; and that the chances of securing regular crops of fruit and healthy trees are made almost a matter of certainty at a trifling expense of fuel, during at most two months in the year, it seems to me quite worth while, when walls are being newly built, that flues should be made in them—for, independently of firing them, the walls would be drier and warmer built hollow; and supposing fires not always required, it would be a great thing to have the means of saving your fruit and trees, even during such seasons as the past, if you could do so by merely expending a few hundred weights of fuel. In the western and southern counties flued walls appear all that is really necessary for growing the Peach tribe, and I prefer them to orchard houses.

R. S.

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### FLUKE POTATOES.

HEARING a great deal about the good quality of these, and their general freedom from disease, I was induced to make a trial of some. The first year, however, I only purchased a very small quantity. They were treated in every respect like other sets, but they were so long in

making their appearance above ground that I almost feared they would not come up at all, and many of them really did not grow. Those that did push gave a very fair yield, but nothing extraordinary; their quality was, however, very good.

On finding this to be the case, nearly all were set aside to plant another year. They kept capitally, and with a quantity which I purchased were planted last spring, in the usual manner, with the exception of a little more manure; and, as in the preceding year, they came up badly, but greatly improved during the summer, and gave fair promise of a good crop; and on taking them up I was by no means disappointed, for both as regards number, size, and quality they were admirable. Everybody who has seen them speaks highly of them, and I think their growth would be much extended if people in out-of-the-way places like myself were aware of their good qualities. For the cause of so many of them failing to grow I was at a loss to account, till some of my friends kindly pointed out to me the fact that they ought *not* to be cut; they also require to be well dressed.

During the two years they have been grown here they have been remarkably free from disease, there not being more than half a gallon affected to a bushel of sound ones. S.

### THE LATE SEVERE WINTER.

*The following is a select list of Coniferæ, Evergreen Shrubs, &c., that have proved hardy in most situations during the last unusually cold winter.*

#### CONIFERÆ.

Abies canadensis (Hemlock Spruce)	Picea grandis
„ Douglasi	„ nobilis
„ orientalis	„ Nordmanniana
Arbor Vitæ (sorts)	„ pinsapo
Biota Meldensis	Pinus austriaca
Cupressus Lawsoniana	„ Benthamiana
Cephalotaxus Fortunei	„ cembra
Cedrus Deodara	„ excelsa
„ Atlantica	„ Hamiltoni
Cedar of Lebanon	„ Lambertiana
Juniperus chinensis	„ Laricio
„ depressa	„ monticola
„ ericoides	„ Sabiniana
„ excelsa	Thuja (sorts)
„ glauca	Thujopsis borealis
„ virginiana (Red Cedar)	Wellingtonia gigantea
Picea amabilis	Yew (sorts)
„ cephalonica	

#### EVERGREEN SHRUBS, &c.

Aucuba japonica	Kalmia latifolia
Berberis Aquifolium	Laurels
„ japonica	„ Portugal
Box (sorts)	Ligustrum japonicum
Broom	Rhododendron (sorts)
Cotoneaster microphylla	Skimmia japonica
Holly (sorts)	

## A FEW VARIETIES OF POPULAR FLOWERS,

*That may be depended on for all classes of growers, and that are also well contrasted as regards colours.*

## AZALEAS.

Admiration	Iveryana
Chelsoni	Milioni
Crispiflora	Model
Criterion	Perfection
Distinction	Perryana
Etoile de Gaud	Sir Charles Napier
Extrani	Standard of Perfection
Gem	Sir H. Havelock (Frost)
Gledstanesi	Stanleyana
Glory of Sunning Hill	Variegata

## FANCY PELARGONIUMS.

Arabella Goddard (Turner)	Lady Craven (Turner)
Amy Sedgwick (Turner)	Master Harry (Turner)
Acme (Turner)	Musjid (Turner)
Beauty (Turner)	Madame Rougiere (Turner)
Bridesmaid (Turner)	Marchioness of Tweedale (Turner)
Circle (Turner)	Modestum (Turner)
Clara Novello (Henderson)	Omega (Turner)
Cloth of Silver (Henderson)	Sarah Turner (Turner)
King of Roses (Turner)	The Champion (Turner)

## SPOTTED PELARGONIUMS.

Bertie (Hoyle)	Mazeppa (Turner)
Beadsman (Turner)	Osiris (Turner)
Bracelet (Turner)	Picnic (Turner)
King of Purples (Turner)	Peacock (Turner)
King of Spots (Turner)	Sweep (Turner)
Mammoth (Turner)	Sanspareil (Hoyle)

## ORDINARY PELARGONIUMS.

Ariel (Fellowes)	Lord Raglan (Hoyle)
Angelina (Hoyle)	Lord Clyde (Foster)
Autocrat (Foster)	Mrs. Benyon (Hoyle)
Bacchus (Foster)	Monarch (Hoyle)
Bridesmaid (Beck)	Mulberry (Beck)
Czar (Hoyle)	Norma (Hall)
Desdemona (Fellowes)	Perdita (Foster)
Empress Eugenie (Story)	Prince of Wales (Hoyle)
Etna (Turner)	Rosa Bonheur (Hoyle)
Eastern Beauty (Hoyle)	Roseum (Turner)
Fairest of the Fair (Beck)	Rose Celestial (Turner)
Festus (Hoyle)	Sir Colin Campbell (Hoyle)
Garibaldi (Foster)	Symmetry (Foster)
Governor-General	The Belle (Turner)
James Lodge (Hoyle)	The Gem of Roses (Beck)
Jessica (Hoyle)	The Lady of Quality (Beck)
Lady Canning (Hoyle)	Transcendent (Beck)
Leviathan (Hoyle)	Volunteer (Hoyle)

## ACCLIMATISATION.

ACCLIMATISATION, or the art of acclimatising plants and animals in countries to which they are exotic, is one of the most interesting branches of natural history. So far as plants are concerned, the past winter has taught us some useful lessons, both as to the great differences in hardiness which exist, in plants of the same species, and also as to the effect which cultivation produces generally on the constitution of plants.

Upon viewing the comparative peculiarities observable in different races of animals and plants, we are led to the conviction that one law is applicable to both, and that the domesticated classes in both kingdoms are constitutionally more tender the farther they are removed from the original types of their race; for instance, what appearance would the high-bred *cultivated* short-horn cattle of to-day present, if subjected to the same food and shelter as their Teeswater progenitors? or a prize Devon, or Hereford, if supplied with no food better than the aboriginal species subsisted upon from which they sprung? All our best breeds of domestic cattle are the results of a cultivation of greater or less duration; but with the refinement of breed, and improvement in what constitutes their superiority, they also inherit a tenderness of constitution which makes them dependent on the care of man for their preservation in their present state of perfection. We might support this analogy by a reference to other races of domesticated animals, and even man himself, did we not consider that sufficient has been stated to illustrate our opinion on this question.

Arguing from the same premises, a similar law prevails with the vegetable kingdom. Long cultivation has made our Cauliflower and Celery, and many other garden plants, almost as tender as exotics, and they now require great protection to preserve them through our winters; and yet the genera from which their origin has been derived are amongst the hardiest of British plants. The same law applies to fruits and all cultivated plants generally. A friend of mine, who resides in the Cape Colony, being fond of plants, when on a visit to this country a few years back, took with him a large collection of Cape Heaths, intending to re-introduce the original Cape species, with the British varieties, now so numerous, of that charming tribe to the home of their family. Young healthy plants, on their arrival at the Cape, were planted in suitable earth in my friend's garden, and tended with considerable care; but the greater part of them died within a year, and none of them continued long healthy, unable to withstand even the vicissitudes of their native climate with constitutions weakened by greenhouse treatment in England; and yet the varieties taken over included all the original Cape species procurable, and of which also several similar kinds were growing indigenous in the locality; and my friend informed me these latter, when placed under cultivation, grew with great luxuriance, under the same conditions which those planted from English gardens could not survive.

The above teaches us an important fact as regards acclimatising plants, and that, as a rule, seedling plants, intended to be transported to a colder climate, should only be raised from parents growing on the most elevated

situations and coldest districts; and this fact should be strongly impressed on the minds of collectors of plants intended to grow in the open air of Britain. There are probably few individuals, who have made hardy plants their study, who cannot bear testimony to the wide difference observable in many species of plants reputed to be hardy, among which the numerous varieties of Coniferous trees which have been planted within the last dozen years afford some striking examples, a remarkable instance of which is named by the editor of the *Gardeners' Chronicle*, relating to a batch of seedling Araucarias in Mr. Glendinning's nursery, in a recent number. The subject is one of great importance to out-door planters, and any evidence we can produce bearing on the subject we gladly record. In our own collection of Conifers are—or, rather, were—several plants of *P. insignis* growing within less than a stone's throw of each other, all on a similar soil and the same exposure, of which, one tree, planted twenty-two years back, has never had a leaf browned even by the severest winters, and has maintained its usual rich verdure through the past trying season; while several other trees of the *insignis*, and its close ally *radiata*, which have been planted subsequently, have died in previous years; two more are this season dead, and the others greatly injured. The tree which has so good a constitution, as compared with the others, was raised from the first batch of seeds sent to the Horticultural Society, I presume by Hartweg, in 1836 or 1837. I name this, as perhaps the Society may know from what locality the seeds were obtained by their collector. For several years we possessed several good specimens of *P. patula*, at all times a delicate Pine, but valuable for its graceful habit and cheerful green foliage. In 1854 or 1855, all of them excepting one were much injured, and two or three died; two or three years later the rest suffered, and subsequently died, but the one noticed above appeared to have a charmed life, for it kept its colour uninjured. Within the past month the effects of the fearful 25th of December, and the frost which shortly afterwards followed upon a thaw, have become painfully visible, and it is now beyond recovery; but leaving us the testimony that, either through some law of nature with which we are unacquainted, or owing to its parents having been natives of a colder climate, it possessed the power of resisting cold in a greater degree than others growing under the same conditions. Foreign seedlings of the Cypress, Juniper, and *Abies* sections of *Coniferæ* are all liable to be affected differently by severe cold, and in a seemingly inexplicable manner.

Having these facts before us, are we right at all in inducing anything approaching a luxuriant growth in plants as to whose hardiness doubts exist? We think not; for this past winter must have shown how much more easily pampered plants have been cut down by the frost, than those of slower growth, but with a more matured system; and consequently having the power of enduring cold to a much greater extent than those which have been planted in rich soils. Near where I write are four Stone Pines, twelve years old, which had grown luxuriantly, and are much cut; while an older tree, which had made but little wood, owing to its growing on a dry brashy soil, is none the worse; and many similar cases occur with other species of plants.

But notwithstanding all that we can do by planting trees and shrubs on elevated ground and dry soil, by way of acclimatising them—and most certainly this should be our first step—protection from wind alone being regarded as of consequence; we should take every means to obtain our seeds or seedling plants from as cold a climate as the tree will grow in, or occupies indigenously; and in preparing the seedling plants, by no means coddle them by hothouse, or even greenhouse treatment; but raise and keep them hardy from their first development into plants, until the period for planting; their growth will be slower, but you will lay the foundation of as hardy a constitution as can be given to them. I do not wish to be understood as saying this treatment will make the plants more hardy than is natural to them; for all plants will bear only a certain limit of cold, prescribed to each by nature herself. But you certainly will not make them more tender; and that is the point to insist upon, not only in their preparatory stage, but in their after culture, and that forcing them to grow beyond the power of the solar heat of our climate to ripen their wood is an evil which tells its own tale, by making them much more susceptible of injury from our winters than they otherwise would be.

Above all, avoid damp valleys for proving plants on which there is any doubt; to the inexperienced they may appear warmer and more sheltered, but the damp atmosphere common to low situations is inimical to the maturation of the current year's wood, on which the hardiness of the plant or tree will mainly depend, and its chances to longevity increased.

S.

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### THE OHIO SQUASH.

THIS is a vegetable which I think deserves to be more generally known and cultivated than it is; it is very nice—far superior in flavour to the common Vegetable Marrow. I am of opinion that it is more nutritious, and what is of great importance, is, that it keeps a long time after being cut; they were used here last winter up to February, and were favourites to the last; how much longer they might have kept, provided I had stored more of them, I cannot say. For winter use, I cut them when they attain a measurement of from 18 to 24 inches in circumference, and I very seldom find one decay; I merely place them on shelves, in a dry situation, secure from frost. For cottagers, whose stock of winter vegetables is often limited, this Squash will be found most valuable, and anybody who can command two or three barrowfuls of well-rotted manure may grow it successfully; it may even be trained over hedges or other fences. Everyone to whom I have given them appreciates them highly.

CUCUMIS.

## CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—Specimens of Azaleas wanted for late blooming should now be carefully shaded from bright sunshine and exposed to a free circulation of air at all times, save when there may be danger of the temperature sinking below  $36^{\circ}$ ; and plants which it may be desired to retard as long as possible may be placed out under a north wall, but every possible care must be used not to expose these to heavy rains or a temperature below  $36^{\circ}$ , and we recommend placing them out of doors only in cases where it may be desirable to keep them back longer than could be done by any other means at command. If healthy vigorous plants of these are exposed to the full influence of the sun, and the weather should prove bright and mild, the blooms will soon be too far advanced to bear without injury any further attempt to retard; and Azaleas bloom so much finer in a gentle moist heat than in a cool airy house that every means should be used to keep them back sufficiently to allow of placing them in a shady moist heat before the blooms begin to open. Plants which have bloomed, if wanted for early flowering next season, should be placed at once in a moist warm temperature, so as to secure early growth, which is the best preparation for early forcing. Repot such as require more pot room and nicely tie and regulate the shoots, cutting out all weak back wood, and any which may not be required for filling up the specimen. Camellias intended for early blooming should also be placed in a moist warm temperature at once, selecting such varieties as generally bloom early, and such plants of these as are pushing plenty of wood buds. These must be shaded from bright sunshine as soon as they start into growth, otherwise the young leaves will be very liable to be scorched; and they should be syringed overhead every evening, and carefully attended to with water at the root, giving weak manure water to such as are rather under potted. The general stock should be carefully looked over as soon as they are out of flower—well cleaning the foliage, repotting such as require this attention, and placing them where they can be kept rather close and moist, so as to encourage free and early growth, which is perhaps the most certain method of securing a fine display of bloom.

*Conservatory.*—Twiners, such as the beautiful Mandevilla, Ipomœa, Tacsonia, Passiflora, &c., which bloom in summer and autumn, should now be liberally supplied with water at the root, in order to promote strong healthy growth early in the season; and timely and frequent attention should be given to regulating the young growths, so as to induce each to cover the space for which it may be intended, without having to resort to untwining and tying after the plants have made long growths, when it is very difficult to dispose the shoots of such things so that they will look natural and free. Hardenbergias, &c., will require a liberal supply of water at the root while in bloom, and should be cut back freely as soon as they have done flowering, and carefully cleansed if infested with scale. These will not require much water at the root after cutting back until they start into growth, but will be greatly benefited by a rather moist atmosphere, and syringing overhead on the evenings of bright days. Attend to keeping specimens planted in the

beds and borders properly supplied with water at the root. Also cut back *Luculias* and other plants which require this attention, to keep them bushy, and see that this is done before they start into growth. Keep everything clear of aphids and other injurious insects. Be prepared with shading, which will be necessary to preserve the beauty of plants in bloom, and, if used only for a few hours during the forenoons of bright days, will not injure plants making their growth. If the weather prove bright and dry, sprinkle the beds, borders, &c., morning and evening, in order to secure a moist atmosphere, which will greatly benefit things in growth, and prolong the beauty of those in bloom. See to providing a liberal supply of *Fuchsias*, *Clerodendrons*, *Statice*, &c., for the decoration of this house, when the *Azaleas* and other spring blooming things are over. Also get a good stock of Chinese *Primulas* (double and single), *Daphnes*, &c., for autumn and early winter blooming; likewise get a large batch of *Achimenes* and *Gloxinias* potted and started, selecting the most useful varieties.

*Cold Frames.*—The whole stock of plants propagated by cuttings intended for the decoration of the flower garden should be potted off with the least possible delay, and late weakly plants should be placed in a warm moist temperature, so as to get them sufficiently strong in time to allow of their being properly hardened before planting-out time. The general stock of half-hardy annuals should be sown in a gentle heat at once, not forgetting to provide a liberal supply of *Stocks* and *Asters*, which should be pricked out as soon as they are sufficiently strong to handle in lines upon a bed of light soil on a spent hotbed, so as to have them strong stocky plants by the middle of May. Where frames cannot be spared for this purpose hand-lights will answer, or even, with a little extra care, good plants may be obtained with the aid only of hoops and mats to cover the beds. See that the whole of the bedding-out stock is perfectly free from green-fly, which, if allowed to gain a footing, is sometimes difficult to eradicate, especially in the case of the woolly-leaved varieties of *Calceolarias*.

*Flower Garden.*—If not already done, no farther time should be lost in getting shrubs injured by the winter cut down, so as to remove the unsightly portions; and those that are either dead or so disfigured as not to be worth leaving removed, and the ground prepared and replanted, and attend to keeping recently planted trees and shrubs supplied with water. Also get any necessary re-arrangement of American plants done at once, and take up and divide herbaceous plants where necessary, and large-spreading stools of these never flower nearly so fine as smaller plants, and the transplanting will afford an opportunity for trenching and enriching the soil for weakly growers, &c., more effectually than it could otherwise be done. *Roses* should be planted at once, except the more tender sorts, as *Teas*, which may be left until the end of the month. We need not say that no pains should be spared in the preparation of ground to be planted with *Roses*, or that it should be trenched at least 2 feet 6 inches deep, and abundance of good rotten manure worked in and well mixed with the soil throughout its whole depth; and where the soil is of a light gravelly nature, the expense of replacing a portion with good strong tenacious loam, where this can be obtained at any reasonable cost, will

be amply repaid. In many parts of the country, Roses will require no farther pruning this season than cutting off the dead shoots; and as it will, in most cases, be readily seen now what is dead, this should be cut off at once, and where the pruning was not performed by the frost this should be finished. Sow hardy annuals at once; also biennials and perennials now or towards the end of the month. *Greenhouse*.—Many of the specimens here will be coming into bloom; and as the beauty of most of our finest New Holland and other plants will be but of short duration if exposed to bright sunshine in a dry atmosphere, shading on the forenoons of bright days will be necessary, but this should be used sparingly, and attention should also be given to keeping the atmosphere moist by sprinkling the passages, &c., two or three times during bright drying days. Ventilate freely but cautiously during the prevalence of cold winds, and endeavour, by opening the ventilators on the sheltered side of the house, only to avoid currents of cold dry air passing over plants in bloom or those making their growth. Look to last month's directions as to the management of young stock, and endeavour to induce these to make free strong growth. Attend carefully to the watering of these and also the general stock, and be particularly careful not to allow any of the stock, and particularly large specimens, to get too dry during bright weather. *Stove*.—Keep a sharp look-out for insects of all kinds, and endeavour to eradicate these immediately they are perceived. Maintain a constant and abundant supply of moisture in the atmosphere, and syringe the plants freely overhead every afternoon, and play the syringe freely under the foliage of things which are known to be subject to red spider; but avoid touching *Ixoras* which are showing flower, for these are liable to drop their flowers if syringed after the heads are in a forward state. Ventilate freely on fine days, but avoid admitting cold drying winds, and shut up early in the afternoon. Water carefully but rather freely, especially free-growing plants, as *Clerodendrons*. Attend to staking and training and stopping shoots which are overgrowing the others, and endeavour to keep all young-growing stock near the glass, so as to promote short-jointed strong growth. Shading will be necessary here soon if the weather proves bright, but use this as sparingly as possible. Attend to providing a stock of plants for autumn and winter blooming.

*Hardy Fruit*.—If the directions previously given have been carried through, very little remains to be done in this department for the present. The most important thing is the protection of choice fruit-tree blossoms from spring frost; and if Shaw's tiffany or Haythorn's hexagon net is used for protection, it may remain on the trees till the crop is safe. The fruit *sets* very well under this light material, especially if a space is left open at the bottom of the wall for the admission of air; but if any covering of a thicker texture is applied, it should be always removed through the day. Keep a close watch for the first appearance of green-fly on Peach trees, and destroy them by using common snuff and sulphur in equal parts; this may be applied either with a dredge or sulphur bellows, and it is the safest thing to use at this early season, when the young fruit would be injured

by a wash sufficiently strong to kill the green-fly—next month it may be used with safety. Do not commence disbudding the Peach and Nectarine trees at present; but, on the other hand, encourage all the foliage, to protect the young fruit from cutting winds, and to encourage an active circulation of sap in the trees. Graft Apples and Pears early in the month, especially large trees that have previously been headed down for that purpose. Plant Strawberries, and keep the hoe moving in dry weather among the growing plants, and prepare the fruiting beds for mulching with dung or litter next month. Liquid manure may now be given, especially to old plantations. Examine the borders of orchard houses and water freely if dry. The trees in pots will also require frequent waterings, and occasionally with liquid manure. Give plenty of air and use the syringe freely, either in the mornings or evenings of fine days. *Forcing Ground.*—Cucumbers and Melons will now require more air and water in proportion to the increase of sun-heat and light. Keep the linings turned or renewed, so that the bottom-heat does not decline. Syringe the plants and close early in the afternoon; still continue to cover the frames every cold night, except where fire-heat is used. Thin and stop the shoots, so that the foliage may have full exposure to air and light, and avoid shading if possible. Pot the young plants, and sow again early in the month for succession; also Vegetable Marrow and Gourds. Make the last sowing of French Beans under glass, either in frames or handglasses—keep close till they are up; those in bearing should be well watered and syringed, to keep them in a healthy condition. Earth up Potatoes in frames, and give all vegetables under glass a good soaking of water once or twice a week, according to the state of the weather, and abundance of air at all times. Give Cauliflower, Lettuce, and other plants forwarded under glass, full exposure, for the purpose of hardening them before planting in the open ground. Pot Capsicums, Tomatoes, and Egg plants, and keep them growing in a moderate heat. *Pines.*—Look over the succession plants and water if dry; and if any were not shifted last month, no time should be lost in getting them repotted, using a mixture of free turfy loam and rotten manure. Keep the plants close for a few days after potting. Syringe occasionally, but do not give much water at the root till the plants begin to grow, when more air and water should be given, avoiding, at all times, a current of air through the pit, by giving front and back air at the same time. Plants in fruit require a temperature of about 80°, with an increase of 10° during sunshine. Water freely, and syringe the plants when the house is closed in the afternoon, to keep up the requisite moisture. Attend to the linings of those grown in dung pits. *Peaches and Nectarines.*—Tie in and regulate the shoots in the early house. Select for next season shoots of moderate strength, choosing those springing from the heel or base of the previous season's growth; stop the shoots above the fruit, with the exception of those that are required to form leading branches. Proceed with the thinning of the fruit as they may require it; of course this must entirely depend on the condition of the tree—what quantity it is capable of bringing to maturity. Double the number may be retained on a vigorous tree in comparison to those in a weakly

condition, which should only carry a moderate crop, and every assistance should be given by surface dressing and liquid manure. Do not hurry the fruit during the process of stoning: a night temperature of about 60° at that stage will be sufficient. Use the syringe frequently, to keep the foliage clean and healthy, and do not allow the inside borders to get dry. Continue the disbudding and thinning in the late house, and air on every favourable opportunity. *Cherries*.—Keep the trees well syringed while the fruit is swelling; also give plenty of moisture at the root; as soon as the fruit begins to colour less moisture is needed and the temperature may be increased, with plenty of air through the day. Keep down the black-fly by dipping the young shoots in tobacco water. *Strawberries*.—See directions given last month. *Vinery*.—Attend to the thinning of the berries in the succession houses, commencing at an early stage after they are set, and keep the shoots tied in and the lateral shoots stopped. Water the inside borders and maintain a moist atmosphere during the time the fruit is swelling. Where the fruit is beginning to colour, syringing must be discontinued; and attend to previous directions in regard to temperature, air, &c. Vines in pots must not at any time suffer from drought, especially those where the fruit is swelling. Water liberally with liquid manure, and cut away all useless growth. Young Vines in small pots should be shifted when they have made a growth of a few inches; in potting, use rough turfy loam mixed with sheep droppings. *Kitchen Garden*.—On the first favourable opportunity, the principal crops of Altringham and Surrey Carrots, Beet, Salsafy, and Scorzonera, should be sown; also succession crops of broad Beans and Peas, sowing twice through the month. Scimitar, Champion of England, Victoria, and other Marrows are suitable for sowing at this season. Sow early French Beans on a warm border, and at the end of the month Scarlet Runners and Haricot Beans should be sown. Get the ground well prepared for the main crop of Potatoes, which should be got in before the month is out. Choose a piece of rich light soil for planting Cauliflower, Lettuce, and Cape Broccoli, that were forwarded under glass; these should be hardened by full exposure to the weather a few days before they are planted out. Snow's Early Broccoli, Walcheren and Mammoth Cauliflower, intended for autumn use, should be sown at the end of the month. Sow Incomparable and Red Celery, Early and Late Broccoli, Cabbage, Kale, &c., and succession crops of Turnips, Lettuces, Radishes, and small salad, in a shady situation every few days. Make new plantations of Seakale, Horseradish, and Jerusalem Artichokes. Dress and earth up Asparagus beds in dry weather. Make new beds early in the month. Keep the soil moved by frequent hoeings among all growing crops. Keep down weeds, clear walks, and clear away all litter, and make all clean and neat.

#### PLANTS FOR EXHIBITION.

*Cinerarias*.—If last month's instructions have been carried out, the plants will now have attained the shape required for exhibition; but as the lateral shoots will still be growing, they should be tied out as wide as possible as they develop themselves. Still continue to give

weak liquid manure, to give brilliancy to the flowers. Water freely and shade in the middle of the day when the sun is very bright. Ventilate freely when the winds are not too parching or cold. Give each plant as much light and space as possible. Keep an eye on seedlings, and select the finest for the following seasons. *Pelargoniums* will now require increased attention, as they are making considerable progress. The flower buds of the May plants will now begin to appear above their foliage. Whenever the weather is mild, air should be freely given, and that early in the morning; the house, however, should be closed sufficiently early in the afternoon to dispense with fire-heat as much as possible. Very careful attention must be given to watering the plants, which, during dry harsh weather, should be carefully examined twice a day. Shading from the midday sun will be necessary. Prepare and lay up some good turfy loam with some deer or sheep manure, which, occasionally turned over during the summer, and kept sheltered from heavy rains, will make excellent compost for potting in the autumn.

#### WORK FOR SMALL GARDENS IN APRIL.

*Auriculas*.—These will now be in their perfection. Carefully look over and take notes of your bloom, even though you may have done it with the same kinds before, the effect of season being quite as interesting to a thorough amateur as anything else. Of all new kinds, if you possess any, take special notice, carefully comparing them with older varieties in the same class, so as to see whether they are an advance upon them or not. If you have seedlings, do not trust your own judgment, but submit them to some one who has grown them well. A good bloom will now reward all the care and potting that they have had for months. *Carnations and Picotees*.—Any that have been left unpotted should now be finished off, and during this month should be in some sheltered place where the cold biting winds cannot injure them; if they have been gradually hardened off they will bear it better than if kept in close confinement until potting time. *Pinks*.—The surface of the bed must be kept stirred, and a top dressing given. They seem with me to have suffered much from the severe winter, but time will tell, as they very rapidly make growth, when once they set to work at it. *Pansies*.—These will now be coming into bloom, and will require a liberal supply of water. Pinch off superfluous shoots and make cuttings of them. Watch for slugs, which are very destructive to the bloom. *Greenhouse*.—Bedding plants of various kinds may now be removed to pits or frames, so as to give more room for growing plants. Cuttings of *Verbenas*, &c., may still be struck in a hotbed if required. Fumigate for green-fly and syringe in fine weather; both of these operations tend very much to the health of the plants. *General Work*.—Move Japan Lilies out of doors—a cool place they like best. Prepare beds for and plant *Gladioli*. Get all ready for the bedding-out work, which will take place next month. Keep all clean and tidy, and destroy all slugs, &c., unmercifully. “*Delenda est sluggiana*” must be the cry with gardeners.





Madame Furtado.  
(Verrier)  
Plate 176.

## MADAME FURTADO (ROSE).

(PLATE 176).

AH me! we live in a puzzling age, when the ordinary means of intelligence are rapid enough, but far outstripped by the extraordinary. How one was puzzled in the Crimean war to read telegrams giving a slight sketch of events, and then a fortnight afterwards getting the details, but before they arrived to find that another telegram quite upset them; so the other day we had a long account of the conciliatory measures adopted by the Emperor of Russia towards the Poles, and as we were reading it (much to our own satisfaction) a telegram is announced that a massacre had taken place, and the conciliation was that of bullets and bayonets; so in Roses growers get a-head at such telegraphic speed that we are quite puzzled. We are just thinking over the Roses of last year, determining which we shall retain and which reject, asking our friends their "experience" in the matter, when lo! we have a Rose of a newer brood altogether put into our hands, and we are asked what we think of it. Growers now get over to France, and obtain their plants of new sorts much earlier in the season; they then work away at grafting, and by pushing them on in a strong yet moist heat are enabled to have them in bloom at this early season, and to advertise them for sale. But let no one who has not a warm place to put them in venture to purchase just at present. They are not hardened off, and to place them in a cold greenhouse without a fire is almost certain to subject them to mildew if not to death, the shock consequent on the change of temperature being too great for them in their highly excited state; for the same reason it is hazardous to venture an opinion on them, as they cannot be in character and their after state may very much differ from what they are now. This much, however, I think may be said, that those which show themselves good in the graft are very unlikely to disappoint afterwards. If they come full and of good shape they will most likely, under a more natural course of treatment, fully maintain, if not exceed, their character in those points. Colour of course it is difficult to decide about, and habit still more so, though shrewd guesses may be given on these points.

There are amazing efforts being made on all hands to get forward with a stock of Roses on their own roots, and I am quite inclined to think that the well-known intelligence of our gardening world will lead to the remedying of the only defect under which the system labours, the length of time before they make good plants. We shall see; but I shall be very much

surprised if this be not accomplished in a much shorter space than hitherto has been the case, and that even in the first autumn really good plants will be obtainable. If so, farewell to standards! We shall never have then the heartache some have had this year; for independently of growers for sale, the devastation amongst amateurs has been tremendous. I believe the highly valued originator of the National Rose Show has lost 1000, and another private grower in my neighbourhood has lost 900; while on the other hand even Teas, on their own roots, are endeavouring to push their way up through the ground again.

The following notes must therefore be taken with all the above reservations, and though I have the plants now blooming in my own house (for which I am indebted to the kindness of one of our best rosarians), I must still say they must be taken "cum grano salis."

ABD-EL-KADER (V. Verdier & C. Verdier), apparently a strong and vigorous grower; the petals of the flower are large and somewhat crumpled, it is not very full, the colour a brilliant velvety crimson, darker in the centre, and likely I believe to be a striking flower.

DARZENS (Ducher), a Rose of vigorous habit, large and tolerably well filled, the colour a peculiar one, *yellowish rose*; described in the French catalogues as of the colour of *fresh butter*—that is a varying commodity with us, from creamy white to deep saffron. I am at a loss to discover a trace of yellow.

GENERAL WASHINGTON, H.P. (Granger), a vigorous grower; the flowers are very full, large, and exquisitely *built*, the colour a brilliant vivid red. I am quite sure that this Rose cannot fail to please; it has a peculiar scent, more approaching to the Tea Roses.

JEAN BART, H.P. (Margottin), a vigorous, free-blooming variety, the colour deep reddish violet, somewhat of the same shade as Empereur de Maroc, but much more free in growth and blooming.

COMTE DE FALLOUX, H.P. (Trouillard), a perfect gem as a pot Rose. I saw six plants of it the other day in bloom, and nothing could exceed their beauty; on every shoot there were one or more buds; the colour a brilliant crimson and the fragrance delicious. It is not of a very vigorous habit, but neither is it delicate. The figure in the "Floral Magazine," while quite a portrait in many respects, was incorrect in making the flower droop, for it stands quite erect on its footstalk. I feel confident that when this flower becomes well known it will be the Rose for gentlemen's conservatories in winter, and for Covent Garden it will be invaluable.

MADAME FURTADO (Victor & Ch. Verdier), a moderate grower (*not delicate*); flowers very large and very double—form excellent, somewhat of the style of Madame de Cambaceres—brilliant Rose colour, the centre filled up with small petals of a deeper colour. The figure in the present number gives a very accurate idea of it; it

remains to be seen whether it is too full to open out of doors well, but in the house it is a very grand Rose.

REINE DES VIOLETTES (Millet-Malet).—It is said that a late eminent author who was constantly bored for his autograph had a drawer inscriber “*No go*,” and into this used to be put all such demands. Now, I am inclined to think, this much-be-praised Rose will have to be put into the Rose grower’s *no-go* drawers. It is very vigorous, quite smooth in the wood ; it comes out a good colour, but immediately commences to fade ; on the second day is quite dingy, and dies off into a very poor slaty thing—such at any rate is my experience of it.

LA BOULE D’OR (Margottin).—I have as yet only seen this in the bud—there it is very yellow, and promises to be, what I have heard it described, the yellowest Rose grown except Persian Yellow ; if so, it will be a decided acquisition, as its habit is good.

MADAME STANDISH (Trouillard), a very free-growing *hardy* variety ; I say this advisedly, from having seen it with hosts of others. It has stood the last severe winter without protection, where others have perished by scores. The colour is what is called “*rose satinee*” by the French raisers ; and I think, from the style of its growth, it is likely to prove a fine pillar Rose.

These are all that I have seen at present. I hope by-and-bye to have frequent opportunities of seeing the others, though doubtless there are many of our readers who, with better opportunities and more correct taste, will be able to much more accurately give us their character. I know, however, how much people wish to know about the new varieties, and hence these notes, which future observation may perhaps correct.

*Deal, April 23.*

D.

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### ON PLANTING IN MAY.

THIS has been an unfavourable spring for planting, for from the breaking up of the frost to the end of March rains were nearly incessant, and clay soils, and those approaching them, could not be worked in consequence ; since that time the air has been both cold and dry, and not at all tempting to the planter, and much is now left on hand for completion. I do not think we need much regret this, for of all months in the year for planting evergreens, I consider February, March, and April (except the end of April), the worst months for planting evergreens of any size ; and therefore, if advantage has been taken of the late dry weather to trench and well pulverise the soil, preparatory to actual planting, advantage may be taken immediately rain falls, and we get a cloudy sky, to commence. If the ground has been well worked, it will have absorbed heat from the sun, and its temperature will greatly assist the development of young roots immediately the plants are transferred to their new quarters. There are, however, two or three things to attend to when planting evergreens in May which, it may be as well to point

out to the inexperienced; for of course to all engaged largely in planting, experience will have dictated them, as facts which are not to be trifled with if you wish to succeed. In the first place, the soil, whether the planting is to be continuous in breadths of ground or only single specimens in holes, must be broken perfectly fine; indeed, the more pulverised and dry the soil with which you surround and cover the roots of newly planted trees the more quickly will new roots protrude into it. My plan is to work the surface soil which has been exposed to the sun for some time into a powder, and with this to cover the roots, giving only a very moderate quantity of water at planting. The next point is to have a puddle hole made near where your plants are being taken up, and directly they are out of the ground immerse the roots in the puddle, and work them about until every root is well coated over. The roots should be pruned before immersion. They should be then carried to the prepared ground at once, and carefully planted. If you have to carry or cart them any distance, envelope the roots in wet straw or moss, to prevent them from becoming dry before planting. Next take care that the heads of the trees are engined over each evening about an hour before sunset, except when it rains; and if you have time to syringe the leaves overhead two or three times daily, when the sun is not shining very powerfully on them, it will greatly assist in arresting perspiration from the foliage until the roots are in a position to supply the waste of the system by their usual action; and lastly, mulch over the surface of the roots immediately after planting; and where the trees are large, moss or hay bands may be wrapped round the stem and principal branches, to facilitate the ascent of the sap and keep the bark moist. These points attended to it will be found that the plants will quickly rally, even where the summer's growth has commenced, and but little water in comparison will be required to be given to the roots for some time; for experience teaches us that the roots renew themselves much more freely when the earth about them is only moderately moist and warm (which it will be if our plan is followed) than when placed in a cold unpulverised soil and deluged with water, as is too often the case. All the *Abies* section of Conifers and some *Pinus* may safely be planted all through May with the above precautions. Cedars, Yews, *Cryptomerias*, *Taxodiums*, Hollies, and *Ilex* of all kinds and evergreens generally. We hope to transplant Spruce and Silver Firs 20 to 25 feet high, and other evergreens in proportion; and reasoning by the success which has followed our previous trials, without any fear as to losing a single plant, although none of them have had any previous preparation.

S.

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### THE SLOUGH AURICULAS.

WEDNESDAY, the 10th of April, was indeed to me "dies cretâ notanda," for I enjoyed there such a floricultural treat as for many a long year I have not had; for although I saw last year the Monks-town Auriculas, and still hold to my opinion that I never saw a stage

of plants in such perfection, as Dr. Plant's, yet it had then (though, I believe, the liberality of my good friend, the Vicar of Alford, has since remedied that) one great defect, which I noticed at the time, a want of variety. It was a stage of six hundred blooming plants, in the highest state of perfection, any of them fit to place on an exhibition table, but then the same variety was repeated over and over again; and thus an air of sameness was given to the stage, which considerably detracted from its value and beauty. At Slough, on the other hand, there is a very large variety; every kind nearly of known or unknown value is grown; and the whole are so done as to give an appearance of great effect and beauty. The growth of the plants, too, leaves nothing to desire; the foliage is large and ample, in many instances entirely covering the pot, and displaying a vigour which was eminently characteristic of the success which seems always to attend Mr. Turner in whatever department he enters. They are not, however, what amongst growers for exhibition would be considered the thing, inasmuch as sometimes two or even three trusses are left on the same plant; and this in a strictly *Auricula* country would be fatal to a stand or pair on an exhibition table. It evidences a considerable amount of confidence in the vigour of his plants to enable a grower to draw thus upon them—a confidence which certainly, in the present instance, does not seem misplaced, as I never saw plants so evidently rejoicing in their treatment. The frame in which they are placed is a large two-light one, with a stage erected in it, giving successive steps suitable for the height of the plants. This, while an effective arrangement, is not by any means so much so as that adopted by Dr. Plant, where, the plants being ranged to the level of the eye, were all seen at once, and that without the need of stooping, no slight matter for those who feel their backs are not so pliable as they used to be a dozen years ago. I shall best serve the interests of the growers of the flower if I first give some remarks on those flowers which are either new varieties or were new to me, and then add some on the older varieties.

*Volunteer* (Turner).—In many respects this is an advance on some of the older dark selfs. The petals are large and without any indentation, the whole appearance of the pip being flat; but it is deficient in both eye and paste, the former being small and of a watery colour, and the latter wanting solidity, not so much so as Oxonian certainly, but still sufficiently *blanketty* to detract from the value of the flower. The foliage is good, and the flower altogether a striking stage variety, pleasing more at first sight than it does on closer inspection.

*Rifleman*.—This is in many respects a similar flower, having the same excellencies as to size and shape, and the same defects as to eye and paste, in a stronger measure perhaps.

*North Star* (Richmonds).—A decided acquisition. When I noticed it in the *Florist* a couple of months ago I only wrote from hearsay. Having now seen the flower, I can testify to its being an excellent variety, the colour being somewhat similar to what I remember Heys' Apollo, a bright lively blue, but a much better shaped

flower, paste good, and the eye pale yellow ; a very striking stage flower, and one which is sure to attract the eye at once.

*Mr. Finch* (Chapman).—Another flower of the same raiser as the Sisters Maria and Sophia ; not certainly equal to the former of these, but a very fine flower ; the eye large and yellow, the paste solid, the ground colour a beautiful violet, somewhat similar to the two just named ; edge a good grey, the pip large, and the flower altogether a good one, wanting, indeed, the refinement of Maria, in which respect that lovely flower is still unequalled.

*Rev. George Jeans* (Turner).—A worthy tribute to that enthusiastic Auricula grower, who has done so much to bring the flower into vogue. The flower is a very good grey edge, somewhat in the style of Sykes' Complete ; good eye, edge decided grey, and the colour a deep black ; it received a label of commendation from the Floral Committee of the Horticultural Society at their meeting on the 10th of April.

*May* (Clark).—A very excellent flower, good grey edge, something like Lancashire Hero, ground colour intense lampblack, the eye pale orange.

*Lady Sale* (Smith), good grey, fine paste and eye, but deficient in ground colour.

*Miss Brightly* (Spalding).—Another flower of the raiser of Blackbird, Bessy Bell, &c., and somewhat in their style ; the colour is good, a dark purple and the foliage white ; the flower is, however, rather crumpled, and has (despite of  $\Phi$ ) the great defect of his other flowers, throwing up the thrum above the eye.

*Brixton Farewell* (Chapman), rough, the colour good, thrum-eyed, and a second-rate flower altogether.

*No. 138* (Traill), a pretty light purple flower, somewhat rough in its pretty state, and requires to be grown another year or two before anything positive about its merits can be said.

*No. 83* (Smith's), grey edge, splendid circular, paste of great solidity ; it will require proving before it can be fully decided on.

*Richard Cobden* (Smith), a plant of large and vigorous growth, a fine lively green, paste good, and a large quantity of ground colour, the eye, if anything, rather too small ; but it is a most striking stage flower, and will for that reason find its place in every good collection, and from its habit is likely to increase quickly.

*White Rival* (Traill), white edge, coarse in texture, and with a great deal of colour ; at present it is by no means a rival to Glory.

*Mrs. Sim* (Smith), white edge, though rather greyishly inclined, ground colour dark ; a neat-looking flower.

*Metropolitan* (Spalding).—What a pity that raisers will persist in giving names to their flowers already held by others. Here is a third Metropolitan amongst so limited a class as self-Auriculas. It creates great confusion, and answers no end that I can conceive. This flower was of a good colour, light blue ; but not so good as North Star, either in shape or colour, though somewhat resembling it.

*Lord John Russell* (Smith), good lively green edge, with abundance of

ground colour ; rather rough, however, and inclined to throw up the thrum too much.

*George Lightbody* (Headly).—Mr. Lightbody speaks of this as the best grey edge in cultivation. I have not yet seen it as such ; it is not, to my mind, equal to Lancashire Hero, which it closely resembles in some points, and is deficient in ground colour ; moreover, it seems to have a weakly constitution. My plant is gone, and Mr. Turner speaks of it as difficult.

*Hufton's Squire Munday*, alias *Faulkner's Hannibal*.—After much consideration, I have come to the conclusion that these two flowers are synonymous ; not only are they alike in colour, but in their very peculiar foliage. The flower is rough and in most points defective, the paste being quite scalloped and the eye not first rate. It is, however, a very fine trusser, is of a rich dark colour, looks well on a stage, and is therefore, I think, under whichever alias a grower has it, not to be discarded just yet.

*Waverley* (Walker).—An old flower, with too much green in it, or rather too little body colour ; in this respect not unlike Yates' Morris Green Hero, a flower long since discarded from most collections.

*Sir Isaac Newton* (Storey), green ground colour, very deep, going too much into the edge, eye good, the green somewhat forced.

So far with regard to new or comparatively little-known flowers ; and as there was a large collection of the older varieties, an opportunity was afforded of comparing them one with the other, and from what I have said it will be seen that many of the old flowers are unequalled by recent additions. I do not think, in green edges, Booth's Freedom or Page's Champion have been beaten. I am sure none of the new greys are a beat on Maria or Lancashire Hero. Taylor's Glory still holds its place as the best white edge ; and I am not certain that any dark self beats Othello. This may not be very encouraging to raisers of seedlings, but withal, I believe a great deal may yet be done, and what we want is good constitutioned plants, such plants, for instance, as John Bright or Richard Cobden. Had they the properties of Champion or Freedom, they would indeed be glorious flowers. Perhaps if they were used as the maternal plants of a new breed, carefully hybridised with one of the first-rate greens named, the desired result might be obtained ; and let it not be forgotten that two at least of the flowers above named are new, one so much so as to be almost impossible to obtain, and therefore, we may fairly say that a good start has been made of late years. Let seedling raisers not be contented with saving seed any way, but let it be done carefully, and I do not see why the same success should not attend Auriculas as has been so strikingly manifested in other flowers. If one be ambitious, here is a place for posthumous as well as present fame. Raise a first-class Auricula, and when that fabulous party, the educated New Zealander, sits "chewing the cud of sweet meditation" on London Bridge, he will rummage up the catalogues of these days and find your name as a raiser. Many who were formerly famous for their seedlings in Dahlias, Geraniums, &c., have long since disappeared ; but the Pearsons, Howards, and

Dicksons, of half a century back, still are typographed in Auricula lists. Amongst older varieties I found in good order, Page's Champion, Smith's Waterloo, Dickson's Matilda, Dickson's Duke of Cambridge, Howard's Lord Nelson—green edges; Lancashire Hero, Waterhouse's Conqueror, Syke's Complete, Fletcher's Ne Plus Ultra, amongst greys; Taylor's Glory, Summerscale's Catherina, Hughes' Pillar of Beauty, Campbell's Robert Burns, Smith's Ne Plus Ultra, amongst whites; Spalding's Blackbird, Martin's Mrs. Sturrock, Netherwood's Othello, Martin's Mayfield, Berry's Lord Primate, amongst selfs. And could only wish that more persons would visit this deeply interesting collection and judge for themselves. Its beauty will not be over when these lines are in print, and the trip down will be amply repaid.

*Deal, April 17.*

D.

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## REPORT ON SCARLET AND OTHER BEDDING PELARGONIUMS,

GROWN AT CHISWICK IN 1860.

*By MR. MOORE, Secretary to the Floral Committee.*

(Extracted from the Proceedings of the Royal Horticultural Society.)

THE season of 1860 having proved unfavourable to these plants, it has been determined to renew the trial of them in the present season, and, as far as it can be done, to prove them also under pot culture. The brief particulars noted concerning them, and which embody the opinion pronounced by the Committee, though influenced to some extent by an exceptional season, may, nevertheless be worth recording. They are to be understood as applying to the varieties as grown in the open air, and in many cases are derived from single plants.

The following is a summary of the varieties which the Committee adjudged to be the most desirable for cultivation:—

### *Series I.*—PLAIN-LEAVED SCARLET PELARGONIUMS.

§ 1. *Flowers scarlet*:—Frogmore Improved, and Punch. Defiance and Wellington Hero, in addition, were commended for pot culture and for training up conservatory pillars. § 2. *Flowers cerise*:—Beauté de Meldoise, Lady Middleton, Le Titien. § 3. *Flowers rose-pink*:—Christina, Rose Queen. § 4. *Flowers white*:—The only variety of this colour was considered inferior.

### *Series II.*—HORSE-SHOE-LEAVED SCARLET PELARGONIUMS.

§ 1. *Flowers scarlet*:—Baron Hugel, Captivation, Lilliput, Martin Gireau, Queen of England, Scarlet Perfection. Bishopstowe, Conway's Royalist, and New Globe were selected as good secondary sorts; while Amazon, British Flag, Compactum, and Richmond Gem were commended for pot culture or pillars. § 2. *Flowers cerise*:—François Chardine, Mons. Martin, Rubens, and Sheen Rival; and for pot culture Paul Labbé. § 3. *Flowers salmon or flesh-colour*:—Prince Louise of Hesse; and for pot culture, Aurora and Blackheath Beauty.

§ 4. *Flowers rose-pink*:—None of the varieties in this group were considered of first-rate character. § 5. *Flowers blush with pink centre*:—Henri de Beaudot. § 6. *Flowers white*:—Madame Vaucher, and *Nivea floribunda*.

*Series III.—NOSEGAY PELARGONIUMS.*

These all have zonate leaves. The best sorts were Crystal Palace, Imperial Crimson, Pink Nosegay, and Red Nosegay. Of good secondary sorts, of larger growth, there were:—Bishopstowe Nosegay, Purple Nosegay, and Salmon Nosegay.

*Series IV.—IVY-LEAVED PELARGONIUMS.*

These were all considered to be useful bedding plants for various purposes.

*Series V.—VARIEGATED-LEAVED PELARGONIUMS.*

§ 1. *Leaves golden edged*:—Golden Chain and Lady Cottenham were pronounced to be useful varieties. § 2. *Leaves silver or cream-edged*:—Of the scarlet-flowered sorts: Annie, Alma, Bijou, Burning Bush, Countess of Warwick, Julia, Perfection, Scintillatum; and for pot culture, Picturatum. Of those with cerise-scarlet or rosy-tinted blossoms: Flower of the Day and Flower of Spring, both first-class sorts. Besides the foregoing, Lilac Variegated and St. Clair, both with pink flowers, were considered useful varieties of secondary rank. The varieties having the whitest-edged foliage were:—Alma, Bijou, Jane, Mrs. Lenox, Mountain of Light, Mountain of Snow, and Perfection.

*Series VI.—HYBRID BEDDING PELARGONIUMS.*

The varieties of this group did not succeed as bedding plants in 1860. In the following brief descriptions of the varieties, habit and colour are the chief points to which attention has been directed:—

*Series I.—PLAIN-LEAVED SCARLET PELARGONIUMS.*

§ 1. *Flowers scarlet.*

1. Collinson's Scarlet.—From Messrs. Fraser. Medium habit; flowers scarlet, in small trusses. Inferior.\*

2. Defiance.—From Messrs. Fraser. Vigorous habit; flowers large, in fair-sized heads, elevated on long stalks, light scarlet. A good variety for training to the pillars of greenhouse conservatories, or for pots.

3. Emperor.—From Messrs. Fraser. Vigorous; flowers large, bright scarlet.

4. Frogmore Improved.—From Messrs. Fraser. Medium and compact habit; flowers large and well formed, in fair-sized trusses, bright scarlet. One of the best sorts grown.

5. Gen. Sir F. Williams.—From Messrs. Low and Co. Rather vigorous in habit; flowers large, scarlet. Similar to *Punch*, but inferior to it.

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\* It may be explained that this term has been employed to express briefly the fact that superior sorts of similar character are known. It does not necessarily imply that the varieties to which it is attached are worthless.

6. Goliath.—From Messrs. Rollisson and Sons. Vigorous ; flowers large, well formed, in good-sized trusses, reddish-scarlet. Inferior.

7. Harkaway.—From Mr. Taylor. Dwarf, slender habit ; flowers narrow-petaled, in small trusses, scarlet. A useful bedding sort.

8. Indispensable.—From Mr. Turner. Dwarf ; flowers scarlet, in small trusses. Inferior.

9. Lamartine. From Mr. Scott. Medium spreading habit ; flowers light scarlet, of good form. Inferior.

10. Little David.—From Messrs. Low & Co. Dwarf ; flowers scarlet. Inferior.

11. Lord Raglan.—From Mr. Turner. Medium habit ; flowers large and showy, in small trusses, scarlet. Inferior.

12. Magnum Bonum.—From Mr. Scott. Vigorous ; flowers small, in compact trusses, deep scarlet. Inferior.

13. Mrs. Bloomer.—From Mr. Taylor. Dwarf compact habit ; flowers medium-sized, scarlet. Inferior.

14. Punch.—From Messrs. Fraser and Mr. Taylor. Rather vigorous in habit ; flowers large, scarlet. A fine variety for large beds. It appears that there are several distinct seedling forms of this variety, and that the best of them has a small white eye.

15. Rigby's Queen.—From Messrs. Fraser. Vigorous ; flowers large, loose, bright scarlet. Inferior.

16. Royal Dwarf.—From Mr. Turner. Medium habit ; flowers medium-sized, in small trusses, scarlet. Inferior.

17. Scarlatina.—From Mr. Turner, Messrs. Fraser, and Messrs. Low & Co. Vigorous ; flowers large, in medium-sized trusses, bright scarlet. Inferior.

18. Tom Thumb.—From Messrs. Fraser. Medium or dwarfish habit ; flowers scarlet. Inferior.

19. Wellington Hero. From Messrs. Fraser. Vigorous habit ; flowers large and well formed, in fine trusses, scarlet with white eye. A fine variety for pot culture, and for conservatories.

### § 2. *Flowers cerise, or rosy-scarlet.*

20. Beauté de Meldoise.—From Messrs. Fraser and Mr. Turner. Moderately vigorous ; flowers large, well formed, in good-sized trusses, rosy-scarlet, similar in colour to *Lady Middleton*. A very fine variety, superior to *Le Titien*.

21. Judy.—From Messrs. Fraser. Dwarf ; flowers rosy-scarlet. Inferior.

22. Lady Middleton.—From Mr. Taylor and Messrs. Fraser. Moderately vigorous, compact habit ; flowers large, well formed, abundant, in good-sized showy trusses, rosy-scarlet. An old variety, of good quality.

23. Le Titien.—From Mr. Turner. Medium habit ; flowers finely formed, and growing in compact trusses, better shaped than those of *Lady Middleton*, which they resemble in their rosy-scarlet colour. A useful variety, of excellent properties.

24. Lord John Russell.—From Messrs. Rollisson & Sons. Dwarf spreading habit ; flowers medium-sized, reddish scarlet, deeper than the

rosy-scarlet of *Lady Middleton*. It was not, however, considered a desirable variety.

§ 3. *Flowers rose-pink.*

25. *Christina*.—From Mr. Kinghorn and Messrs. Low & Co. Moderately dwarf; flowers freely produced in fair-sized trusses, deep rose-pink uniformly coloured. It is deeper coloured and dwarfer than *Rose Queen*, and is further distinguished by the absence of white from its upper petals. It is one of the best sorts of its colour.

26. *Lucea roseum*.—From Messrs. Fraser. Vigorous; flowers pale rose-pink. Inferior.

27. *Princess Alice*.—From Mr. Ingram. Medium spreading habit; flowers deep rose-pink. Inferior.

28. *Rose Queen*.—From Mr. Kinghorn and Messrs. Rollisson & Sons. Medium habit; flowers medium-sized, in moderate trusses, deep rose-pink with white base to the upper petals. It is one of the best rose-coloured sorts.

29. *Roseum compactum*.—From Mr. Turner. Dwarf compact habit; flowers small, deep rose-pink. Inferior.

§ 4. *Flowers white.*

30. *Ingram's White*.—From Mr. Scott. Medium spreading habit; flowers white. Inferior.

*Series II.*—HORSE-SHOE-LEAVED SCARLET PELARGONIUMS.

§ 1. *Flowers scarlet.*

31. *Agatha*.—From Messrs. Rollisson & Sons. Medium habit; leaves boldly zonate; flowers small, in compact trusses, scarlet. Inferior.

32. *Amazon*.—From Messrs. Fraser. Vigorous habit; leaves distinctly zonate; flowers large, well formed, in large compact trusses on long hairy stalks, light scarlet. A good variety for pillars in conservatories.

33. *Baron Hugel*.—From Mr. Turner, Mr. Taylor, and Mr. Scott. Also known as *Conway's Princess Royal*, and *Dr. Duval*. Dwarf and spreading in habit, with distinctly zonate leaves; flowers medium-sized, in small trusses, scarlet. It appears to be an early and profuse bloomer; and producing bright-coloured flowers, and decidedly horse-shoe-marked foliage, is to be recommended.

34. *Bishopstowe*.—From Mr. Turner. Medium habit; leaves boldly zonate; flowers medium-sized, in compact trusses, bright scarlet. A good old sort.

35. *British Flag*. From Mr. Turner and Mr. Taylor. Medium spreading habit; leaves distinctly zoned and mottled with green; flower-stalks pale-coloured; flowers large, in medium-sized trusses, light scarlet. It was considered a good and useful variety for in-door culture, in greenhouses and conservatories.

36. *Captivation*.—From Mr. Turner and Mr. Scott. Vigorous habit, with boldly zonate leaves; flowers full size, in bold long-stalked trusses, scarlet. It is similar in character to *Empress of the French*, but the trusses are bolder, and it was pronounced a good variety of the large or vigorous habited series.

37. *Clarissa*.—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers small, in compact trusses, scarlet.

38. *Compactum*.—From the Society's collection. Coarse habit; leaves distinctly zonate; flowers small, in large compact trusses, scarlet. Inferior as here grown, but a good variety for in-door culture.

39. *Compactum coccineum*.—From Messrs. Fraser. Vigorous habit; leaves boldly zonate; flowers small, in compact trusses, scarlet. Similar to *Royalist* and *Bishopstowe*, but not so bright in colour.

40. *Conway's Royalist*.—From the Society's collection. Medium habit, rather spreading; leaves boldly zonate; flowers small, in compact trusses, bright scarlet. It is similar to *Bishopstowe*, but rather dwarfer, and is a useful variety.

41. *Cottage Maid*.—From Mr. Scott. Medium habit; leaves boldly zonate; flowers medium-sized, scarlet. Inferior.

42. *Empress of the French*. From Mr. Turner and Messrs. Low & Co. Vigorous habit, with boldly zonate leaves; flowers large, in bold trusses, scarlet. The variety is rather coarse, and was considered inferior to *British Flag*.

43. *Fire Queen*.—From Mr. Scott. Medium habit; leaves indistinctly zonate; flowers scarlet, of medium size, loose. An inferior sort.

44. *General Pellissier*.—From Messrs. Fraser and Mr. Scott. Medium habit; leaves distinctly zonate; flower-stalks pale; flowers medium-sized, tolerably well formed, in moderate trusses, scarlet. Inferior.

45. *Glory of Somerset*.—From Mr. Scott. Medium habit; leaves zonate. This variety did not flower, but is said to be a dark scarlet with white eye.

46. *Ivery's Pet*.—From Mr. Scott. Medium habit; leaves boldly zonate; flowers medium sized, scarlet. Inferior.

47. *Lilliput*.—From Mr. Turner. Very dwarf; leaves small, with distinct dark zone; flowers medium-sized, very bright scarlet. This variety proved to be a little gem.

48. *Martin Gireau*.—From Messrs. Rollisson & Sons. Vigorous; leaves distinctly zonate; flowers large, in bold long stalked trusses, light scarlet. A good variety, with fine bold inflorescence.

49. *New Globe*.—From Messrs. Fraser. Vigorous habit; leaves boldly zonate; flowers small, in compact trusses, bright scarlet. In the way of *Bishopstowe*. The foliage is fine, and the colour of the flowers good.

50. *Orion*.—From Messrs. Low & Co. Medium habit; leaves boldly zonate; flowers medium sized, loose, scarlet. Inferior.

51. *Queen of England*.—From Mr. Scott. Vigorous, with boldly zonate leaves; flowers large, of good shape, produced in fair-sized trusses, bright scarlet. A variety of good properties. The same variety was received under the name of *Excellence*, apparently a misnomer.

52. *Reidi*.—From Messrs. Fraser. Medium habit; leaves boldly zonate; flowers scarlet. This variety was not well in flower, but was considered inferior.

53. Richmond Gem.—From Messrs. Fraser and Mr. Scott. Vigorous habit; leaves slightly zonate, mottled with green; flowers light scarlet, rather loose. It is, however, a fine pot plant.

54. Roi de Feu.—From Messrs. Rollisson & Sons. Medium habit; leaves boldly zonate; flowers small, in compact trusses, very bright scarlet. In the way of *Bishopstowe*, but no improvement.

55. Scarlet Globe.—From Messrs. Rollisson & Sons and Messrs. Low & Co. Medium habit; leaves zoned; flowers large, in fair-sized trusses, bright scarlet. Inferior.

56. Scarlet Perfection.—From Mr. Turner. Also called *Attraction* and *Boule de Feu*. Medium habit; leaves faintly zonate; flowers in fair-sized trusses, bright scarlet. It is a very fine variety.

57. Scarlet Unique.—From Mr. Ingram. Medium habit; leaves distinctly zonate, and marbled with green; flower-stalks pale; flowers small, in small trusses, scarlet. Inferior.

58. Shrubland Scarlet.—From Mr. Taylor. Vigorous habit; the leaves faintly zonate; flowers scarlet, in large showy heads. A variety called *Eclipse*, sent by Messrs. Fraser, appeared to be the same as this.

59. Village Maid.—From Messrs. Low & Co. Vigorous, with boldly zonate leaves; flowers medium-sized, in moderate trusses, rather loose, scarlet. Inferior.

### § 2. *Flowers cerise, or rosy-scarlet.*

60. Beauty of the Parterre.—From Messrs. Fraser. Medium habit, with indistinctly zonate leaves; flower-stalks pale; flowers small, in compact trusses, of a lively rosy-scarlet. Inferior.

61. Cerise Unique.—From Messrs. Fraser. Medium habit; the leaves slightly zonate; flowers small, cerise-scarlet. Inferior.

62. Comte de Morny.—From Messrs. Low & Co. Dwarf; leaves indistinctly zonate; flowers well-formed, in fair-sized trusses, lively cerise or rosy-scarlet. Inferior.

63. Emperor.—From Mr. Turner. Dwarf and vigorous; with boldly zonate leaves; flowers in small trusses, rosy-scarlet. Inferior.

64. François Chardine.—From Messrs. Fraser and Messrs. Low & Co. Medium habit; with boldly zonate leaves; flowers large, well formed, in medium-sized trusses, deep rosy or salmony-scarlet. A fine variety, near to *Mons. Martin*, but having better foliage.

65. Lady Dorothy Neville.—From Messrs. Rollisson & Sons. Dwarf spreading habit; leaves distinctly zonate, and mottled with green; flower-stalks pale; flowers above medium size, rather quartered, rosy or cerise-scarlet. Inferior.

66. Leoni.—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers large, in moderate-sized trusses, cerise or rosy-scarlet. A promising variety, but not well flowered.

67. Mons. August.—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers large, well formed, rosy or cerise-scarlet. A promising variety.

68. Mons. Deschamps.—From Messrs. Rollisson & Sons. Dwarf; leaves distinctly zonate; flowers well formed, cerise-scarlet. Inferior.

69. Mons. Martin.—From Messrs. Rollisson & Sons, Mr. Turner, and Messrs. Fraser. Medium habit; leaves distinctly zoned; flowers large, well formed in compact trusses, of a lively rosy-scarlet, or bright cerise-scarlet, like *Lady Middleton*. This is a fine sort, in the way of *Rubens* and *Lady Middleton*, and one well deserving of cultivation.

70. Paul Labbé.—From Messrs. Fraser. Medium and somewhat erect habit; leaves distinctly zoned; flowers of good size and fine form, but produced in small trusses, rosy-salmon. A fine variety for pots.

71. Picturatum.—From Mr. Hally. Medium habit; leaves indistinctly zoned; flowers deep rose. This variety scarcely came into bloom.

72. Rubens.—From Mr. Taylor. Moderately vigorous; leaves zoned; flowers large, fine form, produced in good-sized compact trusses; cerise-pink. A fine variety for all purposes.

73. Sheen Rival.—From Mr. Kinghorn. Medium and somewhat spreading habit, with distinctly zoned leaves; flower-stalks pale; flowers large, well formed, in bold compact trusses, cerise-scarlet. One of the best varieties in cultivation.

74. Surprise.—From Mr. Turner. Dwarf, with zoned leaves, distinctly marked with mottled green; flowers medium-sized, in compact trusses, rosy-scarlet. Inferior.

75. Talma.—From Messrs. Rollisson & Sons. Medium habit; leaves slightly zoned; flowers rosy-scarlet.

76. The Bishop.—From Mr. Scott. Medium habit; a very distinct variety, the leaves green, with a yellowish green centre, and a dark zone; flowers large, in large trusses, rather loose, rosy-scarlet; they are produced on pale-coloured stalks. Though a distinct sort, it is of inferior properties.

### § 3. *Flowers salmon or flesh-colour.*

77. Aurora.—From Mr. Hally. Dwarf; leaves distinctly zoned; flowers deep salmon-pink, not well developed. The variety is evidently not adapted for open air culture in such a season as the past, though a very beautiful object for pot culture.

78. Blackheath Beauty.—From Mr. Hally. Dwarf; leaves distinctly zoned; flowers pinkish-blush. This, like *Aurora*, is a beautiful little plant for pot culture, but in seasons like the past is not suited for bedding.

79. Cherry Cheek.—From Mr. Taylor. Vigorous; leaves large, zoned; flowers medium-sized, deep salmon-pink. Inferior.

80. Chione.—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zoned; flowers medium-sized, flesh-colour. Inferior.

81. Criterion.—From Mr. Taylor, Mr. Scott, and Mr. Turner. Moderately vigorous habit; leaves large, distinctly zoned; flowers well formed, in compact trusses, flesh-colour or blush. Ineffective, and evidently not suited for out-door culture in seasons like the past.

82. Prince Louis of Hesse.—From Mr. Ingram. Medium habit, with the erectish growth of *Paul Labbé*; leaves distinctly zoned; flowers large, well formed, salmon-red, paler towards the edges. This, which was grown as seedling A, was pronounced a first-class variety

of the salmon-coloured series. Mr. Ingram states that it is very pretty when grown in the shade.

83. Kingsbury Pet.—From Mr. Turner, Messrs. Fraser, and Mr. Scott. Medium habit; leaves distinctly zonate; flowers of good form, produced in fair-sized trusses, salmon or pinkish flesh-colour. A good variety for pot culture, but not equal to *Aurora*.

84. Lady Emily Stanley.—From Mr. Turner. Medium habit; leaves boldly zonate; flowers flesh colour, in small trusses. Inferior.

85. Madame Chardine.—From Messrs. Low & Co. Medium habit; leaves distinctly zonate; flowers rosy-salmon. Inferior.

#### § 4. *Flowers rose-pink.*

86. Amy.—From Messrs. Rollisson & Sons. Medium habit; leaves with distinct dark zone; flowers rose-pink, white on the upper petals. A very poor and inferior sort.

87. Frogmore Seedling.—From Mr. Taylor. Medium compact habit; leaves distinctly zonate; flowers narrow petaled, deep rose-pink. Inferior.

88. Ingram's Seedling.—From Mr. Ingram. Medium habit; leaves faintly zonate; flowers small, rose-pink. Inferior.

89. Minnie.—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers medium-sized, in moderate trusses, deep rosy-pink, white on the upper petals. Inferior.

90. Princess Royal.—From Mr. Ingram. Dwarf compact habit; leaves faintly zonate; flowers small, deep rose-pink, with white on the upper petals. Inferior to others of this colour.

91. Tom Thumb's Bride.—From Mr. Turner. Dwarf, with slightly zonate leaves; flowers small, in small trusses, deep rose-pink, with white on the upper petals. Not equal to *Rose Queen*.

#### § 5. *Flowers blush with pink centre.*

92. Anthony Lamotte.—From Messrs. Low & Co. Medium habit; leaves boldly zonate; flowers medium-sized, of good form, in small close trusses, whitish with pink centre. Not equal to *Henri de Beaudot*, and paler in colour.

93. Comte de Morny.—From Messrs. Low & Co. Medium habit; leaves distinctly zonate; flowers small, in small close trusses, whitish, with salmon-pink centre. This was similar to *Anthony Lamotte*, and quite distinct from another variety under a similar name, also contributed by Messrs. Low.

94. Henri de Beaudot.—From Messrs. Low & Co. Moderately vigorous in habit; leaves distinctly zonate; flowers medium-sized, in moderate-sized trusses, of good form, whitish, with a large distinct salmon-red centre. The best of the salmon-eyed light varieties.

95. La Coquette.—From Messrs. Rollisson & Sons. Dwarf; the leaves slightly zonate; flowers blush white, of a deeper blush at the eye. Inferior.

96. Skeltoni.—From Mr. Turner, Messrs. Fraser, and Mr. Scott. Dwarf; the leaves distinctly zonate; flowers small, in small trusses, white, with blush centre. Inferior.

§ 6. *Flowers white.*

97. Auber Henderson.—From Mr. Scott. Dwarf; leaves slightly zonate; flowers white, of tolerably good form. It is now surpassed by other white varieties.

98. Boule de Neige.—From Mr. Turner. Moderately vigorous habit; leaves distinctly zonate; flowers small, of good form, white. A good variety, but inferior to *Madame Vaucher*.

99. Lady Turner.—From Mr. Scott. Moderately dwarf habit; leaves distinctly zonate, white. Not well developed.

100. Madame Vaucher.—From Messrs. Low & Co. Medium habit; leaves distinctly zonate; flowers of moderate size, well formed, produced in compact trusses, white. This was adjudged to be one of the best white sorts.

101. Miss Emily Field.—From Mr. Scott. Dwarf; leaves faintly zoned; flowers blush-white. Inferior.

102. Niveum floribundum.—From Messrs. Rollisson & Sons. Dwarf; leaves with distinct dark zone; flowers in medium-sized compact trusses, well formed, white. A good white variety, but not considered equal to *Madame Vaucher*.

The following sorts did not produce flowers:—

103. Amy Robsart.—From Messrs. Rollisson & Sons. Dwarf; leaves slightly zonate.

104. Impératrice Eugénie.—From Messrs. Low & Co. Medium habit; leaves with a distinct narrow zone.

105. Première.—From Messrs. Rollisson & Sons. Vigorous and coarse habit; leaves distinctly zonate.

106. Royalist.—From Messrs. Fraser. Leaves indistinctly zoned.

*Series III.—NOSEGAY PELARGONIUMS.*

107. Bishopstowe Nosegay.—From Mr. Taylor. Vigorous; leaves large, faintly zonate; flowers rosy-crimson, in large bold trusses. It is a good large growing sort, but was considered rather coarse.

108. Crystal Palace.—From Mr. Taylor. Dwarf and compact; leaves prettily marked with a narrow distinct dark zone; flowers small, pink. The flowers were not well developed, but its dwarf habit and very pretty foliage are sufficient to recommend it as a desirable variety in this section.

109. Frewer's Nosegay. From Mr. Taylor. Medium compact habit; leaves zoned; flowers small, rose-coloured, in small trusses, which are not well filled.

110. Imperial Crimson.—From Mr. Turner. Medium habit; leaves faintly zoned; flowers loose, produced in moderate-sized heads, deep rosy-crimson. One of the best of the nosegay section.

111. Model Nosegay.—From Mr. Turner. Vigorous habit; leaves faintly zoned; flowers loose, in large heads, rose-colour. This was considered too coarse in habit.

112. Pink Nosegay.—From Mr. Taylor and Messrs. Fraser. Medium habit; leaves neatly zonate; flowers large, bright rose, in moderate-sized trusses. This is a fine variety, with flowers larger than in any other Nosegay variety grown in the collection.

113. Purple Nosegay.—From the Society's collection. This was also received under the name of *Mrs. Vernon* and *Mrs. Colville*. Vigorous; leaves large, zonate; flowers bright rose-colour, in good trusses, but they were not well developed. It is, however, a good large growing sort, though somewhat coarse.

114. Red Nosegay.—From Mr. Taylor. Medium habit; leaves bright green, with faint zone; flowers reddish crimson, in good-sized trusses. A variety of good habit, and one of the best in this section.

115. Salmon Nosegay.—From Mr. Taylor. Vigorous; leaves large, zonate; flowers salmon-pink, in large trusses. It is a distinct large sort, somewhat coarse.

*Series IV.*—IVY-LEAVED PELARGONIUMS.

These are all of spreading habit, and have loose narrow petaled flowers. They are useful bedding sorts.

116. Golden Ivy-leaved.—Leaves having a motly edging of yellowish-green and zonate.

117. Scarlet, or Crimson Ivy-leaved.—From Messrs. Fraser. Leaves green; flowers loose, rosy-crimson.

118. Variegated Ivy-leaved.—From Messrs. Fraser. Leaves cupped, silver-edged; flowers lilac.

119. Variegated Crimson Ivy-leaved.—From Messrs. Low & Co. Leaves cupped, silver-edged; flowers pink.

120. White Ivy-leaved.—From Messrs. Fraser. Leaves green, slightly blotched in the centre; flowers large, white.

*Series V.*—VARIEGATED-LEAVED PELARGONIUMS.

§ 1. *Leaves golden or yellowish edged.*

121. Golden Chain.—From Mr. Scott. Leaves flat, golden-edged; not in flower. Well known as one of the most useful bedding sorts for special purposes.

122. Lady Cottenham.—From Mr. Turner and Mr. Scott. Medium habit; leaves flat with yellowish-green edge, and faintly zonate; flowers deep pink, or rose-colour. A useful sort.

§ 2. *Leaves silvery or creamy-edged.* \* *Flowers scarlet.*

123. Alma.—From Mr. Scott, Mr. Turner, Mr. Taylor, and Messrs. Fraser. Medium habit; leaves broad, flattish, white edged; flowers medium-sized, in compact trusses, deep reddish scarlet. A first-class variety.

124. Annie.—From Mr. Kinghorn. Dwarf compact habit; leaves with a whitish edge; flowers large, light orange-scarlet, rather loose. It is one of the more desirable varieties, similar to that called *Flower of the Day*, but having better foliage.

125. Bijou.—From Messrs. Low & Co., Messrs. Fraser, and Mr. Turner. Medium habit; leaves rather convex, white-edged; flowers large, well formed, bright scarlet. This is one of the finest varieties in cultivation, and was considered to be quite A 1.

126. Brilliant.—From Mr. Taylor. Medium habit; this, which is a variegated sport from *Tom Thumb*, has leaves slightly edged with white, the edge more or less abortive; flowers bright scarlet. It is a useful sort.

127. Burning Bush.—From Mr. Hally. Dwarf; leaves convex edged with creamy-white, and zoned with dark red, pinkish on the younger parts; flowers of good form, in fair trusses, medium-sized, light scarlet. A very excellent variety.

128. Countess of Warwick.—From Mr. Kinghorn, Messrs. Low & Co., and Messrs. Fraser. Medium habit; leaves rather cupped, silver-edged, with distinct dark zone; flowers medium-sized, in compact trusses, bright scarlet. It is one of the best varieties, and is good either for beds or pot culture.

129. Jane.—From Mr. Turner. Vigorous, with spreading one-sided habit of growth; flowers large, well formed, light scarlet. It is, however, inferior to other sorts.

130. Julia.—From Mr. Turner. Medium habit; leaves having a creamy edge; flowers medium-sized, in good trusses, scarlet. A distinct and good variety.

131. Mountain of Light.—From Messrs. Fraser. Medium habit; leaves convex, white edged; flowers scarlet. Inferior.

132. Mrs. Lenox.—From Mr. Taylor. Medium habit; the growth rather one-sided; leaves with distinct white edge; flowers bright scarlet, in small trusses. It was considered to be inferior to *Alma*.

133. Perfection.—From Messrs. Low & Co. Medium habit; leaves flattish with broad white edge, and mottled green surface; flowers of tolerable form, in fine trusses, bright light scarlet. A variety of good properties.

134. Picturatum.—From Mr. Turner. Medium habit; leaves with a creamy edge and zoned with red; flowers of medium size, in compact trusses, scarlet. A pretty variety for pot culture, but apparently not suited for beds.

135. Scarlet variegated.—From Mr. Taylor. Medium habit; leaves cupped, with creamy or slightly silvered edge; flowers loose, crimson scarlet.

136. Scintillatum.—From Mr. Hally. Medium habit; leaves cupped, creamy silver-edged, and dark-zoned; flowers well formed, of medium size, and produced in good trusses, deep scarlet. It is a very beautiful variety.

\*\* *Flowers cerise, or light rosy-scarlet.*

137. Attraction.—From Mr. Kinghorn. Leaves creamy-edged, and zonate; flowers cerise-scarlet; not in good condition.

138. Bridal Wreath. From Mr. Turner and Mr. Scott. Medium habit; leaves white-edged; flowers rosy-scarlet above medium size. Inferior.

139. Fairy Nymph.—From Mr. Turner. Medium habit; leaves rather cupped, white-edged; flowers cerise-scarlet, in small trusses. An inferior variety.

140. Flower of the Day.—From Messrs. Fraser. Medium habit; leaves rather cupped, creamy-edged; flowers light or cerise-scarlet, of medium size, and good form, in fair-sized trusses. A good old useful sort.

141. Flower of Spring.—From Mr. Turner. Moderately dwarf habit; leaves silver-edged, and mottled with green; flowers large, of

extra fine form, rosy-tinted scarlet. This is a first-class variety, fine every way.

142. Mountain of Snow.—From Messrs. Fraser. Medium habit; leaves concave, white-edged; flowers large, well formed, light salmony scarlet. A useful variety.

143. Shottesham Pet.—From Mr. Turner. Moderately vigorous; leaves cupped, silver-edged; flowers medium-sized, cerise-scarlet. Inferior.

144. Variegated Tom Thumb.—From Mr. Scott. Dwarf; leaves white-edged; flowers small, cerise scarlet. It is too small to be effective.

\*\*\* *Flowers reddish-crimson:*

145. Lady Granville.—From Mr. Taylor. Moderately vigorous; leaves cupped, slightly silver-edged; flowers loose, reddish-crimson. Inferior.

\*\*\*\* *Flowers pink.*

146. Lilac variegated.—From Mr. Taylor, Moderately vigorous; leaves cupped, slightly silver-edged; flowers pink, loose, in trusses of considerable size. A distinct and useful old-fashioned sort. It was received under the name of *Peach Blossom* from Messrs. Low & Co.

147. St. Clair.—From Mr. Turner, Mr. Taylor and Mr. Scott. Moderately vigorous in growth; leaves cupped, white-edged; flowers rose-pink, in compact trusses, rather indifferent in form. It is, however, distinct, and useful as a rose-coloured variegated-leaved sort.

148. Silver Queen.—From Mr. Taylor, Messrs. Low & Co., and Mr. Turner. Medium habit; leaves flattish, white-edged; flowers loose, pink, distinct in colour, but inferior.

The following did not produce flowers:—

149. Fairy Nymph.—From Mr. Scott. Leaves silver-edged, indistinctly zonate.

150. Koh-i-noor.—From Mr. Scott. Dwarf, the plant being weakly in habit; leaves silver-edged. Described as a bright scarlet.

#### *Series VI.* HYBRID BEDDING PELARGONIUM.

This name is applied to a group having more or less resemblance in habit, foliage, and blossoms to the classes of show and fancy kinds. There are some interesting and useful varieties in this section, but during the last season they scarcely came into bloom, and they are evidently not adapted for bedding out in seasons like that of 1860. Some of them form fancy pot plants suitable for decoration.

#### REGENT'S PARK SPRING MEETINGS.

At the three early meetings of the Royal Botanic Society, held this season, the following among other prizes were awarded:—

*March 20.* NEW PLANTS, &c.—Small Silver Medal to Mr. W. Bull, Chelsea, for *Pteris cretica albo-lineata*, a fine new variegated Fern. Bronze Medal to Mr. Bull, for *Calamus Verschaffeltii*, a very elegant Palm from Madagascar, having pinnated leaves, glaucous beneath, on

brownish-red stalks, which are armed with needle-shaped spines pointing backwards. Certificate to Mr. Bull for *Areca Verschaffeltii*, a vigorous growing, but elegant pinnated Palm from Madagascar, remarkable for having a yellow-keeled rachis to the leaves. Also to Mr. Bull, for *Rhodea japonica macrophylla fol. aureis marginatis*, a herbaceous plant, with bold erect lanceolate leaves, broadly edged with yellow. First Class Certificate of Merit to Mr. James, gr. to W. F. Watson, Esq. Isleworth, for *Cineraria Lord Elgin*, a variety with remarkably smooth florets of a bright and distinct Magenta-colour; but somewhat reflexed forming, slightly convex flower heads. Second class Class Certificate of Merit to Messrs. F. & A. Smith, Dulwich, for *Cineraria Queen of Spring*, a very showy large-flowered variety, having a dark disk surrounded by a ring of white on the lower half of the florets, and tipped with bright rosy-purple. Also to Mr. Todman, gr. to R. Hudson Esq., Clapham Common, for *Azalea Flag of Truce*, a fine white semi-double variety, with large blossoms resembling those of a double Oleander.

Of this class of plants there were also exhibited the following:—From Mr. Todman, Clapham: *Azaleas*—Miss Amelia, very light rose-colour, slightly spotted; Miss Julia, bright rose; Lord Macaulay, large bright rose, well spotted; Advancer, a lively rose in the way of *Triumphans*; Hope, small bright rose; all flowers of average merit but wanting in distinctness. From Messrs. Parker & Williams, Holloway: a small-flowered *Cattleya*, allied to *Mossiæ*, with a purplish lip, lemon-coloured at the edge towards the inflected portion. From Messrs. Cutbush & Son, Highgate: *Begonia Prince of Wales*, a handsome variety very closely resembling *Marshallii*. From Mr. Bull, Chelsea: *Agathea cœlestis fol. variegatis*, an uncertain dwarf variegated bedding plant, which had been already rewarded at the Society's summer exhibitions. From Mr. James, Isleworth: *Cinerarias*—Lord Raglan and Lord Clyde, two deep purple-rose selfs. From Mr. Wiggins, Isleworth: *Cinerarias*—Victor, and Maiden Fair, two rose-tipped, grey-eyed sorts. From Mr. Todman, Clapham: *Cinerarias*—Attraction, white, scarcely tipped, and with a purple disk; Clapham Defiance, rose-purple with white ring around the dark disk, a showy but old fashioned sort; Perfection, similar in colour to Clapham Defiance, but with a grey disk; General Simpson, bright rose purple. From Messrs. F. and A. Smith, Dulwich: *Cinerarias*—Mammoth, very large, irregularly tipped with rose; Sanspareil, purple-shaded rose, with white ring around the disk; Symmetry, unevenly and faintly tipped with rose, and having a dark disk; Standard, deep blue, white at the base, with grey eye; King of Italy, deep crimson with dark disk; Delicata, a rather pretty sort, pure white, with a slight tip of bright rose; Celestial, irregularly tipped with dark blue; Rosa Bonheur, large with heavy tip of rose purple.

*April 3.* NEW PLANTS, &c.—Small Silver Medal to Mr. Todman gr. to R. Hudson, Esq., Clapham Common, for *Azalea Flag of Truce*, a showy semi-double white variety, producing large flowers well filled out with petaloid filaments. It had been awarded a certificate at the previous meeting. Bronze Medal to Messrs. Parker & Williams, Holloway, for *Statice propinqua*, a half-shrubby greenhouse hybrid, raised between

*S. Halfordii* and *S. puberula*, and resembling *Statice profusa*, a moderately vigorous free-blooming blue and white flowered hybrid of similar origin. Also to Mr. W. Bull, Chelsea, for *Citharexylon niveum*, a young plant of a broad-leaved Palm, of which the leaves are white and pulverulent beneath. Certificate to Mr. Bull for *Amaryllis vittata fol. striatis*, a variety in which the leaves were marked with a more or less regular central band of pale green. First Class Certificate of Merit, to Mr. Todman, Clapham, for *Azalea Lord Elgin*, a showy deep bright rose-coloured variety of good form, and neatly spotted on the upper segments. Also to Mr. C. Turner, Slough, for *Cineraria Prairie Bird*, a medium sized variety, having the florets clear violet blue with a very small portion of white at their base; for *Cineraria James Andrews*, a new-coloured variety with broad florets, rose, suffused with blue, so as to produce a rich purple or puce-plum-colour, deeper in tint than *Antagonist* mentioned below: and for *Auricula Rifleman*, a large-flowered mulberry purple self, with circular eye and even paste, and blooming in fine trusses. Also to Messrs. F. and A. Smith, Dulwich, for *Cineraria Queen of Spring*, a brilliant variety of good properties, having a dark brown disk, surrounded by a clear white ring, and bright rosy tips to the florets, the colours clear, and well defined. Second Class Certificate of Merit to Messrs. Smith for *Cineraria Antagonist*, a showy, well-formed bright rose suffused with blue, producing a purplish-hued flower, lighter than *James Andrews* already mentioned, and with a dark disk; for *Cineraria Rosy Morn*, an attractive bright rose-coloured variety, with a narrow ring of clear white around the grey disk; and for *Louise*, a variety in which the florets were white at the base, tipped with deep rosy-tinted purple, and set around a dark-coloured disk. Also to Mr. James, gr. to W. F. Watson, Esq., Isleworth, for *Cineraria Duchess of Hamilton*, a very large-flowered variety of average properties, rewarded for its size; the flower-heads have a dark-coloured disk, surrounded by a white ring, and heavy tips of rosy purple. Also to Mr. Bull, for *Primula sinensis (fimbriata) nivea plena*, and *rubella plena*, two pretty semidouble varieties, which it has been stated are perpetuated by seeds, and will thus form useful decorative objects, though individually inferior to some of the fine double kinds already known.

There were also exhibited in this class the following additional subjects:—From Messrs. Jackson & Son, Kingston:—*Sauromatum guttatum*, a singular Araceous plant, flowering before the leaves are produced, the spathe curiously spotted with brown. From Mr. Todman, Clapham:—*Azaleas*—*Rosy Morn*, light rose, deficient in spotting; *Lord Clyde*, salmony red, faintly spotted; *Rose Celestial*, clear bright rose, full medium size, smooth, and of good form and substance, but deficient in spotting; *Bridesmaid*, light rose, slightly spotted, but of a faded-looking tint; *crispiflora rosea*, large crispy clear rose. These were for the most part good varieties of average merit, but wanting in distinctness, and in some cases deficient in the spotting which produces so fine an effect in many varieties of this flower. From Mr. Bull; *Dracæna spectabilis*, a narrow green-leaved sort, not at all showy in its present state. From Mr. C. Turner: *Rose John Waterer*, a hybrid perpetual of a deep rose colour filled with small confused petals; also

Madame Boll, a fine light rose, coloured sort; Cineraria Lurline, a pretty and showy kind, rewarded last season, having the florets heavily tipped with deep rose, and a white ring around the dark disk; also, more or less closely resembling this in colour and general character, Fairy King, Fleur de Marie, Miss Franklin, Amber Witch, and Miss Eyles—the latter a pretty flower, selected for a certificate last season. Reynolds Hole, a bright crimson self, rewarded last season, showy but with somewhat ribbed florets; Great Western, rosy self suffused with blue; Eton Boy, crimson self; Maid of Astolat, white with dark disk, and slight tip of rosy-purple; also Auricula Volunteer, a fine dark maroon self rewarded last year; and North Star, rough purple self. From Messrs. Dobson & Son, Isleworth: Cinerarias—Conqueror, a showy large bright rose-crimson self, with grey eye; Meteor, bright rose self; and Admiration, one of the heavily rose-tipped class. From Mr. James, Isleworth: Cineraria, Lord Elgin, rewarded at the last meeting. From Messrs. W. Cutbush & Son, Highgate:—Cineraria, Miss Burdett Coutts, a purple tipped variety, inferior to Louise. From Messrs. F. & A. Smith, Dulwich: Cineraria Prima Donna, dark disk, and moderately heavy tip of bright rose; Criterion, dark disk, with slight purple tip; Lilacina, light lilac-tinted rose; Orion, large, with small dark disk, and uneven tips of deep rose; Perfecta, crimson self, very near Reynolds Hole; Géant des Batailles, good bright crimson self, rewarded last season; Sanspareil, puce-tinted rose with grey eye; Standard, grey eye, and heavy purple tips; also Pelargonium Snowdrop, an early forcing variety with white flowers in the way of Album multiflorum: and Pelargonium floribundum, rose colour, with feathery spot.

*April 24.* NEW PLANTS, &c.—Small Silver Medal to Miss Clarkson, Avenue Road, St. John's Wood, for *Athyrium Filix-fœmina*, var. *Frizelliæ*, a remarkably elegant and curious form of Lady Fern, in which the pinnæ were reduced to small flabellate bodies resembling the pinnæ of *Asplenium flabellifolium*, thus forming a narrow linear frond. Bronze Medal to Mr. B. Williams, Paradise Nursery, Holloway, for *Rhododendron Madame Wagner*, a beautiful variety in which the flowers are white edged with bright rose-colour. Bronze Medal to Mr. W. Bull, Nurseryman, Chelsea, for *Pteris rubro-nervia*, an elegant free-growing Fern having a red midrib to the pedately pinnatopinnatifid fronds. Certificate to Mr. Bull, for *Erica "mediterranea alba,"* a very dwarf, white-flowered, hardy Heath, resembling *E. carnea* in habit. First Class Certificate to Mr. Turner, Slough, for Variegated *Pelargonium Clara*, a variety with well-marked foliage having an orange-coloured zone and gold margin, the flowers of a deep bright scarlet, and well formed. First Class Certificate to Mr. Turner, for *Pelargonium Herald of Spring*, a horse-shoe-leaved variety with very large and finely-formed flowers of a lively orange-tinted cerise. First Class Certificate to Cineraria Miss Franklin, a variety with very large flower heads, which have heavily rosy-crimson tipped florets, and a clear ring of white around the dark disk; a variety of large size combined with good properties. First Class Certificate to Messrs. F. & A. Smith, Dulwich, for Cineraria *Magnum Bonum*, another large-

flowered and ornamental variety, having a dark disk, and white florets with a moderate tip of blue. Second Class Certificate to Messrs. F. & A. Smith, for *Cineraria Enchantress*, a bright-looking and effective kind, useful for decorative purposes, the florets white at the base heavily tipped with reddish purple, and the disk dark-coloured. Second Class Certificate to Mr. Turner, for *Cineraria the Colleen Bawn*, a variety of diffusely branched habit, the flowers having a dark disk, and white florets with slight and rather irregular tips of blue; a pretty decorative sort. Second Class Certificate to Mr. Turner, for *Cineraria Great Western*, a distinct and attractive self-coloured variety, of a purple-flushed rose colour, and having a dark disk. Second Class Certificate to Mr. Turner, for *Pelargonium Prince of Hesse*, a fine horse-shoe-leaved variety, having large finely-formed flowers, of a delicate salmon-pink, paler towards the edges. Second Class Certificate to Mr. Turner, for *Auricula Rev. G. Jeans*, a variety with large grey-edged flowers, having maroon markings, and an even paste; a useful second-rate flower.

Of this class of subjects there were also shown many others to which no awards were made.

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#### PALMS.

THERE are few places in Europe where so good an idea can be formed of the luxuriance and variety of tropical vegetation as in the noble Palm house of the Royal Botanic Gardens, Kew. Standing in the gallery, we look down upon Bananas, Spice-plants, and hundreds of the most characteristic trees of hot countries. Here we always find some plant of peculiar interest in flower or fruit. Last year a member of the Cocoa-nut genus blossomed for the first time. This gigantic and yet graceful tree—the *Cocos plumosa*—produced an enormous mass of pale primrose coloured flower-spikes, which for several days were as beautiful as a plume of feathers. The flowers have now been succeeded by many fruits, which are rapidly progressing towards maturity. The Wine Palm, *Caryota urens*, is now in blossom; this is the first time this glorious tree has produced perfect inflorescence in Europe; it has previously made one or two abortive attempts to flower, but never accomplished the feat so successfully as at the present time. Another species, which is often confounded with this, blooms much more freely, and that even in a small state, viz., the *Caryota sobolifera*. *C. urens* is a common tree throughout the warmer parts of India and the East Indian islands. It is as useful as well as ornamental Palm. By simply tapping it the natives obtain, every day in summer, from a single tree, as much as a hundred pints of a very pleasant beverage; on this account the tree obtains the name of the Toddy Palm. Its fruit is not edible, the outer covering of it being of so acrid a nature as to blister the mouth. *Seaforthia elegans* is also producing flowers of an elegant and delicate rose colour. This is the Australian Cabbage Palm, so called because the young leaves form a by no means disagreeable addition to the dinner table. The inflorescence of *Areca Baueri*, the Norfolk Island Palm, looks like an elegantly-formed piece of cream-coloured coral. *Sabal umbraculifera*, the gigantic Fan Palm of the West Indies,

is laden with large bunches of its black, shining fruits, each about the size of a Grape berry.

Popular taste inclines to the cultivation of plants remarkable either for their form, size, or colouring of their foliage; we feel confident, therefore, that Palms will shortly play an important part in this movement. But, says some one, Palms cannot be properly cultivated except in a house of gigantic proportions, like that at Kew; and who can afford such a stove, except, indeed, the ducal proprietor of Chatsworth? Yes, that is the point which has hitherto kept them out of our exhibitions; that idea has prevented our nurserymen from obtaining a stock of Palms, and discouraged almost every one who would have tried the experiment. And yet there is just as much error in the matter as truth. I have practically studied horticulture in more than half a dozen different countries, and my native land is the only one in which Palms are considered unfit for general cultivation. In Prussia, in Saxony, in Austria, in Hanover, in Belgium, you will hardly find a garden of any note in which Palms are not grown for decorative purposes. There are dozens of species which may be grown in the same sized pots, and not occupy more room than most of the plants which are cultivated for the beauty of their foliage. We hope soon to see prizes offered specially for Palms, as they are now for *Dracænas*. Variety is what we want among fine-foliaged plants; we want as many kinds of gracefully growing plants as can be obtained, why then should we not seek them among Palms, whose great characteristic features are elegance and beauty. There are Palms which may be grown in the greenhouse, as well as those which require a stove. There are bright colours among Palms, too—as for instance, *Latania rubra*, *L. aurea*, and *Areca Verschaffeltii*; while for gracefulness of appearance there are few Ferns which could rival a well-grown plant of many species of *Calamus* and *Chamædorea*. The only objection which can be brought against Palms is, that they grow too large; but people forget the time it takes them to attain any great size. A specimen of either of those we have named, or of many others which could be mentioned, would take from 10 to 25 years before it became too large for exhibition purposes, and surely that is as long as we can expect any plant to remain in perfection.

So great is the demand for Palms upon the continent, that some nurserymen devote themselves almost exclusively to their cultivation, and in every establishment at least one or two houses are set apart for them. The nursery of M. Augustin, of Wildpark, near Potsdam, is one of the most noted for these plants. Every excursionist who goes to Berlin should visit this garden; it is only a trip of some 15 or 16 miles from that city. Palms will be found growing there, not by the dozen, or the score, not even by the hundred, but by thousands and tens of thousands. It is almost impossible to conceive the number of them raised in this establishment without personal inspection. M. Augustin's catalogue contains the names of between two and three hundred species, and of almost all of them he has a large stock. All I can say in conclusion is, that I hope Palms may soon become as plentiful as Ferns in this country. Should the cultivation of this family be once fairly started, there cannot be the slightest doubt that they will become thoroughly and generally popular.

DELTA.

## ROSES.

I EXPECT the late Russian winter will effect one or two reforms in Rose growing, by what I hear and see. It is a fact that nearly all the standards and worked Roses are dead; while those growing on their own bottoms, though the upper wood may be killed, are breaking strongly from the bottom. La Reine, Géant, Duchess of Sutherland, Lord Raglan, Madame Vidot, Prince Leon, Madame Knorr, Lord Palmerston, Eugene Appert, Anna des Diesbach, Cardinal Patrizzi, La Ville de St. Denis, and a host of others, struck from cuttings, and growing in an exposed situation, are throwing up shoots strongly from the bottom; and so are even *Devoniensis* and *Souvenir de la Malmaison*. Of course it will take some time to work up a stock on their own roots, as it takes time and good cuttings to do it; but as we must come to this, the sooner it is set about the better.

Standard Roses are now being generally condemned; the *Florist* has taken the lead in the matter; and I see the veteran king of Rose growers feels that their days are numbered; and his business shrewdness has already suggested what form the next style of fashion in Roses is to assume. I am not disposed to question the soundness of his authority, but would advise amateurs like myself to cultivate their own stock. In September and October next all the sound healthy year's wood will grow if made into cuttings and put firm into a sandy compost and covered with a handglass. In a sandy soil and a somewhat sheltered situation the handglass is not necessary, as I have succeeded well without; but during frost you are enabled to protect the cuttings more readily; and some of the Chinas, Teas, and tender Perpetuals strike quicker with a glass over them. The glasses should have moveable tops, to give air, so as to keep the cuttings dry. If the cuttings are taken off in August or September, and if you can then get the wood tolerably well ripened, it is the best season. (They strike best when not fully ripened, but just when the wood begins to cut firm.) They will form roots freely during the autumn and winter, and you must judge by the progress of the tops as to the state they are in, as they will probably make a start to grow, in which case keep them cool by removing the glass top, or giving plenty of air. By March or the beginning of April you may take up the cuttings and transfer them to a mellow piece of ground, in rows, 18 inches apart, to grow a year before final planting—or to beds, as may be required. The cuttings may vary from 6 to 8 or 9 inches in length, of which two joints with buds will be above the ground when the cutting is inserted, and the rest below. The heel of the cutting should be at a joint, which should be clean cut through, and the buds taken out of that part of the cutting below the surface, to prevent future suckers. When put into the ground without glasses, any time during the autumn will do. These will have to remain all the following summer, and should therefore have more room, as some of the kinds will make a good growth.

In detailing my own plan, and by asking you to publish it, I may do a service to others who, like myself, not have the means of buying largely every year worked Roses, and yet are desirous of possessing in abundance the Queen of flowers. What standards I have

I manufacture from my dwarfs. Where the sort is capable of forming a strong shoot, I keep it, and remove all the rest, and the buds from this one, up to two or three feet, to which they are cut back and left to form a head, which they will soon do. Of course I have to buy new kinds, which are worked, but I keep them for stock, to take cuttings from, and think myself lucky if they live long enough to supply me with what I want before they die, for they are very short-lived with me, on my dry, sandy soil.

AMATEUR.

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### NOTES ON THE MONTH.

THREE weeks, aye a month, of dry weather has done wonders for the land, and what was all mud and bird-lime in March is now in fine order for seeds of all kinds; and the thousands of couch fires one sees in crossing the country indicate pretty clearly not only the state of the weather, but the vast extent of land over which couch and other weeds had spread themselves unchecked during 1860, and which the dry days of April have now mostly converted into ashes, to the great relief of the farmer and the benefit of the future Barley and Turnip crops. What is good for the farm cannot be bad for the gardener, and so far nothing could have happened more opportunely for those who have to deal with heavy clay soils; for where these have been properly worked they must have benefited largely by the process and be fit for every description of crop. But the nights have been frosty (as usual) of late, and our *register* indicated 6° of frost on the morning of the 20th, and 5° the morning following, and this with a keen easterly wind. We felt a somewhat queer sensation when reading the thermometer's doings for the night, considering that all our wall Plums, Cherries, and Pears were in full bloom, and that 1860 had quietened our anxiety as to wall Peaches for a year or two, for 6° of frost under such circumstances is fearful odds to fight against. However, we are glad to say, from what we can see at present, no damage has occurred to anything on the walls—a breadth of tiffany, just under the coping, kept off vertical frost; and as the days previous had been bright, the walls retained some degree of heat, we should suppose sufficient to keep the air adjoining just above freezing point; and then the atmosphere was dry, which we have found has always a great deal to do with the matter. What Pears and Plums were in bloom on our orchard trees have been destroyed, and indeed every year's experience only confirms more strongly our previous conviction as to the impolicy of growing such fruit as choice Pears, Plums, as orchard fruits, when the uncertainties of our climate are considered.

The planter, too, looking forward to a showery April, may have felt some disappointment at the absence of rain; and if he was imprudent to plant evergreens in March, most likely will be taught a useful lesson, and will be led to conclude that September and October are rather more fortunate months for evergreen planters than March or April.

The Horticultural Society seems just now troubled with an *embarras des riches*—strange contrast to former times. £50,000 expended on 21 acres of ground, and now £20,000 more wanted, while one of the Council told the meeting held the other day that they did not

want them to find the money—there was no difficulty about getting that—they only wanted their consent to allow them to spend it; and so, as they were told not to trouble about the cash, the meeting unanimously gave the council the power to borrow the additional sum. We shall see what we shall see when this £70,000 is expended, and the big building in the adjoining ground complete in 1862; and surely a greater architectural monstrosity was never concocted, to “press the earth with dulness and foul shapes.” We hope that the Council of the Horticultural Society will not needlessly hurry Mr. Eyles to a completion before the work can be legitimately done, remembering that work done in a hurry is seldom well done, and that it would be far wiser to wait a little longer for some portions of his work to be completed than to have it done imperfectly. G. F.

[Quite true the amount to be expended is a large sum, but we believe the Council have expectations of very large receipts which will soon enable them to pay off the Debenture Capital.—*Editor of Florist.*]

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#### CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—Specimens of the former expected to bloom as finely as it is possible to have them should be placed, before they begin to open their blooms, where a moist warm temperature can be maintained, carefully shading them from the sun as soon as the flowers begin to open. Syringe the plants overhead morning and evening. Shut up the house early on the afternoons of bright days, and sprinkle passages, walls, and every available surface, so as to thoroughly saturate the atmosphere with moisture; and also be careful to have the balls thoroughly moist, for unless the plants are freely supplied with water at the root the flowers may be expected to be undersized and crumpled. Give water, however, only when the ball is approaching dryness, but then give a thorough soaking, so as to make certain about moistening the whole of the roots. When the plants are fairly in bloom gradually inure them to a freer circulation of air; then remove them to a cool house, but continue to carefully shade from the sun, and maintain a moist atmosphere, so as to preserve the blossoms as long as possible. Plants that have bloomed should be repotted at once if they require more pot room, properly distributing and tying the shoots and placing them in a rather close moist shady house, to encourage free growth. Also stop gross shoots on young plants of new or other varieties in free growth, and nicely regulate the wood of these, so as to keep them in form, and secure the largest possible increase of size during the season, and see that these are not allowed to suffer for the want of pot room, and also that the whole stock is perfectly free from black thrip. Look over and attend to last calendar's directions as to Camellias. Some of the early started plants will probably be setting their bloom buds towards the end of the month; and as soon as the buds are fairly set these had better be removed to a cool house or a shady situation out of doors, for if allowed to remain in a moist warm atmosphere they will

be liable to start into fresh growth, and this would probably ruin the bloom. See that the foliage of the whole stock is clean and free from insects. *Conservatory*.—There will be a plentiful supply of plants at command for the decoration of this house during this month, but do not overcrowd to the extent of injuring any of the permanent specimens, and use as much care in the placing of the plants in bloom as if they were scarce, and endeavour to produce the best possible effect with the abundance of materials at command. Ventilate freely during warm weather, but avoid cold draughts, especially against things that have been brought from the stove; and use every care to maintain a moist atmosphere, keeping the beds and borders well watered, and frequently sprinkling every available surface. Also keep a sharp look out for insects, and if red spider is perceived upon any of the permanent specimens, give these a thorough washing with the engine or syringe; and apply gentle doses of tobacco smoke as often as may be necessary, to keep aphids and thrips in check, taking care to have the house as dry as possible before smoking; and if only a few plants, which can be moved, are infested, these had better be removed to some other house or close room, so as to avoid the risk of injuring things in bloom, and the certainty of rendering the atmosphere of the house unpleasant for days by smoking. Attend to regulating the young wood of twiners before this gets too much entangled, and see that plants of these in free growth are properly supplied with water at the root, particularly such things as Passionflowers, Mandevillas, &c., which bloom upon the young wood, and which bloom but poorly unless where they make a vigorous and rather early growth. See that every possible effort is used early in the month for providing a supply of plants for blooming here throughout the summer and autumn. *Cold Frames*.—Bedding-out plants which are sufficiently strong should be gradually exposed to a free circulation of air, leaving them exposed at night only when there is danger of frost, but shade from bright sunshine if only to save labour in watering. Late stock, however, should be encouraged by a close moist rather warm temperature, in order to get them sufficiently strong for planting out as quickly as possible, and allow of their being hardened and ready for placing in the beds before the end of the month; and if the weather proves favourable towards the middle of the month, planting out may be commenced, beginning with such things as are not the most tender and have been well prepared by exposure to air, &c. But we would not advise planting out if the weather appears unfavourable or frost likely to occur; and before beginning to plant out be certain that the whole stock is perfectly free from green-fly, particularly Calceolarias and Verbenas, and keep those in small pots liberally supplied with water. *Flower Garden*.—Get the beds, &c., prepared for their summer occupants, thoroughly pulverising the soil by occasional diggings wherever this can be done; and get the arrangement for planting decided upon at once, so as to be able to add manure or leaf-soil for such things as will be benefited by such dressings. The whole class of variegated Geraniums delight in a rich light soil; and ground to be planted with these should have a liberal coat of old decayed manure nicely incorporated with the

soil, and the dwarf Lobelias will be benefited by a similar preparation of the ground where they are to be planted. But Verbenas—especially the strong growing kinds—Petunias, Calceolarias, Heliotropes, &c., bloom more freely in a deep light rather poor soil than in strong rich ground, and scarlet Geraniums can hardly be planted in too poor a soil. Attend to the plants with water. After planting out never allow the balls to get dry until the roots get good hold of the soil; and if the weather should prove very hot and dry, a slight shade, such as would be afforded by sticking branches of evergreens amongst the plants, would be beneficial, especially for such things as may not have been well “hardened” before planting. If not already done, sow the more useful and showy kinds of hardy annuals about shrubbery and herba-ceous borders, or wherever space can be found for them. Also plant out in well-prepared soil, Stocks, Asters, and half-hardy annuals which have been raised under glass, and carefully attend to these with water until they get fairly established. *Greenhouse.*—Many of the New Holland plants will now be coming in bloom, and unless these are shaded on bright days their beauty will be but of short duration. During bright warm weather, sprinkle the floors and passages, &c., frequently, so as to keep the atmosphere moist, which will greatly assist in prolonging the beauty of specimens in bloom, and also benefit plants making their growth; and these should be syringed overhead on the afternoons of bright days. Ventilate freely during warm weather, but sparingly if drying cold winds prevail. If not already done, Epacrises and winter-blooming Heaths should be cut back, placing them in the closest part of the house until they “break;” and those that have been cut back, and have started into growth, should be repotted where necessary, and any over-luxuriant shoots stopped, so as to secure close compact specimens. Attend carefully to everything with water, examining the plants frequently, and never water a plant without giving enough to thoroughly moisten the whole ball, and a too free use of the syringe after the heads are fairly formed is also apt to cause the flowers to drop before opening. Start a fresh lot of Achimenes, Gloxinias, and Clerodendrons, which will be extremely useful for late summer and autumn decoration, and encourage the growth of such things as Euphorbia jacquiniiflora, Gesnera zebrina, G. cinnabarina, Aphelandras, Epi-phyllums—the truncatum varieties; Hebeclinium, Impatiens Jerdoniæ, Manettias, Sericographis, Sonerilas, Thyracanthus rutilans, which with many others, are always extremely useful for winter blooming and easily managed; but for early blooming they should be encouraged to make free growth at once. See that everything is perfectly clear of insects, and do not allow young stock to suffer for the want of pot room.

*Forcing Ground.*—Still continue to keep up a good heat to Cucumbers in bearing. The linings at this time of the year are liable to get too dry, therefore they should be examined, and if necessary turned and well watered. Keep the shoots thin, so that leaves may have the full benefit of air and light. Stop the shoots at every joint as soon as the fruit is visible. Water freely and occasionally with liquid manure. Syringe the plants in clear weather, and close early in the afternoon. Look over Melons; stop the shoots and cut away all useless growth. Give plenty of air during the time the fruit is setting, and place tiles

under the fruit when they begin to swell. Plant out those sown last month and sow again for succession; likewise Cucumbers both for frames and for ridging in the open ground. Give good soakings of water to Potatoes, Carrots, &c., in frames, and remove the lights every fine day. As soon as the frames are clear of any of these crops, fork over the soil and close the frames for a day or two to get the soil warm, in preparation for planting Cucumbers and Melons. Harden off Tomatoes, Egg-plants, and tender herbs, to be in readiness for planting out by the end of the month. Give plenty of air and water to French Beans in pits; and as soon as these are in bearing those growing in pots in the forcing houses should be thrown away, as the red spider will now be troublesome. *Hardy Fruit.*—The prospect of a crop of fruit in this department is not very cheering. All fruit trees, with the exception of Plums and Apples, have suffered from the effects of the cold wet summer of last year, followed by an unusually severe winter, which has caused much injury in many gardens to the unripened wood. Peaches and Apricots have suffered most; indeed, we hear accounts from some parts of Peach trees being totally killed. It is not unlikely that many of the shoots of last year's growth in Peach trees will die back during the early part of the summer, when the sap in the shoots becomes exhausted. These should be cut back to the healthy part, as well as all other side shoots that are destitute of fruit, the object being to furnish the trees with a fresh supply of bearing wood. Disbudding may now be commenced, removing a few of the strongest shoots at first from the vigorous branches; but all the foliage on the weaker members should be encouraged for the present, to equalise the flow of sap throughout the trees, and at all times retain sufficient foliage to shade the main branches from the scorching sun. Keep a sharp watch for green-fly, and destroy them by using common snuff and sulphur in equal parts, or by a wash made of tobacco, soft soap, and sulphur—2 lbs. of each will be sufficient to make twenty gallons; use with the syringe in the evening when the sun is off the trees. Go over Apricot trees and remove all strong shoots that are not required to fill the wall. Keep a close watch for the first appearance of caterpillars; about this time they will be making their appearance, and the curling of the leaves will indicate their whereabouts; they are very destructive to the leaves as well as to the young fruit, and the only way to get rid of them is to unroll the leaf and pick them out. The fruit will now require thinning; this should be done at different periods—the final thinning should be done when all danger of dropping is past. The young fruit may be used for tarts, and it also makes an excellent preserve. Keep down weeds in Strawberry beds, and mulch the ground round the plants with stable litter, which will greatly assist the plants by keeping the soil moist, and the rains will wash it clean before the fruit ripens. Plant out early forced plants, and if kept watered in dry weather it is likely they will produce a good crop of fruit in the autumn. *Peaches and Nectarines.*—Continue to syringe the trees till the fruit begins to ripen, and give plenty of air at all times. Tie in the shoots, and expose the fruit as much as possible. When the fruit is swelling the temperature may be increased with safety, and water freely at the root. Tie in and thin the shoots in the late houses. Give air freely, and use the

syringe to keep the foliage healthy. *Cherries*.—Reduce the moisture when the fruit begins to colour, at the same time increasing the temperature to hasten their ripening. Water well at the root. When the crop is gathered remove the trees to a shady situation. *Pines*.—Shift the succession plants as they may require it, and keep up a moist growing heat ranging about 70° at night and from 80° to 90° during sunshine; by all means avoid a burning bottom heat. Give plenty of air in warm quiet weather, but always avoid a draught in the pit, for giving front and back air to the pits at the same time is the principal cause why the plants sometimes assume a brown and unhealthy appearance. Give water freely to all plants and liquid manure occasionally, especially to those in fruit. All plants intended for winter fruiting should have their final shift, and give them more heat and less moisture, to encourage them to start into fruit. Keep up a moist heat in the fruiting pit, and the temperature should range from 75° to 80° through the night, with an increase of 10° by sun-heat. Syringe and close the house early in the afternoon. *Vinery*.—Continue to apply artificial heat to all except the late houses, so that the temperature does not fall below that previously maintained. When the fruit is perfectly ripe the houses may be kept cool, to prevent the fruit from shrivelling. Keep the latest Vines retarded as much as possible until they show for fruit, when the usual treatment must be given. Clear out all plants such as French Beans, Strawberries, &c., from the Vineries, otherwise red spider may be troublesome on the Vines. Assist pot Vines by mulching with strong manure and watering with manure water. Cut away all useless growth. *Strawberries*.—Introduce the last lot of plants under glass early in the month; this crop will keep up the supply between the forced fruit and the ripening of those in the open ground. Give plenty of air and water to those in bearing, and syringe frequently to keep down red spider. *Kitchen Garden*.—Now that many of the crops, such as Onions, Potatoes, Parsnips, &c., are progressing, the hoe should be kept moving amongst them, and at the same time thinning should commence. Plant out Cabbage, Lettuce, Walcheren, and other Cauliflowers, and sow again for the succession crop. Look over the seed beds, and if any failures sow again immediately. Sow Beet, Cardoons, Salsafy, and Silver Onion, on poor soil, to have them small for pickling. Carrots may be sown at any time through the month, and Turnips on a cool border. Sow Dwarf Beans in light soil on a warm border. Also Scarlet Runners and succession crops of Peas; these should be sown sufficiently wide to admit of two rows of winter Greens or Broccoli between them by-and-bye. A drill of summer Spinach may be sown in the middle for the present crop. Prick out Celery in about three inches of rich earth placed on a hard surface; prepare trenches for the early crop; plant out as soon as the plants are sufficiently strong. Water well after planting. Sow Radishes and small Salad in succession. Cut out seed spikes from Seakale and Rhubarb. Plant out tender herbs at the end of the month; also Tomatoes and Egg-plants. Prepare ridges for Vegetable Marrows and Cucumbers, and plant under handglasses. Dutch Cucumbers for pickling may be sown in rich light earth in the open ground.

## PLANTS FOR EXHIBITION.

*Cinerarias*.—As specimen plants will now be in full flower, great care must be taken to see that they do not want for water. Weak liquid manure may still be given with advantage. Shade through the middle of the day, and give all the air you can, avoiding as much as possible any strong current passing through them, which curls the foliage and deteriorates the quality of the flowers. Still tie down any overgrowing shoots to furnish the bottom of the plants, and, as advised last month, look well to seedlings for next season's culture. *Pelargoniums*.—Let the plants be kept clear of each other, that free circulation of air around them may not be impeded; they will also require a liberal supply of water, in which they should not be stinted. Treat them some three or four times a week with a little manure water made by diluting sheep-dung therein. If possible, increasing care and attention will now be required. As the plants come into bloom, let them be well shaded from the midday sun, and carefully exclude bees from the house. The process of tying, as detailed in previous months, should be judiciously continued, bearing in mind that, to ensure an even head of bloom when exhibited, the flowers should be carefully tied out some days previously. In cases where it is wished to reserve the bloom for late shows, let the plants be placed in a cold pit or in a house with a northern aspect; in each case they may need slight protection, and take good care that all are kept clear from green-fly.

## WORK FOR SMALL GARDENS IN MAY.

*Auriculas*\* will now be going out of bloom. If seed is desired, take the trouble of hybridising; if not prick off the truss, and place the plants in a cool place sheltered from the sun and heavy rains. *Pansies*.—As these go out of bloom cut them down; put in cuttings in a shady border, and be very careful of mildew and dust with sulphur, otherwise no autumn cuttings will be obtainable, and these are decidedly the best for pot culture. *Carnations and Picotees*.—Alas! my little lot is of a very shady character, and there is not much prospect of a bloom; but they will require now staking and tying up, as they advance for bloom. *Bedding out* will now be at its height, and those who have been fortunate enough to save theirs will be very busy. It is a subject which requires longer directions than can be given in a calendar, and about which a great deal has been written in former numbers of the *Florist*. *Greenhouse*.—As Azaleas, *Cinerarias*, &c., are removed, more space will be given to Geraniums, and where people have only a 12-foot house to grow them in this is of some consequence. I of course can never presume to stake and tie out, as I like to see variety, and this can only be done by having small plants and allowing them to grow naturally. *Tulips* will now be coming into bloom. I hope to have an opportunity of seeing some good collections this year. They will require now careful shading and protection from weather. In general work care will be required to keep all things tidy, the Grass out of walks; and if rain comes, of which we have had a plentiful scarcity lately, slugs will have to be watched against. D.

\* Some very interesting notes on new flowers have just reached me (April 26) from the Rev. Geo. Jeans, but too late for the present number.





JA

Bougainvillea Speciosa.  
Plate 177.

## BOUGAINVILLÆA SPECIOSA.

(PLATE 177).

WE this month furnish our readers with a coloured representation of this wonderful plant, which has flowered so magnificently for these last two or three years past under glass in the garden of the Rev. C. E. Ruck Keene, at Swyncombe House, near Henley-on-Thames. The roof of Mr. Keene's plant stove, in which it is growing, has been one mass of floral beauty for several weeks this spring. In April last the plant covered with lovely mauve-coloured inflorescence nearly 400 feet of glass, and would have covered even more, but that every terminal spray hung down loosely, many of them a yard or more in length. Certainly it was a glorious sight; the house, however, in which the plant is growing is ill adapted for the exhibition of its wonderful beauty. One wants to look down upon it as it is looked upon by the sun, to which its blossom is displayed. At a distance from it, and standing on a somewhat higher floor, you see imperfectly the upper surface of the mass of bloom lying nearly close to the glass; and in the slanting light of the evening sun the whole of the leafy canopy reflects on one side an almost glowing sheet of colour; while on the other, partly in the shade, and the semi-transparency of the coloured bracts thus coming into play, it has more of an amethystine hue.

The plant at Swyncombe has already a stem as thick as one's wrist, and everywhere there is evidence of the most vigorous vitality.

As regards treatment, however, we have been favoured by the following letter on the subject from Mr. Daniels. He says, "Let us commence with a young plant, say in a 60-sized pot. I should first turn it out and examine its roots, and if I found them healthy, I should pot on into a 32-sized pot, using a mixture of peat and loam, in about equal parts, in a rough state, with a fair proportion of silver sand, taking care to use plenty of drainage, as the plant, though a gross feeder in an older state, is very impatient of too much moisture while young, several fine healthy young plants having died that have been sent from here, from, I have no doubt, too much water, and the soil being allowed to become sour from imperfect drainage. After the plant is potted, plunge it in a sweet bottom-heat, such as that of a Cucumber or Melon pit, or Pine stove; and if this is done in spring, stop the plant, so as to make it throw out lateral shoots, with the view of producing a stiff handsome bush. If to be grown as a specimen in a pot, this stopping and shifting must be practised at intervals of about a month for the whole summer, taking care that the pot is well filled with roots by August (and never shift till the

roots touch the sides of the pot), then gradually reduce the quantity of water, and raise the pot out of the plunging material, and place it in a dry airy house. Give just sufficient water to prevent flagging. With the above treatment, by winter the wood will be found to be quite hard and firm. Place the plant in a dry airy house; give only just sufficient water to prevent its leaves dropping off—about once in three weeks or a month will be found sufficient for this. If all has gone well, a plant thus grown will be found at the end of one year under the above treatment to be in appearance something resembling a nice round Gooseberry bush, with the whole of the lateral shoots hanging down over the outside of the pot. Towards the end of January, if early bloom is required, plunge the plant in bottom heat, in the hottest and driest end of the house. Give water sparingly for the first month, afterwards more frequently; and towards the end of February or beginning of March it will begin to unfold its charms. If your specimen is required to be planted out no stopping should take place, as of course the first object would be to cover a given space of roof or wall; but in either case it must have all the light and sun that can be given it while in bloom, or the colour will be found to be very faint; and if planted out in a larger mass of earth it will require watering less frequently. The large plant here is growing with its roots close to the boiler, which projects through to the inside of the house; this made the end of the house so hot that any other plant placed near it was always destroyed with insects, as spider, scale, &c.; but it is a great recommendation to *Bougainvillæa* to say that no insect except greenfly ever touches it. I believe too much dry heat cannot be given, nor too little water. The large plant here, although covering a space of quite 400 feet, has not been watered more than three times since August last, although in a roasting heat: and I believe it would not have suffered if not watered at all during that time.”

With respect to the colour of our plate, we must confess that it badly represents the brilliancy and lively beauty of that of the floral leaves themselves. This Mr. Andrews frankly admits; in short we believe it to be impossible to faithfully exhibit on paper the many shades which are blended so nicely together by nature in the lovely inflorescence of this noble plant. The figure, however, is as good as could be made under the circumstances, and, with the exception just alluded to, correct.

We may just note in conclusion that *Bougainvillæa* has bloomed in other places besides Swyncombe; but compared with the plant there, very imperfectly; and to Mr. Daniels belongs the honour of having first shown the world what this fine creeper is capable of becoming under skilful cultivation. The specimens which he has shown at the floral exhibitions this year have excited the wonder and admiration of all who have been so fortunate as to see them.

## HORTICULTURE IN AUSTRALIA.

FOR the following valuable information on the culinary vegetables and orchard produce of Victoria, we are indebted to Mr. F. Smith of Melbourne:—

The climate is admirably adapted for all European vegetables, from the old Scotch Kail to the delicious Melon, the latter surpassing those of English growth in flavour and tenderness. Yet the climate is not without drawbacks to the culture of vegetables at certain seasons, such as long-continued droughts with severe hot winds during the summer, or as heavy rain during the winter, when culinary crops suffer most severely in untrenched and undrained soils. But our spring and autumn are so congenial to growth that amazing crops are produced even with most simple modes of treatment. The soils used for growing vegetables vary from stiff adhesive clay to the sterile sandy soils, the worst of which produce crops to advantage at some season when properly managed; but the more productive of all are either the deep brown loamy or black vegetable soil, well pulverised and free of stagnant water. The best situations are low banks sloping to the rivers or creeks and low flats, if not subject to floods, with almost any exposure, the north being the least favourable. Where the site is on a declivity, the upper portion is selected for crops of winter growth, and the lower portion generally for crops of summer growth.

A few remarks on some of the leading crops will assist in giving some idea of the culinary vegetable resources of the country. Cabbage: Good supplies can be had daily all the year, as far as the growth of this wholesome and nutritious vegetable is dependant on climate. But the aphides have become so destructive during the last four years that crops can only be brought to perfection by great skill and attention; the chief remedies seem to be perpetual examination of the plants and frequent liquid stimulants, principally guano, to the young growing crops, and it is worthy of remark that in localities with cold underground the ravages of the aphis are more readily subdued than elsewhere.—Cauliflower: The principal crops are fit for use in June and July and from October to January, then less abundantly obtained till March and largely again till June. Although all English varieties are productive, dwarf sorts are preferable.—Peas: Supplies can be had daily all the year round, but are sparingly to be got in very wet winters.—Kidney Beans are excellent summer crops, withstanding hot winds well; seeds ripen freely.—Onions: Young green Onions may be had daily; those intended for keeping ripen only from November to February; seeds generally mature well.—Parsnips, although long neglected, are very much in request and esteemed; the main crop is ready in January; they grow exceedingly large, and are very superior in quality.—Carrots: Daily supplies can be had without difficulty; they are extensively cultivated; in flavour they are superior to those of England; seeds generally mature well.—Turnip: Spring, summer, and autumn crops can be with difficulty obtained on account of the aphis and the dry hot nature of the climate.—Potatoes: Three crops may be produced in one twelvemonth—one in May, October, and

November ; they are, as may be imagined, extensively grown, producing heavy crops of fine quality, but their keeping properties are shortened on account of the mild winters.—Asparagus, Rhubarb, and Seakale bear very abundantly ; seeds ripen perfectly.—Cucumbers and Vegetable Marrow : On tolerably good soils there is no more trouble or care bestowed in the sowing and growing of these crops than there is with any common vegetable.—Melons : The Rock and English green and yellow-fleshed varieties being more of a rich heavy nature, although not quite so much appreciated as others, are grown in very large quantities. These commence ripening their fruit about the end of January. The crops generally are heavy ; the plants have six to eight fruits each, weighing from 4 to 10 lbs.—Tomatoes are sown in October, and ripen fruit very profusely from January onward.—The Chinese Yam has recently been cultivated, and promises to become an additional table vegetable of the colony. The long-podded Chinese Bean is found to be hardy in Victoria, and would unquestionably luxuriate in the northern districts.

Concerning the orchard products we have the following. What occurs to us in the admirable account given by Mr. Smith is the advantage that will result from importing and exchanging seeds and roots with our distant friends.

Perhaps there is no more favoured land upon earth than Victoria for producing in abundance and perfection a variety of the finest fruits, whether they are considered as a mere luxury or as constituting one of the necessities of life, adapted to the wants of man in this hot climate, or as likely to become one of the staple articles of our commercial exports at no distant period. Nearly all the fruits of them which can be cultivated in any of the temperate latitudes can be produced here in the briefest space of time and with the most certain success. However sterile and unpromising the land may appear, the simple act of breaking up the earth and of introducing drainage when needful appears to act as magic on the newly planted ground, converting the barren-looking wilderness into a fruitful garden. It is astonishing to observe how very rapidly and how vigorously the trees grow when placed in favourable situations under good treatment. But horticulture has to contend with the long parching droughts of the summer months, experienced particularly in low open districts, and occasionally with fierce burning winds. A hot wind, however, seldom continues more than two or three days at a time, and is almost certain to end in a good fall of rain, which soon rallies up the exhausted powers of vegetation. Fruit realised this season the following average prices : Apples, 1*d.* to 3*d.* per lb. ; Pears, 2*d.* to 1*s.* ; Plums, 3*d.* to 6*d.* ; Cherries, 6*d.* to 1*s.* and 1*s.* 6*d.* ; Apricots, 6*d.* and 1*s.* per dozen ; Peaches, 2*d.* to 1*s.* 6*d.* per dozen ; Walnuts, 3*d.* to 6*d.* per dozen. This may suffice to show that fruit is freely available for all classes, both for dessert and cookery purposes ; and the community will no doubt soon be placed in a position to provide for the preservation of fruits on an extensive scale. The reasons why, comparatively speaking, but little land is as yet devoted to this lucrative and pleasant branch of industry may be sought in the low return for the capital expended, so long as the price of labour and the outlay for garden

land continued so unusually high. An eastern aspect having a little declivity is the most eligible for fruit gardens. It is invariably found that upon naturally sandy poor soils fine fruitful orchards can be established under good management when the choice loamy deep soils are not available. The deep alluvial cool soils along the river banks are very suitable for all kinds of stone fruit; and rich gravelly bottoms of the hill sides for Apple, Pear, Quince, Mulberry, &c. None of the small English fruits, such as Gooseberry, Currant, Raspberry, or Strawberry succeed well, except in cooler valleys or mountainous elevations, where they always attain the highest perfection for quality and productiveness. A few remarks on the leading kinds of fruits will assist in judging of their comparative value in the colony. The Loquat trees delight in warm gentle slopes of hills on good soils, where they produce in some seasons very good crops of fine large well-flavoured fruit. Quince, Walnut, Chestnut, Apple, Pear, Peach, Nectarine, Apricot, Cherry, Plum, are common. Figs grow to perfection, some varieties bearing two or three crops in the year freely; the leading varieties are green and white Provence, green and brown Ischia and Smyrna. It may be expected that dried colonial Figs will eventually supersede those imported. Orange and Lemon trees: Although there are some few Orangeries in favourite spots in the vicinity of Melbourne, yet they are generally planted in smaller quantities in the warm places of orchards, or in clumps on lawns, more for the sake of ornament and variety than for profitable purposes. The Vine: Amongst the branches of industry yet to be extensively developed the cultivation of the Vine will be one of the most important in this colony. The climate throughout the greater part of our territory being exquisitely adapted for the growth of Vines, although the severity of hot winds and blight has, during showery seasons, in some localities, affected the Vines. The vineyards hitherto established in various parts of Victoria comprise approximately an area of 600 acres. It seems, however, that their extent is annually increasing without a corresponding increase in wine manufacture, and thus the market is more plentifully supplied in Melbourne with table Grapes—prices ranging from  $1\frac{1}{2}d.$  to  $6d.$  per lb. There have been instances this season of an average weight of 25 lbs. of fruit on Vines three and four years old, bunches attaining a weight of upwards of  $2\frac{1}{2}$  lbs.

Gladly would we continue the sensible remarks of Mr. Smith if our space would permit, for it is impossible not to feel deeply interested in whatever relates to our colonies, and especially to Melbourne, so many of our personal friends having made that their future home.

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#### A SPECIMEN FERN.

THOUGH we searched all Europe over, we should probably not find another plant which could rival the magnificent specimen of *Angiopteris evecta* which occupies the centre of the tropical fernery in the Royal Botanic Gardens of Kew. This gigantic plant is of such colossal pro-

portions, that it looks like the living type of that wonderful Flora which, ages upon ages ago, covered vast tracts of country with a dense and luxuriant vegetation, successive forests of which were buried beneath the sand and mud cast upon them by some terrible convulsion of nature, their remains forming the strata which we now quarry as coal, and which forms one of our greatest national treasures. The rapidity of its growth, the peculiar appearance of the plant, as well as its great size, favour this idea. One can hardly believe, at first, that the *Angiopteris* belongs to the same family as the semi-transparent and delicate little species of *Trichomanes*; the whole plant, in some kinds of the last-named genus, might be covered with a shilling.

The fronds of this plant are about eighteen feet in length, spreading out at regular distances; there are a dozen and a half of these fronds. Each one is supported by a thick stem, as much as eight or nine inches in circumference; what a contrast to that of the Maiden-hair Fern (*Adiantum*), which looks like fine black wire. All the fronds of the *Angiopteris* radiate from a large solid crown, having two thick fleshy appendages at the base of each. The fronds are twice divided (bipinnate), the ultimate divisions being linear-lanceolate in form, and about three inches in length. In old plants, almost every pinnule is fertile, the cases containing the spores being arranged in a double row along the veins towards their points. These spore-cases are separate, and usually eight or ten in number; this is the leading character which, in a botanical point of view, separates *Angiopteris* from the nearly allied genus *Marattia*—in the latter, the spore-cases are united. The number of spores which such a plant as this must ripen is something too enormous for the mind to grasp—it borders upon the infinite. There are, as was said before, eighteen fronds upon the plant; each of these produces on the average thirty primary divisions (pinnæ), and one of these taken from the middle of the frond will be found to be subdivided into about a hundred pinnules. One pinnule taken from near the middle, so as to get the average as nearly as possible, we found to have about two hundred and thirty veins which bore sori, each of these sori consisting of from eight to ten spore-cases. How many spores each case might contain, would require great microscopic power and still greater patience to determine. We have, however, carried it far enough to show that it is an arithmetical calculation of proportions corresponding with the plant which gave rise to them.

The name of this plant is very frequently mis-spelt. We often find it called *Angiopteris erecta* (upright-growing), instead of *A. evecta* (which means spreading), the alteration of a single letter giving a different and quite erroneous meaning to the term.

There are now several kinds of *Angiopteris* in cultivation, but as they all appear inclined to grow to a similar size, and as their general characters are all nearly alike, one specimen of the genus will be as much as even the most princely establishment will find room for. We however subjoin a list of them:—*A. Teysmanniana*, *A. gigantea*, *A. Brogniartii*, and *A. pruinosa*. There are several other names, but most likely they are only synonyms. The last-named species is beautifully white on the under side of the fronds.

They are all inhabitants of marshy ground in the East Indian and Polynesian islands, and consequently require a liberal supply of water. Where room can be found for its accommodation, a plant of *Angiopteris* is well worth growing, for it certainly is one of the wonders of the vegetable world.

DELTA.

### A FEW RATHER NEW BEDDING PLANTS.

THOSE who have not seen *Alstroemeria chilensis* when planted in masses, can form no idea of its beauty for a large bed on turf. Nothing has a richer appearance ; and, as they bloom from July to September, they give us a long season of their beauty. They only require that their bed rests on a dry porous bottom, to prevent any stagnant water from lodging near their fleshy roots, and if right in this respect, they are not very particular as to soil, but a light sandy loam will suit them well. When the stems die down in the autumn, the bed may be covered over with dry ashes or sawdust, throwing a little fine earth over to hide it. With no protection but this my plants have stood through the past winter without injury and are growing vigorously, and will in two or three weeks be a mass of bloom of every shade of orange, carmine, scarlet, yellow, and pink.

*Hedychium Gardnerianum*, *flavum*, and *coronarium* : strong plants of these, turned out in June, have been known to bloom in September ; but, whether or not, their noble appearance proves very effective for giving an exotic character to particular situations. They should have sheltered situations exposed to the sun, and be planted out in leaf-soil, sand, and light loam.

*Oxalis Bowiei* makes a neat autumn bed. The bulbs should be preserved from year to year, and planted in any dry soil in April : they will commence blooming in August, and continue till frost destroys them. The flowers are a bright rose, and produced in abundance. *O. floribunda*, a smaller growing species, also makes a neat bed or edging.

*Tigridia conchiflora*, *Wheeleri*, and *pavonia*. These make very effective beds. The bulbs require to be planted from March to the end of April, in any common garden soil. The flowers are yellow, orange, and brown.

*Lilium speciosum* and *album* are fine objects in dry seasons, planted in a peat bed, or for mixing with American plants.

*Gladioluses* are now so well known as most desirable garden plants, that we need not further allude to them.

For certain situations, or low vases or tazzi, there are very few plants superior to the old African Lily (*Agapanthus umbellatus*). It forms a noble bed when it can have plenty of water when growing.

The old Chimney *Campanula* (*C. pyramidalis*) is another favourite plant for certain situations.

Marvel of Peru : This plant is extensively planted on the Continent, where it grows freely, and looks well covered with its many-coloured flowers. We rarely see it in Britain, where it might be judiciously

introduced as a fine plant for a large lawn bed, or for mixing in borders. It will bloom the first year from seed sown in heat, and afterwards the tuberous roots should be preserved like Dahlias.

*Canna*: The exotic species are all now coming into general use in Britain; on the Continent they have been planted out for several seasons. The noble foliage of all the species renders them extremely valuable for giving effect to the flower-garden. Our plan is to mix the tall scarlet *Lobelia* or *Gladioli* with them, which, when combined together, form striking groups. Soil, light and open.

*Anomatheca cruenta*: This pretty little bulb forms one of the neatest border plants we know for larger masses. It is also useful for small beds, from its neat habit and showy little flowers.

*Asclepias tuberosa*: This plant was formerly much more grown than at the present time. It forms an excellent orange colour bed, flowering throughout the season, and thrives best in peaty soil.

*Caladium* and *Arum*, two allied genera, of which several species are largely planted on the Continent for flower-garden decoration in warm situations. Their coloured rich foliage tells with admirable effect; and those who have the chance should try them in open porous soil, well supplied with water in dry weather.

R.

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#### CRYSTAL PALACE FLORAL EXHIBITION.

THE grand flower show of the Crystal Palace Company, which took place on the 18th ult., inaugurated these popular meetings for the present season, and judging from what was there produced, we may fairly predict a brilliant season for the admirers of horticultural productions for 1861.

The summer and autumn of 1860 were unpropitious for in-door as well as out-door gardening; and when we consider the immense importance of a dry atmosphere and light in perfecting the wood and organism of plants necessary to produce bloom buds, we need feel no surprise that *Azaleas* in some places are sadly deficient in bloom, or that many *Heaths*, *Epacris*, and *New Holland* plants, are blooming indifferently from the same cause, and that sparseness of flower is very prevalent, even under the best management. At a local show which we attended the other day, where the magnificent *Azaleas* are generally one blaze of bloom, they were so inferior this season that we expected the plants had stood in the open air throughout the past season, up to housing time, which was the case. Those who kept their plants under glass had them in a better condition, although these were hardly up to the mark. By this we by no means infer that there was any deficiency of bloom in the *Azaleas* exhibited the other day at Sydenham. Many of them were magnificent, and, in fact, were *the* plants of the day; but we opine that they had received glass treatment, and probably a *little* fire-heat, to obtain a good set of bloom; whereas for years we have had them covered with bloom, with no other assistance than what a full exposure to the sun, after they had made their growth in July, gave them.

We said just now that the Azaleas made the exhibition at the Crystal Palace, but not altogether; there were some magnificent Roses in pots, and when we looked—and who didn't look, and admire too—at that grand Paul Perras in the Messrs. Lane's collection of 10 pot Roses, we thought of the trouble Dr. Lindley had in persuading these great Rose firms, (and nearly everybody else,) that Roses *might* be grown in pots; whether the Doctor had in his mind's perspective any of those wonderful specimens which of late years have formed the great attraction of these meetings, and of which Paul Perras appeared to us the acme of perfection, we are not prepared to say; but as he is not the man to give up a thing when its practicability has been made clear to him, *he persisted*, and then people began to *try* what could be done with them, and now we see the result; and we beg therefore to thank the Doctor for having been the means of introducing the highest features of art—as regards cultivation—on the most beautiful flower in creation.

The weak point in the exhibition appeared to us to be the four first classes, stove and greenhouse plants. Whether these collections were really the best that could be brought forward, or whether, as was hinted to us, the best plants were being kept in reserve for Kensington Gore, we are unable to say. If there was no reservation, then most of the collections were faulty and not up to the mark, and moreover some of the plants were so outrageously overtrained that it ought to have amounted to a disqualification.

The feeling that one has after having seen these great shows for two or three seasons is that they become so familiar that one can almost, without going to look at the cards, award the prizes, and even name the individual plants that comprise the collections. In greenhouse plants this is especially the case. Now and then a new plant finds its way into the collections, and adds a little variety; but generally speaking we are face to face with old friends, who have, indeed, grown a trifle larger and more corpulent than last year, but whose general contour is very much as it was, exhibiting tokens of a *green* old age. The first collection in stove and greenhouse plants was that contributed by Mr. Tredwell of Norwood; it contained the usual quantum of Cape and New Holland plants, Ixoras, Boronias, Impatiens, Aphelexis, &c. In collections of 12, Messrs. Green, Baxendine, and Cutbush; and in collections of 6 and 8, Messrs. Chilman, Kaile, Page, and Smith, were contributors. Those of plants distinguished for the beauty of their foliage were certainly deficient, probably owing to the early day at which the exhibition was fixed; but the plants generally speaking were not remarkable. Amongst Orchids, the largest and best collection was furnished by Mr. Day of Tottenham, the most remarkable of his plants being *Dendrobium Devonianum* and *macrophyllum*, *Lælia purpurata*, *Cattleya Mossiæ*, and *Oncidium ampliatum*. Mr. Tredwell was second; and had some fine plants of *Phaius grandifolius*, *Phalænopsis grandiflora*, and *Lycaste Harrisoniæ*. Collections of 6 and 10 Orchids were furnished by Messrs. Milford, Stone, Page, Penny, Bunney, and Woolley. Amongst the plants exhibited were *Phalænopsis amabilis*, *Cattleya lobata*, *C. Aclandiæ*, *C. Mossiæ*, *C. amethystina*, *Lælia purpurata*, *Vanda suavis*, *Oncidium ampliatum*, *Uropedium Lindenii*,

*Aerides Warneri*, *Odontoglossum citrosimum*, *Calanthe veratrifolia*, *Vanda insignis*, *Cypripedium hirsutissimum*, *Dendrobium nobile*, *D. cærulescens*, *D. Paxtoni*. Azaleas, as we have said, were exceedingly beautiful, Mr. Turner of Slough taking the post of honour. Nothing could be more beautifully grown than his collection was; and moreover they were so placed as to colour, &c., as to give the greatest possible effect. This is rather an intuition than an art, but Mr. T. seems to possess it; for whatever the plants he exhibits, there is always an evident determination to make the most of them in all points. Mr. Green, gardener to Sir E. Antrobus, and Mr. Carson, also showed good collections; the smaller-sized groups were also excellent. In six, Mr. Turner was first, and in eights second. Amongst new varieties which were exhibited by Mr. Ivery of Dorking were Gem, a fine plant, beautiful crimson, and well shaped; Admiration, pink with white stripe; Etoile de Gand, white and pink (figured in the *Florist*);- Distinction, salmon; rosea alba, and Lord Raglan. Cacti were hardly in bloom, and Heaths were as usual pretty and striking, but no way remarkable for novelty.

Amongst new plants, Mr. Williams of Hornsey contributed *Lælia* sp., like *purpurata*, but purplish instead of white. Mr. Bull of Chelsea contributed several new things, some of which had been previously exhibited at the Floral Committee, such as the variegated *Agathæa cœlestis*, *Campylobotrys refulgens*, *Dracæna spectabilis*, &c., but there was nothing particularly worth noticing.

The most attractive features of the exhibition were, after all, if we may judge from the groups of visitors, the fruit and florist's flowers. It was, however, amongst the latter that as florists we found ourselves at home. Roses in magnificent bushes, Geraniums quite shrubs, and Tulips and Pansies, all distracted one's attention. In Roses, the first prize was taken by Mr. Lane of Berkhamstead. His plants were Paul Perras (H.B.); Souvenir d'un Ami (Tea); Comtesse Molé (H.B.), large, but coarse; Baronne Prevost; Triomphe de Paris (H.P.); Coupe d'Hébé (H.B.), a most beautiful bush; Chenédolé; Jules Margottin (H.P.), covered with its large and fresh-looking flowers; Gloire de Dijon (Tea), very fine and beautiful; and Leon des Combats, fine. Mr. William Paul of Waltham Cross was second, with Louise Odier, Souvenir de la Malmaison (B.), Souvenir d'un Ami, Baronne Prevost (H.P.), Chenédolé (H.B.); Vicomtesse de Cazes (Tea), very yellow; Paul Perras (H.B.); Paul Ricaut (H.B.), very fine indeed; Jules Margottin (H.P.), and Madame de St. Joseph. Messrs. Paul & Son of Cheshunt were third with Auberon, Charles Lawson, Narcisse, Baronne Prevost, Souvenir de la Malmaison, Jules Margottin, Géant des Batailles, Chenédolé, Niphotos, and Paul Perras. In 6 Roses in 8-inch pots, Mr. Wm. Paul took first prize with Victor Verdier, very large rich rose; Empereur de Maroc, very dark; Madame Boll, large rose, but rough; *Lælia*, a large fine shaped rose in the style of Louise Peyronney; Madame Damage, a fine Tea; and Triomphe de Paris. Mr. Charles Turner of Slough was second with Mathurin Regnier, Madame de Cambaceres, Caroline de Sansal, Jules Margottin, Paul Perras, and Duchess of Sutherland. Messrs. Paul & Son third, and Messrs. Lane & Son fourth. In cut Roses there were some fine blooms

exhibited by Mr. Wm. Paul: amongst them, Eugene Appert, intense glowing crimson—Madame William, fine Tea—Baron Gonella, large Bourbon—Homeré, mottled Rose, Tea—Triomphe de Lyons (H.P.), fine crimson—Buff (H.P.), dark red—President, fine Tea—Victor Verdier—Empereur de Maroc, very dark—Cardinal Patrizzi, very dark.

The Pelargoniums were remarkable, especially taking into account the dull and sunless time that we have had. Mr. Turner, of Slough, was, as usual, first in both large kinds and fancies; Messrs. Dobson & Son, of Isleworth, second. Mr. T.'s plants were Mr. Marnock, Desdemona, Rose Celestial, Candidate, Roseum, Guillaume Severyns, Admirable, Governor-General, Fairest of the Fair, and Prince of Wales. They were beautifully arranged as to effect, and the lilac tint of the French one, Guillaume Severyns, had a very fine effect as a contrast. Messrs. Dobson's were Admirable, Sanspareil (an old but fine spotted variety), Rosalie, Fairest of the Fair, Eugene Duval, Rose Celestial, Una, Symmetry, Aurelia, and Fair Ellen. Fancies in 8 varieties were, in Mr. Turner's collection, Modestum, Madame Rougière, Lady Craven, Cloth of Silver, Circle, Celestial, Queen of the Valley, and Acmé. The plants of Celestial and Acmé were perfect models of growth. Messrs. Dobson's were Madame Rougière, Negro, Captivation, Evening Star, Madame Van de Weyer, Attraction, and Bridesmaid.

In Cinerarias, in groups of 6, Mr. Turner was first with Bellissima, Alarm, Slough Rival, Perfect, Lidgard's Brilliant, and Queen Victoria. Messrs. Dobson & Son were second, with Duchess of Sutherland, Brilliant, Perfection, Mrs. Hoyle, Masterpiece, and Mr. Marnock. Mr. Burley, of Limpsfield, Surrey, was third, with Mrs. Dix, Miss Godfrey, Perfecta, Beauty, Wonderful, and Perfection. Mr. Fry, of Bromley, fourth. One of the most striking groups of plants exhibited was one of six shrubby Calceolarias, exhibited by Mr. Burley, of Limpsfield, very large in size, and approaching somewhat the herbaceous ones in colouring; their names were Lord Raglan, Emperor, Primrose Perfection, Victor Emmanuel, General Havelock, and Lord Derby. Mr. B. is evidently on a strain of flowers which cannot fail to be generally popular and profitable to himself. He also exhibited some cut blooms of a dwarf bedding variety, *angustifolia globosa*, very bright yellow, and said to be very dwarf.

Cut flowers, with the exception of Roses, already noticed, were confined to Tulips and Pansies; in the former four stands were exhibited, the best being that of Mr. Turner, of Slough, utterly disproving what we have heard alleged against the Slough Tulips that they were coarse—nothing could be cleaner than the strains were, and one or two of his own and Mr. Headly's flowers were exquisite; they were Royal Sovereign, Rosa blanca, Fleur de Marie, Aglaia, Lady Wildair, Sir C. Campbell, Duchess of Cambridge, Mary Headly, Claude, Sarah Headly, King, George Glenny, Friend, Rose Celestial, Dr. Horner, Seedling 64 S, Rutley's Queen, Enchantress, Duchess of Sutherland, Seedling C 29, and Gem of Gems. Mr. Betteridge was second; Everard, George Hayward, Salvator Rosa, and Strong's King were very fine. Mr. Norman, of Woolwich, was third. Mr. James Batten, Clapton, fourth.

In Pansies, the first and second prizes were taken by Mr. James, gardener to F. Watson, Esq., Isleworth, the rule of the Palace shows being that an exhibitor may take all he can get. The first stand of flowers contained Colonel Wyndham, Rev. H. H. Dombrain, Nepaulese Chief, Francis Low, Father Gavazzi, Maid of Bath, Lord J. Russell, Alexander McNab, Eugenia, Miss Hill, Ladyburn Beauty, Alice, Duchess of Wellington, Mr. J. White, Mrs. Laird, Canary, Duchess of Hamilton, General Young, Rev. J. Dix, Nymph, Jeannie's Rival, Miss Walker, Saturn, and Mr. T. Graham. Mr. Shenton was third; Messrs. Dobson & Sons, fourth.

It was early for Seedlings of any kind. A nice rosy salmon variety of bedding Geranium, which has already received the stamp of the Floral Committee, was exhibited by Mr. Turner, of Slough, called Prince of Hesse, and raised by Mr. Ingram, of the Royal Gardens, Frogmore. Amongst miscellaneous subjects, one can hardly pass by the very beautiful Dahlias made of paper, and which really at first sight might deceive even a practised eye.

Considering all things the fruit was good, although in no great quantity. Mr. Hill's black Grapes were first-rate specimens of Grape forcing, and those from Mr. Henderson of Trentham scarcely inferior. The white Grapes were, with one or two exceptions only, unripe. The Peaches were fair, but nothing extraordinary; but, on the contrary, the Nectarines from Trentham were all that could be desired, both as to size and colour, as also were Mr. Henderson's Circassian Cherries. Melons were pretty plentiful, and some of them really of first-rate flavour; Mr. Taplin's green-flesh, and that placed second, particularly so. The scarlet-fleshed Melons were also in good condition. There were a few fine Pine-apples among the 24 specimens exhibited. The Charlotte Rothschild from Chatsworth is a new and apparently good Pine in the way of the Cayennes; this was placed first, and with two or three Cayennes, a Providence and Queen, comprised those to whom prizes were awarded. Lastly—for there were no Figs, and nothing in the miscellaneous class to call for comment—there were the Strawberries; and it would be difficult to match such a *bonne bouche* as some of the Queens and Napiers in Mr. Smith's collection would make with these delicious fruits. Suffice it to say, his dish of Queen's was most superior, and fully indicated the fact of the British Queen being yet the first Strawberry in cultivation. Mr. Smith had also Oscar in good condition; fine, and of large size. Mr. Smith was deservedly first in both classes, and Mr. Turner of Slough was second in a collection of three varieties.

The day, though bright and dry, was at times bitterly cold; a north-east wind swept over the grounds, and produced a general chilliness over those who attempted anything like a parley in the grounds, and doubtless was the cause of a number of ladies and invalids remaining at home sooner than run the risk of a rheumatic attack. We are, however, happy to state that upwards of 10,000 persons visited this very gratifying exhibition.

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ON SOME OF THE NEW AND SCARCE AURICULAS, AND  
THE WHITE-EDGED SECTION.\*

FOR one living half-way between London and Edinburgh, it is too early yet to make remarks on the Auricula bloom of the year; but as there is an advantage in doing so, though imperfectly while the plants are yet in bloom, and may be compared with what is said of them, I take the liberty of sending you a part of what I have to say at once. As I am this day an exhibitor for the first time at the Botanic Gardens in London, I took the opportunity of sending half-a-dozen new ones besides the competitors, for public inspection merely; and more would have been added if the basket had been larger, and more still had it been a week later. Indeed, it was just that week too early for my prospect of a prize; but that may pass; the flowers themselves are with me the first prize. Those I sent for inspection are *Lycurgus*, *Lords Clyde* and *Byron*, *Formosa*, *Pizarro*, and *Superintendent*, to which, perhaps, may be added the two *Uniques* which were among the competitors. I hope Mr. Turner also sent *North Star*, *Volunteer*, and *George Lightbody*; this last I should myself have sent, but that it was only half opened, for it promises to be what I hardly expected, worth its grievously high price. On each of these I would make a few remarks.

*Campbell's Pizarro, self*.—Beyond reasonable question the gem of the new ones; the best of selfs, and the nearest approach to ideal perfection that has yet been achieved in the Auricula. Its colour is neither very bright nor new, being a deep rich brown, identical with that of *Mary Gray*, which is probably its female parent, and which it resembles in the form as well as the colour of the flower, and partly also in the foliage. But *Pizarro* is absolutely flat and throughout circular and proportionate, with good open orange eye and low anthers, and is a capital trusser.

*Smith's Lycurgus (Green)*.—Had I had another week for this to have opened slowly and perfectly, it would have been the chief attraction of my contribution. It is a most striking flower, with but one fault, a beaded margin to the edge, its green being otherwise pure and deep. The truss sent to London for inspection was not in full bloom, and its shape spoiled moreover by being forwarded in heat.

*Lightbody's Lord Clyde, self*, very striking certainly; and Mrs. Sturrock looked so tame beside it that I withdrew the latter from the set to be exhibited, and substituted a *Vulcan*, *Pizarro* being a fortnight past its best, and besides being, I believe, not yet let out. But *Lord Clyde* has faults. It does not flatten, and its paste is angular and too narrow; its colour is a very dark crimson, but it is lively, a good

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\* This paper was forwarded to me last month too late for insertion; its value, however, is not dependent on the time of its appearance, as it will be read with interest by all Auricula lovers. My good friend promises some observations on the other classes, which will be most acceptable, as no one has a keener eye, better taste, or a more varied collection.—D.

trusser, with large healthy handsome foliage. It is still in the raiser's hands, and the plant I sent to London belongs to him.

*Campbell's Lord Byron (Green).*—This raiser aims high, though not all his progeny can claim a place among the first. The present is a very showy flower, dressy perhaps would be a better word; inferior perhaps to Admiral Napier, though the latter has a bead, but much better than Lord Palmerston, and its very deep mulberry colour is novel and attractive, and contrasts well with the edge. But it has too much of it; its paste is thin and undefined, and its short footstalks prevent the formation of a large handsome truss. Still I was very near showing it, for it has a pure and vivid green edge, which is so rare, though it is too narrow.

*Smith's Formosa, self.*—Of a colour that, though not new, is extremely rare, and reminds one of the nearly extinct Redman's Metropolitan; and is almost exactly that of a pasteless Auricula in my possession, imported some thirty years ago from Hamburg. It is nearer lilac than anything else, but is a compound of that with French grey; its paste is good, but the eye only lemon; and it is far from flat, nor are its footstalks long enough. Still it is very ornamental, and its foliage particularly so.

*Mattley's Superintendent (Green).*—Of the imitators of Page's Champion, such as Hudson's Apollo (which is perhaps rather in the way of Leigh's Colonel Taylor), or Lightbody's Fairy Queen, this is the most redoubtable. In fact, if I were a Champion, and standing next to a Superintendent (though not of police), I should feel my petals rumped. They are very like one another, with an equally pure and brilliant edge; but this has a perfectly flat pip, which Champion never has. Its only drawback is in its thin paste, in which it resembles Colonel Taylor. Moreover, it seems to be the smallest plant among Auriculas. I have two; but they were such bits of things that, not being expected to show bloom at all, they were both put into one small pot, where they produced each a full truss, with large and bold pips, and in that condition went to London to see the world, and to be seen.

*Turner's Volunteer, self.*—Yet in the raiser's hands. Of a colour that, in the Dahlia, would be miscalled purple. When first fully open it most resembles that of Sim's Eliza, but differs from it in being lighter and yet having more of violet. It is a fine large flower, very showy, and smooth at the margin; flattens well, has a broad petal, and good breadth of paste, which however would be improved by being a little thicker. The eye is circular and depressed, but is lemon coloured and bleaches early, and the whole flower is short lived.

*Richmond's North Star, self,* figured in the January No., and to be let out by Mr. Turner. Of a new shade, though not new tint. Two shades lighter *plum* than Meteor Flag (for in this latter, as in many others, the plum and the violet contend for predominance), or six than Hey's Apollo. It has too many petals, as the very correct drawing shows, but they flatten out well, and make a circular frilled pip of good size (this frilled appearance is exactly represented in the figure); good broad circular paste; eye large but round, and of a good deep cowslip that lasts well, with low anthers.

*Unique, Maclean's and Dickson's.*—These are not new flowers, but both are much rarer than they should be; and though here placed together have little in common except their beauty, which is such that, in a collection of six out of upwards of 130 sorts, I shewed them both. Maclean's is a lively energetic masculine flower, Dickson's all feminine softness and grace; indeed, the delicate grey velvet of its edge is unequalled, and it makes an even and particularly handsome truss.

And now, instead of entering upon Headly's George Lightbody, before I know much about it, I will conclude with some practical general observations on the third section, or white edges. The late Mr. Beck used to say that Taylor's Glory was the only good one, which is so far true that for one good white edge it is easy to find four in any other section. One of the best I have ever seen was the grey-edged Lightbody's Sir Charles Napier, which, in all my plants this year, is a pure and distinct and excellent white; and I should have shown it this day as such, though with only six (but those were perfect) pips, but that I was overruled. Owing to the show being too early for me by a week, I was obliged reluctantly to forego Heap's Smiling Beauty, and to put up with Lightbody's Fair Maid; the maid instead of the mistress, which is about their relative value. Why do not the three C's—Messrs. Campbell, Cunninghame, and Cummings, or other enterprising raisers—turn their attention to whites and seed expressly for them? The great fault of this very pretty section of Auriculas is that so few have a well-defined body colour; the colour runs into the edge, and the edge meals over the colour, and there is no sharp contrast between them. By far the best of all in every requisite is Heap's Smiling Beauty; next may come Taylor's Glory; 3rd, Ashworth's Regular; 4th, Taylor's Favourite; 5th, Taylor's Incomparable. What is to be called the sixth? I am at a loss to tell. Earl Grosvenor or Countess of Wilton may *possibly*, if they can be got to flower in time; but I am doubtful. Of Smith's Ann Smith and Lady Sale I can say nothing, as I have not seen them on the plants, and Trail's White Rival is not yet open with me; but all the rest are not worth numbering in order of merit, and few of them ought ever to be shown. And even of those numbered above, Favorite has too long a stem, and is apt to hold down its head; Incomparable is usually streaky; and Glory itself is uncertain, liable to curl, and difficult to be caught on the day. True Briton, fine as it is, is undecided, and the petal curls; Catherina is occasionally not much amiss, though always indistinct; Pott's Regulator is an ornament to the box, but its edge is undecided, and its eye too large and bleaches; Robert Burns is uncertain, often having a mere streak of colour, and always too large an eye; Smith's Ne Plus Ultra is pointed, angular in the rings, and the edge not mealed enough; Fair Maid has an impure, mealed, dull colour; Popplewell's Conqueror is all eye and colour, and that not distinct; Pillar of Beauty has its colour coarsely daubed on, and the eye bleaches; Clegg's Crucifix is like the preceding, coarse and indistinct; Gairn's Model is much too small, and even what there is of it is not distinct enough to form a contrast; Countess of Dunmore is very poor, edge impure, colour smeary, and eye too large; Mrs. Willoughby is a lady in mourning,

who has brushed by a meal tub; Lee's Bright Venus is as distinct sometimes as any of the outsiders, but has the misfortune to have a Polyphemus eye, in which a truant humble bee could conveniently hide himself from the chastisement due to his intrusion into the Auricula box. For exhibition purposes it would be a mistake to cultivate more than at most half-a-dozen varieties, and, in fact, if I really wanted to win, I should confine the number to the three first named. Surely this is a reproach to all seedling raisers. What would a box be without its mealed-leaved plants and white edges? All the other sections have been improved surprisingly; Leigh's Colonel Taylor's exhibition days are numbered, though its purity will secure for it an honoured place, and its difficulty of multiplication a high price. But it will not stand against the circular flowers of more recent times. The Privateers and Ringleaders are no longer the models of the greys; nor will the Hannibals and Squire Mundys (which *are* the same flower; and is it not an odd coincidence that Admiral Mundy was cruising about in the Hannibal all the time?) hold their ground against the Pizarros and North Stars now coming into the market. Let us hope the whites will not be far behind their brethren, and that some worthy compeers of Smiling Beauty may soon be forthcoming.

GEORGE JEANS.

### PEACHES COVERED WITH A SHEET,

FROM MARCH 11TH TO MAY 10TH.

FROM April 8th to May 9th we had trying weather, the ice being some mornings half an inch thick. I hear, from bad wood and other causes, Peaches out of doors are annihilated; those covered with wheat straws in Rushton, and fir boughs in Rawston, are both failures. The following is the result of sheet covering on my three trees, which are close to the rivulet:—Top Peach, 175 taken off, 168 left on; middle tree, 176 taken off, 198 left on; lower tree, 183 taken off, 144 left on; total 510. They are nicely sprinkled over the trees, the wood is abundant, leaves thoroughly clean, and though the trees are from 24 to 50 years of age, they are vigorous from head to foot; they are 9 feet high, 54 feet in breadth. It will naturally be asked how can they be vigorous from head to foot? These are the keys. Eight years ago I cut them down as far as I dare. I cut all their downward roots off (some as thick as my arm), and all their radial roots in a circle of 30 inches from the stumps. I removed the earth around them, and filled in with new stiff loam and black dung. Since then they have become good fruitful trees, and the two lower trees are the best I ever saw, either under glass or outside of it. I neither disbud nor pinch, but leave all the wood on till a week before gathering, and then I only cut off the forward wood. After cropping, I lay in a double quantity, and leave it till spring, and then remove what I don't want. One reason why I don't disbud is this: I feed very high, and the wood would become too gross; if spurs are formed, I leave them on. I like the article of

M.R.C.S. much. I shall be glad to see him here, and I will undertake to show a fine array of the only four things to which I pay any attention, Peaches, Roses, Raspberries, and Strawberries; I never had the second and fourth so strong and good. Souvenir d'un Ami has opened the season to-day with three blooms; the Géant, Triomphe de Paris, redden; and within a few days the following novelties will bloom out of doors—La Boule d'Or, Triomphe de Lyons, Victor Verdier, Madame Boll, Lord Nelson, L'Elegante, Alexandrine Belfroy, and Madame Louise Carique; the three last and second are sure to please. I have besides Vaisse, Montceau, Melanie, Furtado, Amiens, Violettes, Terre-Noir, Eugene Verdier, Crapelet, Bonnaire; they appear to be nice plants, but are not budded. H.P. Parmentier has bloomed, and is of fine form, thick and smooth petal, rose and silver; her leaf is thick and clean, an item too much overlooked. Walnut leaves I do not like.

I could not end without a word about a Rose. Manetti is the first stock in the world.

May 10.

W. F. RADCLYFFE.

#### EFFECT OF FUNGI ON ROOTS.

THE following may possibly be of interest. In a garden where I am directing some improvements was a large Portugal Laurel, which, without any apparent cause, had gradually decayed. Upon examining the soil, however, about its roots large patches of a yeasty-looking fungus were conspicuous; and, on still further scrutiny, the half rotten stump of a tree felled some two or three years ago, revealed itself. The Laurel has just been grubbed up, and on nearly the whole of its roots are traces of the Mycelium of a fungus. This has, I imagine, killed the tree, the primary cause, however, being the decaying tree stump.

L.

#### AMARYLLISES.

To me it is something extraordinary that, while florists are picking up everything in the way of new Cinerarias, Calceolarias, &c., so very few individuals grow Amaryllises; and yet they are, perhaps, more easily managed than either of the above favourite classes, and no comparison can be drawn between the superior beauty of our Amaryllis, when in good bloom, and either the Cineraria or Calceolaria. With the Amaryllis there is a nobleness and grandeur which leaves the others far in the distance, and, besides these advantages, very many of them possess a delicious fragrance. I only wish Mr. Turner or the Messrs. Henderson would grow and exhibit them, when we should soon get them known and popularised among the professed florists.

To grow them, a low pit with a hot-water pipe round it is all that is required. When growing, they delight in a warm moist atmosphere, with plenty of light, and a slight bottom heat, although this is not

absolutely necessary. Supposing an attempt made at cultivating them in January, and that you start with dry bulbs, pot the bulbs in medium sized pots, allowing plenty of drainage, and using a rather rich loam and sand for potting. You may now place the pots on the surface of a tan or leaf bed, to afford a slight bottom heat, and within 18 or 24 inches of the glass. The temperature, if they are not wanted in bloom very early, may be 50°, raised gradually to 60° as they show for blooming. This latter temperature is quite sufficient for ordinary culture by fire heat. As they throw up their flower-scapes, the plants may be removed to the conservatory or greenhouse, or for in-door decoration, than which, when mixed with Ferns and Mosses, nothing is more useful or beautiful. If they are not wanted to bloom before June a much less heat would suffice; and, indeed, an ordinary brick pit, without fire heat, would bring them sufficiently forward. After they have done blooming they should be placed near the glass, and encouraged to perfect as many leaves as they produce. When these give indication of turning yellow or ripening, reduce the quantity of water and allow more air, by which treatment the bulbs will gradually ripen off their leaves and get into a dormant state by October, when the bulbs in their pots may be laid on one side, in a shed or cool house, to winter. By forcing them a little earlier, in May or June, I have managed to ripen the bulbs by August, when, by placing them on the shady side of a wall for a month, and again introducing them to the frame, they have given me a second bloom in October, and on to Christmas.

I see, by the Bulb Catalogue of the Messrs. Henderson, Wellington Road, that they cultivate a valuable collection of Amaryllises; should any of your readers wish to start with them, they cannot do better than apply at once.

R.

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#### LATE GRAPES.

A VALUABLE collection of these was shown in February last at one of the meetings of the Horticultural Society. They had been grown in the great vinery in the Society's Garden at Chiswick, and the fruit had been allowed to hang on the Vines till the first week in February, when it was cut and placed in the fruit room. The berries of all the varieties were very much shrivelled, and some had almost assumed the appearance of Raisins. They consisted of:—Barbarossa, quite plump and fresh, very juicy, but last season not richly flavoured; Burchardt's Prince, a long tapering bunch, the berries much shrivelled, very rich and vinous; Blussard Noir, which, though an early Grape, hangs well, and when shrivelled has tender juicy flesh, rich and rather vinous, but not equal to many others; Catalenesia Nera, a long tapering bunch with oval berries, thick skin, and firm flesh, very rich and vinous, but not so piquant as Burchardt's Prince; Gros Panse, a wine Grape with firm crisp flesh without much flavour; Morocco Prince, bunch long and

tapering, berries oval, black and shrivelled, skin tough, flesh firm, juicy. very rich, vinous and piquant, a very excellent late Grape; Muscat of Alexandria, very fine; Œillade précoce, a small bunch slightly shrivelled, flesh very tender and juicy, of good flavour, but neither rich nor vinous; Oldaker's St. Peter's, berries shrivelled, but apt to become mouldy and fall, skin thin, flesh tender, very rich and vinous; Prune d'Hérault, skin thick, flesh firm, neither juicy nor rich; Raisin de Calabre, a long tapering bunch, berries white, skin thin and tough, flesh tender, juicy and sweet, but neither rich nor vinous; Verdal, an early Grape, which appears to hang remarkably well, berries shrivelled and in sound condition, the flesh very sweet, rich and vinous.—Mr. T. W. Booth, gardener to R. Egerton Warburton, Esq., Arley Hall, near Northwich, furnished excellent bunches of Muscat of Alexandria, which had almost acquired the condition of Raisins.—Mr. Mobbs, gardener to W. B. Praed, Esq., Tyringham, near Newport Pagnell, also sent a collection of bunches of Early Grapes, grown in pots, which were well coloured, and exhibited much skill in Grape cultivation.

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#### PRIMULA DENTICULATA.

I HAVE had beautiful specimens of this really pretty plant, and I would recommend all who love Primulas to grow it extensively. If your plants are young let them be potted in a mixture of half turfy loam, quarter sharp sand and quarter decayed leaf soil; keep them all summer in the shady part of a cold pit or frame. In autumn let them be protected from rain, and winter them in the warm end of a greenhouse. In February they will show flowers in abundance, and will keep in beauty for three or four months at a time; they do not seem to like cold winds or draughts, and therefore should not be exposed to them. I have some nice plants in full flower, and they will remain so a long time.

W. S.

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THE HANOVERIAN BAND COMMITTEE of Bath held their first grand Horticultural Fête in Sydney Gardens, on the 15th ult. The day was fine, and the exhibition was attended by all the rank and fashion of Bath and its neighbourhood, including rather a wide area, as we understand upwards of 10,000 visitors attended the exhibition.

The Azaleas were the great attraction, and though many magnificent specimens were staged, they were hardly so well bloomed as in former years. Cape Heaths were particularly good, and the same may be stated of the Stove and Greenhouse classes. Pelargoniums, Calceolarias, Ferns, &c., and other popular flowers, were well represented, as well as Fruit and Vegetables; and taken altogether it was one of the best exhibitions the society has held.

## THE POTATO DISEASE.

THE Potato disease is a most important national matter, for a Potato is the rich man's luxury and the poor man's wealth. Too much consideration cannot be given to it. Various remedies have been tried, but not one of them has as yet been thoroughly and universally successful. Till we can determine the cause and seat of the disease we shall not be able to remedy it. However it may have originated, I am persuaded that it is now a "tuber" disease, liable to more or less development, according to the suitability of soils, seasons, and situations. I believe the disease may be propagated externally as well as internally. One thing is certain, that the greens of the Potato having been cut off so often since 1845, before the Potatoes are perfected, the cellular tissues have been injured, and are less able to resist the disease. I find here that the thickest skinned and hardest stalked Potatoes, such as the early Dugdales, stood it best last year. My cottagers grow this sort on an exposed chalky hill, and last year I observed that, though the greens were cut off, the tubers were but little affected. The soil and the situation, I need hardly observe, were favourable. I never knew more of all kinds in any year so bad as last year. I planted all the 6th and 7th of March last year (equal to February in any ordinary year) in ground dunged in the autumn and mowed twice. I have no doubt that the disease, be it "fungus, insect, or virus," goes from the diseased "set" and roots upwards into the greens through the circulation, as well as into the young tubers by the string: for I cut some open at digging time, and found the disease in the very heart of the young Potatoes. I have done nothing as yet to remedy the disease by way of prevention; but, being persuaded that it is now chiefly a tuber and root disease, I mean to try a few nostrums, confessing humbly that I am "at my wits end." I shall take off the "sets" from some of the plants as soon as they are up, and leave nothing but the new roots and stalks. To some of these roots I shall apply a solution of vitriol at the time that I remove the "sets" from the roots. If the disease is "fungus," vitriol is a good remedy. It is always successful in curing smutty seed Wheat. To some of these deprived "roots" I shall put sulphur, to some soot, and to some lime. I propose also to try these things on the greens on some ranks which are not deprived of their "sets" as soon as the greens appear; for if it is a fungus proceeding through the circulation or pitching upon the leaves and descending downwards it will quickly spread its spores, to be developed in suitable weather. I shall try the experiments on the Dalmahoy, which is a charming Potato. One thing is observable that, when the greens are striking, the stench in confined situations is nearly as offensive as smut in Wheat or fungus puffs on a down. I mean also to bandage tolerably tight the stalks beneath the greens, to try and stop the ascent or descent of the disease through the circulation.

The following things are tolerably evident to me that, if the disease is in the cellular tissues, as I believe it to be, external applications *only* will fail; that if it is a fungus, as I believe it to be, its development

depends on heat, wet, and contiguity to the atmosphere, and that keeping the Potatoes dry in the ranks is the best way to stop its underground development, although it will not stop its existence; that the disease being in the cellular tissue it will be a good thing to remove the "set" as soon as the Potato is rooted up; that those who try experiments should have a book, and put down everything that they do with nicety; that leaving out of their statements some one apparently trifling thing may seriously affect the correctness of their conclusions.

In fine, let me hope that everybody will suggest and try some remedy, and that he who succeeds may receive a substantial testimonial of national gratitude.

*Rushton.*

W. F. RADCLYFFE,

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### CHRISTMAS ROSES.

HAVE any of your correspondents ever observed the partiality slugs have for the flower buds of *Helleborus niger*? For years I have not been able to gather a perfect bloom, indeed hardly a bloom at all. Last year I thought to baffle them by potting my favourites and maturing them under glass, and accordingly did so early in September, just after the buds shewed themselves. I found, however, in November that most of them were disfigured by these pests, the mischief having been done immediately the calyx made its appearance.

M.

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### READING HORTICULTURAL SOCIETY.

THE first exhibition for the present season took place on the 23rd ult., on the site of the old Abbey. Special arrangement had been made in a portion of the inner ruins for the reception of plants, similar to that which has been so successfully carried out in the Regent's Park. At Reading, a considerable space of ground is formed into a kind of amphitheatre, formed with turf banks, round which the plants are staged on grass steps, gravel walks leading round or through the grass slope to examine and survey the plants, and a gigantic sheet of tenting covers the whole. Altogether, the effect, when filled with plants, was admirable; nor were there the inferior odds and ends generally got together to make up a local exhibition. We believe the artistic arrangement of the panel garden, with its turf banks and tables for the plants, is due to the good taste of G. W. Hoyle, Esq., to whom and his fellow-secretary, G. Lodge, Esq., are mainly due, not only the high character of the exhibition brought together for the occasion, but the very business-like and gentlemanly way in which the whole was managed.

As an exhibition, our readers will draw their own inferences, when we tell them that Mr. May exhibited the unrivalled collection of stove and greenhouse plants which won, the day before, the highest honours

at the Royal Botanic Exhibition ; that Mr. Turner had also his magnificent Azaleas, Pelargoniums, and Tulips ; that Mr. Ivery also exhibited Azaleas ; Mr. Noble, Rhododendrons ; and that Messrs. Lane & Son sent their Pot Roses. Among the local exhibitors, J. J. Blandy, Esq., of Reading, whose taste for horticulture is so well known, contributed to a great number of classes, including a grand display of fine-foliaged plants, Ferns, Orchids, stove and greenhouse plants, and fruit, in all of which Mr. Ingram took first or second prizes. The former classes evinced excellent cultivation, and would have stood high in any competition. We must not close our short report without noticing the extraordinary Oscar and British Queen Strawberries and Black Grapes shown by Mr. Dwerrhouse, gardener to Lord Eversley. The Oscar Strawberries were the best ever grown of that popular kind.

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### GAZANIAS.

A VERY interesting group of the different kinds of these in cultivation, in illustration of their differences of habit, was shown at one of the meetings of the Royal Horticultural Society by Messrs. E. G. Henderson & Son. *G. pavonia* was of close or tufted growth, with long stalked leaves, which were regularly pinnatifid, sprinkled with rigid hairs above and on the ribs beneath. It was described as a shy bloomer ; but with large, well-formed, and very beautiful flowers. *G. rigens*, of close tufted habit, was said to be more restricted in growth than its reputed varieties ; the leaves were smooth, narrow, and tapered into a long stalk-like portion, acute at the apex, and either simple and merely widened upwards, or occasionally with three or four pointed lobes. It is a fine old plant when suitably grown. *G. rigens major* was more robust, rather close-habited, with broader that is spathulate, bullate, crowded leaves, and blooming scantily, so that it is little sought after. *G. splendens*, or *rigens hybrida*, which is the variety or species lately brought into notice as a valuable bedding plant, blooms profusely throughout the summer and autumn months, and afterwards by protection in the greenhouse continuing to expand its later blossoms until January ; it had smooth spathulate leaves and a free branching habit. *G. uniflora* was of branching habit, but without special treatment too diffuse to produce adequate blossoms for flower-bedding, and the flowers are yellow, instead of orange, as in all the preceding.

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### ROYAL BOTANIC SOCIETY.

MAY 22.—This, considering the unfavourable spring we have had, was an excellent exhibition. Azaleas and Pelargoniums were numerous and made a brilliant display. Roses were produced in first-rate condition, and there was as usual also large numbers of stove and greenhouse plants. A large collection of the latter, furnished by Mr.

May, gardener to J. Spode, Esq., Hawkesyard Park, near Rugely, was in a most beautiful state, both as regards growth and flower. It consisted of *Ixora javanica*, a noble bush, each branch of which produced a glorious bouquet of rich orange flowers; *Ixora coccinea*, also in good condition; *Pimelea Hendersoni*, 5 feet through, though it was stated to be only four years old, and covered with bloom; huge specimens of *Epacris*, *Chorozemas*, *Coleonemas*, and *Azaleas*; *Pimelea spectabilis* and *Gompholobium polymorphum*, the latter grown in the form of a bush, a state in which it is much prettier than when trained on a trellis; *Acrophyllum venosum*, *Genetyllis macrostegia*, loaded with drooping orange red bells; the Heath-leaved *Tetratheca*; *Dipladenia crassinoda*; an Everlasting or two, and a charming specimen of blue *Leschenaultia*. To these a first prize was awarded. Of Orchids, Mr. May also sent a small collection, which received a first prize; it consisted of *Dendrobium nobile* and *Paxtoni*, two examples of *Phalænopsis*, *Cattleya Mossiæ*, and *Aerides affine*.

Among large *Azaleas*, Mr. Turner's plants again stood first. His specimens of *Chelsoni*, *Criterion*, and *Iveryana*, were magnificent. Messrs. Green and Carson also showed large and fine specimens.

Roses in pots were shown in beautiful condition; in Mr. Francis's group, which was not at the Crystal Palace, were *Vicomtesse Decazes*, covered with rich yellow flowers; *Paul Perras*, *Souvenir d'un Ami*, *Coupe d'Hébé*, *Madame Willermoz*, *Jules Margottin*, *Auberon*, *Baronne Prevost*, *Niphetos*, a white kind; and *Madame Hector Jacquin*. From Mr. Wm. Paul came a collection in small pots which was greatly admired, and deservedly, for the plants of which it consisted were nicely grown and well flowered. Amateurs also showed tolerably well on this occasion; Mr. Terry, gardener to Lady Puller, had good plants of *Paul Perras*, *Souvenir d'un Ami*, *Niphetos*, *Vicomtesse Decazes*, *Jules Margottin*, and *Comte de Paris*; and A. Rowland, Esq., of Lewisham, had a beautiful plant of *Chénédolé*, with large richly coloured blossoms; *Gloire de Dijon*, *Queen*, *Baronne Prevost*, and *Paul Perras*. Of cut Roses a beautiful collection was shown by Mr. Wm. Paul, containing among others blooms of the following new kinds, viz., *Victor Verdier*, a large showy rose; *Madame William*, yellow; *Baronne Gonella*, rose; *Comtesse Cecil de Chabillant*, rose; *Virginal*, white; *Gloire de Santenay*, crimson; and *Madame Boll*. Messrs. Paul & Son also showed cut blooms, among which was a remarkably fine truss of the fawn-coloured Tea Rose, *Madame de St. Joseph*.

Of Cape Heaths Mr. May had a small collection, consisting of *ventricosa magnifica*, *florida*, *odore rosæ*, *vestita purpurea*, *ventricosa coccinea*, and *suaveolens*.

New plants were numerous. From Mr. Pike, Winchmore, came a fine specimen of the handsome sweet-scented purple and white double *Petunia* named *Inimitabilis*; Messrs. Veitch sent the variegated variety of *Pteris cretica* in beautiful condition; also the *Petunia* just alluded to, the handsome *Lomaria blechnoides*, a pretty *Gloxinia* named *Princess Beatrice*, the silvery-veined *Adelaster albivenius*, and *Araucaria excelsa variegata*. Mr. Williams again showed his new variety of *Lælia*, and

a singular creeping Ficus-like plant from Manilla ; from Messrs. Fraser came a new white-flowered Heath which promises to be an acquisition to that tribe of plants. Messrs. Ivery sent two new Azaleas, and Mr. Bull a great variety of plants, consisting of Palms, Ferns, variegated Begonias, double and single-flowered Petunias, some of them very pretty ; three kinds of Dracæna, the handsome *Campolobotrys refulgens* and *pyrophylla*, *Aralia leptophylla*, a pretty kind ; the singular-looking *Alocasia metallica*, *Sphærostema marmorata*, with silvery-blotched leaves ; three kinds of *Caladium*, *Statice propinqua* and *profusa*, *Cissus porphyrophyllus*, *Theophrasta imperialis*, the long spiny-leaved *Hippomane longifolia*, a glaucous variety of *Araucaria Cunninghami*, *Rhopala crenata*, and a species of *Cupania*. Mr. Verschaffelt also showed some new plants, chiefly Begonias, and other things remarkable for the beauty of their leaves, among which the most conspicuous was *Campylobotrys Ghiesbreghtii*. Captain Speke showed blooms of a handsome red and white-flowered Amaryllid from Central Africa ; Messrs. Lee, a fine plant of *Cordyline indivisa*, and some pretty New Zealand Ferns. Messrs. A. Henderson & Co. furnished *Rhododendron calophyllum*, a large pink-tinged white-flowered kind, a dwarf yellow Wallflower, and the singular purplish blue-flowered *Mantisia saltatoria*.

Among miscellaneous subjects were some handsome stands of Pansies from Messrs. Downie & Laird ; Tulips and Verbenas from Mr. Turner ; a collection of variegated Begonias from Mr. Young, Highgate ; and a large *Phænocoma proliferum* from Mr. May, Rugeley.

Pelargoniums, especially the two first collections, both from nurserymen and private growers, were excellent. Leviathan, Fairest of the Fair, Candidate, Etna, Picnic, Vesta, Admirable, and Rose Celestial, in Mr. Turner's group, which was placed first, were beautifully grown and well flowered. Messrs. Dobson had Governor-General, Fairest of the Fair, Una, Viola, Rosalie, Rose Celestial, Symmetry, R. Benyon, Eugène Duval, Fair Helen, Sanspareil, and Admirable. In the Amateurs' class, Mr. Nye, gardener to E. Foster, Esq., sent among others, Rose Celestial, Fair Helen, Flora, Sanspareil, Sir Colin Campbell, Fairest of the Fair, Saracen, and Vesta. Mr. Bailey, Shardeloes, contributed extremely well grown plants, dwarf and well flowered, both of ordinary and fancy kinds ; their only fault was that the blossoms were rather small. Of fancy varieties those from Mr. Turner, to which the first prize was awarded, were also all that could be desired. Messrs. Dobson and Fraser likewise showed good collections. In the different groups, Cloth of Silver, Acmé, Madame Rougiere, Circle, Formosissimum, Princess Royal, Attraction, and Lady of the Lake were conspicuous. Several Seedlings, which we hope to describe this month, were shown.

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#### PROPAGATING ROSES.

I HAVE often heard it remarked by persons who have propagated the Rose, that the Hybrid Perpetual class could not be rooted from cuttings in the winter, but that all the other classes could be. I think this is a mistaken idea ; I have succeeded in propagating them equally as well

as either the Bourbon or Bengal Roses, which with me are the most certain to root. I put in the first week of December last, one hundred cuttings of the Souvenir de Leveson Gower, and on examining them to-day I find that all but six of them have rooted well. My course of treatment is this :—I have a bed containing four inches of clean washed sand ; the bottom is bored full of two-inch holes, over which is spread straw, to prevent the sand from falling through. The pipe which conducts the hot water through my greenhouse is completely boxed up under the bed, which affords a strong bottom-heat, and I have sashes over the cuttings which confine the heat that arises from the sand. I keep the cuttings moist by watering with clear rain-water, at about 70° temperature. The glasses must be kept close, only occasionally raising them to give air.

I have not only succeeded in rooting Roses in this way, but a great many varieties of hard-wooded plants. It may, perhaps, be an old plan, but to me it is entirely a new one—I have never seen it used, but only adopted it, after experimenting in various ways in rooting plants from cuttings.

*Lancaster.*

T. H. H.

### LANDSCAPE GARDENING.

IT has been asked—Is landscape gardening an art or a trade? I should say it is as much one as the other. Mechanical arts are trades. The fine arts are more scientific, and call forth a greater exercise of mind, refinement, and natural good taste. Landscape-gardening may be defined as a science, practical in its developments. It embraces good taste in arrangement, combined with scientific and practical gardening, applied to beautify the landscape.

Simple gardening, or gardening without landscape prefixed, is also a science, practical in its developments. It embraces botany, and a knowledge of the various kinds of care each plant requires. Chemistry also aids it.

Landscape-gardening, like good taste, is a gift, and every lover of the fine arts is supposed to possess the gift of good taste. The height of good taste is the love of nature. But it is necessary first to familiarise ourselves with nature's forms before we can form a model of taste.

It is the pursuit of every good gardener to know the real character of the plants he is dealing with. It is the gardener's business to assist nature and provide for the wants of the plant, that it may develop itself in healthy beauty. So, on these grounds, we would claim that it takes a gardener to be a *landscape-gardener*.

I would not count a man not a landscape-gardener because he was not born and brought up in a garden ; but he should be a practical gardener. It is the study of a lifetime to be a proficient in all the branches of gardening, and too much time cannot be afforded to mere extraneous branches.

I never meant to say that because a man may be a proficient in any other business that he is unfitted for the duties of a landscape gar-

dener ; but he is unqualified to beautify the landscape to an exalted degree of perfection, unless he is or has been a practical gardener.

As illustrative of these views, I would further remark : First—Landscape gardening is *gardening* ; the *making beautiful* by the scientific and practical application of planting, digging, levelling, mounding, dressing, building, or removing unsightly objects. Also manuring, draining, and general improvement of the soil, that Grass, trees, and flowers, vegetables, and fruit may grow to perfection when planted. And it is of the utmost importance that the designer should be *able* to direct the work, or to do it. If he is not, his qualifications to design are of the most limited nature. He may see the castle or garden in the air, but he cannot command the material to make it permanent. He may think he can go to the nursery and get what trees suit him, and so on ; but the trees will not remain as he plants them. The big tree, costing five dollars, will be outstripped in three or four years by the little one at its side that you paid twenty-five cents for ; and that handsome little evergreen that he planted on the walk, will probably have to be cut down or trimmed out of shape in two years, because its branches will extend twenty feet in diameter in a very little while. Paint remains where the painter puts it, but your trees run away and spoil the picture.

And so a gardener must know the proportions that his trees will attain. He has this foreknowledge to govern his taste in creation of landscape scenery. Science is often lost without a knowledge of minute practical details.

A doctor sent an order to an apothecary for two articles, to be applied separately to a patient ; but as “separately” was not mentioned in the order, (the doctor thought it unnecessary, supposing the apothecary should know,) the apothecary put up the articles in one bottle. The doctor coming in, inquired, “What have you done ? Don’t you know that these combined make a deadly poison ?” The apothecary laughingly applied the bottle to his mouth, and said, “Haven’t I drank them repeatedly ?” then fell backwards and died.

So in gardening,—things well enough by themselves work badly together. An injudicious application of fertilisers will kill a tree or plant, and an injudicious combination of trees, &c., will kill all harmony.

Landscape-gardening is not wholly inaccessible. If you are a good gardener, you only want to add the gift of good taste, and improve the combination. Mark what has been done in the art, and excel it if you can.

Many good florists are not skilled nor have the taste to lay out grounds ; but from the gardeners we would select or make the *landscape-gardeners*, as a captain would select a mate from experienced navigators.

All the absurdity concerning architects, surveyors, civil engineers, draughtsmen, and painters becoming landscape-gardeners, is that they should, all at once, become possessed of those acquirements that take professional men a lifetime to learn !—*American Gardeners’ Monthly*.

## EFFECTS OF THE WINTER.

THE following notes may perhaps be interesting to your readers, showing as they do the effects of the late cold winter on plants growing in the pleasure grounds at Highclere Castle, near Newbury, Berks:—

Pinus insignis	killed.	Thujopsis borealis,	uninjured
„ tuberculata	„	Taxus adpressa	„
„ monticola,	injured.	Taxodium sempervirens,	injured.
„ Montezumæ	„	Cryptomeria japonica,	uninjured.
„ Llaveana,	uninjured.	Araucaria imbricata	„
„ Jeffreyi	„	Quercus Ilex,	injured.
„ Pallasiana	„	„ „ Fordii,	nearly dead.
„ Lambertiana	„	Wellingtonia gigantea,	uninjured.
„ excelsa	„	Berberis japonica,	injured.
Abies Brunoniana,	injured.	„ Bealii	„
„ Douglasii,	uninjured.	„ Fortunii	„
„ Menziesii	„	„ Darwinii,	uninjured.
„ morinda	„	Aralia spinosa	killed.
Picea cephalonica	„	Cratægus pyracantha	„
„ Pinsapo	„	Lonicera flexuosa	„
„ grandis	„	Rhus cotinus,	young wood killed.
„ Webbiana,	injured.	Punica granatum	„
Cupressus torulosa,	killed.	Halesia tetraptera	„
„ Uhdeana	„	Cercis siliquastrum	„
„ Goveniana	„	Calycanthus floridus	„
„ macrocarpa,	killed in an	Prunus sinensis	„
	exposed situation ; un-	Ilex cornuta,	killed.
	injured where sheltered	Laurustinus, Sweet Bays,	Arbutus,
Cedrus Deodara,	uninjured.	Escallonia rubra,	Ligustrum
„ atlantica	„	japonicum, Myrtus communis,	
Juniperus Bermudiana,	killed.	killed back to the ground, but	
„ recurva,	uninjured.	breaking from the bottom.	
Thuja gigantea	„	Wistaria sinensis,	uninjured.
„ nepalensis	„	Forsythia viridissima	„

On the morning of December 25, 1860, the thermometer indicated 8°, 24° below the freezing point, the lowest noted here last winter.

May 22.

D.

## CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—Get the seed pods and faded blooms picked off plants that have done flowering, and remove them as soon as convenient to a rather close warm house, to encourage free growth. Keep them well shaded, and the atmosphere as moist as possible, syringing the plants freely night and morning during bright weather. Plants which require more pot room should be shifted as soon as they are out of bloom, and the shoots nicely arranged, so as to cause the young wood to grow in its proper place and form; and weak back shoots not required for filling up the plant should be cut out, and the wood should not be left too thick. Young plants of new or other

varieties, which it may be wished to increase the size of as fast as possible, should be kept near the glass in a stove or some warm house where they can be shaded from sunshine and afforded a moist atmosphere. See that these are not allowed to suffer through the want of pot-room, and stop over-luxuriant shoots as may be necessary to secure a regular growth. Plants being kept for late blooming should be placed in a shady situation out of doors, where they will keep equally well as in a north house, and will be benefited by the night dews, &c., but they must not be exposed after the flowers begin to open. See that the whole stock is free from thrips, and apply tobacco-smoke or some other known cure directly this pest makes its appearance. Camellias which were started into growth early will have set their buds, and may be placed in a shady situation out of doors, unless they are wanted to bloom early in autumn, in which case they had better be kept in heat until the buds are as large as large peas, and then be removed to a cool airy house, where they will not be so liable to make a second growth as they would if placed out of doors. Those making their growth should be kept rather warm, syringing them freely morning and evening, and shading from bright sunshine. Plants requiring more pot-room should be shifted at once, and see that all are clear of insects. *Conservatory.*—Careful shading, and abundance of moisture in the atmosphere, will be essential here, in order to preserve the beauty of Azaleas and other hard-wooded plants; and these are so beautiful as to deserve any amount of care which will prolong their beauty, if but for a few days. The surface of the beds should be kept constantly moist—paths and every available surface sprinkled two or three times a day during bright weather; giving air freely during the day, and a little left at night, will prevent a stagnant atmosphere, or the blooms being injured by damp settling on them. Remove plants directly their beauty is over, and replace them with others in full bloom; or, if these are scarce, with ornamental or variegated foliaged plants from the stove, many of which will do perfectly well here for two or three months, provided they are placed out of the way of draughts, and kept rather close at first. Attend to regulating the growth of the twiners, and see that these, and specimens planted in the beds, are properly supplied with water at the roots, and also clear of insects. *Cold Frames.*—These will now be cleared of the bedding stock, and will be extremely useful for growing Balsams and many similar plants for furnishing the conservatory in autumn, and will also furnish the best possible accommodation for young specimens of the more tender greenhouse plants, as Boronias, Gompholobiums, &c. &c.; and, indeed, young stock of all kinds of greenhouse plants will do better here for the summer than in the house, or placed out of doors. The finer kinds of shrubby Calceolarias are also well worthy of notice for blooming in the conservatory after the hard-wooded plants are over; and, if a stock of these are in hand, they should receive a liberal shift, stopping and tying out the shoots, so as to secure stocky well furnished plants, and be placed in the cold frames, where they can be shaded from bright sunshine, and afforded a moist atmosphere, and kept clear of aphids by gentle fumigations as may be necessary; and they will form nice plants for blooming in July and

August. Seeds of those sown now will, with ordinary care, make fine plants for next season, and are not so liable to go off at the collar as plants from cuttings are when stopped and kept for late blooming.

*Flower Garden.*—If not already done, finish planting out as soon as possible, and get all plants liable to be injured by being blown about by high winds pegged at once; and Dahlias, Hollyhocks, &c., secured to their stakes. Attend to the whole of the stock with water as frequently as may be necessary until they get well established, giving a thorough soaking every time water is applied, for surface sprinklings leave the roots dry, and are of very little service to the plants. *Greenhouse.*—Large specimens of the hardier kinds of greenhouse plants may now be placed in a sheltered situation out of doors, where they will be shaded from the midday sun; but care must be observed to protect them from heavy rains, either by having a waterproof cloth which can be stretched over them, or by laying the plants on pots on their sides. Those that require repotting should be kept in the house after shifting until the roots get hold of the fresh soil. Attend well to young stock, which will now be growing freely; keep the shoots nicely regulated, and shaped as may be necessary, to secure well-formed specimens, and use every care to afford these a moist atmosphere, sprinkling them overhead early on the afternoons of bright days, and reducing the air; but, as already stated, young stock will be better in pits and frames for the summer than in this house. Spare room in this house may be occupied with Fuchsias and other soft-wooded plants for the conservatory.

*Stove.*—Keep a sharp look-out for insects here, and if red spider makes its appearance upon Dipladenias or other plants, the foliage of which will not bear a very liberal use of the syringe or engine, it must be washed off with the sponge—examining the affected plants frequently, to make certain that the pest is eradicated, for if this is once allowed to gain a footing, it will speedily ruin the finest specimens. Also keep clear of aphid and spider by gentle fumigations as often as may be necessary, but be careful to have the house and foliage perfectly dry before smoking. Keep the atmosphere moist by frequently sprinkling the paths and every available surface, giving the plants a good moistening with the syringe every afternoon before shutting up the house; but avoid wetting the heads of Ixoras, as these are apt to drop their blooms if syringed overhead after they are in a forward state. Attend to providing a supply of plants for autumn and early winter blooming.

*Hardy Fruit.*—During the present month every attention should be given to all trained fruit-trees in this department. All wall-trees especially should be gone over in time, and the shoots thinned and stopped to admit air and light among the fruit and young shoots, which will greatly assist the formation of fruit-buds for the following season. Old Pear-trees in particular, that are unfruitful, should be subjected to the above treatment. Keep Peach-trees free from green-fly by the means previously advised, and dust sulphur on the shoots affected with mildew. Use the garden engine occasionally in warm weather, to clean the trees and prevent red spider. The thinning and stopping of shoots should be carried on in moderation, bearing in mind to retain sufficient

foliage to shade the larger branches from the scorching sun, for at times much injury is done to the trees in this way. Destroy black-fly on Cherries by dipping the shoots in tobacco-water and soft soap, or by syringing the trees with the same. Well wash the trees after the fly is destroyed. Water and mulch newly-planted trees, if the weather is hot and dry. Finish mulching Strawberries with litter or short Grass, at once, if not already done. Water in dry weather. Tie up the large kinds to small sticks, such as the British Queen, or other heavy fruit that do not colour well at the point. Look over Gooseberry and Currant bushes, and see that caterpillars do not injure the trees; hand-picking is the best means of destroying them. Pinch out the points of Currant shoots, to check green-fly, and water with liquid manure if the trees are weakly. *Forcing Ground.*—As soon as any pits or frames are clear of Potatoes or other forced crops, the beds should be prepared without delay, and successional crops of Cucumbers and Melons planted in them. Give good soakings of water occasionally to Melons when the fruit is swelling; keep the shoots thin, to preserve health and vigour in the foliage; stop and earth up advancing crops, give abundance of air through the day in good weather, and avoid shading if possible; syringe the plants on the afternoons of clear days, and close the frames early; be sparing of water, when the fruit approaches maturity. Be careful, and guard against sudden changes in the weather by having linings of Cucumber and Melon beds always in good condition, for if they get chilled it will probably bring on mildew and canker. Sow Cucumbers as they may be required, and Melons for the latest crop. Give plenty of air and water to French Beans, as well as the last crop of Strawberries in pits. Plant out Cucumbers in ridges under hand-glasses, and Tomatoes against a wall in a southern aspect. Egg-plants should be planted on a warm border. *Cherries.*—As soon as the crop is gathered, remove the trees to a shady situation and keep them syringed and watered; the pots should be plunged, or the plants taken out and planted in a northern aspect. Those plants in pots intended for forcing next season should not suffer from drought or from the effect of the Cherry-fly. *Peaches and Nectarines.*—Expose the ripening crop as much as possible to the sun and admit plenty of air, to give colour and flavour to the fruit. Late houses, where the fruit is swelling, should have an increased day temperature, with plenty of moisture. Thin and tie in the shoots in the last house, and treat them as previously advised. *Vinery.*—In the early vineries, where the fruit is perfectly ripe, the houses should be kept as cool as possible by giving plenty of air, to prevent them from shrivelling. Muscats should be assisted with a little fire heat, except in hot weather, so that the night temperature do not fall below 70°, and, with air and moisture, it may rise to 90° in the daytime. Late vineries should also have a little fire heat in chilly weather, more especially when they are in flower. Use dry sulphur if mildew makes its appearance, and keep the house a little warmer for a few days. Vines in pots should have every assistance by mulching and manure water. Plunge the pots, or otherwise shade them from the sun. *Pines.*—Tie up the fruit to keep them upright, when they are swelling off, and maintain a humid atmosphere with a

liberal supply of water at the root. Keep the succession plants growing; syringe in the afternoon, and do not let the plants suffer from drought at the root, especially those planted out on ridges. Shift the plants as they may require pot-room; do not shade, except for a few days after the plants are shifted, and attend to last month's directions respecting airing, temperature, &c. *Kitchen Garden*.—Nothing could be more favourable, to get the soil in proper condition after a very wet autumn, than the dry spring of 1861; a warm shower now will cause all crops to make rapid growth. The principal thing now is to keep the hoe moving every opportunity among all growing crops and other parts of the garden; also go on with the thinning of Onions, Parsnips, Carrots, &c. Another sowing of the latter should be made early in the month for a late crop, and succession crops of Turnips and Lettuce, and another of Broad Beans, may yet be got in; also Scarlet Runners and Dwarf Beans. Succession crops of Peas should be sown at intervals through the month; Marrow Peas are suitable for sowing in the early part of the month, followed by early kinds, such as Emperor or Sangster's. It is a good plan to sow them in trenches, six inches deep, for the sake of moisture; the rows should be a good distance apart, so that they may have plenty of air and light; Winter Greens may be planted between the rows. Sow Lettuce, Early Cape, Walcheren, and other Cauliflower, and Snow's Early Broccoli early in the month. Sow Coleworts not later than the middle of the month; the London Market and Rosette are among the best. Prick out and plant Celery for early crop; water after planting, and frequently in dry weather. Prepare more trenches, to be in readiness by the end of the month. Plant out Cauliflower, Lettuce, and Brussels Sprouts as soon as the plants are ready. Sow Cardoons immediately, if not already done.

#### PLANTS FOR EXHIBITION.

*Cinerarias*.—We will suppose that these are nearly out of flower, and consequently will require great attention to prepare them for cuttings for the ensuing season. They should now be placed in a shady situation—under a north hedge or wall, and when the wood is mature, cut down to about three inches of the surface of the soil. Stir the top of the soil slightly, and then surface neatly with a mixture of light turfy loam and leaf-mould. Sprinkle daily in dry weather, and protect in very wet weather by lights or other covering suitable to carry the water off. In a few days they will throw up suckers, which should be carefully taken off, and inserted in pots or pans prepared for the purpose, and placed under handglasses or in frames in a shady situation. Pot off as soon as rooted, and encourage by shifting into larger pots. Seed may now be sown for early flowering plants. Keep all plants cool and sprinkle frequently. *Pelargoniums*.—To admire the beauty of your plants as it more and more prominently appears may now be your chief employment. Water freely, but let it be in the morning, and your bloom will last all the longer. From the piercing rays of the sun and the industrious bee you must alike guard; and be sure to keep your plants and every nook about them *perfectly clean*, for the care you thus bestow you will be more than repaid.

## WORK FOR SMALL GARDENS IN JUNE.

*Auriculas* will now require only to be kept cool and clean for some time, and therefore in warm weather water should be freely given; and wherever they are the sun kept from them, as my frames face the N., and they will be well shaded by calico covers. I intend to keep them there this season; it will save me much trouble, and I hope will answer. Green-fly must be kept from them; the most effectual plan for this purpose is to brush them off with a large camel's-hair pencil. Where seed is not wanted the stalks may be pricked off, and the pots must be kept clear of weeds. An interesting article on some of the new kinds will be found in this month's number. *Bedding-out Plants*.—Any that have not been put in should be so now without delay. Verbenas should be pegged down. Where Ferns are abundant they make the best pegs; in default of these, I find a penny broom cuts up into a large number of pegs. It is to be hoped the present will prove a more favourable season than the last for trying the various kinds which have of late been brought out. *Pinks* will now be spindling up for bloom; pick off all flower stems save three, or, where the plant is strong, four. Disbud as the buds show, and where great nicety is desired shade from hot sun. *Carnations and Picotees*.—Tie up the flower stems as they spindle, and watch against green-fly. This warm and dry weather will necessitate a good deal of watering. *Ranunculus*, as far as I can see, will be a failure; when the tubers dry off take them up, and plant either Verbenas or Asters in their place. *Tulips*.—As soon as the flower stems will bend without breaking take up the bulbs, carefully marking any that run or are deficient in quality or height, and put them into a second bed, next year filling up their places with some good bulbs. Many have blown very much out of character this year, owing to the bad season of last year, having militated against the vigour of the bulbs. *Greenhouse* will now be gay with the *Pelargoniums*. I very nearly destroyed my bloom, and have much injured the appearance of my plants by the use of tobacco paper. I suppose there must have been some error in using it; the first time it did not seem to injure them, but the second, when not nearly the same quantity was used, and the *same paper*, some of the plants at the top of the house were completely scorched, and the others more or less injured. Twice I have been thus served, formerly with Gishurst and now with paper; henceforth, nothing but "baccy" for me. *Pansies*.—As these go out of bloom, remove them to a shady place, and sulphur for mildew; take cuttings, and strike in a cool border under a handglass. In general work, the hoe will be much wanted to get rid of rubbish; Hollyhocks and Dahlias will want stakes; Asters and others annuals planted out, and plants tied up, and carefully watched as they grow.

Deal.

D.





Geraniums.

1. *Senecr Wrangler.* 2. *Diophantus.* 3. *The Moor.*

Plate 178

## SPOTTED GERANIUMS.

(PLATE 178).

CONCERNING the handsome varieties of Geranium which form the subject of our plate this month, we hope to give a full description in our next, the limited space at our command on this occasion preventing us doing them justice in our present issue. We may, however, state that they are a wonderful advance on anything of the kind that has yet appeared even in the fine class to which they belong. Although good growers, easy to winter, and throwing full sized trusses freely on all shoots, yet, to have them in perfection, they must be well grown, a point to which it is to be regretted many pay no great attention. True, we never miss seeing splendid specimens at our great metropolitan exhibitions; but in many private establishments throughout the country second-rate plants are the rule rather than the exception. A common fault is too much crowding, and when that happens plants that have their growth wholly to make in spring will not bloom in true character. Over-potting is also a mistake of frequent occurrence; it should be borne in mind that the pots must become full of roots before there can be a fine head of bloom. Starting them into growth at a time when they are throwing up their trusses is likewise injurious.

## ON GREEN-EDGED AURICULAS:

I DO not think either you, Mr. Editor, or those for whom you cater, would thank me for stretching on a Procrustean bed whatever I may have to say on each of the four classes of Auriculas, and making them separately yield an article apiece; but I this will easily do so. And as I began with the least advanced of the four, the white-edged, I will now take that which at present ranks next lowest in its list of first-rate varieties, though highest in general estimation, and much the most numerous in named sorts, namely, the green-edged. The reason of the high estimation in which this class is held, is, because in a good example, the contrast between the four zones is much the most perfect, and gives it a far more striking and refined appearance than can be found in any of the other kinds. Something may also be due to the rarity of such examples. This I believe to have been the spring which moved "D. of Deal" to suggest the fusion of the classes; for no one can see a collection of twelve or more set out for a show, and therefore of the most perfect, without being struck with the absence of any broad line of distinction between the classes; the insensible gradation by which the greens melt into the greys and the greys into the whites, suggesting a natural reason for the Manchester system of class showing by single specimens, or at any rate by not more than one in each class. Take an A1 of each and put them together, and the classes are separated

in appearance as much as in name. Inspect a collection, and even an *habitué* may ask to which class a given specimen belongs.

To produce the full effect of its class superiority there is necessary, besides the form and general markings required in all, that a green-edged Auricula have its edge pure, that is, free from a particle of meal, and of a deep and vivid green, for some are light and some Apple green, and some, though deep and pure, are dull. The best and purest in these respects, if you except its pointed form, is the old Lancashire flower Leigh's Colonel Taylor, which came out nearly fifty years ago; and its contemporary, Booth's Freedom, is but little behind it in that, and before it in most other properties. Page's Champion came out not very long after them; and when to these you have added others, Lady Ann Wilbraham, Litton's Emperor, and Beeston's Apollo, I am at a loss what other I can name that has been long enough in hand, with me at least, to rank with them as pure and perfect green edges. And of these how far from perfection is the best! Something of this deficiency may be owing to their being members of the highest and most perfect class, for the ideal type in such will always be further beyond ordinary reach than in lower classes. But more is due to the actual falling short of any fair standard in the varieties themselves, which is much more conspicuous in these than in the greys or in the selfs. Yates' Morris Green Hero, though permitted to take a low prize this year at Middleton, I cannot consent to include among show flowers at all; its green is so dull and so broad, with a mere thread of colour, that it has made a long approach in returning to its original condition of a leaf. Its purity of edge once deceived me into thinking well of it; but after I had grown it a year or two I completely gave in to the general opinion of its demerit and discarded it.

No doubt there are other long-established flowers besides the six mentioned that are undeniable in purity of edge, of which perhaps the best is Hudson's Apollo; but unless under superior cultivation its want of size and its form of truss render it insignificant, and its green is not nearly deep enough. In a good trainer's hands it may be made a first-rate flower, but it requires special attention, and is besides of delicate constitution. You must be careful how you play tricks with it, to get more body colour and a more vivid green; if indeed they ever succeed, the tricks I mean, good cultivation does. Of Matley's Superintendent, I can only speak from one year's experience; Mr. Lightbody says it is too angular. I sent a pair to London, and not a pip on either had an angle in it. Its fault was that the paste was weak and thin. In a good year like this, it need not fear being shown against the Champion itself. The question really is, how often do these years come? And that cannot be answered without longer trial. Dickson's Duke of Wellington after all deserves its London popularity, for it does its best to please; it is showy, it is hardy, it is prolific, it is not particular as to treatment, and always looks well and striking; and in the ten years I have grown it, and that by the dozen, I have seen it with a pure green edge of tolerable breadth—*once!* And what is more it was then fit to show at Middleton. But it would be absurd to rank it with the pure green edges because it can sometimes be seen pure. Its

habit is to be impure, and besides, with the colour overpowering the edge and spoiling the symmetry of the flower. There are several others that sometimes come pure and throw a first-rate truss; Headly's Conductor and Excellent do, the latter having a dull but deep green edge; Hepworth's Robin Hood, Lightbody's Fairy Queen, Ashton's Prince of Wales, which last, from its angularity, narrowness and dulness of body colour, and want of smoothness, must rank low with the connoisseur notwithstanding; Franklin's Colonel is often pure, though light green in the edge, but then it has no two pips with the very smart colour like polished Spanish mahogany of equal breadth; Prince Albert I have seen pure, and then if caught before the tube bleaches it is first-rate, though of light green; Lord Lynedoch may be pure and deep, but so may Mother Bunch; Star of Bethlehem stares at you like a vulgar minded, but not bad looking, milkmaid, all eyes and cheeks; Howard's Lord Nelson is better, but seldom gives a truss for an exhibition table; Hogg's Waterloo is pretty, but only Apple green; and Clegg's Lady Blucher is light green in the edge and angular throughout. Of the newer ones, Lycurgus, if it ever shakes off its beading, will go into the front rank, and General Neil bids high for a good place; but time is wanting to judge correctly of these. I do not remember to have seen any other sorts with a pure edge at any time. But there are many good flowers remaining in the class notwithstanding, some of them far better in their impure state than most of the above. Campbell's imitations of Booth's Freedom, Admiral Napier, and Lord Palmerston, are both good, the former very large and bold, the latter more correct, but with a light and transient eye; Matilda is perfect in form and beautiful in colour, but the edge is light and the eye transient, also, it forms a bad truss; John Bright has a bleaching eye, Emerald too small a one; Freeman is not pleasing, though sometimes very fine; Sir John Moore is brilliant and effective, and easily satisfied; Moore's Violet is among the loveliest of the lovely; Oliver's Lovely Ann is useful and lasting; Lord John Russell is lively and good; Trail's General Havelock is good; Pollitt's flowers have far too many petals (lobes), and are anything but smooth, but are not to be despised; Partington's Trafalgar is useful; Smith's Waterloo is of doubtful green and thin paste, but I cannot part with it.

In this enumeration I have left out some that I grow, but the only one worth mentioning is Strong's Sir Isaac Newton, which, though an old flower, is very rare, and not first-rate either.

And now to conclude. Where are we to look among them all for the type of a green edge such as we want? I confess I know not. Is not Page's Champion the best we yet possess? "D. of Deal" thinks it is, "Φ" says it is, and I am forced to admit that it is. And therefore it *is* the best, for who in the Auricula world shall pit his dictum against such a trio? But then I say shame to seedling raisers if it is. But I believe it is, notwithstanding. If Dr. Plant would teach us to grow Booth's Freedom as he can grow it, with nine or eleven pips, *that* would be second. Shall I confess to the mortifying fact that I fear Wilbraham ought to stand third? Dickson was supposed to have achieved a revolution in these matters. But though every flower of

his is beautiful, and Wellington *will* hold its place in spite of adverse criticism, he did not remove the reproach from the class. Nor till some resolute seeder will be content to *isolate the parents and exclude insects and cross for the purpose*, foregoing the pleasure of the bloom of a few of his best plants, can we expect that the reproach will be removed. For as this class is farthest removed from the original simplicity of the wild species, and exhibits the highest effect of artificial cultivation, it is natural that fewest seedlings should be found in it at all, and fewest of the few in a pure as well as perfect state. But now that we know better than formerly—everyone knows—how to raise the seed when we have it, and that by a little care every plant may be bloomed by the end of the third year, some blooming in their first, the labour and time required are not what they were.

To those who mean to try for this class I have a word of advice—*eschew chance seed*. If you have a collection of good flowers, and choose to let them seed, by all means do so. It will not hurt them as it does annuals or biennials. Let them give you what seed they will, collect it carefully, and—*sell it*. It will produce many good flowers. It may possibly produce some first-rate in the other classes, though there is no florist's flower that produces from seed so few of even average excellence; but seed so saved will yield you no first-rate green edge.

GEORGE JEANS.

### VISITS TO NURSERIES.—No. V.

MR. JOHN CATTELL'S, WESTERHAM, KENT.

THE traveller who forms his idea of the beauty and fertility of the county of Kent from that portion of it that meets his eye as he whisks along at express speed from London to Dover will have a very incorrect opinion of the garden of England, inasmuch as the line traverses some of the worst land and some of the most unpicturesque portions of the country. Here and there, as at Penshurst, he gets a glimpse of some of its richly wooded and historic spots; but in general there is little either to attract attention or merit praise. To see it, he must diverge from the main line; and in some of its beautiful valleys and byeways he will find scenery which for richness and quiet pastoral beauty can hardly be surpassed. Let him leave, *e.g.*, the Tunbridge station; and if he be a good walker, and does not mind mounting a good hill (for Kent *has* its hills) let him trudge to Sevenoaks, and “my word for it” he will feel that he has been amply repaid. If he do it as I did the other day (though alas! I do not feel that pedestrian tours suit me quite so well as they used), when the woods were vocal with the trill of the nightingale and the jolly song of the thrush, and green of every hue marks the foliage with a variety of tints equal to those of autumn, and with the far more pleasing associations of lovely spring time, he will, if he have an eye for nature's beauties, greatly rejoice. As he mounts the hill that nears the town of Sevenoaks, let him take his stand, and then look back over the weald of Kent, and what a lovely view meets his eye! On a clear day, the downs of Fairlight over

Hastings can be seen; and wood and hamlet, church spires peeping through the foliage, and streams threading their way like a silver string through the verdant meadows, form a picture not easily forgotten; and then at Sevenoaks he may take the road to Bromley, passing again some lovely spots, or he may drive through the valley that leads from Chennie to Westerham, a valley at a considerable elevation, but dotted with the residences of many of our nobility and gentry. Knole, the seat of the Earl of Amherst, but celebrated as one of the oldest and most historic houses in Kent; Chevening, the residence of the Earl of Stanhope (better known as Lord Mahon, the historian); Squerries, the ancient domain of the Wardes, are among those most worthy of notice. At Westerham, if he be a gardener, he will find too that for which I was bound the other day, the quiet, but productive, nursery of Mr. John Cattell. It is one with which I have been for many years acquainted, when it was under the management of the elder Mr. Cattell, one of those sturdy honest yeomen who contented with "keeping near shore," cared not to launch out into those less safe seas, where more gain might have accrued. He last year entered into his rest, full of years, and honoured and respected by his friends, who were many, and his nursery is now under the more enterprising management of his son. The place is at present somewhat difficult of access, Edenbridge being at present the nearest point of access, and though only four miles, yet as a very high and steep hill intervenes between it and Westerham, it has not been found possible to make a public conveyance pay. When the new branch of the Dover and East Kent line is open it will be more easy to reach; but I am sure that if anyone desires to pay Mr. Cattell a visit, he will be always ready to send a conveyance to the station; and not only will they find a nursery replete with many plants in excellent health, but also a pleasant drive, more pleasant than a walk I once took there, when my zeal for floriculture drew down on me a hearty laugh, my friends being fully persuaded that nothing but there being a lady in the case could have accounted for such a walk on such a day, and nothing I could do could remove the impression.

Since my last visit to these nurseries, considerable improvements have been made in the grounds leading from the seed shop to the greenhouses. A new broad nicely gravelled walk has been formed, fringed on either side with borders of specimen Conifers; amongst these I noticed fine plants of *Wellingtonia gigantea*, *Cupressus Lawsoniana*, *Thujaopsis* or *Cupressus Nutkænsis*, *Thuja Lobbi* and *gigantea*; *Abies nobilis*, *Douglasii*, *amabilis*, and *grandis*; *Pinus excelsa*, *insignis*, and other kinds; *Cedrus Deodara*, &c. &c.; in fact, a general collection of the Coniferous tribe; and although these have all been planted since last September, and fully exposed to the north-east winds, the only plants that have suffered to any extent are *Pinus insignis*; all the others are looking remarkably well, considering the severe ordeal they have undergone. There were a quantity of *Araucaria imbricata* as fresh and green as possible, and as handsome young specimens as could be wished for; and yet *Laurestinus*, *Bays*, *Aucubas*, and many other evergreens suffered severely—the two first named killed to the ground. *Cryptomeria japonica*, large and small plants, are scarcely

browned. *Wellingtonia*, *Cupressus Lawsoniana*, *Thujopsis borealis*, and *Thuja gigantea*, here as in other places, must certainly be placed A 1 in the list of hardy plants.

The last two seasons having given an impetus to the cultivation of fruit trees in pots, Mr. Cattell has found it necessary to erect a large house, 90 feet by 20 feet, expressly for their cultivation; economy and utility were the principles studied in its erection. The ventilation is arranged in the manner described by Mr. Rivers in his "Orchard House Guide," and seems to answer the purpose thoroughly, as nothing could look more healthy and vigorous than the young shoots and leaves of the various fruit trees with which it is filled. The glass used is 16 oz. horticultural for the sides and 21 oz. for the roof, 16 oz. being found too slight for the roof, and it was thought the extra cost for the 21 oz. glass would be saved almost in one season, as a great deal of 16 oz. glass is broken in putting in, and is liable to crack from other causes. I inquired the cost of this house, and found it somewhat under £120, showing how cheaply they may be built and yet be useful.

Roses form a leading feature at this establishment. I found, however, they have suffered very much here. Mr. C. does not think more than two or three buds in a hundred are left alive. A large piece of ground has been planted with standard Stocks, and these are now breaking freely. I observed a nice lot of the new Roses of this season, but none have bloomed sufficiently to form any opinion as to their merits. There is one point in which these nurseries may be relied upon; owing to their exposed position it is impossible to have *tender* or coddled plants, even the old Clove Carnation will not stand the winter, and Chrysanthemums are impossibilities in the open air.

American plants are also extensively grown; amongst them is a unique collection of Ghent Azaleas now nicely in bloom, and includes every shade of colour peculiar to the tribe.

In the other portions of the nurseries, fruit trees, ornamental trees, &c., and selected vegetables, are grown. The Reliance Cabbage and Cattell's Dwarf Purple-top Beet are two well-known useful vegetables; and particular attention is paid to the saving of the seeds of the various kinds of Kales and Broccoli. Amongst the Kales, Buda, Curled Jerusalem, and the old Jerusalem, are the best and most productive. Coming's Reliance Broccoli is the only variety that has withstood the test of the late winter; it is now forming heads of a good size, and should be grown in every collection.

There are also quantities of florist flowers, herbaceous plants, &c., usually found in nursery gardens. Large beds of the beautiful Squill (*Scilla siberica*) were just past their best at the period of my visit. Every spring the beds are covered with their beautiful rich light blue flowers. This, and the White Dog's-tooth Violet (*Erythronium dens canis alba*) are two of our prettiest spring flowers.

Space will not permit my extending the notice of the many good things to be found in these nurseries; they are, however, worthy of a visit from all persons who take an interest in gardening, and they may rely upon the proprietor or his assistants endeavouring to make their visit an interesting one.

Deal, June 20.

D.

## THE FRUIT CROP OF 1861.

THE season being now so far advanced as to enable us to speak with accuracy as to the state of the fruit-crop, I beg to offer a few remarks on the subject. Its importance cannot be over-rated. When we consider the daily increasing demand for fruit which the daily increasing populations of all our great towns create, its importance is clearly manifest; and moreover, when we consider the facilities which railways and steamships, now-a-days, offer continental growers of sending their produce to all our great markets, enabling them, with their more favourable climate and cheap labour, to sell at prices highly injurious to home growers, it becomes a necessity with the latter to make every endeavour to meet a competition so destructive to their interests. As there must be a cause for everything, so, when there is a deficient fruit-crop, the cause generally assigned is the cold unfavourable weather of our springs. That cold, frosty, unfavourable weather in spring is highly injurious to fruit-crops, no one, who knows anything of fruit-tree cultivation, will deny. I, however, notwithstanding this drawback, believe it is quite possible to get good crops of fruit in nine seasons out of ten. Extraordinary and exceptionable seasons, like the last, which baffle the skill of the best cultivators, will occasionally occur, but when they do come we should take them as salutary stimulants to renewed exertion. With these few prefatory remarks, I now proceed to the subject more immediately before me—The Fruit Crop of 1861.

The fruit crop in this part of the country is, with the exception of Cherries, bush fruit, and Strawberries, very light. What, then, let us ask, is the cause? Has a mild winter and a cold precarious spring done the mischief? Decidedly not: for surely the last winter was sufficiently seasonable and cold to satisfy those who say the seasons have completely changed since their juvenile days—that now our winters are much milder than they were in former times, and our springs much milder, and hence the failure of our fruit crops. With the exception of two slight frosts early in May, I never remember a spring more favourable for fruit-trees than the past; therefore, the deficient crop this year cannot be attributed to the mildness of the past winter, nor to the precarious weather of the past spring. What, then, has been the cause of the deficient crop? Owing to the last most extraordinary season, the want of bright solar light for so many months last year and the great fall of rain, the young wood and buds were unripened and imperfect, and hence the cause of our deficient fruit crops this year. Even our glass structures have suffered from want of light last season; hard-wooded greenhouse plants are not in general flowering so profusely as usual. Vines in late houses, where little or no artificial heat has been used, have not “shown” fruit so abundantly as usual, nor are the bunches as compact and full as usual. Peaches, Nectarines, and Pears in orchard-houses, where no *artificial* heat has been used, are also very deficient.

And now as to the state of out-door crops. Bush-fruit—Raspberries, Gooseberries, and Currants—are abundant crops. Raspberry canes

suffered in some places last winter. Gooseberry-trees have in many places suffered much from caterpillars. I keep my bushes clear by dusting them with powdered Heligbre as soon as I perceive any on them. Currant bushes have in many places suffered from fly, Strawberries are very fine; I never saw the British Queen so good.

Cherries appear to be a general crop. Peaches and Nectarines may be set down as a complete failure. Old trees have in many places been completely killed last winter, and much of the young wood has been killed in many places. The trees here have escaped with little injury. This I attribute to several causes: in the first place, the situation of the garden is a dry one—the subsoil is of a gravelly porous nature; and, in the next place, I never encourage over-luxuriant growth, but am satisfied with wood of moderate thickness, which, by being kept sufficiently thin and nailed in proper time, will get properly matured in ordinary seasons.

Standard Pears are also a failure this season; trees on walls have a sprinkling of fruit. Some of the trees here have nice crops; the sorts are—Easter Beurré, St. Germain, Glou Morceau, Swan Egg, Vicar of Winkfield, &c. Fig-trees suffered much last winter; the wood has in many places, even under a thick covering of straw, been killed. Part of one of the large trees here suffered in this manner; the greater part is, however, alive, and has a good many fruit.

Apricots are very thin in general; indeed they may be called a complete failure—or nearly so; the trees in some situations suffered from last winter. The trees here received no injury; they have a nice sprinkling of fruit on, but I cannot call it an average crop.

The Apple crop is in general a light one. Cockpit is, however, a heavy crop; this is a sort much grown in this part of the country—it is a free-growing tree and bears abundantly. It keeps well, is an excellent baking Apple, and, when ripe, a good dessert fruit. There are several trees of it here, all full of fruit; most of them had heavy crops last year.

Plums are a tolerable crop, full an average one on walls; on standards they are rather light, having suffered from the frosts at the beginning of May.

The above is an accurate account of the state of the fruit at present in this part of the country. The deficiency I attribute, not to the precarious weather of the past spring, but, as I have already stated, to the want of light, the quantity of rain, the low temperature, and heavy crops of the past season.

If now we attend properly to our trees, we may confidently look forward to a good crop in 1862. We must not, however, neglect our crop now, and put our chief trust in a favourable spring. We must remove all superfluous wood at once, nail all shoots that require it, and try to keep insects down, so as to have the foliage healthy as long as possible. Perseverance in attending properly to the trees *now*, will assuredly be rewarded by an abundant crop in 1862.

M. SAUL.

*Stourton, Yorkshire.*

## VARIETIES OF COMMON YEW (*TAXUS BACCATA*).

(Read before the Floral Committee of the Royal Horticultural Society,  
March 12th, 1861).

By Mr. WILLIAM PAUL, F.R.H.S., Cheshunt Nurseries, Waltham Cross, N.

As many of our favourite evergreens hitherto reputed hardy have been seriously damaged or destroyed by the last winter's frost, we turn with increased interest to those which remain to us uninjured. Bays, Evergreen Oaks, Arbutus, Euonymus, Laurestinus, Common Laurels, Cypress, and in some cases, Portugal Laurels are killed. Araucarias, Deodaras, and some other South American and Indian beauties have in many places complexions as brown as ground rhubarb; Phillyreas and more hardy evergreens are stripped of their leaves. But our native plant, the common Yew, is safe; none of the varieties have a leaf injured in this valley of the Lea, where the thermometer on Christmas-day was 5° below zero.

The common Yew is, no doubt, well known to every observer, but perhaps the numerous and beautiful forms which have descended from it are as yet strangers to the many. It is these varieties which I would now attempt to describe. They are many in number, beautiful in appearance, and vary greatly among themselves. Neat, graceful, elegant, picturesque, sombre, massive, grand, are terms which may be appropriately used to one or the other of them.

It is my present intention to look at them from one point of view only, and that a popular one—their value as ornamental trees in garden scenery—and so regarded, they seem to fall naturally into four groups, viz.:—

*Group 1.*—Varieties of a spreading habit, of which the common Yew is the type.

*Group 2.*—Varieties of pyramidal or columnar habit, of which the Irish Yew is the type.

*Group 3.*—Varieties of weeping habit.

*Group 4.*—Varieties with variegated foliage.

### *Group 1.*—Varieties of spreading habit.

1. *T. baccata*, common Yew.

2. *T. b. fructu-luteo*, the yellow berried Yew. This is one of the most elegant; the pulp surrounding the seed is of a dull yellow colour instead of red, as in the ordinary kind. The growth is vigorous; the leaves are of a very pleasing green medium tint.

3. *T. b. nigra*.—This is a striking plant of bold and rather upright growth; the leaves are of a bluish or blackish-green. It flowers abundantly, and is very effective in the landscape, forming a somewhat sombre, but grand and massive tree.

4. *T. b. procumbens* forms a huge spreading bush; leaves bright green, the plant, looked at as a whole, having a reddish appearance.

### *Group 2.*—Varieties of pyramidal, or columnar habit.

5. *T. b. fastigiata*, the Irish, or Florence-court Yew, is a plant of rigid growth, columnar in form; leaves dark green. This plant is too

familiar to require an extended notice, although very useful in formal gardening. Seeds of this variety produce for the most part the common Yew, but some vary in form and tint.

6. *T. b. cheshuntensis* is a very graceful variety, of pyramidal growth, the leaves small and closely set on the branches; the colour is of a bright glossy green. It appears to stand midway between the common and Irish Yew, but is less formal than the latter and grows twice as fast. This variety was raised by me some years ago, from seeds of the Irish Yew.

7. *T. b. pyramidalis*.—This variety resembles *cheshuntensis* in outward form, the leaves are, however, broader and shorter, and the bark of the young shoots reddish.

8. *T. b. nidpathensis*, the Nidpath Yew, resembles *cheshuntensis* in the leaf, branch, and colour of the foliage, but is of stiffer growth, being columnar rather than pyramidal in habit, with a disposition to spread at the top.

9. *T. b. stricta* is similar to the preceding, but with smaller and paler green leaves; it is almost as erect as the Irish Yew, and forms a compact dense tree. This is a seedling from the Irish Yew, raised from the same batch as *cheshuntensis*.

10. *T. b. nana* is a neat plant of dwarf habit, and compact upright growth; the leaves of a dark and more glossy green than the common Yew. It appears equally suitable for a single tree on the lawn, for planting in masses, for the shrubbery, or for a dwarf hedge in a geometrical garden. This also is one of my seedlings raised from the Irish Yew.

11. *T. b. erecta* is similar to the preceding, but of larger growth, although with smaller leaves.

12. *T. b. erecta Crowderi*, the variety recently brought under notice by Mr. Crowder, of Horncastle, is of compact pyramidal growth, and approaches more nearly to *erecta* than to any other, but has smaller branches, and will probably not grow to so large a size. It appears of more regular growth than *erecta*, and may perhaps be considered an improved variety of it.

13. *T. b. ericoides (empetrifolia)* is an interesting and neat little plant of dwarf growth, closely set with branches; the leaves are small, the bark reddish.

#### Group 3.—Varieties of weeping habit.

14. *T. b. Dovastonii* is a weeping variety, somewhat picturesque, the branches shooting horizontally to some distance from the main stem, and drooping at their points. The foliage is ample, of a dull dark green.

15. *T. b. Jacksonii* is a distinct and elegant weeping variety, with small light green leaves somewhat curled.

16. *T. b. recurvata* is a handsome variety, with leaves of a pale dull green. The habit is diffuse, rather drooping, the leaves curled in the way of *Picea nobilis*.

#### Group 4.—Varieties with variegated foliage.

17. *T. b. variegata*, the Golden Yew, is a well-known plant of

great beauty, well suited for planting in masses, and relieving the monotony of large surfaces of green. The gardens at Elvaston Castle derived some of their celebrity from the artistic working up of quantities of this beautiful tree in contrast with the darker shades of green. I have heard it said, on good authority, that the Golden Yew is a male plant, but as I have seeded it, I strongly suspect that there are two or more varieties of too close an external resemblance to be distinguished. This supposition is strengthened by the fact that the offspring from seed retain the variegation of the parent, though differing slightly among themselves.

18. *T. b. elegantissima* is paler in colour, and of more erect and uniform growth than the last-mentioned. Both these varieties, if grown entirely in the shade, quickly become green, but regain their golden appearance on re-exposure to the sun. They form handsome formal plants when worked standard high on the Irish or common Yew.

19. *T. b. "silver variegated"* is a seedling from the Golden Yew, but which I never thought sufficiently distinct or attractive to merit a name.

20. *T. b. fastigiata variegata*, the variegated Irish Yew, is a sport from the Irish Yew, with occasional silver leaves. The plant is of slow growth, and still scarce, but it is hardly striking enough to become a general favourite.—*Royal Horticultural Society's Proceedings*.

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### A PRUSSIAN GARDEN.

ONE of our correspondents has forwarded us the following extract from the diary he kept while travelling through northern and central Europe. As it gives some idea of horticulture, as practised in Germany, we have no doubt our readers will find some interest in it.

“June 30.—At ten o'clock this morning I walked down the most beautiful and imposing street in the world; almost all the public buildings of Berlin are clustered at one end and along the sides of it. There is the king's and half-a-dozen other palaces, the Cathedral, the Museum, the University, the Opera-house, the Arsenal, the monument to the great Fritz—all within a few minutes' walk of each other, and all within sight at once. Along the street, which is perfectly straight, although more than a mile in length, there are four lines of Lime-trees; the centre avenue is reserved as a promenade for pedestrians. This noble street is very appropriately called 'Unter den Linden' (Beneath the Lime-trees). At its western extremity there is a magnificent triumphal arch; this is surmounted by a figure of Victory, standing in a chariot drawn by four horses. Beyond this gate, called the Brandenburgher Thor, stretches the principal public park near Berlin; an avenue several miles in length, and in a line with the street I had just left, divides it into two parts. I followed this avenue for nearly a mile, and then, taking one of the smaller ones, struck off to the right across the river Spree, and was soon in the village of Moabit. It is an easy walk from Berlin, and is therefore a favourite place of resort for the Prussian Cockneys. The village has, therefore, a varied appearance;

one-half of it is devoted to manufactories—the other, to music-gardens and other places of amusement. A large open space occupies the centre of the village, around which the houses are scattered. At this time of year it looks very bright and pleasant; but as the soil is nothing but sand, and the summers here are very hot, the trees are almost leafless and the turf entirely burnt up by the end of July. Nevertheless, the celebrated Bavarian beer and the music are attractions which never fail in bringing visitors here by hundreds and thousands, especially on a Sunday.

“It was to the private residence of one of the principal manufacturers of this village that I was directing my steps; his garden is celebrated through all Germany. Herr Borsig is one of the leading locomotive engine builders on the Continent—it was a grand day for Moabit when the thousandth engine was finished. He does also a very extensive business in every other branch of the iron trade, and he keeps a little army of workmen. He is no less zealous as a horticulturist than successful as a manufacturer. The garden is thrown open to the public two days in the week on the payment of five silber-groschen (sixpence English), this money being in winter divided among the poor of the neighbourhood. The ground upon which this princely mansion and beautiful garden stand was, twenty years ago, an open common. While walking round it I could hear the dull heavy report of the tontons strokes of Nasmyth’s steam-hammer—‘There,’ thought I ‘is the fairy who has wrought this change.’

“I was most politely conducted round the establishment by the very intelligent gardener, Herr Geardt, the man after whom that beautiful new variety of *Gymnogramma* is named. In visiting a German garden, nothing strikes an Englishman so much as the want of evergreens; the winter is too severe for anything except a few Conifers. It is astonishing, too, the amount of labour that is expended in keeping the turf fresh and green here. On either side of the flight of steps leading up to the hall-door were two fine plants of *Dracæna australis*, and two others of the New Zealand Flax (*Phormium tenax*); these are planted out in summer and taken up every autumn. In front of the entrance there is an elaborately and intricately designed flower-garden, very different from anything of the kind we see in England, and the effect is, perhaps, not so good as our more bold and striking plans. The design of the small square garden, on the south side of the house, is more simple. Mr. Geardt explained to me that he kept the flower-garden as gay as it is now from the commencement of April by a succession of plants. I think more attention should be paid to this point at home, where the climate would be more favourable for it than here. I took a note of the plants he employed for this purpose.

“To the left of the mansion is a long conservatory, divided into three portions. The middle one is paved with marble; the floor of the other two, covered with a turf of the common Lycopod, *Selaginella denticulata*. The effect of this is most beautiful; flowering plants are plunged in groups, and there is a semicircular bank of Australian plants as a background. A gallery runs along the back of these houses, and the wall behind it is covered with the dark green glossy foliage of the

Camellia. There is a broad stage along the front of the house, beneath which are the hot-water pipes; they are kept out of sight by a light iron-work trellis, to which the Irish Ivy is trained. It is curious to observe how fond the Germans are of the Ivy; they would go mad with delight if they could have it growing out of doors as luxuriantly as we have.

“Beyond the conservatory is a well-furnished little Fernery; and at right angles to it a magnificent Palm-house. It is an oblong building, with a ridge-and-furrow roof, and a gallery running all round it. There are eight or ten large specimens of Palms, and a Tree-Fern with a clear stem of twelve feet in height; around these small Palms and other stove plants are very artistically grouped. Rockwork is introduced into this house with a very good effect; it is done upon such a massive and gigantic scale that one is almost forced to believe it is natural. The staircase leading up to the gallery appears to have been hewn out of the solid rock; a spring of clear water gushes out near the top, and falls in a cascade by your side as you ascend. Ferns, Aroids, and other creeping plants grow in the fissures of the rocks, and fall in natural wreaths over the ledges. I never saw rockwork so successfully managed. No natural stone is used, but the design was first roughed out in brickwork, and then a surface of cement given; this shows no trace of the workman's tool.

“On the opposite side of the garden, a range of three span-roofed houses was devoted to a fine collection of Orchids, purchased a few years ago in England. In the warmest division, the centre of which is occupied by an open tank which keeps the air always moist, a set of Pitcher-plants and other varieties were growing most luxuriantly. Behind these houses come another range—a Peach-house and two vineries; forcing has not, however, reached that perfection in Germany to which it has attained in England, although they have very little of that dull sunless weather against which our countrymen have to struggle.

“It was rather amusing to see a bed of Rhubarb in one part of the ground, planted entirely for its fine foliage; strange to say, its stalks are seldom or never eaten in this neighbourhood. There were also several other beds of Cannas and other foliage plants, so characteristic of German gardening, but I do not think they were quite so fine as those I saw in the Louisen Strasse yesterday, nor was there so great a variety in the plants used. There was one sight, however, which I never saw equalled. In the lower part of the garden was a large sheet of water; as there is a great quantity of waste hot water from the manufactory close by, it is conveyed underground into this lake, so that almost any temperature may be kept up. At the time of my visit, the surface of the water was half covered with Water Lilies, and hundreds of flowers were expanded. Among these Nymphæas were many hybrids and species not often met with; the variety in their colours was charming. There was the bright blue, pure white, deep crimson, and every shade of pink. I should think the effect of this could not be rivalled in Europe. There was a Victoria house close by, in which the royal Water Lily was growing well. Most of the Nymphæas had been

planted in baskets of soil, and started into growth in this tropical aquarium; then, as soon as they required more room, and the temperature out of doors warm enough (the water was kept at about 80°), the baskets were sunk in the places where they were intended to remain during the summer.

“There were many other points worthy of note in this garden, but time does not permit me to mention all. At the lower side of the garden was a terrace, overlooking the Spree, with its tall-masted shipping, the dome of the Schloss glittering in the distance. There were several beautiful fountains. There were some splendid standard Orange-trees, and some Portugal Laurels grown on the same plan, which looked even finer; and there was a standard Weeping Ash, the straight stem of which had been grafted at least thirty feet above the ground. I think, instead of writing more, the better plan would be to recommend all English lovers of gardening who should make an excursion to Berlin, to spare one afternoon (either on a Tuesday or Friday—the public days), for a visit to the garden of Herr Borsig at Moabit. There are omnibuses every hour, if a two-mile walk is thought too much beneath a Prussian sun; I can assure them that they will not consider this the least pleasing way of spending a few holiday hours.”

DELTA.

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## THE ROYAL HORTICULTURAL SOCIETY'S OPENING FETE.

THE 5th of June having been appointed for the great inaugural fête of this society, the new gardens at South Kensington were formally opened by the President, H.R.H. the Prince Consort. The morning of the day did not give great promise of being fine, and during the forenoon a violent thunder-storm occurred, which deluged the ground with rain, but the whole passed away before the hour arrived at which the gates were to be opened for the admission of the public; and the afternoon, though lowering at times, was dry, and enabled a large and highly distinguished company to visit the new gardens and the superb collections of horticultural skill which the occasion had collected together.

From previous notices which had been issued by the society to the fellows and the public, before the day of meeting, they were informed that the gardens would be in an unfinished state, a circumstance we stated would be the case some time ago, after a personal visit; and although much—very much—has since then been done, yet there still appears to be a great amount of mason's work to get through to complete the steps, fountains, canals, &c., and, so far as we could judge, the whole will not be finally finished before the autumn, when the general effect will be more easily comprehended, and we therefore reserve our comments on the style and character of the gardens until that opportunity.

To return to the exhibition: it contained, according to the best authorities on the subject, the finest specimens of plant and fruit cultivation ever exhibited at one time. The new conservatory, or winter

garden, contained the collections of Azaleas, Stove and Greenhouse plants, Ferns, Orchids, new plants, and some other classes. The grouping, generally speaking, was good, but in one or two instances an improvement was suggested by a friend in the method of arrangement. But in reference to this, when we consider the unfinished state of everything, and even with work progressing up to the very hour of opening the gardens to the public, the surprise to every practical mind was how everything got into its place so quickly, and with less confusion even, than we have many times witnessed to accommodate a tenth part of the articles sent on that morning to Kensington. The getting up of the exhibition must have entailed a vast amount of labour and anxiety on the general superintendent, and it is therefore with no ordinary pleasure we add our testimony to that given already by our contemporaries to the great exertions made by that gentleman and his staff to satisfy every one connected with the exhibiting body, and to congratulate the society and Mr. Eyles on the unmistakable success of the day's proceedings.

The present opportunity seems to us a favourable one to notice briefly that part of the society's operations on which its future success and position, as the first horticultural society in the world, will hereafter have to be measured. With the special support and countenance of Royalty and the Aristocracy, besides a long list of Fellows elected from nearly every class in society—(a proof how universal is the feeling which inclines Man to interest himself with the art of cultivation and production, whether the objects sought to be realised belong to the useful or beautiful in nature)—the success of the Horticultural Society may now be considered unquestionable, and Kensington must therefore become a popular place of resort for the fashionable world; and as its contiguity to the Great Exhibition Building of 1862 will enable the thousands visiting the Exhibition to see the Gardens at the same time, of course a large income will be realised thereon; and it is with the funds which Kensington will produce that we look forward to the development of the science of horticulture at Chiswick, where we hope the practical part of gardening will receive that amount of support which will enable Chiswick to become equally the exponent of cultivation, as Kensington will be of pictorial gardening. On this point we mention with satisfaction the two Committees on Fruit and Flowers, which are working admirably under the management of their respective secretaries, whose names are of themselves a guarantee to horticulturists and florists that the duties of each department will be most efficiently conducted.

The fruit arranged under the eastern arcade was of itself an exhibition, not that all was perfection—far from that; many new exhibitors have evidently to wait until they reach these exhibitions before they find out what good cultivation consists of, or we should not so frequently see the inferior productions which in some respects mar the general appearance of the whole. In collections, Mr. Ingram, of the Royal Gardens, and Mr. Henderson, of Trentham, were the only competitors. The former, who took the first prize, had a well varied collection—the most noticeable of which was a dish of nicely ripened

Muscat Grapes, a Cayenne Pine, good Nectarines, and superb British Queen Strawberries; Mr. Henderson had fine black Hamburgh Grapes, Trentham ditto, excellent Peaches, Nectarines, Melons, and Cherries. The Pine class was not well represented; a large Providence from C. Bailey, Esq., a batch of Cayennes from the Royal Gardens, and an excellent Queen from Shardiloes, embrace all worth mentioning. Of Black Grapes, the Black Princes of Mr. Hill were perfection itself; but the Hamburghs were scarcely so good as those exhibited at the Crystal Palace. There were a few dishes of Muscats ripe, but generally they were not in condition. The Buckland Sweetwater Grapes exhibited by Mr. Hill showed that Grape to be a valuable acquisition; it very justly obtained the first prize in the white class. Besides the above new Grape, Mr. Henderson exhibited the Trentham Black in good style; and Mr. Standish had a most interesting collection of new Grapes, containing Ingram's Hardy Prolific, a new black Grape of great merit, both for productiveness and quality—Muscat Trouveron, which may be described as a large form of the White Frontignan, has the delicate aroma of that esteemed variety, with much larger berries—Citronelle is also a white Grape of merit. Grapes in pots were very good; the four pots of the Black Hamburgh, exhibited by Mr. Sanders, probably the best ever seen, were first-rate specimens of cultivation. Mr. Masters had also some fine pots, as had Mr. Standish of his new varieties. Peaches were generally good, Nectarines the same. Those exhibited by Mr. Rochford, the Elruge, were large and in good condition; Mr. Henderson exhibited Murray, and Mr. Peacock had the best-coloured dish of Violette Hative we have seen this year. Cherries call for no particular remark; but Mr. Smith's collection of three kinds of Strawberries, consisting of Queen, Oscar, and Empress Eugenie, were wonderfully fine—in single dishes, Sir Charles was equally good.

Melons were numerous, but very few first-rate; that to which the first prize was awarded, named Hybrid Cashmere, was a deep-fleshed variety, with a thin rind, and we were told was deliciously flavoured—it was contributed by Mr. Meredith; Mr. Frost was second. In the scarlet-fleshed section, Turner's Gem carried off all the prizes.

We noticed, in the miscellaneous class, a dish of the Banana in good condition.

Hardy ornamental plants: Of these the groups sent by Mr. Standish and the Messrs. Veitch contained many new plants, principally from Japan. The former had very recently received a case of Japan plants from Mr. Robert Fortune, which had been so carefully packed and tended during the voyage that, although many of them were fine bushy specimens, they exhibited the best of health, and formed perhaps the most interesting group of novelties ever exhibited on one occasion. The Messrs. Veitch's large connexion also enabled them to bring forward a host of new things, both in this class and that of new species of flowering plants. In Mr. Standish's collection, we observed *Sciadopitys verticillata*, *Thujopsis dolabrata variegata*, *Retinosperma obtusa*, male and female plants of *Aucuba*, a *Eurya*, *Bambusa variegata* (a pretty plant), two *Podocarpuses* (with striped foliage), a blotched-

leaved *Euonymus*, *Osmanthus aquifolius* (a nice looking Holly-like plant), a very pretty variegated Box (which will be sought after for embroidery work in fancy patterns for parterres, as indeed will all these variegated plants if hardy), variegated varieties of *Thea*, *Camellia*, *Rhapis*, *Gardenia*, and *Daphne*. This group of Japan plants shows us that the Japanese gardeners have paid quite as much attention to variegated plants as ourselves, and that they are equally as good cultivators, judging by the specimens Mr. Fortune has sent, which bore a favourable comparison with British grown plants.

The Messrs. Veitch had young plants of the grand *Libocedrus tetragona*; also a very distinct looking *Abies* from Vancouver's Island. A dwarf *Thuja* (which will be useful in ornamental parterre work), a new variegated *Euonymus*, and the handsome *Acer japonicum polymorphum*. The Messrs. Jackson exhibited a new *Buxus* from Nepal, a handsome-looking shrub; and a *Juniper* from Asia Minor, with elegant small leaves.

The beauty of the *Pelargoniums* shown on this occasion has, we think, never been surpassed, and their numbers were unprecedentedly great. Those shown by Mr. Turner who, both for Fancies and ordinary kinds, took first prizes, were in all respects admirable examples of skilful cultivation, and the exhibitions from amateurs were also good. They occupied a position by themselves under one of the colonnade wings of the conservatory, and were, as they deserved to be, objects of universal admiration.

The special prizes offered by Mr. Dilke, V.P. (whose active interest in everything which concerns the society is well known,) for fruit and flowers combined as decorative objects for the dinner table, brought forward a number of competitors, and, taken altogether, this part of the exhibition was perhaps the most interesting, as it was certainly the most novel, feature of the whole display. The groups consisted of three baskets or dishes, and the arrangement of these showed an immense disparity as regards the taste displayed. In some instances, the exhibitions were elegant and refined, to wit, those to which prizes were awarded; while others consisted of little more than a combination of subjects, beautiful in themselves, but entirely destroyed, as regards effect, through bad arrangement, which in several instances descended to vulgarity. However this will in time be mended, and next year will doubtless show an advance in good, as well as the absence of such bad taste, as that of which we now complain.

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We learn that on the morning of the 24th ult., Her Majesty the Queen planted a *Wellingtonia*, which was presented to the Society by Messrs. Veitch, in the new garden at South Kensington. It will therefore form a fit companion to that put in by H.R.H. the Prince Consort on the 5th ult. The Queen being still in mourning, the ceremony took place only in the presence of the members of Council and a few of their friends who had the privilege of being present on the occasion.

## NOTES ON THE MONTH.

THE glorious weather of the early part of June has been broken up by an unsettled atmosphere and copious rains, the effect of which on the parched crops and thirsty soil has been almost magical. Nothing that we remember has ever surpassed the wide-spread luxuriance which now clothes the face of the country; meadows and pastures, grain, pulse, and roots have all the appearance of immense vigour and healthiness, indicating full stocks for the barn and store-yard in the autumn. The hay crop in some districts will probably prove the lightest, the tropical climate of the early part of the month (when the thermometer in the shade indicated  $86^{\circ}$  for several days) having checked the growth of the Grass and brought on a premature maturity. Again (the 24th) a tropical sky has revisited us, and, with the mercury rising, bespeaks more heat and summer weather.

Early on the 5th of June we took a quiet stroll through Mr. Nesfield's *chef-d'œuvre* at the Horticultural Society's new Garden at Kensington. We noticed some considerable deviations from the published plan in the lower part, opposite the Council chamber (a noble room), and we think, considering the Gardens are surrounded by bricks and mortar, in the form of terraces, squares, arcades, &c., with the great Exhibition building in front, and the "annex" on one side, that the effect would have been more pleasing had there been less of the "mason" seen in the Gardens themselves. To the eye accustomed all day, in bright sunshine, to the glare of streets and houses *ad infinitum*, nothing so completely induces the sensation of repose and enjoyment as a verdant lawn. To our own sensorium the relief is something wonderful, and our enjoyment of the beauties of a garden is greatly increased after spending a day or two in town. For these reasons we should have preferred more lawn, trees, and shrubs, and less of the artificial prevalent in the shape of retaining walls, balustrades, terra-cotta, and, we will add, embroidery work and gravel; we think the water will be good when completed. But, as the Prince President, in his admirable address to the Council, told them he hoped to see Gardening again take its place with the sister arts—Architecture and Sculpture—we bow with submission to so high an authority, merely premising that more use might have been made of architectural trees than appears to be the case. But then the work is unfinished, and our comments must be taken more as suggestions than a critique on what, on the whole, will be a magnificent spot for London.

We could not help admiring the wonderful collections of plants brought together from the four quarters of the globe, to grace the opening day of the Royal Horticultural Society's new garden. We noticed representations of the Flora of Australia and Behring's Straits, Vancouver's Island, and Japan; majestic Ferns from New Zealand and Orchids from the tropics; "flowers of all hue," and fruit from every clime, were brought together such as no other country, and no cultivators besides, could produce; and her most gracious Majesty, who paid privately an early visit to the exhibition, must have felt a just pride at

the wonderful display her subjects had brought to do honour to the opening exhibition of the society, in which Her Majesty and the Royal Family take so earnest an interest. The florist's art, too, as distinguished from that of the general plant cultivator and introducer, was strongly represented; such Pelargoniums and Azaleas—so redundant of bloom and so systematically trained—that we should like to know who tied all those tiny stems so evenly; surely, thought we, Messrs. Turner and Fraser must employ those little French mademoiselles who manufacture the bouquets for operas for this purpose. But perhaps we are wrong. Then the Roses: how proud Mr. Lane must have felt with his collection, though they were perhaps slightly inferior to those he exhibited at Sydenham, and Mr. Wm. Paul had equal reasons for congratulations; of this latter, who has not many agreeable reminiscences, through reading his "Morning Rambles among the Rose Gardens in Hertfordshire," or "An Hour with the Hollyhock." By the bye, anent of Roses, we do not remember seeing the "King of Roses" at all that day (we allude to the Rev. S. R. Hole), though two other great clerical celebrities in the floral world were present, D. of Deal and the Rev. Jos. Dix. But we must finish, or your editor will finish for us, when he comes to make up his matter; not, however, before we ask the society—great and powerful though it now is—not to forget, in this its day of prosperity, the humble florist. We should like to see a larger corner of the exhibition, and tolerably wide margin of prize left to this meritorious class; when we should hope to see Pinks and Polyanthus, Auriculas and Anemones, Sweetwilliams and Rockets—exhibited as in the olden time, "with the modern improvements"—as well as Carnations, Picotees, Pelargoniums, and other more fashionable flowers. G. F.

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### ROYAL BOTANIC SOCIETY, REGENT'S PARK.

*June 12.*—With all the dazzle and splendour of the opening fête at South Kensington still fresh in one's mind, with the recollection of the wonderful store of plants of all sizes and kinds then exhibited, and with one's clothes still redolent of the presence of royalty, Princes and Dukes, native and exotic, I yet dare to utter the heresy that if you want to see a flower show you must go to the Regent's Park [!] Somewhat satiated as one had been by the previous exhibitions of the year, and expecting to see the same friends again, there was still such a freshness and beauty in the appearance of the grounds, and the manner of grouping the plants was so artistic, that it was impossible not to feel pleased and to acknowledge the vast superiority that the Botanic Society must always have in the position of its grounds and the greater nearness to the fashionable population of the West-end [?] I do not know what the attendance was, as I generally manage to get away before that takes place; but I believe the fineness of the day attracted large numbers. The Royal Family were present at a private view, and were followed by the ex-Royal Family of France, who were evidently greatly pleased with the great beauty and variety of the productions.

I will confine myself on this occasion to what are called florist flowers, the great bulk of other plants being the same as has been previously described. In Fuchsias the first prize was awarded to Mr. Young, gardener to G. R. Barclay, Esq., West Hill, Highgate, for exceedingly well-grown plants of Catherine Hayes, Guiding Star, Rose of Castile, Prince Imperial, Souvenir de Chiswick, and Queen of Hanover; equal 2nd to Mr. Bishop, of Regent's Park, and Sir J. R. Goldsmith; 4th, to G. F. Bennett, Esq., Tulse Hill.

In Pelargoniums Mr. Turner was, as usual, first amongst growers; his sorts were Etna, Desdemona, Candidate, Guillaume Severyns, Rose Celestial, Evelyn, Viola, Sir C. Campbell, The Belle, Ariel, Nestor, and Madame Furtado; 2nd, Messrs. Dobson; 3rd, Messrs. Fraser; 4th, Mr. Winder. Amongst amateurs, Mr. Forster, of Clewer, was first, with Fairest of the Fair, Seraskier, Ariel (a grand plant), Sanspareil, Symmetry, Carlos, Rose Celestial, Conspicuum, Sir C. Campbell, and Fair Helen; 2nd, Mr. Drake; 3rd, Mr. Doxat; 4th, Mr. Taylor; 5, Mrs. Hodgson. I noticed some very bad spelling on the cards of the latter lot, which would have, in the eyes of less lenient judges, disqualified it altogether. In Fancies, which were decidedly behind the mark, Mr. Turner was first; the sorts were, Acme, Rosabella, Clementhe, Princess Royal, Captivation, and Madame Rougiere; 2nd, Messrs. Fraser; 3rd, Mr. Winder, of Hendon; 4th, Messrs. Dobson. Amongst amateurs, Mrs. Hodgson, The Elms, Hampstead, was first; 2nd, Mrs. Drake; 3rd, Mr. Watson, Isleworth. An interesting lot of seedlings was exhibited; one, which obtained the prize as the nearest approach to scarlet with the habit of florists' Pelargoniums, was a very bright one from Mr. Turner, called Flambeau; there was also a first class certificate to Paragon, a fine spot, by Messrs. Rollisson; Lilacina (Beck's), a peculiar shade; Rosy Bloomer (Beck's), very fine and clear; Loveliness (Turner), an exquisite light ground, with spot; Senior Wrangler (Turner), another fine spot; and Emperor of Morocco (Turner), dark fancy; Hoyle's Celeste, Turner's Zingari, very dark top petals; John Leach, a good spot; and Undine, a light spot, obtained second class certificates. Some fine Verbenas were shown by Mr. Perry, of West Bromwich, and Mr. Turner, of Slough. The latter's stand contained Bellona, Mars, Riccio, Beatrice, Kathleen, Queen of Roses, Il Trovatore, Fairy, Princess Mary, Reine Blanche, Zampa, Pendrillon, Firefly, Grand Eastern, Admiral Dundas, Garibaldi, Diadem, The Flirt, Elfrida, Angelina, and Lord Clyde. Pansies were exhibited by Messrs. Downie, Laird, & Laing, and other growers; Ranunculuses by Mr. Tyso, and Roses by Messrs. Paul, Lane, &c. &c. But our space forbids us entering into particulars, and we hope that the forthcoming Rose shows will give us an opportunity of writing on them; so many and apparently such good Roses, are coming forward, that it will require no little discrimination to know what to keep and what to reject.

*Deal, June 20.*

D.

## RHODODENDRON PRÆCOX.

THIS new Rhododendron is stated to be a hybrid raised from *R. atrovirens*, crossed with *R. ciliatum*, and has every appearance of having been obtained in that way. It forms a dwarf erect openly-branched shrub, of a couple of feet in height, with slender twigs leafy at the end. The leaves are small, from one to nearly two inches long, oblong-oval acute, deep-green, rugosely-veined, and sparingly ciliated. The flowers grow in small terminal heads of two or three together, and are of a light rosy-lilac, about two inches in diameter, forming a shallow expanded self-coloured cup, with rounder overlapping obtuse and slightly undulated lobes. Mr. Davis, of Wavertree, by whom it was raised, states that it had proved perfectly hardy, having been grown for two years in the open ground without the slightest injury from frost; and that in this situation it formed a dwarf bush, with dark-green leaves about the size of those of the Myrtle, flowering about the end of March in great abundance, the blossoms as large as a moderate-sized Indian Azalea. The plants, he continued, "will be found invaluable for forcing, from the fact that they may be got in flower at any time during the winter months, merely by placing them in a greenhouse. The flowers last more than three weeks after expansion, and from the peculiar odour of its foliage, which it inherits from its mother, not a green-fly will live upon it."

## LANDSCAPE GARDENING.

IT is plain that they who would imitate nature in gardens, must do so in another way than by copying her piecemeal. They ought, indeed, to be imitators, but not painters, transcribing her spirit, and not her individual expressions—her general countenance or aspect, and not her particular features. An artist, to be a painter or a landscape artist, or an amateur in either branch, should go to nature to study principles, gathering up snatches of scenery, and storing them up in his memory or his portfolio for future use. He should note all that pleases him, and endeavour to understand how and why it influences his mind. By thus filling his brain with numberless beautiful little pictures or images, and his intellect with the foundations and sources of pleasure in his art, he will come from nature doubly primed to give practical utterance to his imaginings, and prepared to embody in a composition the fine touches, and a more artistic and spiritual element which he has collected from such a variety of sources. All this is his "duty." Nature is the great school of landscape gardening. It is in her broader teachings and general promptings that materials should be gathered for practical use. And these, be it remembered, will be solely available in idealising and exalting art, in "landscape and picturesque gardens." This he acquires by industry.

To regard a garden otherwise than as a work of art, would tend to a radical perversion of its nature. A garden is for comfort and con-

venience, luxury and use, as well as for making a beautiful picture. It is to express civilisation, and care, and design, and refinement. It is a blending of art with nature, an attempt to interfuse the two, or to produce something intermediate between the pure state of either, which shall combine the vagaries of the one with the regularity of the other. That beauty should be the ultimate aim of every operation of gardening in landscape. There may be different opinions as to what constitutes beauty, and of what ingredients it is made up; some affirming that its chief elements are those of form—others, that it consists solely in association. We may assume that it is to be found in both. Beauty in gardens is not by cultivating only a few particular species of plants, and not merely harbouring, but cherishing, a dislike to all others. A garden denuded of half or three-fourths of its proper ornaments is much in the same predicament as an individual with only a portion of his ordinary garments. It is imperfectly clothed, insufficiently finished, weak in the expression of the beautiful. And should be pretty obviously expressed in that part of every garden which is in the immediate vicinity of the house, terraces, straight lines of walks, avenues of trees or shrubs, rows of flower-beds, and geometrical figures, with all kinds of architectural ornaments. The artist's taste will be shown in his "acquirements" in concealing all its manifestations in the little arts, and ingenious contrivances, and kindly cares which embellish gardens, as they do life, without ever revealing the machinery of their action, and of which the effect is seen and felt in their results, rather than their process—in the whole rather than the detail. A beautiful, quiet-looking garden, like a well-educated individual, presents no particular feature that can attract special notice; all is smooth, easy, agreeable. And perhaps this quietness of expression is the truest index of "duties, acquirements, and abilities," refinement and taste.

The artist's "abilities" assist him in the greatest of practical difficulties which an artist in landscape has to contend with—his "acquirements" in dealing with the picturesque. Smoothness and regularity of treatment are so thoroughly what an ordinary gardener is accustomed to, that it requires no small effort to enlighten him as to the mode of achievement of anything really beautiful in the way of curved lines and undulations. But when ruggedness and the appearance of rude naturalness are sought, it is indeed hard to obtain a practical operator in either architect, surveyor, civil engineer, or draughtsman and "landscape-painter."

The practical gardener in landscape knows nothing imparts a greater air of refinement and gentility to a garden than a certain amount of richness and polish. His "acquirements" teach him the first of these may be attained by means of a tasteful selection of plants and flowers, and by the sparing use of appropriate architectural decorations. Everything straggling or ragged, all that produces confusion, and, as a rule, all angularity and harshness, are completely opposed to it.

Modern tendencies in gardening have been too much away from its character as an art, and the more it is restored to its legitimate position, the more nearly will it be brought into kindred with architecture. All architects endeavour to extend their business; for as a house and a

garden are naturally and intimately associated, and it is a law of the universe that boundaries of each domain in the natural kingdom should insensibly mingle and be lost in each other, so it is plain that an unvitiated taste would be most gratified when the province of architecture is extended so as to embrace lightly and harmoniously such parts of the garden also, in these parts, rises in character to meet the requirements of architecture, until either art is so refined and attenuated that it would be almost difficult to say what belongs exclusively to each.

Still there is that about gardening which, in the nature of things, and apart from the difference of materials with which it has to deal, constitutes it a distinctive art. And garden architecture has lineaments of its own decidedly removed from those of house architecture, and so seldom studied, that the ordinary architectural practitioner is at sea the moment he enters the region of the garden. It is less a matter of rule and measurement. Its effects are more to be judged of by the eye. It comprehends a far greater variety of combinations. It requires a man to be as much an artist (at least in feeling) as an architect, and to be familiar with natural groupings and tones—to take an entire landscape in the range of his design, and not merely isolated or detached objects. In fact, the garden architect has to make a general picture, and not simply to set a work of art, as it were, on a solitary pedestal.

The province of garden architecture is, primarily, to supply fitting appendages and accompaniments to a house, so that the latter may not appear naked, alone, and unsupported. If judiciously applied, it will be effective in helping to produce a good outline or group; to carry down the lines of the house to connect it with other buildings, such as a conservatory, arbour, &c.; to provide a proper basement for the house; to afford shelter and privacy to a flower-garden; to extend the façade or frontage of a house; to shut out back yards, offices, &c.; to enrich, vary, and enliven the garden; to supply conveniences, such as shelter, receptacles for birds, plants, sculpture, &c., with museums for works of art or specimens of natural history, and supports for climbing plants; to indicate refinement, wealth, and a love of art; and otherwise to blend the two by communicating a more artistic tone to the garden.

But in addition to expatiating upon the political and physical relations of gardening in landscape to mankind, it is not unusual for authors or editors, in order to excite, on the part of gardeners and the community in general, an increased interest in the cause of gardening in landscape, as well as to commend their own labours to public favour, to indulge in elaborate encomiums on the moral dignity of rural pursuits, and their adaptedness to ennoble the lives and characters of those who engage in them. Such encomiums are just, and in their proper place useful and gratifying. No reflective mind, however, whether that of a gardener or a tradesman, needs to be informed of the tendency of constant communication with the works and phenomena of nature to purify the thoughts, and thus exert a largely restraining influence upon the dark passions of the human soul. No man works more in the immediate presence of his Creator than the gardener. He sees Him not only “in the cool of the day,” but in every waking moment—in the purity and fragrance of the circumambient atmosphere—in the untamed grandeur

of nature's mountains, rocks, fields, forests, and gushing waters—in the germination of every seed—in the growth of every leaf and of every blade of grass; by these, and numberless objects besides, is he impressed, not only with the power, wisdom, and goodness of Him who “causeth the grass to grow for the cattle, and herb for the service of man,” but with the gracious course of His providence, which rewards every discovery of His laws, and every act of obedience to them. It is uttering no harsh judgment, then, when we say, briefly, that the man who can live and labour, surrounded by so many and so palpable attestations of a beneficent and controlling Power above, without realising the nearness of his relations to that Power, or without hymning in his heart devout ascriptions to praise and gratitude, is a sad example of the derangement which sometimes characterises man's moral machinery. And if, with the Book of Nature thus unfolded so luminously before him, his feelings fail to be voluntarily awakened to a just sense of the honourableness of his employment, and of his “duty” to improve every means and facility that will enable him to become skilful and thrifty in his calling, no words of rhetoric, however eloquent, will be able to arouse them.

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#### DOUBLE-FLOWERED TABERNÆMONTANA CORONARIA.

ALTHOUGH this fine stove shrub has long been common in well-managed collections, it is not so generally cultivated as it deserves to be. Its large white flowers are hardly inferior to those of the Gardenia in fragrance, and last longer in beauty, and are produced very thickly under proper management.

Being a native of the East Indies, it requires a warm moist temperature while growing, with a liberal supply of water at the root, but when the wood is formed, from which flowers are expected, it must be subjected to a period of cool dry treatment, to thoroughly ripen the wood, which is essential if a good display of blossom is wished for. By the exercise of a little forethought and attention, to get the wood properly ripened, and allow the plant a period of rest, it may be had in bloom at any time from March to November, as properly ripened wood will never fail to produce flowers.

Young plants should be placed in a moist growing temperature of about 65° by night and 75° by day, as early in spring as circumstances will admit; and if they can be afforded a bottom heat of about 85°, this will greatly assist in promoting active growth. At this season the plants should be kept near the glass, and afforded all the light possible, admitting air whenever the state of the weather will permit, in order to prevent long-jointed weakly growth. If dwarf short-jointed plants have been selected, the points of the shoots may be pinched out, tying the latter down to induce the lower buds to start, but if the plants are straggling they had better be sufficiently cut back to secure a close habit. Shifting must be attended to as soon as the pots are mode-

rately well filled with healthy roots, using pots one or two sizes larger, according to the vigour of the plants. If in bottom heat, great caution will be necessary, for a fortnight or so after potting, to apply water properly; for when the pots are plunged, it is not so easy to judge of the state of the soil as when they are exposed; and so little is required in this case, that beginners are very apt to water too frequently, and many a promising plant is thus ruined. Care should always be exercised to ascertain the state of the soil before giving water, and there should be no dribbling, or mere surface watering, but enough should be given to thoroughly moisten the ball, giving no more until it is absolutely wanted. As the season advances, it will probably be necessary to afford a slight protection against bright sunshine, but only a thin shade should be used, and this as sparingly as can be safely done. As soon as the pots are found to be well filled with roots, give a second shift, unless that should not be the case until towards the end of the growing season, when it will be better to avoid shifting till the following spring. Maintain a thoroughly moist atmosphere, and syringe the plants overhead on the mornings and evenings of bright days in summer; and also keep the shoots regularly tied out and stopped, as may be necessary to secure a compact bushy habit; but in the case of plants intended to bloom the following spring, stopping must not be practised later in the season than will allow of getting the young wood properly matured before winter. If the plants can be placed in a pit or house where the temperature may range about  $55^{\circ}$ , this will form a suitable situation for them in winter, and if proper care has been exercised to get the wood well ripened in autumn, the night temperature may be allowed to fall as low as  $45^{\circ}$  in hard weather. Give very little water to the soil at this period, only just sufficient to preserve the roots in a healthy state, but draw the syringe over the foliage occasionally on the morning of a bright day, so as to clear it of dust, &c. If it is intended to grow large specimens before allowing the plants to flower, place them in a moist temperature of about  $65^{\circ}$ , by fire-heat, as early in spring as circumstances will permit, and afford them a brisk bottom heat, to induce a vigorous root action. See to the state of the roots, and shift before these suffer for want of pot room; also keep the shoots tied out and stopped as may be necessary to secure bushy growth, and otherwise treat the plants as recommended for last season. While in bloom the specimens may be placed in a cool house, but they must be carefully guarded from damp in the atmosphere, and after flowering they should be cut back as may be required, and re-potted; but with an occasional watering of manure water during the growing season, they may be kept in good health for several seasons without repotting. For soil use good fibry peat and loam, in the proportion of three parts of the former to one of the latter, adding a sufficient quantity of silver sand to ensure a free percolation of water through the ball after the decay of the fibre. Cuttings of moderately young wood soon rot if planted in sandy soil, covered with a bell glass, and afforded a sharp bottom heat of  $80^{\circ}$  or  $90^{\circ}$ .

## PLANTS FOR EXHIBITION.

THERE appears room for a new class of cultivated plants in our exhibitions—that of trained climbing plants, which, if artistically carried out under good cultivation would prove an interesting feature, and one which in some degree would break into the mixed stove and greenhouse class, by showing the plants under a new form, interesting in itself, and under which the plants might assume a great variety of outline, through the agency of the different shaped trellises employed.

When it is considered that a number of showy plants are necessarily excluded from the tables of our exhibitions, solely through the difficulty of training them so as to harmonise with other specimens, the managers of exhibitions should make them into a class by themselves, stipulating that the gracefulness in their outline, and natural style of training, should have weight with the judges, just as much as the mere value of the plant or its merit as regards cultivation. We might then expect to see the different species of *Bignonia*, *Brachysema*, *Hardenbergia*, *Lapageria*, *Passiflora*, &c., among greenhouse plants; and *Allamandas*, *Ipomœas*, *Hoya*, *Jasminum*, *Echites*, *Dipladenia*, and *Combretum* exhibited in something like their natural form, instead of being tied into balloons and globes, as now generally seen. I am of opinion that if a class was formed, with prizes for the best 12 or 6 climbing plants, something both tasteful and novel would result in a very short time.

IRIS.

## SCOTTISH PANSY SOCIETY.

THE Seventeenth Annual Competition of this flourishing Society was held in the Experimental Gardens, Edinburgh, on Saturday, the 22nd of June. The Exhibition, as a whole, was a very successful one, a great improvement being observable in the quality of the blooms produced.

The following is a list of the successful competitors, with the names of the first and second prizes in each class, which will give a very correct idea of the best blooms shown on this occasion.

Nurserymen's prize for 24 dissimilar blooms: 1st, Messrs. Downie, Laird, and Laing, West Coates, Edinburgh, with Mrs. Laird, *Eclat*, *Great Northern*, Mr. T. Graham, *Duchess of Wellington*, Colonel Wyndham, *Francis Low*, *Mary Lamb*, *Nepaulese Chief*, *Cherub*, Miss Williamson, *Miss Carnegie*, *Ladyburn Beauty*, *Perfection*, *Lady Lucy Dundas*, Lord Clyde, Rev. H. Dombrain, Lord Cardigan, *Royal Standard*, Charles Watson, Mrs. Downie, *Countess of Rosslyn*, C. M. R. Ramsay, *Fair Maid*; 2d, Robertson, Paul, & Co., Paisley, with A. M'Keith, *Cupid*, *Bruce*, *Maid of Bath*, Rev. H. Dombrain, *Mary Lamb*, Lord Clyde, *Prince Imperial*, *Nymph*, *Jessie*, James Peddie, Earl of Derby, *Miss Carnegie*, *Reine Blanche*, Alex. M'Nab, *Saturn*, *Seraph*, *Cherub*, L. Desdemona, *Perfection*, *Othello*, *Annie Wood*, *Lavinia*, Wallace; 3d, Mrs. Carstairs, Warriston Lodge, Edinburgh; 4th, Messrs. Dickson & Co., Edinburgh.

Practical Gardeners and Amateurs, for the best 18 dissimilar blooms: 1st, Mr. J. Fraser, gardener, Belmont, Edinburgh, with Lady Susan, Mr. Hope, Nepaulese Chief, Colonel Wyndham, Miss Hill, Ladyburn Beauty, Jessie, Mary Lamb, Perfection, Mr. A. M'Nab, Lord Clyde, C. W. R. Ramsay, Miss Carnegie, Mrs. Laird, Francis Low, Alexander, Isa Craig; 2d, Mr. H. Gibb, gardener, Inglis Green, Slateford, with Mr. A. M'Nab, Miss Talbot, Lord Derby, Nepaulese Chief, Mr. M'Caule, Duchess of Wellington, Lavinia, C. W. R. Ramsay, Jeannie, Duchess of Hamilton, Francis Low, Ladyburn Beauty, Conqueror, Dundee, King of Purples, Mrs. Downie, Mr. J. Graham, Mr. J. White; 3d, Mr. James Dobbie, Renfrew; 4th, Mr. James Henderson, gardener, Millbank, Gorebridge.

Practical Gardeners and Amateurs, for best 12 dissimilar blooms: 1st, Mr. J. Fraser, gardener, Belmont, with Mrs. Hope, Mary Lamb, Nepaulese Chief, Blinkbonny, Colonel Wyndham, Alexander M'Nab, Lord John Russell, Lady Susan, Miss Hill, Mrs. Laird, Alexander, C. W. R. Ramsay; 2d, George Wilson, Esq., Dunse, with Rev. H. Dombain, Countess of Rosslyn, Perfection, Dr. Stewart, Mr. J. Graham, Rev. Joshua Dix, Una, Nymph, General Young, Jessie, Mr. Hope, Royal Standard; 3d, Mr. James Henderson, Millbank; 4th, Mr. John Hampton, Newport, Fife.

Practical Gardeners and Amateurs, for best 6 dissimilar blooms: 1st, Dr. Stewart, Chirnside, with Alexander M'Nab, Countess of Rosslyn, Mr. T. Graham, Cream of the Valley, Miss Carnegie, C. W. R. Ramsay; 2d, Mr. John Hampton, Newport, with Jessie, Countess of Rosslyn, Ladyburn Beauty, Perfection, Mrs. Laird, Gen. Young; 3d, Mr. Jas. Dobbie, Renfrew; 4th, Mr. James Fraser, Belmont.

Amateurs exclusively who cultivate their own plants, for best 6 distinct varieties: 1st, Charles Watson, Esq., Dunse, with Saturn, Mr. T. Graham, Mrs. Downie, Alex. M'Nab, Una, Rev. H. Dombain; 2d, Mr. James Dobbie, Renfrew, with Lizzie, Alexander M'Nab, Countess of Rosslyn, Perfection, Mr. Hope, Nymph; 3d, George Wilson, Esq., Dunse; 4th, Dr. Stewart, Chirnside, Berwick.

Classes open to all; best 12 dissimilar blooms—4 selfs, 4 light grounds, and 4 yellow grounds: 1st, Messrs. Downie, Laird, and Laing, with Countess of Rosslyn, Eclat, Blinkbonny, Imperial Prince, Lord Clyde, Lady Lucy Dundas, Nepaulese Chief, Mary Lamb, C. W. R. Ramsay, Rev. Joshua Dix, Lady Susan, and Perfection; 2d, Messrs. Dickson & Co., with Volunteer, Mrs. Hope, Lord Clyde, Milton, Mr. J. White, Mr. T. Graham, Prince of Prussia, No. 58 Seedling of 1861, Attraction, Caroline, Countess of Rosslyn, and Mrs. Hopkins; 3d, Mr. John Fraser, Belmont; 4th, Mr. William Wilson, Old Cathcart, Paisley.

Open to all, and selected from all the blooms in the Exhibition—best yellow ground single bloom: 1st, Messrs. Downie, Laird, & Laing, with Perfection; best self, Mr. H. Gibbs, with Nepaulese Chief; best light ground, Messrs. Downie, Laird, & Laing, with Lady Lucy Dundas.

Premier bloom in the Exhibition, Messrs. Downie, Laird and Laing, with Lady Lucy Dundas.

Single blooms, Amateurs exclusively: Best dark self, Mr. James

Dobbie, Renfrew, with Lizzy. Best yellow self, Mr. Wm. Wilson, Old Cathcart, with Cherub. Best light ground, Geo. Wilson Esq., Dunse, with Mrs. Laird. Best yellow ground, Charles Watson, Esq., Dunse, with Mrs. Downie.

Seedlings were numerous and many of them very promising. The only flower selected for an award was a dark self named Charles Watson, from Messrs. Downie, Laird, & Laing; this was awarded a Certificate of Merit. Colour, very dark bronzy purple; form good, smooth, and of fine quality.

A stand of curious fancy Pansies was also exhibited by the Messrs. Downie, Laird, & Laing, which attracted great attention. The flowers, instead of their ordinary regular markings, were spotted, striped, and blotched in a most extraordinary manner. These are rapidly becoming great favourites.

The next annual Exhibition will be held in Glasgow, June, 1862, when, in addition to other prizes, four handsome silver medals will be competed for.

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#### CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—Azaleas which have dropped their blooms should not be allowed to stand about wherever they will be the least in the way, but should, immediately their beauty is over, be cleared of all decaying blooms and seed pods, and placed where they can be encouraged to make free growth by keeping the house rather close and moist, and shading the plants from bright sunshine. There has been little difficulty this season in keeping plants for late blooming; and in many instances the plants are so backward, that unless they are well attended to as soon as they are out of flower, there will be little chance of getting them to set for bloom without the aid of artificial heat late in autumn; and the necessity of having to resort to this should be avoided as far as can be done by making the most of the present favourable weather. Before placing the plants where they are to make their growth, repot such as require more pot-room; and in all cases well thin out all back shoots which can be spared, and tie the plants so as to nicely distribute the wood and secure regularly filled-up and handsomely-formed specimens. Examine plants in free growth frequently and carefully for black thrips, and apply tobacco-smoke or some other effectual remedy directly this pest is perceived. Stop gross shoots on young plants; and such as have made a free growth, and are inclining to set for bloom, may be stopped regularly over and encouraged to make another growth. Plants which have well set their flower-buds should be removed to a cool house or shady situation out of doors, but not exposed to bright sunshine. Camellias making their growth should be carefully shaded from bright sunshine, syringing them freely over-head at least every evening, and affording them a moist atmosphere. And any plants which require more pot-room should be shifted at once, using about equal parts of good fibrous loam

and peat, with a free admixture of silver-sand and rough bones; those that have fairly formed their bloom-buds should be placed in a shady sheltered situation out of doors. *Conservatory*.—Careful and substantial shading, with abundant ventilation and a thoroughly moist atmosphere, will be necessary here during bright weather, in order to prolong the beauty of the few remaining Azaleas and other hard-wooded plants. And specimens planted in the beds or borders will require to be liberally watered at the root; and such as are making their growth will be benefited by being syringed over-head every evening while the weather is bright and warm; and every care should be used to keep everything clear of red spider and other injurious insects. In removing stove plants to this house be careful to place them in the closest part of the house; for, however warm the weather may be, plants from the stove will hardly feel at home in this house, if they are exposed to through draughts; while, with a little management and care, most stove plants, whether those in bloom or those grown for the beauty of their foliage, will do perfectly well here for some months, especially if we have a warm season. But they must be gradually inured to the change, by keeping the house rather close and moist; and, in the event of cold damp cloudy weather occurring soon after any valuable plants have been removed to here from the stove, it might be advisable to use a little fire-heat; but this will hardly be necessary, unless we experience another such a season as last. Use every possible foresight and endeavour to make the most of the means at command for providing a supply of plants for blooming here throughout the summer and autumn. *Cold Frames*.—The more tender greenhouse plants which may be making their growth here should be very carefully attended to, so as to induce a free vigorous growth, in time to allow of getting the young wood well ripened up before winter. Boronias, Gompholobiums, and similar things, should be kept rather close, shutting them up early in the afternoon, after lightly syringing the plants and well moistening the walls and bottom of the pit, allowing the temperature to stand at from  $75^{\circ}$  to  $80^{\circ}$  for an hour or two after shutting up; and similar treatment may be adopted with most New Holland plants; but if any are observed to be making weak or thin growth, they should have air left on for the night; and the syringe must be sparingly used upon Apelexis and some other things. See that all are properly supplied with water at the root, and do not allow young vigorous plants to suffer through the want of pot-room. Also keep a sharp look-out for greenfly and red spider, and use means to clear any plant infested with either of these pests immediately they are observed. Leschenaultias are particularly subject to the attacks of the former, Chorozeas to the latter, and Pimelea Hendersonii to both. Keep the plants near the glass, and do not stand them too close together, and screen them from bright sunshine by a thin shade; attend to stopping and training, as may be necessary to secure close compact specimens. *Flower Garden*.—There will be little required here at present beyond attention to the ordinary routine work necessary to secure neatness. Keep Verbenas, &c., nicely pegged until the ground is covered; and where the practice of edging the beds

or planting them with several distinct colours is adopted, give attention to keeping the plants regulated, so that each band of colour may occupy the space intended, and the whole will then be seen to advantage if the plan of planting was correct; but where a line intended to form a distinct edging to a bed is allowed to extend into the beds, and the plants forming the bed to mix their flowers among those of the edging, the only feeling which can be experienced on looking at such a bed will be that it is a disagreeable muddle. Keep Hollyhocks and Dahlias secured to their stakes as they advance in growth, and if the weather should prove dry and hot do not allow them to suffer through dryness at the root; and other things must also be attended to with water as may be necessary to keep them in vigorous health until they have fairly covered the ground. *Greenhouse*.—Many of the inmates of this house will now be placed in their summer quarters in a shady place out of doors, and their room in the house may be occupied with Fuchsias and other things for the decoration of the conservatory in autumn; or if the house can be cleared of all plants which would be injured by rather close moist treatment, it may be used for Azaleas and Camellias making their growth, and New Holland plants, which require a little assistance to induce them to start freely into growth after having been cut back. Heaths will now do better in a shady situation in the open air than in the house, and will be much less liable to suffer from mildew; but they must be protected from heavy rains, either by means of a waterproof cloth, spare lights, or tilting the plants on their sides. Epacris are exceedingly useful for winter decoration, and the early flowering varieties should be encouraged to make a free growth as soon as possible; but they must not be kept so close as to induce weak growth. Any plants of these which require more pot-room should be shifted at once, so as to allow of their getting well established in their pots before winter; and all should be nicely trained, endeavouring to keep the specimens well furnished at the bottom, for some of the most useful varieties are not naturally of a compact bushy habit. *Store*.—Attend to last month's directions, and do not allow any of the specimens here to be injured by insects; and during bright warm weather sprinkle the paths, floors, &c., frequently, so as to maintain a moist atmosphere and keep the plants properly supplied with water at the root. Use sufficient shading to prevent tender things being scorched, but such plants as Allamandas and many others will not set freely for bloom if they are kept too closely shaded. Get Dipladenias and other twiners properly trained as soon as they are fairly set for bloom, taking care to nicely distribute their flowers; also tie out Achimenes, Gloxinias, &c. Attend well to young stock of hard-wood and other plants, and do not allow those in full growth to suffer from the want of pot room.

*Hardy Fruit*.—In our last month's calendar we advised the thinning and stopping the shoots of all trained fruit trees at an early stage of their growth—therefore, if this remains undone it should be proceeded with early in the month; and at the same time make the final thinning of Peaches and Apricots, leaving the heaviest crop on the vigorous parts

of the trees. Young Apricot and Peach trees that are making a vigorous growth should be stopped, to induce them to make shoots of a fruitful character. Keep the shoots free from fly and closely nailed to the wall, so that the wood may be well ripened. Thin and stop the shoots of Figs as soon as they have made a growth of about six inches. If the weather sets in hot and dry, Strawberries (where the fruit is ripening) will require frequent waterings. Tie up the heavy fruit as before advised, and place nets over the beds, to protect the whole from birds; it will also be very beneficial in partially shading the plants. Layer runners for new plantations, also for forcing; cut away all spare runners, and keep the beds free from weeds. Orchard houses will now require plenty of air, and a little through the night in hot weather would be beneficial. Assist the trees occasionally with liquid manure during the time the fruit is swelling, and at no time should they suffer from drought. Syringe in the evening after a bright day. *Forcing Ground.*—Attend to last month's directions. Plant out the last crop of Melons early in the month, and sow Cucumbers for the late crop. If the weather sets in shady and cold, the linings of Cucumber and Melon beds should be attended to. *Peaches and Nectarines.*—Go over the trees as soon as the crop is gathered, and cut away all useless shoots, such as are not required for fruiting next season or for filling up vacant places; when this is done, give the trees a good syringing with the garden engine, and if the borders are dry, and the trees are weakly, a good soaking of manure water would greatly assist them for another season. Give air night and day; and if the weather is warm, the sashes may be removed altogether about the end of the month, which will assist in ripening the wood. Expose the fruit in the succession house as much as possible to air and light as soon as it begins to ripen, for the purpose of giving better colour and flavour. Keep the atmosphere dry and a little warmer through the day, with air at all times in favourable weather. Water the borders if dry. *Pines.*—Shift succession plants as soon as the pots are filled with roots; do not reduce the ball, merely remove the drainage, and, in potting, use free turfy loam, with a mixture of rotten manure—do not press the soil too firmly in the pots. All plants intended for fruiting early next season should now be shifted into their fruiting pots, otherwise plant them out on ridges, which is an excellent plan where there is the convenience to do so. Water freely, and keep a moist heat in the fruiting pit, and air according to the state of the weather; avoid shading, and do not admit front and back air at the same time, to cause a draught through the pit. When the succession plants are growing in tan beds, care should be taken that the heat is not too violent, otherwise it may greatly injure the young roots, from the effect of which they would not soon recover. *Vinery.*—In the late houses, where the fruit is swelling, a moist growing heat should be maintained. Use fire-heat in chilly weather to these as well as late Muscats. Air freely in the early part of the day, but syringe and close as soon as the sun is off the house in the afternoon. Tie in the shoots and thin the berries as they may require it. Ripe Grapes should be kept cool by admitting plenty of air; and as soon as the crop is cleared syringe the Vines and allow the lateral

shoots to grow, so that the foliage will remain in a healthy state for some time to come, during which time the Vines will be gaining strength for the following season. *Kitchen Garden.*—Continue to plant out succession crops of Celery, and give them good soakings of water in dry weather. Earth up the early crop. Plant out Lettuce and Endive, and sow again for succession. As soon as any ground is clear of early Peas, Potatoes, &c., the winter crops of Greens, Broccoli, Brussels Sprouts, and Savoy should be got in without delay; also plant out Cauliflowers, and make a sowing of Walcheren and Cape Broccoli for the late autumn crop; this must be done early in the month. Earth up and stick Peas and make the last sowing about the middle of the month; choose a moist piece of ground, with full exposure to air and light. Sow Black Negro or Mohawk Beans.

#### PLANTS FOR EXHIBITION.

*Cinerarias.*—If last month's instructions were attended to, they will now be throwing up suckers, which, when about an inch long, should be taken off and prepared by removing the bottom leaves, so as to prevent the base of the cuttings suffering from damp and mildew. Place these round the edges of pots, or, if more convenient, in pans well drained in an admixture of loam and silver sand; a cold frame or pit in a northern situation is the most desirable place. Pot off as soon as rooted, sprinkle frequently, and shade daily in bright weather; keep them moving by shifting frequently. *Pelargoniums.*—These will still be in fine bloom; but as they go out of flower, dry them well before cutting down. Also well fumigate, and thoroughly clean them of green-fly before putting the cuttings in. Clear away all old petals from such as are seeding, to keep off damp; any refuse will cause the stalks to damp, and good seeds may be lost. Some cuttings should be put in, to ensure some early bloom next spring.

#### WORK FOR SMALL GARDENS IN JULY.

*Auriculas.*—Keep clear both of weeds and green-fly, and be sure that they are shaded from sun and heavy rains; greenfly multiplies very fast, and should be brushed off with a camel's-hair pencil. Have the compost ready prepared for potting by the end of the month; I shall try mine a little richer this year, one-half rotted dung, the other half loam and leaf-mould. *Carnations and Picotees.*—These will now be blooming, and will require carding, tying, &c.; the bloom this year will I fear be a defective one, as the layers were so very late in rooting last season. *Pansies.*—Make cuttings as they can be taken off; the old plants in pots to be either plunged or planted out in a cool border, to encourage growth. *Greenhouse.*—Pelargoniums will be soon past their prime; let water be withheld and the plants well hardened off before cutting down; do not spare the knife. *Dahlias* will require tying out, and cutting according to the character of the sort, some needing it more than others. *General Work.*—Weeding and hoeing and keeping the ground clean will give a good deal of work. Verbenas must be kept pegged down, Asters staked and tied, Phloxes the same; Pinks must be piped, Carnations layered, and everything kept in order.

*D., Deal.*





Petunia.  
*Madam Ferguson.*  
Plate 179.

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## PETUNIA MADAM FERGUSON.

(PLATE 179).

ALTERATIONS both in the form and colour of Petunias have of late been numerous and striking; but among single kinds we have seen none so constant and beautiful as the variety which forms the subject of our plate this month, and of which a charming specimen, loaded with upwards of a hundred flowers, in which there did not appear the slightest tendency to sport, was shown at the last Royal Botanic Society's exhibition in Regent's Park. This favourite kind, for so it was considered by all who saw it at the "Park," was raised by Mr. Ferguson, of Stowe, in Buckinghamshire, in the spring of 1860; but being the smallest among thousands of seedlings, it did not flower till October in that year, when its first blooms were submitted to the inspection of Mr. Beaton, who pronounced it to be "a most charming flower," and added, "You are welcome to make me godfather to it." Being very weakly, it survived the severity of last winter with difficulty. In May, however, it was sufficiently forward to enable examples of it to be shown, and it was again exhibited at the opening fete of the Royal Horticultural Society at South Kensington. On all occasions the constancy of its characters has been so remarkable as to induce people to think, and even say, that all bad flowers had been picked off. Such was, however, not the case, and to settle the matter, Mr. Ferguson determined to exhibit to the Royal Botanic Society the fine specimen above alluded to. The flowers are of a rich glossy silky white, regularly and distinctly marked with five bands or stripes of beautiful bright purplish crimson.

This variety has a hard wiry habit, and a strong disposition to bloom in a small state; under ordinary treatment it is, therefore, somewhat difficult to propagate. Out of doors it makes a good bed, and under glass, both in the shape of bushes in pots or trained up pillars, it is both pleasing and effective, and in the evening it is reported to emit an agreeable perfume.

It may not be out of place to mention that we picked a flower exactly like those figured, off a Petunia at Slough the other day; but that was the exception not the rule, for the rest of the blooms on the plant exhibited different colours and varieties of marking. Madam Ferguson, therefore, at present remains distinct and unique of its kind.

## ORCHARD HOUSES—CULTURE.

WE shall have to dispense with walls for Peaches and Nectarines at any rate, and probably for Apricots, and by-and-bye our south walls will be occupied by Pears, as they are now at Heckfield and other places—a wise economy, and one perfectly justifiable on the grounds of the precarious nature of the Peach crop.

When glass was a costly object, indulging in glass erections was considered much in the same light as keeping hounds or a yacht—*i.e.*, entailing a large annual expense, and as such confined to the wealthy, who only might enjoy the luxuries they produced. The times have changed much within even the last quarter of a century, and since the duty has been taken off glass, and free trade in it established, it has opened up a wide field of enjoyment for professional men and the middle classes of society, who can now have their own glass erections—their greenhouse, pit, and orchard-house—appended to their establishment, coming within their means for keeping up, and entailing no great expense in the first cost. We shall look through these several items of country-life enjoyment, to show what may be done with them, what they will cost, and what is the best plan of construction, in the hope that some of our readers may profit by our remarks, or at any rate may compare them with the opinion of others who instruct in the same line, and draw therefrom their own conclusions.

If we have any readers anxious to commence at once with growing the Peach (by which please to understand the Nectarine and Apricot, as regards culture, will be included), say next season, of course plants with fruit-buds on them will be required, and we will suppose these will have to be purchased in the autumn in the ordinary way, and potted for a twelvemonth before they are in a state to bear fruit, unless you go to the expense of buying ready prepared trees, which are costly, and which, to furnish a house, would cause an outlay equal to the building itself. We say, therefore, do this, and save your cash. Go to a nursery and look out your stock—good strong maidens with plenty of lateral shoots, if down to the stock, so much the better; buy your trees as they stand, they will rarely exceed 1s. each, and when you have marked them as your own, cut the leading branch down to (say) from 3 ft. to 3 ft. 6 in., according to their strength. There will then remain, probably, from five to eight or nine laterals, springing from the main shoot headed down, and these should all be shortened back one-third of their length. These trees will look something rather stumpy compared with those unpruned; but never mind, this pruning back will induce the formation of blossom-buds on the lateral shoots, and we shall be enabled to show you that many of these trees, if the present season proves a favourable one, will produce you fruit next year. If the trees are growing in what is called a quarter, thick together, pick out the outside ones, that the sun and air may more readily act upon them, to further your wishes in respect to fruitful buds. There are also to be met with in nurseries, cut-back trees of the Peach, which have not been well formed for training, and are allowed to grow for buds; these have generally four or five strong shoots, and as they are a year older than the

former a few would be just the thing for you. If you can put your hand on such secure them, though at double the price of the former, and shorten back each shoot one-third, and also any laterals which may have grown; these will make strong plants, certain to produce a larger crop than the year-old trees. The plants must remain until October, when, as soon as the leaf shows signs of getting ripe and falling off, they will have to be taken up, brought home, and potted, on which we shall write hereafter. Bear in mind, the sooner in August you cut back the plants, the greater chances you have of obtaining fruit-buds; so, if you mean to commence, set about the matter at once—procrastination means failure in this instance.

Having secured your trees, set about procuring as much sound loam as will serve to pot your stock; good heavy top-spit from a common or roadside, dug at once and stacked up in an open place, will become in good condition by October, when all that will be required will be to mix a very little rotten manure with it, or a little road earth, if the soil prove too heavy. You will also require a certain number of 10 or 12 inch pots.

R. T. O.

*(To be continued.)*

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## THE ROSE SHOW AT SOUTH KENSINGTON.

SIX weeks ago the hand which writes this article was dangling idly over the side of a boat in the pale green waters of "clear, placid Leman." The boat was returning from Chillon to Vevay, and the proprietor of the hand was ruminating about Byron and about Bonnivard, that poor "Prisoner of Chillon," of whom Byron sang, trying to imagine what his sensations must have been, when, after six years in his double dungeon of wall and wave, he was delivered by the bravery of the men of Berne, and brought out of his living sepulchre into the glorious sunlight of heaven. As his sight must have been wholly impotent to sustain "the bickerings of the noontide blaze," so must his spirit have shrunk and trembled in the great amazement of his sudden gladness, and in the strange perplexity of his new-born hopes. At first, he must have been quite unable to realise his freedom, or to believe in himself.

A month went by, and then my own feelings were somewhat akin to Bonnivard's. I, too, passed from a scene of dreariness and desolation into an arena of loveliness and life, for I went from the burial-ground of my dead Rose-trees to the brilliant assembly of living beauties in the conservatory of the Royal Horticultural Society at Kensington. Bonnivard himself, when that prisoner of Chillon became a free man with the chill off, could not have been more bewildered by his bliss; and as for blinking, there has been nothing like it, I am sure, since the days when we boys were wont to inflict upon a touchy old spinster, knitting at the window opposite our school, the dazzling torture of the looking-glass. My Rosarium was strewed like a battle-field with dead Generals—Castellan and Jacqueminot, Simpson and Pelissier among them; Field Marshal the Duke of Cambridge made no sign; great Princes

and Emperors were stiff and stark; the very Giant of Battles lay lifeless by the dead Lion of Combats amid broken Standards, which never more should unfurl their bright colours to the wind; and lo! here they all were, renascent, in their best health and in their best uniforms. I stood astonished, like the hero of that thrilling story, "The Woman in White," when, at the grave of Lady Glyde, he saw, standing close to him, her ladyship's living self.

Overwhelmed for a time by the mere vastness of the great enjoyment before me, like some famished mouse unexpectedly finding himself in the middle of a cheesemonger's shop, I gazed, with my eyes and mouth as open as a countryman's at a coronation, upon that charming company, until at length their individual identity revealed itself to my glad perception, and one after another the dear friends, for whom I had mourned as lost, smiled a pleasant greeting upon me. Although many of them were evidently in indifferent health, and some of them were as altered in their appearance as ladies and gentlemen who land at Folkstone, after two hours' misery among the "white bears," yet never did I feel so earnestly happy in welcoming each familiar face; never did I know so thoroughly how absence, according to the adage, educes a new fondness from the heart. Wisely has it been said by a Warwickshire dramatist—

"If all the year were playing holidays,  
To work would be as easy as to play;  
But when they seldom come, they wished for come;"

and in all our enjoyments a little previous deprivation or abstinence is sure to cause a keener zest. Do you not remember that grand supper at the end of "the half," for which we saved our sixpences, and of which for days before its actual mastication we spoke yearningly with bated breath? Do you not remember, how, when Mr. Robinson, the butler (he was of "robust habit," as we gardeners say, and was irreverently known to us boys by the appellation of "Old Swill-tub"), had taken away our candle, another light, concealed never mind how, was produced from under the cubicle of Jones, minimus—how a rabbit-pie, surrounded with cheese-cakes, was brought out of the portmanteau of "cock-eye Dobson," jam and lobsters from the hat-box of "sneaky Smith," with various viands, and fluids (I grieve to say), from other occult localities and deep mysterious bins? And, more pertinently to my present theme, do you not recall, how, to ensure a full fruition of our banquet, we put our appetites into a due restraint and training, eating sparingly throughout the day, and with an affected magnanimity bestowing our cheese at supper upon the tiny non-subscribers to our approaching feast? Well, thus jejune and fasting, went I to the great feast of Roses; glared upon them like ravenous Richard, when—

"Round he cast his greedy eyes  
Upon the tartlets and the pies;"

and finally settled down to my meal, like a doctor's horse to the Squire's old beans. But what have I done, unhappy miscreant that I am? I have dared to draw a vile analogy between the Queen of Flowers and a cheesecake: I have assimilated Her Majesty to a dead lobster;—I banish myself from metaphor for life!

The Rose Show, then, which was held in the new gardens of the Royal Horticultural Society on Wednesday, July 10, and with which was incorporated the Grand National Rose Show, was, in simpler phrase, a great refreshment to us poor frozen-out amateurs, whose thermometers, on the morning of Christmas last, showed 42° of frost, and whose Rose trees, nine-tenths of them, were burnt, or in the budding ground. Pleasant it was to forget awhile the vacancies and gaps at home; the waste places to which one had wandered in happy forgetfulness to see some fairest of the fair, and found her place was empty; and here to rejoice once more in the presence and the perfume of *all the Roses!* Yes, here in their glowing beauty were the flowers of which I had so often dreamed, amid the pale sweet Pea blossoms, the flaunting Poppies, the Nasturtiums, the Balsams, the Larkspurs, and "bedding-out stuff," which reign for the present in my rosarium, like a mob in a plundered palace.\* It was all I could do not to take off my hat to the lovely Countess de Chabillant; all I could do not to call to Madame Vidot—

"Madame, I bow, as is my duty,  
Down to the shadow of your shoe tie;"

and I was only prevented by the Bishop of Nimes ("for his *eye* was upon me") from kissing Madame Knorr upon the spot.

I am not going through the list of established beauties, as long as Don Giovanni's, who turned into glorious summer the winter of my discontent, for the *Florist* must have a supplement if I did, and most of its readers are already well acquainted with the charming personages referred to; but I pass on now to gaze upon newer faces, and to speak of individuals recently appointed to be lords and ladies in waiting upon Queen Rosa, and less known to the public at large.

To my fancy, the three best new Roses in the Show were *Senateur Vaisse*, *Louis the Fourteenth*, and *Reynolds Hole*. With regard to *Senateur Vaisse*, I have a strong conviction that the magnificent bloom of it in Messrs. Fraser's collection was, for shape, size, and colour, conjointly, the best Rose of the day. I kept my eye upon him during the afternoon, and he stood the heat as unconcernedly as though he had been the Fire King at Cremorne; and the Speaker himself might envy the imperturbability of such a Senator as Mr. Senator Vaisse. *Louis the Fourteenth* was shown by many exhibitors, and was invariably brilliant, effective, and distinct. A bloom of him in one of Mr. Turner's stands was the most beautiful Rose for colour in the exhibition, as absolute a monarch as Louis XIV. himself, and sanguinary in complexion as his martial synonyme in war. I went to beg him, just before pack-up time, but only arrived to see him bestowed on an earlier and happier applicant. I hope he was destined for somebody *very* nice, for a lovelier Rose I never saw. As poor old Clark, the cricketer, used to say of Guy, that he "was all helegance, fit to play before Her Majesty in a drawing-room," so I should affirm of that particular flower, that it was worthy to be placed upon the heart of a Queen, yea, of the Queen of Queens, Victoria. Reynolds

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\* I cannot endure my expatriation from metaphor, so give myself a Ticket-of-leave.

Hole was only shown by one exhibitor, Mr. Standish, who is the sole proprietor, and coming from Bagshot, a soil unfavourable to the Rose, was by no means shown in its perfection; but it was universally admired for its originality of colour, a fresh, charming, vivid *Rose*—"lovely pink," according to "D. of Deal"—which may be seen, to quote another excellent critic, "among 50 sorts at 500 yards distance." This latter authority has qualified his praise by remarking that the flower is no great acquisition to florists, but I hope, when he sees it in 1862, he will allow himself to be *beat on* that point. For vigorous growth, and for the abundance and perpetuity of its flowers, this *Rose* can hardly be surpassed.

There were many other *Roses*, of recent introduction and about to be introduced, quite good enough to ensure them a place in every superior collection. Among the former were *Gloire de Santhenay*, *Madame Boll*, *General Forey*, *Roi David*, *Victor Verdier*, *Madame Charles Crapelet*, *Mademoiselle Bonnaire*—all Hybrid Perpetuals; *Victor Emmanuel*, *Bourbon*; and *Boule d'Or*, *Duc de Magenta*, and *Rubens*, *Teas*; and among the latter were *John Standish* (which I have since seen in great beauty), *Madame Furtado*, *Prairie de Terre Noire*, *Mrs. Standish*, *General Washington*, *Marguerite Appert*, *Duc Decazes*, and *Gregoire Bourdillon*. All these I commend earnestly to my brethren who love the *Rose*.

Of this Show generally, it may be said that, although the best growers showed their best *Roses*, the exhibition was necessarily inferior to the three National *Rose Shows* which preceded. This necessity arose from the untoward summer and pitiless winter of 1860, which killed half the *Rose trees* of England, and injured a great proportion of the survivors. The *Roses* at Kensington were deficient, in consequence, both as to size and colour. Some of the boxes, when the lids were removed, instead of presenting the glowing diversity of tints and the glossy freshness of foliage which we have been accustomed to see, showed a dreary surface of dull lilac flowers, reposing on leaves of almost "invisible green." Many of them, invalids when they started, were terribly altered by the journey, and disappointment was as visible upon the faces of their exhibitors as upon the countenance of the sailor who expected grog in the bottle he had found, and opened it to discover—tracts. I remember, in my merry Oxford days, bringing home the leader of a tandem, so very dirty and disfigured, by a little gallop of 20 miles on a wet night from Henley, that the ostler started back on seeing him, and positively asserted "*that bean't our Harkaway*;" and some of the *Rose growers* seemed to me to be murmuring, in their sad surprise, "*that bean't my General Jacqueminot*!"

Such adversities of weather are not likely to recur, and we may hope—"not to the past, but to the future looks true nobility"—to "see another sight," when the knights of the *Rose* hold their next tourney at Kensington. They were there in July, but their armour was rusted and their plumes dragged by the rain, the temper of their lances injured by the frost, and their good steeds sadly out of condition. May they meet, in gallant state, in 1862, and the dear Queen of all *Rose-loving hearts*—*Victoria*!—be there to see!

S. R. H.

## ON GREY-EDGED AND SELF AURICULAS.

WILL you permit me to say, that having always been as particular as Mrs. Malaprop about my parts of speech, I take it the more unkind of the printer to make the first sentence of my last communication ungrammatical, by the gratuitous insertion of a second nominative, namely, the letter "I," in the form of the personal pronoun (page 193). But I must forgive him, as I see there is nothing personal in the matter, except the pronoun; for at page 217 he has made "J. S." give some startlingly unnecessary instructions about the (*non?*)-propagation of the double-flowered *Tabernæmontana coronaria*, and all by the omission of another little vowel, "o." For we are told that if sufficient care be taken, as prescribed, in the original selection, and if sufficient care be taken with them afterwards, "cuttings soon *rot*," while the hapless propagator is expecting them to *root*.

But respecting the grey-edged section of Auriculas, though a very interesting one, it need not occupy a whole paper, and therefore I shall take it and the selfs together. As far as I can discover from old gardening books, the grey edge seems to be the first form of deviation from the simplicity of the wild species, and to have arisen from the force of cultivation acting upon the habit of the plant, to exude a meal upon the thinner parts of its external surface. Colour seems to have a tendency to prevent the formation of this meal. The original species appears to exist in two varieties, the yellow and the coloured, for travellers in its Alpine home have mentioned meeting with both these forms. Choice Auriculas cultivated in pots, and much prized, I find notices of nearly 150 years ago; but the habit of naming varieties appears not to have been in common use then, though probably it existed. The first named variety I have met with, Grimes' Privateer, is still cultivated, and is usually among those that get a prize at Middleton, having been preferred in a judgment of "points" or "properties" (very unsoundly as I think) to Lancashire, when the latter was shown by Robert Lancashire as a seedling in 1846.

Even in 1827, when I first made acquaintance with this florist's flower, at the nursery of a grower in Sunbury, who commonly carried off the cup at the London shows, the green-edged section were included in this class, and only separated by their position in it, like the wranglers and senior optimes of the early Cambridge triposes. The separation of the two classes, though in particular specimens more fanciful than real, and therefore often objected to, is a sound one, and no doubt will henceforth maintain its place.

But why is it that this older class is in every dealer's catalogue the less numerous? And why is it, seeing it is the less perfect form, that the highest priced flowers are almost always found in it, and that the average prices are higher than in any other section? These facts at first sight seem out of due order, and yet when examined they admit of a fair explanation. Being the eldest and first formed class it has had more time to evolve its perfection, and the best specimens of the cultivated Auricula ought to be looked for in it; and consequently inferior novelties would be less tolerated. Besides which, there will be

a tendency in raisers to look for green-edged seedlings as the higher form, and to thrust up into that class productions that as greys would not be worth notice. I know of no doubtful edge except Lancashire in which this is not conspicuous. Lancashire might have been called a green edge; it is more so than Sir John Moore. But it is too intrinsically excellent to hide its only imperfection by a device.

Nevertheless it is by no means easy to find a score—is it to find a dozen? first-class flowers, even in this section. Lancashire, if you can get the edge grey, would rank first in properties, first, indeed, of all Auriculas. Maria, in every case, will be first in beauty. This year with me it was second to none in any respect. The colour I find, by careful comparison, is pure violet; but either from its substance, or transparency, from reflexion, or from some other cause, its tint seems to differ from every other in the floral world, and to be superior to them all. I hardly know how imagination could paint anything more exquisite than my plant was this year, and I only regret it was not in bloom early enough to exhibit in London. What is to come next? Mr. Lightbody will have it his namesake ought to be placed before these two. Perhaps I might accede to its standing next to them. What then? None to be named singly. But there are many that come behind in a ruck, and very respectably up too; Dickson's Duke of Cambridge, when it has an edge not swallowed up into the body colour; Sophia, the same; Dixon's Lady Jane Grey; Fletcher's Mary Ann and Ne plus ultra; Lightbody's R. Headly and Sir C. Napier; Dickson's Unique, when large enough; Maclean's Unique, always. After these come Smith's Bolivar and Capt. Barclay, Headly's Superb, Sykes' Complete, Waterhouse's Conqueror of Europe. Then, at a respectful distance, but still not distanced, Barlow's Morning Star, Grimes' Privateer, Headly's Stapleford Hero, Hedges' Britannia, Kent's Victoria, Pearson's Badajoz, Warris' Union, Willmer's Squire Chilman, Beeston's Fair Flora, Buckley's Surprise, Holland's Village Bride. Bone's Perfection I know not where to place, as I have never seen it in character. There are a few others equal to these last, but not many, and I do not grow them. It is in this class you see the largest proportion of varieties with broad and flattened lobes or petals, making a bold and circular pip, and with pure edges, and therefore it must be deemed to have made the nearest approach towards its perfection, although its three best specimens are all of very recent date.

The Sels are the last class, and till very lately were least in esteem. At present they are attracting as much notice from connoisseurs as they always have from the uninitiated; and that from their intrinsic merit rather than from an advance in the goodness of modern varieties, for the advance has been less rapid than the great increase of late in the number of named Sels would lead us to suppose. Martin's flowers are numerous, and were little thought of at first; nor are any of them, except Mrs. Sturrock, an improvement upon their predecessors. Spalding's flowers had the luck to come in somewhat later, when more inquiries were made for Sels, and, in consequence, they obtained a place beyond their real merits. They are all good, but none of them are a real improvement in properties upon what were grown twenty

years ago. Campbell's Pizarro is an advance, having the stiff petal and brown colour of Spalding's Mary Gray, with the advantage of a perfectly flat and circular pip, and exact proportion in the parts; and therefore it may be pronounced the nearest approach yet made towards a faultless flower. Its drawback is that it is sombre instead of bright; its colour is not, like that of Maria, one that would insist on pleasing in spite of many faults. Next to Pizarro I should place Mrs. Sturrock, notwithstanding its flimsy petal and undecided colour. And then—perhaps—Othello. After these would come Nonsuch, Blackbird, North Star, Vulcan. Then Bessie Bell, the Metropolitans, Meteor Flag, Hey's Apollo, and many others. It will be observed I have not inserted in this list Lord Clyde, which is not because I rank it with the "many others," but the contrary; because I cannot yet satisfy myself where to place it; probably among the first three; but I must grow it another year before I can tell its real value.

And now to conclude. The properties of an Auricula blossom being supposed to consist in form, colour, and substance; the substance being as leathery as may be without clumsiness; the general form circular and flat; and the colour, whatever it is, bright and pleasing; the lobes six in number (and therefore broad) and elliptical; then the form of its component parts comes into review, and here it is that the Self differs from the edged classes. In the latter a line drawn through the centre should leave four breadths on each side of it nearly equal, for the eye, the paste, the colour, and the edge. But in the self the two exterior circles are united into one, and therefore the paste should at any rate never fall short of its due proportion, but rather should occupy a little broader space than in an edged flower. Nor should it ever be angular; the smallest inequality catching the eye so much more readily against the broad unbroken contrast of self-colour. Now it happens that both these particulars are just those in which most of our present selfs most offend. Very few have their proper breadth of paste, or have it circular. Pizarro has both, and therein consists its advance upon its predecessors.

GEORGE JEANS.

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### VISITS BY AN "OUTRIDE."

I STILL like to keep to my old description, the same that I started life on the road with, now nearly thirty years back—although the term "Commercial" is now the modern synonyme for it, as well as for "Bagman," as in days yet older we used to be designated.

Well, then, having an afternoon on hand in Bath, I brushed up, after luncheon at "Amery's," and passing across the market, to make inquiries as to the Potato crop, found myself at the top of Pulteney-street, one of the grandest streets in Britain, with what used to be the Pulteney Hotel at the lower end—a noble pile, and standing at right angles with the street forms apparently an imposing termination, for the roadway branches off to the right and left, leaving the hotel clear. When the present Emperor of the French had slipped his confinement

at Ham, and found refuge in England, he resided here for several months, and may probably in the shady groves of Sydney Gardens, which formerly belonged to the hotel, have meditated on what particular course would soonest lead him to Imperial power, which from a youth we are told he believed it to be his destiny to possess. Turning to the right and next to the left, we soon found ourselves at the gate of Mr. Tiley's nursery—our destination, as we were bent on a look over Tiley's Roses, for which report told me his nursery was famous. Some of the great guns will exclaim, Roses in Bath? Yes, there they are, something like a stock of 100,000 now being budded, and an equal number for sale. To be sure, Mr. Tiley's Rose grounds do not extend to scores of acres, as at Maresfield, Berkhamstead, Sawbridgeworth, or Cheshunt, in one piece; but then land round or in Bath is not to be had in twenty-acre fields; you must be content with a bit here and a larger slice there, just as old gardens and land not available for building upon falls to hand, and hence Mr. Tiley told me his nursery consists of nine separate grounds. Such an arrangement has its inconveniences in some respects, but it is handy in others, and whether for the best or not, has to be put up with.

The principal Rose ground is on the north slope of one of the romantic hills which nearly surround Bath, and which, rising from the valley of the Avon to a great height, form a natural amphitheatre, and constitute the great charm of the city and neighbourhood. From Mr. Tiley's nursery the eye takes in a panoramic view of the "City of the Sun," as it was called by the Romans, with its terraces and crescents rising from the banks of the Avon, which flows through the valley, to the heights of Landsdown to the west, crowned by Beckford's tower. To the north, the view embraces Batheaston, a kind of offshoot from the old city, situate in a valley famous for market gardens and Strawberry grounds (who has not heard of Lydiard and his Strawberries, which, before Smith took to growing them, were unequalled at London shows?) and further up the valley is Swanswick, nestling in Beech woods, peering from which is plainly discernible the "home of a florist," Charles Sainsbury, Esq., the raiser of numerous first-class Dahlias, and an enthusiastic lover of flowers. Further up the Avon, a short distance to the right of Batheaston, is Bathford, the residence of a celebrated florist, the late G. M. Yeeles, Esq., and which we heard is again to come out under the auspices of the present Mr. Yeeles and Mr. Salter, the well-known gardener to his late father. At our back, but towards the summit of the hill behind where we stood, is the residence of — Sims, Esq., once noted for Orchids and Heaths; and a little further on is Crowe Hall, the seat of H. Tugwell, Esq., an enthusiastic florist, who still maintains a great fondness for Picotees and Carnations.

This little digression respecting the locality surrounding where I stood resulted from questions to the worthy proprietor, and may perhaps prove useful to those who, situated like myself, may have a few hours on hand, and may wish to know what there is in *our* line in the neighbourhood; not that we have mentioned all the places worth seeing, but only those brought out by my queries.

This Rose nursery appears to be a deep rather strong loam, and judging

by the luxuriance of the stocks, well suited for both the Dog Rose and Manetti stock. This latter, Mr. Tiley thinks the sheet anchor of the Rose grower; all his dwarf plants are worked on it, and were producing blooms of most astounding size; but he says that it is so rapid a feeder that, to keep the plants in health, it should be taken up yearly, their roots pruned, and planted in fresh soil; with this treatment the stock will last many years in health. We were rather late for the principal summer display of bloom, but still a number of grand Roses were in flower. Of those which occurred to us as extra fine, we noticed Comtesse de Chabillant (figured in *Florist*), and a brilliant distinct Rose it is. Empereur de Maroc, a dark velvet, valuable for its approach to the old Tuscan rose colour; Madame Boll, very fine; Louis XIV., unquestionably the finest Rose out, and one which you should have figured—a deep rich crimson, the petals shaded with a dark velvet hue, difficult to describe, but most gorgeous to look at; it seems to stand the sun well, and will throw our old friend Jacqueminot, with the Géant des Batailles and Eugene Appert class, into the shade; Victor Verdier, cherry coloured shaded with a carmine tint, though not very constant, a pleasing and sterling flower; Virginal, a clear white Perpetual, a lovely flower; Madlle. Eugenie Verdier, a French white slightly shaded with peach, good; Senateur Vaisse, a large showy flower, deliciously sweet; Empress Eugenie, another true white Perpetual; Madame Vigeron, rose; M. Vidot, as well as M. Vigeron, magnificent on the Manetti; M. Celine Touvais, a good show Rose; Madame Crapelet, shaded cerise, fine; Prince Leon, grand, as was also General Jacqueminot; Victor Trouillard, fine; Mdle. Bonnaire, white, but only in the bud—appearance in that state good; Mr. Tiley considers it first-rate. The above are a few of the new Roses caught in bloom. Of the older kinds there was a very fine display, and we were struck with the large size of the blooms generally, doubtless owing to the favourable nature of the soil, perhaps also a northern slope, fully exposed, may assist in producing a larger flower than when the trees are full south. We shall generalise on this more fully, after looking at the Salisbury collection, where I am told wonderful results are obtained from a similar situation.

Mr. Tiley has several houses in this nursery, for the growth, principally, of soft-wooded stuff, and an imposing new range is about being commenced, and also lots of frames for Cucumbers, for which he is much noted; each variety has a separate frame, to keep them distinct, and these were full of fruit ripening off for seed.

In another ground florists' flowers are grown; Fuchsias, bedding things, Ferns (for which we are told there is an increasing demand in the winter), Begonias, to which the same remark applies, and other popular plants filled up the remaining houses; in one we noticed some very prettily marked Petunias, one of which was tipped with white in a manner that reminded us of the beautiful *Ipomœa limbata*. Passing on to another ground, lower down the hill, we found it stocked chiefly with fruit trees, all of which seemed to delight in the deep loamy soil which has been washed from the higher grounds to these lower levels, rendering them well adapted for fruit tree culture. After having thanked

Mr. Tiley for answering all my round-about queries, I returned to my quarters, musing on the perseverance which has enabled Mr. Tiley to work on from a small beginning to his now extensive trade; and I was satisfied that not only are there Roses in Bath, but that they will stand a comparison with larger collections on the score of merit.

If you think the above worthy a place in your number, I may again give you the result of other inspections which I may make during my travels.

“OUTRIDE.”

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### CENSORS.

A CENSOR, like the wife of Cæsar, should be above suspicion; but, if from incapacity or prejudice his awards displease, there is no divinity which doth hedge him round to screen him from a just exposure. Only “*fiat justitia*,” let him have fair play! Let the aggrieved protest, and let the authorities appoint a commission of enquiry, and let the defendant be heard in answer, *at once and upon the spot*, that the decision complained of may be then and there discussed, acknowledged, or condemned. It is as unfair as it is useless to make an anonymous accusation some days afterwards, as “Visitor” has done in the *Gardeners’ Chronicle* of July 13, when “the guests are fled, the Roses dead, and all but he” keep silence, satisfied or not, because the time for expostulation is past.

The letter of “Visitor” is, however, much too amusing to be dealt with very gravely. His insinuation, that “the Judges had *dined*,” fills the mind with novel and merry reflections. If Judges are in the habit of dining before they proceed to their duties at eleven of the clock, a.m., what early village cocks they must be at breakfast, and how wonderfully, according to Sam Weller’s theory, they must “get on at supper!” It is related of some very fastidious cavalry officer, that being quartered in one of our large manufacturing towns, and returning a call which had been paid to him, he found the family dining at one o’clock. “What *do* you think?” he exclaimed at his seven o’clock mess in the evening, “I went to see those Grundys this morning, and *the brutes were at breakfast on a leg of mutton!*” What would he have said, could he have seen these censors over their pudding at half-past ten?

But, further, as the insinuation implies that these censors had so *dined*, that not one of them was “*as sober as a judge*” ought to be, we are prompted to imagine them, with their hats on the back of their heads, and their hair well over their noses, reeling, arm-in-arm, from flower to flower, like intoxicated butterflies on a gigantic scale—now running against some tall Fuchsia, and telling him to “hit one of his own size”—now turning up the inverted cards and awarding the prize, irrespective of the plants, to some favoured exhibitor, with a grand chorus of “for he’s a jolly good fellow”—anon pelting each other with Peaches and Pine-apples, and finally removed by the police.

To speak more soberly than, according to “Visitor,” these judges could have spoken, it is of the first importance to secure the services,

I will not say of honest men, for they, I am proud, as an old exhibitor and as a gardener, to know, are plentiful, but of men who are qualified by a large experience to discharge the office of censor. It is not sufficient that a man should be fond of flowers or that he should have a supervision of gardens, but he should be familiar with the objects submitted to his sentence. He must not only know that such and such flowers are beautiful, but he must know their degrees and capabilities of beauty. We can all of us admire what is lovely in Nature, but thoroughly to appreciate the cleverness and industry of Art you must have *an Artist*.

H.

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### SAXIFRAGA OPPOSITIFOLIA MAJOR.

THIS was exhibited this spring at a meeting of the Royal Horticultural Society, by Mr. T. Rawbone, gardener to R. T. Adderley, Esq., Barlaston Hall, Stone. Mr. Rawbone stated that this fine old native plant, of which large patches full of blossoms were exhibited, was then flowering in splendid condition on the stone edgings of the terrace beds in the flower-garden at Barlaston Hall. He wrote:—

“ I believe this is one of the earliest flowering Saxifrages, and not in very general cultivation, though it certainly deserves to be widely spread. As an edging plant I know nothing to equal it in beauty and profusion of bloom. It has been cultivated here for upwards of 20 years, and with Crocuses in the centre of the beds. The Crocuses we chiefly grow are yellow and white, and they certainly do contrast well with this beautiful purple Saxifrage, and are generally in great beauty at the same time. We replant some of the Saxifrage every year, and I find that growing on or over the sandstone edgings of the terrace beds it does remarkably well. We always pull it into small pieces before planting, which is done about September and October. I believe it will stand any sort of weather—in fact, it does so here, though the terrace is very much exposed. We contrive to keep the bedding plants from growing over it.”

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### FILMY FERNS.

THE word *impossible* has now well-nigh become obsolete. The next generation will have to seek the word in a dictionary, before they can know the meaning of it; and practical gardeners have not been behind their comrades in helping to bring about this result. Our forefathers thought it was impossible to grow Orchids—the stages at the Kensington and Crystal Palace exhibitions will show whether or not they were right. But we need not go so far back for an example of the ingenuity and perseverance of the horticulturist, in overcoming difficulties quite as great as those surrounding the ephital wonders of the tropical forests. Trichomanes and Hymenophyllums, which are found by scores in warm and humid climates of many parts of the world, had been repeatedly

introduced into this country, and as often allowed to die ; it was reserved for the present generation of gardeners to prove that their cultivation was *not impossible*. A long list might now be made of these delicate and lovely little plants, which are as well grown and as successfully propagated as any other tribe of Ferns. There are, probably, more than 30 species in the fernery of the Royal Botanic Gardens, at Kew, and scarcely a less number might be found in the celebrated nurseries of Messrs. Sim, of Foot's Cray, and Backhouse, of York; while in almost every other garden of note, a greater or less collection of these pets may now be seen.

Like everything else, now we know how to manage them, their cultivation seems simple enough, and we wonder how it was that cultivators used to fail with them. Shade and moisture are the two great necessities of their existence; they are absolutely requisite—a gleam of direct sunshine, or a breath of dry air, and the poor little plants would be murdered outright. Guard well against these two things, and all will go well. Soil is a very secondary thing with them; they require but very little; the wet surface of a piece of porous stone, or a block of wood, suits them quite as well, or even better. I like best to grow them among pieces of sandstone, for though I have several growing well upon the stems of tree-ferns and other vegetable substances, yet these, with the continued moisture, are apt to rot; they are also likely to produce fungi, both of which circumstances may bring about unpleasant results. A thorough drainage for the pots, and a little fibrous and very sandy peat sprinkled in between the blocks of sandstone, is what experience teaches us is the best means of growing them. It must be a very snug and quiet corner where they will grow without the protection of a bell-glass; still even this has been accomplished. There is a cavern, deep and shady, with a trickling rill of water in it, in the rockery at Mr. Backhouse's, where several species grow luxuriantly; but in few gardens can the natural habitat of these plants be so closely imitated. The safest and best plan is to cover them with a bell-glass while young, and as they increase give them a square hand-glass, the top of which is made moveable. With glasses so made the top can be lifted off without disturbing or injuring the fronds. During summer these plants cannot be kept too moist, if the drainage be good; they may safely be sprinkled with a very fine-rosed water-pot every morning. They enjoy having their fronds wet. In winter they should be kept a trifle drier, not so much on account of the Ferns, if the air be warm enough, but to guard against mildew, and other minute Cryptogams which are apt to creep over the surface of the soil, and which, if not kept in check, will destroy the young fronds.

And now, having shown how the *impossible* has been conquered in the case of the Filmy Ferns, we want to know why the same term, with some show of truth, may still be applied to the genus *Lindsæa*. This genus includes many species, as beautiful and graceful, and far more varied than the Maiden-hair Ferns. Why are there so few of these in our collections? The so-called *Lindsæa Lowii* is not a *Lindsæa* at all, but has been shown by Mr. J. Smith, one of the best authorities on this subject, to belong to quite another family. Its proper name is

*Arthobotrya articulata*. *Lindsæa cultrata* was in cultivation, is it so still? And there is an Australian species, called *L. linearis*, occasionally met with. But there ought to be dozens of them, and it would be difficult to assign a reason why there are not. They are all extremely beautiful, quite as much so as the *Adiantums*. Who will be the first to prove that the word *impossible* should not be applied to the cultivation of *Lindsæa*? Here is an opportunity for a man to distinguish himself, and such a one as does not often occur.

DELTA.

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### THE PELARGONIUM.

IN my floral chit chat during the past season, I have met among my friends two opinions upon the Pelargonium, from which I entirely dissent, and which I think have been formed without sufficient enquiry or examination. One sentiment often expressed is, that we are making but little progress in the improvement of this favourite flower. Now, if those who think so will do as I have just done—look through the early numbers of the *Florist*, and compare the portraits of the favourites of that day with the flowers that have been raised lately, they will see that an immense improvement has been made in size, colour, and quality of petal, and I may say in every point of excellence. This might be very strikingly illustrated, if we could bring the old favourites into competition with the new; but this would be difficult if not impossible to do, so fully have the new varieties taken the places of the old.

The other sentiment I refer to is the very opposite; it is that the flower has been so much improved there is little room or capability for further improvement. This idea I am sure is far from correct. As a raiser of seedlings I speak from experience. We frequently meet with flowers which, though deficient in some of the requisite properties, such as profuseness of bloom, or size, and therefore unfit to be sent out, are yet great improvements on other points, and help to show the line and way for further novelties. In both size and colour great progress has been made, as well as freedom and constancy of bloom, and I see no reason to doubt that this improvement will in due time be obtained in all the varieties of colour, and be still more extended.

With the excellent advice that has been from time to time given in the pages of the *Florist*, on the cultivation of the Pelargonium, none need to be at a loss, but unfortunately rules are often neglected. Some growers—no, it is hardly right to say growers—some who purchase Pelargoniums, treat them as if of course they would grow without any further care on their part; and we cannot be surprised at the miserable result. But with reasonable attention, and following your excellent hints, a gratifying head of bloom may be anticipated with certainty.

The last two or three seasons I have observed with surprise and sorrow a return to the old plan of exhibiting yearlings at the metropolitan shows—showing, perhaps, their first truss of bloom. This is both unsatisfactory and unwise; it had been abandoned for many years,

and I would strongly urge growers to discontinue it. It is not possible to judge confidently the merits of yearlings.

A RAISER OF SEEDLINGS.

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### STRAWBERRIES.

JULY 19.—The Strawberry season, with the exception of the Alpines, is now over here. My friend, Mr. May, of the National Provincial Bank, at Blandford, came with a noble basket of Queens, to add to my Trollop's Victoria, Alpines, Bicton White Pine, and Belle Bordelaise; and with these we yesterday finished the season, which has been the most abundant that I can remember. The flavour of Strawberries has been better than last year; but still it has not been so good as in a dry West Indian summer. I have destroyed a great many English and Foreign Strawberry plants, heavy croppers, as not distinctive or better than those we have already. I will mention no names, as, in other situations, where the sun rises and shines all day on the bed, the flavour may be better than in my garden, which slopes from the rising sun. With regard to flavour, I have eaten nothing so rich and good as Filbert Pine, tasted in Mr. May's garden. Lest I forget it, let me say (and Mr. John Keynes, I doubt not, will bear witness to my words) that the plants and crops of such sorts as are grown by Mr. May were this year such as would be equalled by few, and probably surpassed by none. Last year I took my friend, Mr. Gloede, who, I regret, was not able to come this year to see me, to review them; and, splendid as the crops were then, I fancy they were still better this year. The crops of the Queen, Filbert Pine, Nimrod, Eleanor, Trollop's Victoria (it colours in his garden as deep as Eugene Appert), Cinquefolia, a rich, fine, and good Strawberry, but dwarf-habited and shabby in foliage, were very heavy. If any of your readers should travel through Blandford in the Strawberry season, I am sure my distinguished brother Fragrarian would be gratified by a call, and I am still more sure the visitor would be gratified. I saw, in his garden, and tasted some fine rich berries of Eliza Vilmorin, raised from the Queen, Oscar, Eugenie, and a very rich and good seedling of his own, which I hope he will introduce to you some day as the "May King." It is of the Filbert Pine flavour and quality. I believe he found the seedling in his Raspberry bed.

As regards my own Strawberries, I must appeal to the tastes of the 24 gentlemen who dined here on the 5th of July. We had 13 dishes, all picked fruit. The finest for size and beauty, and uniformity of growth, were the Eleanors; and the best-flavoured were Rivers' Eliza, and Magnum Bonum, like, but hardier than the Queen in wet valleys. However, as regards the Queen, where she likes the soil, she cares for nothing else. My noble plants in another garden (once half-dead here) are as high as a man's knees, dark, and unfreckled in foliage, and have borne the noblest fruit. The aspect is severe N.E.

The Strawberries that I recommend are much the same as last year's:

1. *Hautbois*. The Black Hautbois, small, but the muskiest and

richest of all Strawberries, and Belle Bordelaise, the most certain and most accomplished of its race. I have had fine crops of the last under my south wall, in the centre of the garden, and under the north wall, where the berries were by far the largest. The monstrous Hautbois, good, is not of such fine flavour and quality as the two former. They are all three easily growable and perfectly hardy, beautiful in foliage, and good.

2. *Pine-flavoured.* The Bicton White, and Brittany White Pine, slightly roseated, are good, ornamental, and interesting. The second is the firmest and highest in flavour, but the first is the best cropper. Mr. Nicholson's White Seedling, like the Bicton Pine, is good.

3. *Alpines.* There is nothing better than the old White. The Whites are, in all instances, larger and better, and better croppers, than the Red. The Red and White bush Alpines are good, and give no trouble. They must be raised occasionally fresh from seed, and the old stools must be divided and fresh planted.

4. *Other Strawberries.* I still recommend May Queen as first early, ripe here the 30th of May. A Strawberry that is ripe, even two days before any other, must be valuable; because, as a beggar once told me, there is "no taste in nothing." Oscar, Wonderful, and Eugenie are the three best British novelties here on trial, and are worthy of a place, and I fancy will give satisfaction. The finest-flavoured of all are the Queen, and her race, viz., Carolina, Superba, Rivers' Eliza, Myatt's Pine (probably the Queen's parent), Scarlet Pine, Magnum Bonum, Hendrie's Seedling, Nimrod, Rival Queen (hardy, and very rich and handsome, but a fickle cropper), Eliza Vilmorin, and La Chalonnaise. To these add Filbert Pine (not grown here), and you have the eclectics of fine flavour and quality. For dependence there is nothing "out," of fine flavour, better (for me) than Rivers' Eliza. Wonderful, apparently the same as Sir Walter Scott, is a very excellent Strawberry, hardy, great cropper, and of fine flavour. Ingram's Prince of Wales, Trollop's Victoria, are great favourites with me, and retain flavour in adverse weather. These two, Rivers' Eliza, and Wonderful, are sure to winter well and crop heavily. If Wonderful is distinct from Sir Walter Scott, it is not far from the best novelty here.

Now, a word about Foreign Strawberries. My valued friend, Mr. Gloede, says, we are bigoted and prejudiced against foreign Strawberries. This does not apply to me; I judge of Strawberries as I find them here. Permit me to say, that Strawberries, which come from fine climates, require time to acclimatize, and should not be judged hastily. Moreover, the discrepancy between Foreign and English judgment arises from the differential powers of the sun. In France, I find that while they are burnt up I am drowned with wet, and lack sun. This, of course, will greatly affect the opinions formed of Strawberries, and render the judgments diverse. I have great pleasure to speak now of a foreign Strawberry, that is really good and valuable in every respect, and not inferior to the best English novelty here; indeed, I am not sure that it is not the best novelty here, viz., La Constante (De Jonghe, Belgium). It is a dwarf and stout hardy plant, the fruit is numerous and handsome, firm, juicy, and of fine refreshing flavour.

Mr. Rivers, in a letter in reply to mine speaking highly of it to him, says: "I have been much interested in *La Constante*; it is so large, finely-shaped and coloured, and with a nice, brisk, unobjectionable flavour. It is, out-and-out, the best market Strawberry ever seen, being so firm." He also, together with Mr. Turner, speaks highly in every respect of the *Crimson Queen* (English), which I have not yet tried. With regard to *La Chalonnaise* (raised by Dr. Nicaise, in France), Mr. Rivers says, "it is a large and very fine-flavoured Strawberry, almost as good as the Queen."

Let us hope, then, that with these admissions, we shall free ourselves from the charge of prejudice. *La Reine*, last year (also raised by De Jonghe), I thought a high-flavoured, heavy-cropping Strawberry. I destroyed with guano my older plants, and the three fresh ones sent late in the fall have not cropped. From my recollections of last year, added to my experience this, I have no hesitation in saying, that these are two admirable Foreign Strawberries. Add to these the *Black Hautbois*, *Belle Bordelaise*, and *White Brittany Pine*, endorsed by me, and *La Chalonnaise* and *Eliza Vilmorin*, both Queen-descended, respectively endorsed by Mr. Rivers and Mr. May, and we have "gained" from abroad seven good Strawberries, besides the useful red and white bush Alpines.

One word more, and I have made a clean breast of it. While Mr. Adolphus Keat and Mr. Milne, respectively from Surrey and Yorkshire, were gone to Salisbury with my 96 roses, on June 27, I had a very agreeable, but short visit, from Mr. Stoveld, of Stedham Park, Sussex, who came with *Chronicle* and *Florist*, containing my articles, in hand, to review my *Fragrarium*; and I am very glad that I stayed at home and made such a nice acquaintance. I was in my other garden, budding *Senateur Vaisse*, *Louis XIV.*, and *Gloire de Santhenay*, three first-rate roses, and the last good in every respect, when my servant came down, and said, "There is a very nice gentleman, who wishes to see the Strawberries." "Very good; say he is most welcome, and that I will be home in a few minutes." After the usual politenesses were over, we went into my home-garden, and tasted the leading of 59 sorts; and, at the end of the review, he did me the honour to say, that he would not have missed the sight of the Strawberries for one hundred guineas; and, that what I had written in various articles was most strictly true. Since then, I have sent him plants of such good sorts as I had ready, viz., *La Constante*, *Nimrod*, *May Queen*, *Black Hautbois*, *Belle Bordelaise*, *Bicton Pine*, *Monstrous Hautbois*, and *Oscar*. In due time I shall send *Wonderful*, *Eliza*, *Prince of Wales*, *Trollop's Victoria*, *Eugenie*, *Eleanor*, and *Brittany White Pine*. These, added to the four sorts he has already, viz., *Queen*, *Keen*, *Old Carolina*, and *Elton Pine*, (*Salter's Jucunda* is as late, and sweeter), he will have the British and Foreign basis of a first-rate *Fragrarium*.

There is one Strawberry here that succeeds admirably, and is good, viz., *Kitley's Goliath*, and the reason that I have never recommended it is, that, in some gardens, it is subject to red spider. It never suffers here, and the plants, crop, and berries have been noble. High cultivation and soot are sure estoppels of red spider. The *Crimson Queen*,

and Frogmore Late Pine, I hope to try next year. Mrs. Clements, wife of the Rector of Worleggan, Cornwall, sent me a forced plant of her seedling, King Arthur, with the fruit on. The berries were large, numerous, well-shaped, and the fruit of excellent flavour. Cornwall is the France of England, and famous for Strawberries; and I hope we may be able to encourage an indefatigable lady Fragrarian by high encomiums on her other seedlings. Ladies do everything well but preach, and that is something like a dog walking on his hind legs; it is not done well, but you are surprised to find it done at all! All married men admit that they are capital curtain lecturers! She once said in a letter, "I perceive by your articles you are a bit of a wag!" If there was any doubt about that, I trust my two last observations will clear up the matter.

Rushton, July 19.

W. F. RADCLYFFE.

### Obituary.

WE regret to announce in our present number the death of Charles Empson, Esq., of Bath, who for several years has been a valuable contributor to the *Florist*, and an esteemed personal friend. Mr. Empson's decease took place rather suddenly in London on June 25th, and has caused a profound grief to his numerous friends, who were warmly attached to him on account of his amiable and disinterested character, and the vast fund of information contained in his richly stored mind, and which induced his society to be courted by all who could appreciate refined taste, and an ardent lover of Nature, which in the late Mr. Empson was happily united to the most catholic philanthropy.

The late Mr. Empson belonged to an ancient Yorkshire family, and his love of natural history induced him, when a young man, to accompany the late Robert Stephenson, Esq., to South America, in which country and Mexico he spent several years exploring the different states of Chili, Peru, Bolivia, Colombia, and Mexico, collecting information on the natural history and archæology of those remarkable countries. Most unfortunately for science the accumulated treasures which he had collected in relation to the natural products and ancient history of the above countries were lost, by the ship which was conveying them to England foundering in the Gulf of Mexico, a mere fragment only being saved. Among things lost were specimens of nearly the entire flora of the vast districts he had traversed, as well as a most valuable collection of treasures connected with the different dynasties who governed those countries before they were conquered by the Spaniards. For the last 25 years Mr. Empson resided in Bath (making occasional continental tours), where his loss will be deeply felt, not only by the upper classes, with whom his conversational powers was the great charm of society, but by the poor, to whom he was ever the kindest and most sincere of friends.

S.

## THE TWO GRAND ROSE SHOWS.

CRYSTAL PALACE, JULY 6TH.

ROYAL HORTICULTURAL SOCIETY, JULY 10TH.

PRESUMING that the proud parent of these Siamese twins is too happily engaged to come down from his ethereal dwelling even to chronicle the success of the Queen of Flowers, I will again venture, as I have endeavoured each successive year, to give the readers of the *Florist* an account of the doings on Her Majesty's gala day, to once more essay it. By the floral world in general, the twin character of this notice will be at once understood; from what was then considered a bold step, but which now seems to have been one of a very moderate character (the opening show at St. James's Hall), four years ago, we have advanced by rapid strides—to Hanover Square Rooms, then to the Crystal Palace, and now two, yet not divided, it and South Kensington both house us. Well may the worthy secretary (to whom I wish not only a recovery of all his lost beauties, but olive branches as numerous as the prizes he may win) rejoice at seeing to what his work has tended—well may he look back with pride at having taken such a step, and smothered in showers of Roses—like President Davis, he may well make his bow to those ardent cultivators who have so ably seconded his efforts. As we saw our favourite standards falling before that fell frost, as we heard coming up from all parts of the country piteous plaints of Roses killed by hundreds and thousands, as day after day, through an unpropitious spring, we saw those that had survived dropping off, we felt, alas! the Rose show must come short; but thanks to the consideration of the projectors of both exhibitions, and to the great extent to which the flower is grown, the number of stands was as great as ever, although the number of blooms fell far short of last year. In the nurserymen's stand of 100 varieties, single trusses instead of triplicate ones were shown, and so with other stands; and indeed, it is an open question whether such an arrangement would not be the best for all future years. They look better, one sees more correctly the character of the flowers, and it gives a better opportunity to growers on a moderate scale to exhibit; and surely it would be better to have seven or eight stands of 100 varieties than three or four from only the very large growers for sale. A fair comparison of the two exhibitions, leads one to give somewhat of the preference to South Kensington. I speak not now of the company or the accessories of the place; the difference between the two in the former respect was as striking as in the latter, the one being evidently of the very highest order, and the other the multitude. We shall, however, go to Sydenham to learn all about bedding out, for few, I conceive will be the imitators of Mr. Nesfield's mosaic patterns; and from what I heard, the conservatory seems too warm a place for cut blooms, as towards the afternoon the greater portion of the Roses were said to be in a very drooping state. My main object is with them, and viewed as a whole I think they were in greater variety and freshness on the 10th than on the 6th; that nurserymen came out more strongly on the former day and amateurs on the latter, while at the same time it must in truth be said that

there was hardly a Rose in either exhibition up to its true character. It was curious to see how utterly untrue the season had made them—to see General Jacqueminot, instead of his brilliant scarlet coat, glorying in its freshness and purity, spotted and dashed as if he had have worn it through a field of gore on a day of mud and rain—to see her Grace of Sutherland, instead of the grand dignified beauty, no better than a China *mandariness*, with pinched features and little feet—or Comtesse Cecile de Chabillant, displaying, not her exquisite lovely tint and shape, but looking as if she had forgotten that it was an exhibition day. What could they do, however, when they had to brave such weather as the last season? They could no more expect to be neat and trim than the young ladies who, venturing on a yachting party, come home draggled and dishevelled—wind and rain, and sea-sickness and salt water, so sadly marring their appearance, as to lead a match-making mamma once to say to her bevy of marriageable daughters, “depend upon it, my dears, yachting is a mistake.”

But now to the details. The greater portion of the stands exhibited were from the southern part of the kingdom; the midland counties having, I believe, suffered most from the frost, were not, contrary to the experience of former shows, represented. Mr. Keynes, of Salisbury, who only won his spurs last year, held a conspicuous place; and Mr. Cranston, of Hereford, re-occupied the ground won from him last year. Amongst amateurs, Mr. Hedge, of Colchester, still stood conspicuous, winning several of the first prizes, while our valued contributor, Mr. Radclyffe, of Rushton, took a place that his zeal and love of the flower justly entitles him to hold, winning a first prize at Kensington with a remarkably fine box for the season.

In the class of new Roses of 1860 and 1861 several boxes were shown at both exhibitions. At the Crystal Palace, Mr. Standish, of Bagshot, was first, and Messrs. Fraser, of Lea Bridge Road, second. Mr. Standish's box contained Madame Furtado, Abd-el-Kader, John Standish, Princesse Clothilde, Gregoire Bourdillon, Marguerite Appert, André Desportes, Madame Standish, John Watson, Eugene Appert, Reine des Violettes, Mademoiselle Bonnaire, Comte de Falloux, Louis XIV., Reynolds Hole, and Ophelia. Messrs. Fraser's were, Madame Furtado, Mademoiselle Bonnaire, Prairie de terre noire, Triomphe de Lyon, Eugene Appert, General Washington, Barlow, Victor Verdier, Louis XIV., Vainqueur de Solferino, Belle de Bourg, La Reine, Parmentier, and Reine des Violettes. At South Kensington, Messrs. Fraser and Mr. Cant, of Colchester, ran a tie as first; the flowers were, Abd-el-Kader, General Washington, Duc de Cazes, Madame Furtado, Princesse Máthilde, Madame Pauline Villot, Madame Charles Crapelet, Le Senateur Vaisse, Victor Verdier, Eugenie Verdier, and Louis XIV. Mr. Cant's, La Boule d'Or (Tea), Eugene Appert, Victor Verdier, Madame Charles Crapelet, Rubens, Gloire de Santhenay, Louis XIV., Madame Boll, Victor Emmanuel, Duc de Magenta (Tea), Buffon, and General Forey. Mr. Standish took second, owing mainly to the smallness of his flowers, with Reynolds Hole, Marguerite Appert, Eugene Appert, Madame Standish, Triomphe d'Amiens, André Desportes, Madame Furtado, John Standish, Gregoire Bourdillon, Comte

de Falloux, and Reine des Violettes. Mr. Keynes was third, with Louis XIV., Madame Furtado, Victor Verdier, Triomphe de Lyons, Vainqueur de Solferino, Sénateur de Vaisse, Mademoiselle Bonnaire, Eugene Appert, Madame Eugenie Verdier, Madame Meillez, Madame Pauline Villot, and Triomphe d'Amiens.

Of the Roses of 1860, we find the following the greatest favourites:—VICTOR VERDIER, a Rose of fine shape, size, and colour; an improvement (not an easy matter) on that fine and favourite Rose, Jules Margottin. SÉNATEUR VAISSE: This is, I think, *the* Rose of last year; as exhibited by Messrs. Keynes and Cranston, it was a truly magnificent flower, large and double, of a brilliant red colour. EUGENE APPERT, a brilliant crimson of the Géant race, not very perfect in outline, but at the same time a most striking Rose, and attracting attention whether cut or in the garden. "Oh, how like velvet!" was the unsophisticated exclamation of my little girl on seeing it. MADEMOISELLE BONNAIRE, a beautiful white with a light blush centre, very good, and in growth better than Virginal. TRIOMPHE DE LYONS, very dark, but too dull in colour to please many. MADAME CHARLES CRAPELET, an exquisitely beautiful Rose, with large petals, but perhaps a *little* too few of them, bright rose colour; this, I think, comes next to Sénateur Vaisse. MADAME BOLL, a large and well-filled Rose, lively in colour, and good in habit. GLOIRE DE SANTENAY, another fine Rose, brilliant in colour, rich crimson, and of good shape; it has hardly been exhibited in character; by some it is said to exceed Sénateur Vaisse. MADAME PAULINE VILLOT, crimson purple, blooms very freely, and a well-formed Rose.

Of the Roses of 1861, MADAME FURTADO seems to take the highest place as yet; it is a very fine, well filled, and well formed Rose, good in shape, and is well represented in Mr. Andrews' figure, the faithfulness of which Mr. Radclyffe has borne testimony to in last week's *Chronicle*. LOUIS XIV.—This is a very fine dark Rose, sharing with Sénateur Vaisse and Madame Charles Crapelet the honour of being one of the best of the Roses of last year; it is very full and well shaped. GENERAL WASHINGTON is another promising Rose, of deep crimson colour, and very full. REYNOLDS HOLE—worthily named after the worthy secretary of *the* National Rose Show—a brilliant pink colour, thick *shelly* petal, and of wondrous habit; the flower standing up well, and instead of failing when older, if possible, better; may its namesake be equally flourishing! GREGOIRE BOURDILLON, a very fine Géant des Batailles, large and more vigorous; is also another acquisition of this year. LA BOULE D'OR (Tea) is certainly in colour what it was said to be, a deep almost orange yellow; *but*—ah, those *buts*!—will it open freely or is it merely a house Rose? There is a hardness about the bud which I do not quite like, but should it do well out of doors it will be a great acquisition. COMTE DE FALLOUX is, without doubt, *the* pot Rose. I am as certain of this as I was that Eugene Appert would prove a favourite, which it has done, or that Reynolds Hole will be a universally grown flower. Of Abd-el-Kader, Princesse Mathilde, Duc Decazes, and others, I cannot say positively what is even my own opinion of them. But there is one Rose

which was lauded up as the best Rose of the season—REINE DES VIOLETTES—which, I believe, will be found to be not worth growing. TRIOMPHE D'AMIENS, on the contrary, is a very novel flower—of good substance, and very singularly mottled and barred with deep crimson on a lighter crimson ground. On the whole, I am inclined to believe that the season of 1860 saw a far finer lot of flowers sent out than any two seasons previous, and that the season of 1861 will produce several of note, but not equal in number to the previous one.

It is curious to remark how the Hybrid Perpetual class is gradually pushing the summer Roses out of growth. Take, for example, Mr. Cranston's stand of 48—which was one of the finest exhibited at the National—one finds one Moss, two H B.s, four Bourbons, three Teas, and thirty-eight Hybrid Perpetuals. By-the-bye, I believe summer Roses will be numbered amongst the things that are past. We used to say we cannot do without Paul Ricaut; but I believe *Senateur Vaisse* will prove to be a Perpetual fully equal to it and very similar. *Jules Margottin* and *Victor Verdier* have displaced *Brennus*. *Coupe d'Hebe* is run very hard by such Roses as *Comtesse de Chabillant*, and so ere long the very best of the Hybrid Bourbons and Hybrid Chinas will be matched—aye, and beaten by the more lasting Hybrid Perpetuals.

At the Crystal Palace, as well as at Kensington, Mr. Hedge, of Colchester, held a very high place. His pan of 36 flowers at the former comprised *Géant des Batailles*, *La Fontaine*, *Auguste Mie*, *Shakespeare*, *William Griffiths*, *Jacques Lafitte*, *Virginal*, *Duchess of Buccleuch*, *Gloire de Mosseuses*, *Prince Regent*, *Duchess of Sutherland*, *La Ville de St. Denis*, *Reine Victoria*, *Lord Raglan*, *Madame Knorr*, *Madame Boll*, *Acidalie*, *Coupe d'Hébé*, *Bizarre Marbrée*, *General Jacqueminot*, *Eugene Desgaches*, *Souvenir de la Reine d'Angleterre*, *Juno*, *Charles Lawson*, *Oderic Vital*, *Letitia*, *Caroline de Sansal*, *Princess Héléné*, *Leo X.*, *Paul Ricaut*, and *Cynthia*. In 18 varieties, Mr. Denis, gardener to H. S. Heyward, Esq., Folkington, Hurst Green, Sussex, took first with *Madame de Cambaceres*, *Melanie Oger*, *Coupe d'Hébé*, *Comtesse de Chabillant*, *William Griffiths*, *William Jesse*, *Alexandrine Bachmeteff*, *Anna Alexieff*, *Madame Hector Jacquin*, *Madame Knorr*, *Auguste Mie*, *Madame Portemer*, *Gloire de Dijon*, *Souvenir de la Reine d'Angleterre*, and *Madame Rivers*. Mr. Cranston's 48 was a splendid lot; it comprised *Senateur Vaisse*, *Madame Charles Crapelet*, *General Jacqueminot*, *Eugene Appert*, *Anna Alexieff*, *Souvenir de la Malmaison*, *Triomphe de Lyons*, *Gloire de Dijon*, *Madame Marie Dauvesse*, *Louis XIV.*, *Virginal*, *Souvenir de la Reine d'Angleterre*, *Caroline de Sansal*, *Alexandrine Bachmeteff*, *Eveque de Nimes*, *Victor Verdier*, *Princess Mathilde*, *La Sylphide*, *Lælia*, *Baronne Hallez*, *François Arago*, *Madame Therese Appert*, *Dr. Marx*, *Louise Odier*, *L'enfant de Mont Carmel*, *Oderic Vital*, *Manory*, *Madame Furtado*, *Eugene Appert*, *Alphonse Karr*, *Madame Vidot*, *Lord Raglan*, *Louis Chaix*, and *Comtesse de Chabillant*. Mr. Keynes also well maintained the position which, as a new hand, he had so ably won last year, having carried off four first prizes at the two shows. In 24 at the Crystal Palace, he had *Gloire*

de Vitry, Triomphe de Rennes (very fine), Madame Vigneron, Madame Vidot, Leon des Combats, Comtesse de Chabillant, Lord Raglan, Pius IX., Comte de Nanteuil, General Jacqueminot, Madame Rivers (very fine), Victor Verdier, Anna de Diesbach, Prince Leon, François Premier, La Ville de St. Denis, Jules Margottin, Paul Dupuy, Senateur Vaisse (a splendid flower), Duc d'Orleans, and Pauline Lanzezeur; his 24 at Kensington were Victor Verdier, Madame Vidot, Triomphe des Beaux Arts, Gloire de Dijon, Madame Pauline Villot, Anna Alexieff, Virginal (very pure white), La Ville de St. Denis, Lord Raglan, Duchesse de Cambaceres, Mathurin Regnier, Eugene Appert, Souvenir de la Malmaison, General Jacqueminot, Madame Miellez, Dr. Bretonneau (too dull to please), Triomphe de Paris, Jules Margottin, Eveque de Nimes (no one can *do* this flower as Mr. Keynes does), Prince Leon, Comtesse de Chabillant, Madame Rivers, and Madame Knorr.

It were useless to transcribe further lists of names, although I have them, and the prize lists will give the names of the winners in each class. Roses, too, were so out of character that it would be idle to pronounce upon them positively. Before leaving this, however, may I ask right out something to be done as to the naming of the flowers. Many were altogether *wrongly* named. People—amateurs especially—lose their tallies, and then put a name which they think correct, but which is often just the reverse, and hence others are led astray; and then as to spelling, alas! one wonders where the schoolmaster is—one may perhaps pardon Prairie de *tair* noir, but ought “*Vilage* Maid” to be passed over—one may pardon the curtailing of the Madame before Duchesse de Cambaceres, but is it quite fair to label “Angleterre” for “Souvenir de la Reine d’Angleterre.” Yet this is done. Granting that the French do give most absurd names, they ought to remain or else be altered by common consent; the “Kotscouby” has been, by common consent, subtracted from “Prince Leon,” but in other cases there is *no* consent on the subject. There is one thing more, too, whatever may be the destinies of the future—happily we know not—but this, I think, will be found necessary, never to hold a Rose show in the *conservatory* at South Kensington again; by 4 o’clock all had fallen, the place being like an oven. Either under canvas or else in the corridors would better them; but it is melancholy to see the Floral Queen so draggled-tailed after a few hours’ of brief glory. Let us hope for a more favourable winter, and I believe that we may then look forward to such a Rose show next year as has never yet been seen.

*Deal, July 24.*

D.

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#### SOMETHING MORE ABOUT STRAWBERRIES.

MOST people, old and young, rich and poor, like Strawberries; they are so wholesome and delicious that all ages may eat them, even to excess, with impunity. No other fruit is so universally relished in this and other northern countries, where it can be successfully culti-

vated, as the Strawberry. It is therefore fortunate that it can be grown in as great perfection in the small plot of land of the cottager, as in the largest and best walled garden.

Strawberries are everywhere in this neighbourhood exceedingly fine, and most abundant this season. The wet weather of last autumn was favourable to the growth of the plants; and the deep covering of snow, by which they were protected from the severe frosts of December and January last, saved them from sustaining the slightest injury. I never saw Strawberry plants look better in the month of March than they did this last season. Nor do I ever remember to have seen them push into growth with so much strength and vigour as they did this season.

A good, deep, heavy loam is considered a soil suitable to the growth of the Strawberry; and with proper cultivation they will in general succeed well in it. But a suitable soil and proper cultivation will not always secure an abundant and fine crop of the British Queen, as I will presently show.

I have always been a grower of the British Queen to a considerable extent, though I have not been always rewarded with a good crop for my labour. Six years ago I selected a piece of ground, which I considered the best here for the British Queen. I had it planted with good strong runners, and gave them proper attention afterwards. They grew well, and some seasons bore some very fine fruit, and other seasons very few and very poor. They have borne more fruit this season, and much finer, than they bore the four previous seasons all put together. Last year they bore very little fruit; indeed, one-half the plants were killed the previous winter, and those that lived looked so yellow and sickly that I felt half inclined to dig them up. If a stranger had then seen them he would have pronounced the land unfit for their growth.

I did not, however, dig them up; but, instead, I had some good rotten manure put round the plants; as soon as there were runners fit for layering, I had them put into pots, and when rooted, I had all the rows made good with the best plants; I had the ground between the rows frequently hoed during the season, and had all the runners pinched off. In the autumn, I had a little rotten manure put around the plants, and the result has been this year the most abundant and the finest crop of British Queen Strawberries that I have ever seen. The British Queen is not an abundant bearer. Nevertheless, I never saw a more plentiful crop of fruit on any other kind of Strawberry.

And not only were they abundant, but they were very fine—the admiration of every person who saw them. Many of the fruit weighed two ounces. I had pecks full of fruit which averaged an ounce and a half each; and this, be it remembered, without any extra attention. During the very dry weather through the months of May and June, the plants never once had a single drop of water given them, neither was the fruit thinned. Had I thinned some of the fruit where finest, and given the plants good soakings of liquid manure whilst the fruits were swelling, I believe I could have obtained Strawberries of very great weight.

From this it is manifest that a suitable soil will not always yield an abundant crop. Few persons ever had a *worse* crop of the British Queen Strawberry than I had last year, and very few ever had a *better* crop than I have had this season. High as was my opinion always of the British Queen, it stands still higher after what I have had this season. I purpose, in the autumn, after the plants have done growing, putting plenty of rotten manure round the crowns to save them, in the absence of snow, from the withering effects of frost. Admiral Dundas, Victoria, and many other kinds have also been very fine this season.

Alice Maud is a very useful Strawberry; it keeps in bearing a long time. Sir Harry I have had very fine, but I don't like it, as I consider the flavour very coarse. Eleanor is very prolific and useful; it is very fine at the present date, July 18, and will continue for some time. For late use we have nothing yet better than Elton, which is a most prolific bearer, is very showy, and is also good for preserving. Oscar I have not yet tried. A friend of mine, a large grower of Strawberries for market, has the Wizard of the North, but he speaks very unfavourably of it.

Six or eight first-class sorts will furnish sufficient variety for private growers: When a great number of sorts are grown, it is very difficult to keep them true, they run so into one another, and the stronger generally overpower the weaker. I always grow a limited number of kinds, and when I have proved a new sort to be better than one I grow, I discard the inferior one and substitute the new sort.

The sorts of Strawberries in cultivation are very numerous, and each year adds to the number; still there is room for very great improvement. It is a strange fact that Keen's Seedling, raised so long since, is still the sort in most general cultivation, both for forcing and open air. Let us hope something better will, ere long, be produced.

M. SAUL.

*Stourton, Yorkshire.*

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### CULTURE OF TOMATOES.

ABOUT the end of the month of last February, I sowed some seeds of these in a pot, which was then placed in the frame of a hotbed. When two or three leaves had become developed, I transferred the plants singly into separate pots, and deposited them in a greenhouse. On the 17th of May, by which time the whole had become fine strong plants, full of flower-buds, I took three of these out of the pots without disturbing the roots further than shortening the taps, and sunk them in a border of my garden against a close paling facing the south, at a distance of about three yards from each other. They were then well watered with weak liquid manure made from fresh cowdung that was allowed to remain a month or two in a large cask before being used. To this a small quantity of Peruvian guano was added, together with home-manufactured bi-phosphate of lime from bone-dust—I mean clear liquid manure a day or two after it is made, when the thick matter has fallen to the bottom.

The good effects of this, mixed as above stated, upon every kind of vegetable, as well as on florists' florists, are probably not generally known to gardeners. When used it must be very largely diluted, or it will kill the plants, instead of acting beneficially. It may be said, that if water be added to the dried superphosphate that is sold in the manure market, and the liquid drawn off after it has been allowed to settle, the same solution may be obtained. I grant it may, but not to the same extent, nor so pure, containing as it does so large a percentage of nearly insoluble matter. Besides, the bought article cannot always be depended upon, for, as has been frequently adverted to, and proved by the analyses of Professor Way, Dr. Anderson, and others, not one-half of what is offered for sale contains a particle of biphosphate. The plan I should recommend those to adopt for gardening purposes who cannot prepare the article themselves, is to get from a respectable manufacturer the liquid separate in jars, and the residue sulphate of lime in an evaporated state, without any admixture whatever, which I have found to be a valuable application, incorporated with dung, to Peas, Beans, Potatoes, Celery, all the Brassica tribe, &c., as well as if diffused alone in promoting the appearance naturally of white Clover on Grass plots, and greatly improving the colour of the sward.

Being shaded for a short period the plants did not droop in the slightest degree, and as they were again watered several times at intervals afterwards with the same composition always very much diluted, they not only grew most vigorously, but displayed a vast profusion of blossom. In order to prevent the stems from bending over these were closely secured to the paling, as they increased in length, with tarred line, such as is used for thatching, nailed across them, all superfluous and crowding shoots being cut away as they appeared, for the purpose of admitting air and sun to the branches intended to mature fruit. Each plant was trained in the shape of a fan, and in course of time showed an immense quantity of fruit. As it was impossible that above a tithe of it could come to perfection, I thinned out the smallest from the bunches and removed the extremities of the shoots when they had reached the top of the paling, 6 feet high, in order to throw strength into the fruit. The effect produced, first from the numerous flowers, and then from the hanging red Apples, was exceedingly beautiful.

Upon gathering, the following was obtained—from one plant 73, another 65, and the third 68, in all 206. The largest measured full 9 inches in circumference, the smallest about  $6\frac{1}{4}$  inches, and the weight of the whole amounted to 42 lbs. 9 ozs., a pretty fair return, I think, from three plants. The crop, however, did not all ripen at one time, some of it having been gathered in September and October, and the remainder early in November, before any was damaged by frost. I attribute the astonishing vigour and fecundity of these plants in a great measure to the application of the guano and soluble phosphate, because of two others that I grew also against the paling by way of experiment, one was watered in the same manner and at the same periods with merely liquid cow manure, and the other with water alone. The former certainly grew as tall, but had not nearly as much fruit upon it

as any of the three others, and that was mostly of inferior size. The other plant did not reach the top of the paling, and ripened but few of its Apples.

The exposure also has, no doubt, had a good deal to do with the ripening, for several plants from the same lot that were placed in a less favourable situation in the garden produced hardly any but small green fruit when overtaken by the frost. These half ripe Tomatoes I have found to be excellent for pickling. Notwithstanding, however, their being in that condition when gathered, a good many of them that were ranged on a shelf in a dry room after a time ripened perfectly. A neighbour to whom I gave two plants had not a single Apple upon them, although they grew luxuriantly, the blossoms having dropped off after they expanded. To account for the circumstance puzzles me completely. Perhaps it arose from my garden being thoroughly drained throughout and his not. Mine has 4 feet pipe drains at 30 feet apart, which I find to answer capitally. The subsoil in some parts is good sound yellow clay. The surface is a good loam to the depth of from 12 to 18 inches, otherwise the soil in both is very similar.

DAILY PAPER.

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#### CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—If the directions of former Calendars have been attended to, the Azaleas will have been cleared of their seed-pods, their wood properly thinned and tied into form, and such as needed more pot-room re-potted, and the plants placed in a favourable situation for inducing them to make free, strong, and vigorous growth. But if any of the specimens have hitherto been neglected, these should be attended to at once, especially plants which bloomed late and heavily, and do not seem inclined to start freely into growth; and these should, if possible, be placed in a warm moist situation, and be afforded every possible attention, to induce them to make vigorous growth at once. Specimens in heat, which have their bloom-buds well formed, should be removed to a cool house, or a sheltered shady situation out of doors, but they must be protected from drenching rains. Young plants, of choice or other kinds, which it may be desirable to increase in size as much as possible, should, if they are setting for bloom, be stopped regularly over and encouraged to make another growth. See that the whole stock, particularly plants in heat, are free from black thrips, and spare no trouble to keep the plants clear of this pest. Camellias which have fairly formed their bloom-buds should either be placed out of doors, or in a cool dry house, keeping them rather dry at the root in order to prevent their making a second growth, which young vigorous plants are apt to do if kept in a close moist situation after they have formed their flower-buds. Any of the plants which may require more pot-room should be repotted at once, so that the roots may get hold of the fresh soil before the blooming season, for these seldom bloom finely unless the pots are moderately filled with roots. *Conservatory.*—The principal

display here at present will probably be produced by plants brought from the stove, and if so, the house should be kept rather close, giving air cautiously against such things as are at all liable to be injured by a free circulation of dry air. But where Camellias and other greenhouse hard-wooded things are planted in the borders, it will doubtless be advisable to be satisfied with such a show of bloom as can be obtained from such things as will enjoy the treatment most suitable for the permanent occupants of the house, rather than to injure these for the sake of securing an extra show at this season, when in-doors flowers are perhaps less valued than at any other season of the year. Make the best possible use of variegated and ornamental-foliaged plants which will bear the temperature of this house, by arranging them tastefully among the plants in bloom; and such things as Crotons, Marantas, Dracænas, Begonias, &c., &c., will, with a little care, do very well here while the weather is moderately warm, and will give variety and greatly assist in producing effect. See that everything in this house is perfectly free from insects, and give twiners and other things growing in the borders a liberal supply of water at the root. Also attend to keeping the young growths of the twiners nicely regulated, going over them frequently for this purpose, and endeavour to avoid in the training of these anything like a too close formal method, or allowing them to get so much of their own way as to result in the appearance of neglect and confusion. Attend to Chrysanthemums and other autumn-blooming things, and endeavour to be prepared to have a good display of bloom here when the out-doors flowers are cut off. *Cold Frames.*—Look over and attend to last month's directions as to the treatment of tender greenhouse things making their growth here, and afford these every possible care, so as to induce them to make free vigorous growth in time to allow of the young wood getting well ripened up before winter. Specimens of Pimeleas, Epacrises, and other free-growing things, which may have been kept rather close in order to induce them to break freely after having been cut back, should, as soon as they have fairly started, be sufficiently exposed to air to prevent their making long-jointed weakly wood; and many things will be benefited by exposure to the night dews when this can be done with the balls being saturated with rain. See that all are free from insects, and attend to training, &c., and re-potting any plants which may require this attention. Examine Ericas, and other things subject to mildew, frequently, and apply sulphur immediately the pest is perceived. *Flower Garden.*—Use every possible effort to maintain perfect neatness everywhere here at present. Keep the shoots of Verbenas, Petunias, &c., nicely regulated as they advance in growth, and remove decaying blooms directly they are perceived to be unsightly. And while the bedding plants are in full beauty, carefully note any errors of arrangement, and prepare to avoid them next season. Autumn-blooming Roses will be greatly benefited by a liberal supply of manure-water, if the weather should prove warm and dry, and they will well repay any attention which can be bestowed upon them. Keep Dahlias and Hollyhocks well secured to their stakes. Proceed as speedily as convenient with the propagation of bedding-out stock for next season,

and aim at getting the young plants strong and well-established before winter. *Greenhouse*.—Any of the specimens which require more pot-room should be attended to as early as possible, and fresh-potted plants must be very carefully supplied with water at the root, and tender-rooted things should be kept in a rather moist shady situation until they appear to have got hold of the fresh soil. Strong growing things, which may already have made a fair growth, should be freely exposed to air, and many of them will do better against a north wall than under glass, but they must be protected from getting their balls saturated by heavy rains, either by being laid on their sides or by some other means. Examine all plants liable to mildew frequently, and apply sulphur on the first appearance of this pest. Also watch Chorozeas, Pimeleas, &c., for spider, and give the foliage a good washing with the engine occasionally, and see that the whole stock is free from all kinds of insects. Such things as the Erica Cavendishi, E. depressa, E. elegans, &c., &c., bloom but sparingly, unless their young wood is well-matured in autumn, and such should, as soon as they have made sufficient growth, be placed out of doors and freely exposed to the sun; but this should be done gradually, and the pots should be shaded on hot days. *Stove*.—Ixoras, which have bloomed, and which it may be desirable to increase in size as fast as possible, should be cut back, re-potted if necessary, thoroughly cleaned, tied out, and placed in the warmest end of the house. These, if properly attended to, will make a fine growth before winter. Attend to re-potting all young growing stock, as may be necessary, keeping it well supplied with water at the root, and the whole of the plants free from insects. Be careful to maintain plenty of moisture in the atmosphere, and give air freely on fine days, but not so as to cause drying currents to pass through among growing plants. Attend carefully to plants for winter blooming, and do not allow these to be placed in an unfavourable situation for the sake of plants which are more showy at present.

*Hardy Fruit*.—Proceed with the thinning and nailing in the young shoots of all wall trees, if any remain unfinished. Peaches in particular should now be kept closely nailed in, to get the wood ripened, and to give the fruit every advantage of air and light. Remove a portion of the leaves from the fruit where it is too much shaded, and at the same time remove any nails that are likely to come in contact with the fruit. If the weather is hot and dry before the crop ripens, give the borders a good watering. Wash the trees occasionally in dry weather, and trap earwigs at their first appearance; perhaps the easiest way to rid the trees of them is to place short pieces of Bean stalks or other hollow stems in different parts of the trees, and look them over every other day, blowing the contents into a bottle, and replacing the tubes as before. Protect all ripe fruit intended for use late in the season with nets or canvas, and mat up Currants and Gooseberries for late use. As soon as the crop of Strawberries is gathered, go over the beds and cut away all runners; fork the soil about the plants, to encourage them to make a good growth before the growing season is past. Layer runners for new plantations; plant as soon as they are rooted. Thin

the young canes of Raspberries, and, as soon as the crop is gathered, cut away all the old canes. *Forcing Ground.*—Melons will require plenty of air and water, while the fruit is swelling; and in hot weather the sashes may be drawn off altogether, closing the frames again at night. Stop and thin the shoots, so that they do not get matted together. If woodlice are troublesome in the frames, it is a good plan to place the fruit on pieces of brick over shallow pans of water—where the fruit is ripening water should be withheld. Should Cucumbers be scarce on the ridges, those under glass ought not to be neglected. If the nights are cold the linings should be renewed, and plants that have been some time in bearing may be cut back and thinned; and if they are top-dressed with rich earth it is likely they will produce plenty of fruit by-and-bye. Plant out those sown last month and sow again for the winter supply; keep the plants hardy by giving plenty of air. *Strawberries.*—Continue to layer runners in small pots for forcing; pot for early work as soon as they are well rooted; place the plants in a situation fully exposed to air and light; place the pots on coal ashes to prevent the worms entering them. The following are among the best kinds for forcing: Keen's Seedling and May Queen, for early work, and Ingram's Prince Arthur, Sir C. Napier, and Oscar, for later crops. *Peach House.*—As soon as the crop is cleared the trees should be looked over, and all useless shoots, such as are not required for next season, should be cut away. Well wash the trees, and water the borders if very dry. If the wood is well ripened, and the weather is warm, the sashes may be removed. *Pines.*—Those planted out on ridges will now require plenty of water, and encourage growth by keeping a moist atmosphere; close early in the afternoon at a temperature of about 90°. Liquid manure should be given occasionally, especially to those where the fruit is swelling; use the syringe freely to all, except where the fruit is ripening. All plants intended for fruiting next summer should be shifted during this month, as well as the young stock, as they may require it; use free turfy loam from an old pasture, with a mixture of sheep or pig manure; do not press the soil too firmly in the pots. *Vinery.*—Maintain a moist growing heat in the late houses; give a little fire heat if the weather is chilly, especially to late Muscats. If mildew makes its appearance dust sulphur on the fruit and leaves, and keep the house a little warmer than usual; it may be easily washed off again with the syringe after the mildew has disappeared. Keep the houses containing ripe Grapes well aired, and free from moisture. Cut out all decayed or unhealthy berries. Remove the sashes as soon as the crop is cleared, if the wood is ripe and the leaves beginning to decay. Vines in pots should be watered often with strong liquid manure; those intended for fruiting next season should be stopped as soon as they are the desired length; cut out the lateral shoots when the wood begins to ripen. *Kitchen Garden.*—Finish planting Broccoli and all Winter Greens as speedily as possible. Make the principal sowing of Vanack and Mitchell's Matchless Cabbage for spring use; these should be sown about the 12th of the month, and plant out those sown last month for Coleworts. Sow Brown Cos and Hardy Cabbage Lettuce toward the end of the month for spring use; plant out those sown last

month, in a warm situation; these will probably be useful in November. Water the late crops of Celery in dry weather, and continue to earth up those in a forward state. Sow Turnips in the second week, and make a sowing of Early Dutch at the end of the month, for use in the spring; also Early Horn Carrot directly—these should remain in the ground for winter use. Sow Tripoli Onion about the middle of the month, also prickly Spinach for the winter and spring supply. Sow American Cress, Chervil, and Parsley; it is a good plan to sow some of the latter under trees, which will be a slight protection through the winter.

#### PLANTS FOR EXHIBITION.

*Cinerarias*.—We will suppose that last month's instructions were carried out, and that cuttings are now ready, which should be carefully taken off and inserted round the edges of pots, well drained with potsherds or other loose matter, in a loose compost of light turfy loam and silver sand, well amalgamated; place in a shady situation, and as soon as rooted, which will be in a few days, pot off into small 60's in a light rich compost. Sprinkle frequently, and if mildew appear, sulphur immediately, or the foliage will be disfigured and the growth of the plants weakened; shift frequently, to encourage growth.

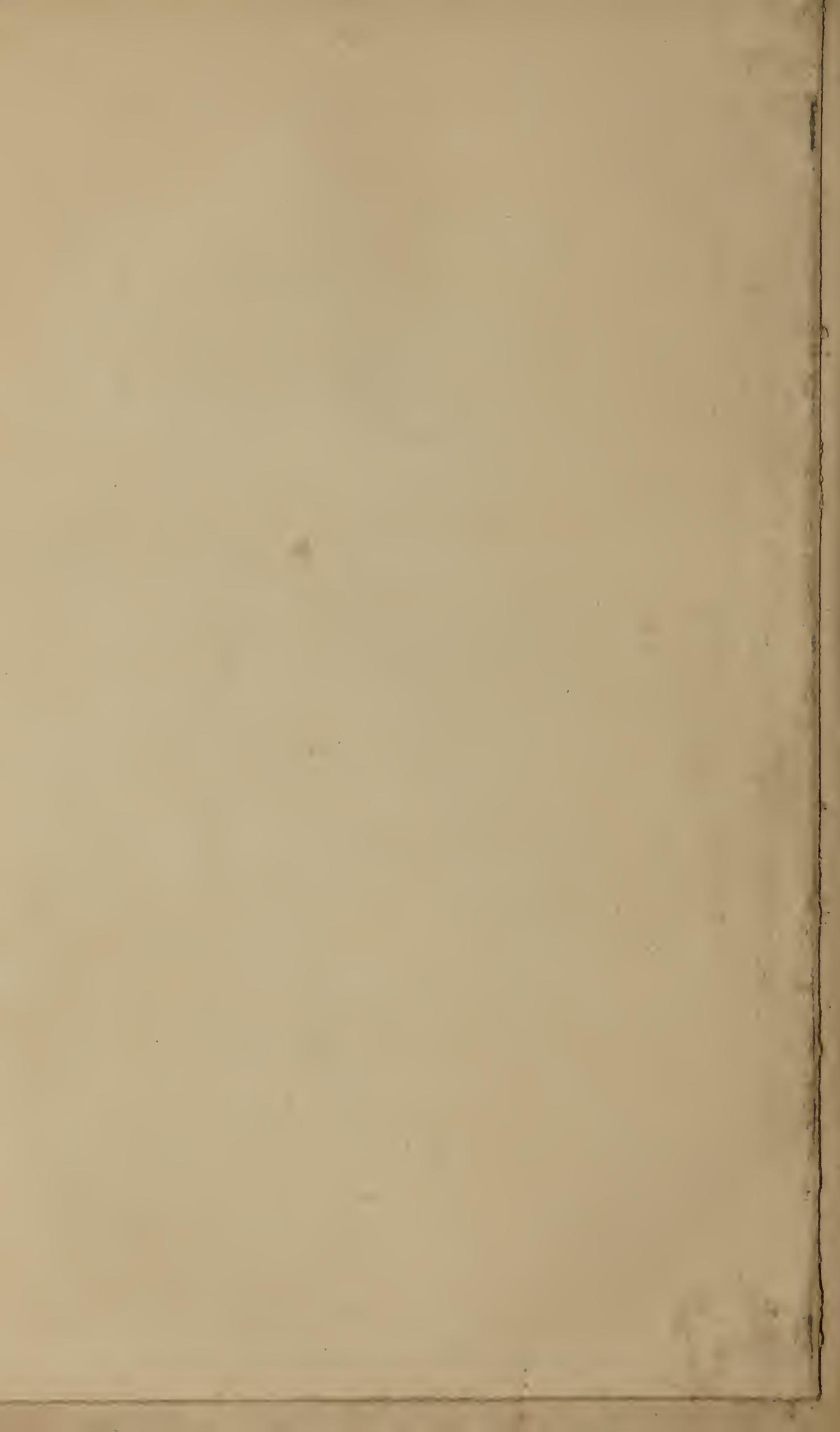
#### WORK FOR SMALL GARDENS IN AUGUST.

*Auriculas*.—These should now undergo the important operation of re-potting. There are two formulas for the compost, either of which is good. No. 1, one-half cow-dung, one-fourth loam, and one-fourth leaf-mould, with a little silver sand: No. 2, one-third each of cow-dung, loam, and mould, with the sand. The former is Mr. Lightbody's, I believe, and no plants can be finer than his. Everything used must be well decayed. Then, again, some shake out all the old stuff, others do not; some use large pots, others small; let experience decide the matter. By all means try experiments, when you have a good stock, but not before. *Carnations and Picotees*.—Layering must be finished as soon as possible. Never layer a run flower under any pretence—the best plan is to take it out at once and prevent mistakes. *Pansies*.—This is the best season of the year to make cuttings for growing in pots. Put them in under a hand-glass in a cool border, taking care of slugs and worms, which very soon throw the cuttings out of place; they must not be kept too close. *Pinks*.—Towards the end of the month these should be planted out in store beds, so as to make growth before October. *Pelargoniums*.—As soon as they have pushed about an inch, they should be watered, and then shifted into smaller pots to make growth, and stood in a cool place, but not exposed to too heavy rain. *Bedding-stuff*.—Cuttings should be made of scarlet and variegated Geraniums, so as to get strong plants. It is of no use troubling one's self with such a host of varieties. The Floral Committee's report will perhaps determine as to which are the best, but growers should decide for themselves, as soil and situation make a wonderful difference. *General Work*.—See to staking Asters, Hollyhocks, &c., and mark anything to be specially kept. Sow Mignonette now for winter flowering, in pots, and keep all neat and tidy.



Grape.  
*Hardy Prolific Muscat.*  
(Ingram)  
Plate 180.

GA



## INGRAM'S HARDY PROLIFIC MUSCAT GRAPE.

[PLATE 180.]

We are indebted to Mr. Standish of Bagshot for permission to figure the new and valuable Grape which forms our present plate; the variety originated at the Royal Gardens, Frogmore, under the superintendence of Mr. Ingram, who, we are informed, obtained our present subject by crossing a black seedling of his own raising with pollen taken from the Muscat of Alexandria.

To Mr. Ingram belongs the merit of having raised not only the seedling Grape now figured, but several other new fruits and flowers owe their origin to the skilful process of hybridising practised by that gentleman at Frogmore; the Prince Arthur, Prince of Wales, Frogmore Late Pine, and Rifleman Strawberries, perhaps the four most useful varieties in cultivation, have all been raised by Mr. Ingram. The Apples, Pears, Peaches, Plums, and Nectarines, have also all been operated upon with successful results, although these results are not yet sufficiently proved to be made known to the world. Nor have flowering plants been forgotten; the Crystal Palace Scarlet Geranium, about which so much has been said, had its origin at Frogmore; so had Princess Alice, a pink variety, and many others. Of Heaths, Epacrises, and Begonias, Mr. Ingram has raised many charming hybrids, a few of which are known, but the greater part are confined to the Frogmore collection.

We have great pleasure in having an opportunity of noticing Mr. Ingram's labours as a most successful hybridist, and hope our pages will ere long show further evidences of his skill in this particular branch of gardening.

Mr. Standish informs us that he has fruited the Prolific Muscat both in pots and planted out, and can therefore speak with certainty to its great productiveness and hardiness. It produces hard, short-jointed wood, with thick robust foliage, a property which adds to its value, when we remember how many crosses from the Muscat have tender foliage, apt to become scorched under a bright sun. The bunches are somewhat long, tapering, and well shouldered. The berries set very freely, even under the disadvantage of a low damp atmosphere; the berries are medium sized, oval-shaped, of an intensely black colour, and well covered with bloom, possessing a rich vinous flavour, with a slight dash of musky aroma; the variety has been pronounced by competent judges to be a most delicious as well as very useful Grape.

The Hardy Prolific Muscat has been exhibited before the

Fruit Committee of the Royal Horticultural Society, where it received a first-class certificate; it also competed for Mr. Wilson Saunders' prize of £5 for the best seedling Grape of the year, which was awarded it as such; and in the miscellaneous class at the opening fete of the Royal Horticultural Society, at South Kensington, it was awarded an extra prize, all of which certify to its excellence. The stock, which is now being distributed, is solely in the hands of Mr. Standish, Royal Nursery, Bagshot.

Our plate gives an excellent representation of this valuable acquisition to our lists of hardy Vinery Grapes. We consider that no garden or greenhouse should be without it; and as, from its habit, it is admirably adapted for pot culture, and the orchard house, we expect to see it very generally grown both in this country and on the continent, where its merits will no doubt procure for it a prominent place in out-door cultivation.

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#### ROYAL HORTICULTURAL SOCIETY'S GARDENS, SOUTH KENSINGTON.

MODERN flower gardening has become one of the fine arts, and requires to be judged by a very different standard to what applies to horticulture as representing cultivation only—the former depending on the combination of certain forms and colours; the latter recognising solely cultivation and training. The one embodies principles dependant on the properties of soil, temperature, and culture; the other, the arrangement of plants possessing different colours, either singly or in groups, so as to form a picture, and in fact governed by the same laws as critics would apply to a painting, which, with a flower garden, may be defined as the “*Beautiful*,” exhibited in visible forms by *colours*.

It will not be difficult, therefore, to understand that the æsthetics of modern flower gardening are derived from the same source as the æsthetics of any other branch of the Fine Arts—Painting, Sculpture, or Architecture. Admitting this, we at once recognise the true position of geometrical gardening, and the force of a passage in the speech of H.R.H. the Prince Consort, when replying to the address of the Council at the inaugural fete, when he stated that he “hoped to see Gardening, and the sister arts Architecture and Sculpture, carried out in harmony together in these grounds to their highest perfection.” This quotation justifies our introducing the subject, and will guide us in our brief review of the gardens on the present occasion.

Before the gardens were in so finished a state as they now are, we thought we could perceive defects in their composition which would tell against them more fully when furnished with flowering plants and dressed out in their summer attire. A second view of them, in their present condition, confirms in some respects our first impressions. The polychrome beds of the *Saturday Review*, or the Box embroidery

set with coloured gravel, are not at all to our taste ; they produce a bit of a polychrome certainly, but we should have much preferred that the verdant slopes on which they are placed had been left unbroken. Then, again, the panels into which the grand shield compartments for flowers, which flank each side of the main walk, are thrown, would have been better filled up, and the flower beds brought up to the level of the gravel walk. Neither are the lines of Box forming the pattern and scroll-work in the design bold enough to be distinguishable at even a small distance, which will prove a great defect in the absence of flowers when the Box and different coloured gravel will alone have to represent the design. An alteration also suggests itself in the interior of the compartments to allow for additional space for flowers ; for, admitting the principle that in the arrangement of masses of colour on a given design or painting, it should be evenly balanced, and not laid on with a great dab of glare in one place, and a weak one to match, more room seems to be required, to enable Mr. Eyles to make good his picture. These latter defects in the details of the design are, however, naturally incidental to most new plans, for even the most cultivated eye can scarcely see far enough to comprehend to its full extent the difference in appearance between a coloured design lying before it and the same carried out and filled with growing plants.

Although the grounds are incomplete, yet the parterres and flower-beds are in the full blaze of beauty ; and however we may differ in opinion as to whether Mr. Nesfield's design for the gardens is the one best adapted for a town garden, as to details, there can be but one opinion on the admirable way in which Mr. Eyles has arranged the planting. We have seen in places more variety, as was to be expected ; but with a few exceptions, arising from not providing space for more flowers in the design (over which Mr. Eyles had no control), the massing of colour and general arrangement are such as to show that that gentleman clearly understood his objects, and has most successfully worked them out.

We have stated above that flower-gardening differs widely from that of mere cultivation ; the principal object of the one being to cultivate, the other to combine. But nevertheless, as bright colours are indispensable for effect, good cultivation is necessary to produce them ; and that this is the case at Kensington, the condition of the bloom affords ample testimony. There is a brilliancy of colour and healthiness of foliage which bespeaks careful tending in this respect—avoiding, on the one hand, an excess of growth, inducing foliage at the expense of bloom, and, on the other hand, any deficiency of support, which would at once show itself in the starved appearance of the foliage and puny blossoms.

The variety of plants employed for the garden decoration are comparatively few ; it is to their numbers, redundancy of bloom, and artistic arrangement, that the grand effect observable is produced. The scarlet section of Geraniums comprises the Crystal Palace Scarlet, so called, which has several synonyms, but is an old variety, raised many years ago by Mr. Ingram, and given away to several parties, who sent it out under different names, one being Collins' Dwarf—others called it

the Frogmore Improved; Punch, Cottage Maid, Royalist, Trentham Rose, Lady Middleton, Rosy Queen (a fine variety), Compactum, and the Purple and a lighter kind of Nosegay, are all largely used, more particularly the first named, which forms the centre line of all marginal beds. Variegated Geraniums are extensively grown, and the beds of Brilliant had a striking effect—Alma, Flower of the Day (Mangles', for edging), Lady Plymouth, and a dwarf free-flowering kind named Halley's Burning Bush; Verbenas, Calceolarias, the dwarf Lobelia, Gazania splendens, and Tropæolum elegans, are also extensively planted.

We have only space to particularise a few of the arrangements. The marginal beds surrounding the two shield compartments on each side the centre walk are composed of a broad line of scarlet Geraniums running down the centre, flanked on each side with Purple King Verbena, and edged with Tropæolum elegans. The circular beds which intervene between the above are mostly variegated plants, one was Alma Geranium, var. Allyson, and a blue Lobelia; a second Lady Plymouth and Lobelia, with the small Maronette Verbena; a third (and this, in our estimation, the prettiest) was planted with Allyson, a free rose-coloured Phlox of the Drummondii section, called Radowitsky, the purple-leaved Atriplex, and a few patches of a deep violet Heliotrope; the combination of colour in this bed was very pleasing. The Rosy Queen Geranium, noticed above, presents a new colour and is a most effective bedder; we believe it was raised by Mr. Kinghorn.

The beds of American plants, and shrubs and trees generally, are progressing freely, the season having been favourable for their growth. We shall have to wait a few years to allow the trees and shrubs to grow into character before we shall be able fully to judge of the general effect. We still, however, incline to the opinion that more evergreen trees and shrubs will be required, more especially such architectural plants as Irish Yews and Junipers, with trained Hollies and Box and Bay trees, and probably some Pines, if they would stand the London smoke.

Steps are being taken to furnish the winter garden with plants for the forthcoming season. The arrangement of this conservatory is unique; the arcades which surround the garden being carried through the north side of it; the roof forming a gallery from which the interior of the building is overlooked, adds greatly to the picturesque character of the interior, and forms a charming spot to view the exhibition on fête days.

#### CHISWICK.

The experimental grounds are now the great feature of Chiswick. All who are interested to know what are the best plants to grow for the flower garden may see and judge for themselves, and learn many a useful lesson for next season. Indeed, we strongly advise all who have the opportunity to avail themselves of it, and taking a large memorandum book with them, make their own observations. They will find growing here all the procurable varieties of Geraniums, Verbenas, Petunias, Heliotropes, Phloxes, Pentstemons, &c., which

they can see at no other place growing together, as all the nurserymen contribute to the stock. By this time the Floral Committee will have met and examined the comparative merits of each plant in all the sections; and we shall get their report in due time. This, in my opinion, however, does not lessen the necessity of country florists and gardeners seeing and judging for themselves. Many ladies and their gardeners are now looking out for some new shade in a Verbena or Geranium to match something they already have or want; and no where could they so readily see what they require, if at all procurable. A personal introduction, or order from a Fellow, is all that is required to procure admission, provided the parties are not F.R.H.S. themselves. A long pit is filled with a very interesting collection of pot Grapes, also for trial; a second pit was filled with Cucumbers for a similar object; and altogether the experimental department is specially worth a visit. The Grapes in the large conservatory have not been cropped so heavily as last year, but the produce is fine, and they bid fair to cover the roof this season with wood; and when this is the case, and the Vines are in fruit, it will be a splendid exhibition of itself.

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#### LAPAGERIA ROSEA AND ITS ALLIES.

ALL climbing plants are beautiful. Though there be many which are difficult to manage, we cannot make them flower in a small state, yet even then they are beautiful, and they are universal favourites. If any friend sends you home a package of foreign seeds, you may, before opening them, be certain that more than half of them will be the seeds of climbing plants. Even our own hedgerows owe the greater part of their beauty to the wreaths of *Convolvulus* or wild Bryony with which they are decked; and when travellers visit the tropics the first thing with which they are struck is the luxuriance and beauty of the climbers. Many of the most beautiful of our cultivated plants are climbers too; what could we do without our *Ipomœas*, *Passionflowers*, *Stephanotis*, *Hexacentris*, and a score of others? But there is not one which can rival *Lapageria rosea* for general use; and yet it is not so often met with in gardens as it deserves to be. And although its cultivation is so simple, yet when we do see it, it is not so luxuriant as it might be.

The *Lapageria* strongly objects to close soil; it should be potted in the very roughest peat, from which the fine soil should be sifted. The peat should be broken into pieces the size of one's fist, and some silver sand sprinkled in as the pieces are arranged about the roots. In potting a very large plant, it will be well to throw in, here and there, a handful of crocks, or better still, some pieces of broken charcoal. Nothing keeps the soil open so well as this; they should not be mixed with the soil, but thrown in clusters. The roots of the *Lapageria* are very wiry and brittle, so that they should not be shifted oftener than is necessary, and if they could be planted out so much the better, such soil as we recommend would not easily become sour if well drained below. With such

soil and drainage it cannot be overwatered; the more liberally it is supplied the better.

The *Lapageria* is a native of Chili, and there are several other beautiful plants from the same country which succeed admirably under the same treatment. By-the-by, no house suits them so well as a greenhouse facing the north. The plants we allude to are *Philesia buxifolia*, a trailing shrub with large trumpet-shaped crimson flowers, and two species of *Luzuriaga* or *Callixene*. The last-mentioned plants belong to the natural order *Liliaceæ*, but in habit and appearance closely resemble those above-mentioned. I have not yet seen the flowers of *Luzuriaga radicans*, but *L. erecta* (or as it is now more properly called *Callixene polifolia*) is a most charming plant. In the spring every leaf produces a little, drooping, white, Snowdrop like flower. It is well worthy of general cultivation, although the plant is but seldom seen. These plants, like almost all those from Chili, are nearly hardy in this country; quite so in well-drained and favourable situations.

DELTA.

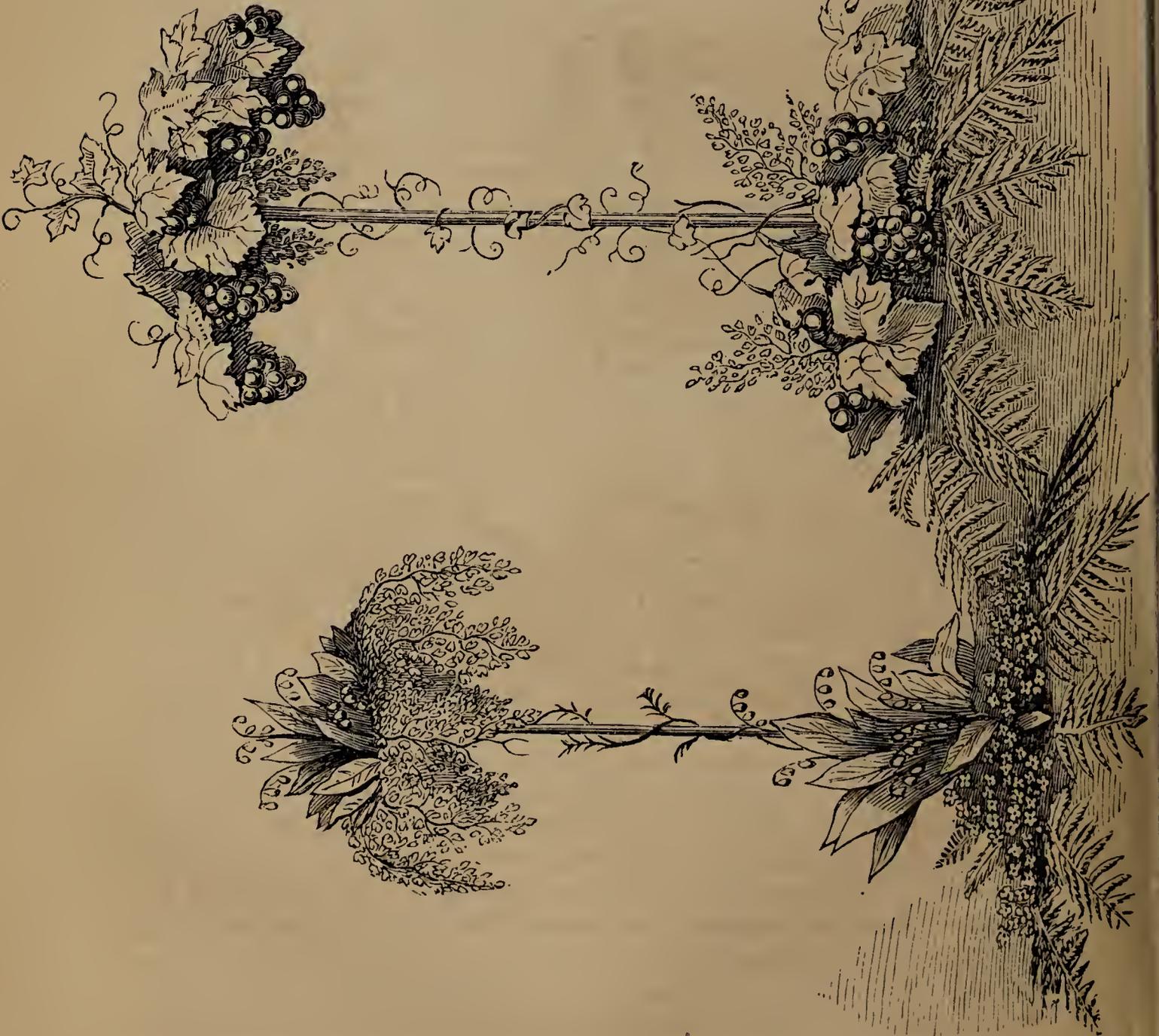
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### FLORAL DECORATIONS.

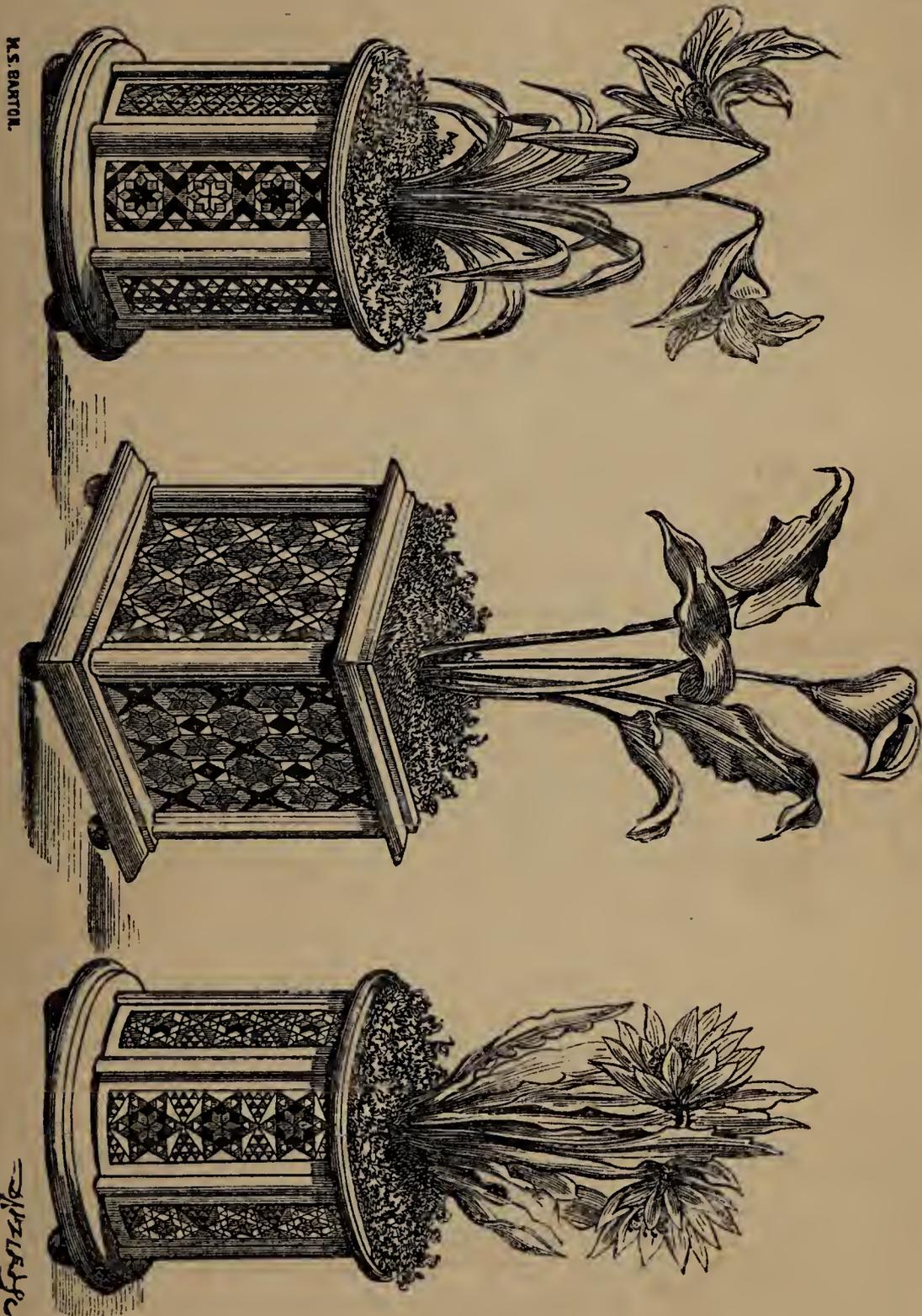
THERE were three persons who achieved, this season, in the floricultural world, what is considered the most desirable and most difficult accomplishment of modern days—the making a sensation, and each in a different department: Mr. Leach, in his production of the magnificent plants of *Disa grandiflora*; Mr., or rather (for shall we not give honour to whom honour is due) Miss March, in the successful competition for Mr. Wentworth Dilke's prize for table decoration; and Mr. Standish, with the wonderful collection of Japanese plants sent home by Mr. Fortune:—the first, conspicuous as a notable example of a triumph over difficulties which had puzzled many a wise horticultural head; the second, as a charming result of taste and just appreciation of beauty; and the third, as a proof of that indefatigable perseverance which leads our Anglo-Saxon race to the utmost parts of the earth in the pursuit of any cherished object, and of the skill which brings them to our own doors as fresh as if they had only just come from a neighbouring nursery. Having lately had an opportunity of seeing Mr. March's design, I think one may say a few words on the subject generally of floral decoration indoors—for that love of nature which so strongly marks our race is to be seen in the constant endeavour at window gardening among all classes of the community, from the lordly occupant of the town mansion in Piccadilly and Belgravia to the toiling seamstress of St. Giles' and Shoreditch. Nothing is more grateful to a regular occupant of the great metropolis than the vase of bright and fragrant flowers adorning the breakfast table, and reminding him of the sweets of country life; and when fashion came to add impetus to it, and, instead of costly epergnes and lumbering plateaux, the *diner à la Russe* demanded stands of flowers, not only as *centre pieces*, but also in other places on the table, it was a wise thought of Mr. Dilke to challenge a competition which might bring out such an example of taste;

as that the fashionable world might fairly appeal to it as the pattern for similar decorations. I shall not easily forget the astonishment which some persons manifested when the label "First Prize" was attached to the design of Mr. March. There were elaborate specimens of silver vases filled with gorgeous flowers, others topped with the expensive Pine, and others as if they were intended for some school children to carry about on May Day. The first prize! Several times I was taken off, *vi et armis*, to decide between contending parties, and always stoutly maintained that the judges were right. Look at the design. Does it not combine every requisite? It is simple, elegant, and inexpensive; the lightness and transparent nature of the stem no ways obstructs the view, and the freshness of the elegant Fern leaves shows off on the white table-cloth admirably. With the same general character, the constituents of the design may vary according to the season of the year; there must not be too much colour, and what there is should be bright and lively; and, as has been kindly suggested to me by Mr. March, many of the smaller Mosses and Ferns would keep in a growing state in the sand with which the dishes are in part filled, and thus add fresh beauty and interest to the design. A visit to Messrs. Dobson and Pearce, of St. James'-street, will well repay the trouble.

And not only may these be taken as a model for dinner-table decoration, but they are also quite suited for the drawing-room or boudoir of the country mansion. They are to be had, as originally shown, all of glass, or else with the bottom dish of zinc, which answers quite as well, is not so expensive, and of course not so liable to damage. Messrs. Dobson & Pearce have also brought out several novel patterns in flower vases, some of which were exhibited at the Rose show at Kensington on July 10; one especially beautiful, with three vases combined together. The visitor to this establishment will not fail to notice the most exquisite specimens of engraving on glass to be seen in England; they have given their attention to this branch very much, and selecting some of the best and rarest specimens of the Venetian school, and the patterns contained in that unique collection in the Hotel de Cluny, they have brought it to great perfection; the variations are infinite, and exquisitely chaste. Of a totally different character are Mr. G. H. Stevens' mosaic jardiniere, of which the following is a representation, though no drawing can give anything like a fitting idea of their extreme richness. Frequently growing plants are brought into the house and placed on the centre of a table, and we all know a common flower-pot is not the most tasteful thing in the world, and these jardinieres are intended to put them into; they are also used as Fern cases, and are very appropriate for that purpose. A very large one was exhibited both at Kensington and the Regent's Park by Mr. Standish, of Bagshot, and all Mr. Stevens' Fern cases have the advantage of thorough drainage, a screw being placed underneath by which the water may be drained off. At the same establishment, either at the Pantheon or in Great Queen-street, are also to be seen some very neat ornamental pots for nearly a similar purpose, although, from their light porous character, the plants may be grown in them, and so brought into the house as they come into bloom. Here, too, a visit will be well bestowed, for not only



is this very beautiful invention applied to gardening purposes, but is to be seen in tables, stands, and various other articles, the small pieces of various coloured glass being combined together in a vast number of patterns, and all very beautiful. On the whole, we may say that these floral decorations are an evidence of the growing taste for floriculture,



and that the thanks of all possessed of real taste are especially due to Mr. Marsh and his sister for the admirable fashion they have set, and to Mr. Wentworth Dilke, for his liberality in thus being the means of educating so good an example of simple taste and artistic arrangement.

Deal, August 20.

D.

## A FEW HERBACEOUS PLANTS.

THE shortness of time during which border flowers last in bloom is no doubt one cause why they are not so much grown; and the reason Verbenas and similar plants have taken their place. I have, however, managed to get them to bloom with me quite up to November, and as the sorts I employ are really valuable both for effect and for cutting, a hint on the plan I adopt may not be unacceptable to your readers.

The plants I take are Phloxes, Delphiniums, Campanulas, Lysimachias, Asters, *Lychnis Bungeana*, &c—the three former principally. The border for these should be deep and well manured in the spring, for much will depend on this. My borders form several large groups in the centre of a lawn surrounded by other beds filled with Geraniums, &c., and are interspersed with dwarf shrubs. About the middle of June—sometimes before—we cut back two-thirds of all our Phloxes, &c., to within six inches of the ground. The beds are now kept well watered to encourage the plants cut back to break afresh, which soon takes place. The spaces between them are filled with *Gladiolus*, *Salvias*, and *Pentstemons*, to produce a show of bloom in the interim, when they are removed, if necessary, to make room for the above to flower, which are now showing bloom, and will continue until late in the autumn; whereas the same plants not cut down are now dying and are being cut away. If the Phloxes throw up more shoots than will grow strong and produce good heads of bloom, I thin them to three or four on each plant, and the same by others. Where herbaceous plants are prized, this plan will enable the above and probably several other kinds to be seen in bloom as long as the season will permit them; they form good masses of bloom in the centre of a lawn, which we could not fill with common bedding plants, and are also very useful for cutting.

G.

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 THE ACHIMENES.

NEARLY all the varieties of this lovely genus deserve to be ranked with the most beautiful and useful ornamental plants which our glass houses possess. Their flowers, of many delicate and pleasing shades of colour, are produced in great abundance for months in succession, and the plants themselves are mostly of compact growth and easy culture. While in a growing state all the varieties require the assistance of a rather warm and moist atmosphere, but during their flowering season they may be removed to a cooler and drier situation, such as a close greenhouse or conservatory, where they may be said to be indispensable during the summer and autumn months.

As all the *Achimenes* increase rapidly by means of their scaly tubers, artificial propagation is almost unnecessary, except in nurseries, where it is perfectly understood. I shall, therefore, merely state that cuttings of the young wood, treated in the ordinary way, and placed in

a brisk bottom heat, will root freely. Taking it for granted that there is a supply of tubers at hand in early spring, they should be separated from the soil in which they have been wintered, and planted in shallow pots or pans (the latter are preferable) well drained, and filled with light sandy soil to within two inches of the top. The tubers should be laid rather thickly and regularly upon the surface, and covered with mould to the depth of an inch, or as much more as the pan will hold.

Water should be sparingly applied, only just sufficient should be given to keep the soil in a moist state. If active growth is desired, without loss of time, plunge the pots or pans in a gentle bottom heat. When the plants are about three inches high they should be carefully lifted from the soil and potted in 7-inch pots, placing twelve or more plants in a pot, according to the sized specimens that may be wanted. After potting, place them in a close and rather warm atmosphere till they have become fairly established; a temperature of about  $60^{\circ}$  at night, allowing it to rise  $10^{\circ}$  or  $15^{\circ}$  with sun-heat in the daytime, will be found the most congenial to the plants at this stage of their growth. As soon as they are established in their pots, air should be freely admitted on all favourable occasions, and the plants kept near the glass. If all goes on well they will soon fill the pots with roots, when a final shift will be necessary. The size of the pots for this shift should be regulated by the size which it is desirable the plants should attain; 10-inch pots will be sufficiently large where moderate sized specimens only are required; but for very large masses, 12 or 13-inch pots may be used. Some first-rate cultivators prefer deep pans for *Achimenes*, but these are better suited for plants to be flowered in a moist, warm house, than for those intended to be removed to the greenhouse or conservatory during the flowering season. About twelve plants may be placed in a 10-inch pot. It will be necessary to maintain a moist atmosphere, and keep the house rather close till the plants can lay hold of the soil; and water must be carefully supplied during this time, but the syringe may be used freely, if the weather happens to be bright. As soon as the plants start into free growth, after potting, air may be more freely admitted, and a slight shade during the forenoon of sunny days will be found beneficial. Varieties of the habit of *pedunculata* should be stopped as soon as they are established in their flowering pots; and if it is intended to train them in a formal manner all the kinds should be staked before the shoots have become entangled. The stakes should be cut off at the height to which the variety is likely to attain; they should be so arranged as to form the frame-work of a handsome specimen, and the shoots should be kept carefully tied as they advance in growth. When it is supposed that the pots are filled with roots, an occasional watering with clear manure water may be given. Indeed, I regularly water my *Achimenes* with weak manure water from the time they are well established in their flowering pots till the blooming season is over, and I think that the plants are greatly benefited by this treatment. If it is intended to remove the plants to cooler quarters while they are in flower, they should be judiciously and carefully prepared for the change by giving more air, and gradually lowering the night temperature as much as circumstances will allow. When removed they should be

placed in the warmest part of the house to which they have been transferred, and guarded from currents of cold air; but if they can be kept in an intermediate house the flowers will be larger, and the blooming season will be prolonged; still, a close kept conservatory will supply a suitable temperature, at least during summer and early autumn.

When they have done flowering they may be thrown on the rubbish heap, merely preserving about two pots of each variety for stock; these should be kept sparingly supplied with water, and if they can be removed to a warm dry house, the ripening of the tubers will be better secured than under other circumstances. Water must be altogether withheld as soon as the leaves assume a sickly appearance, and when the tops die down the pots may be removed to any dry situation, where they will be free from frost, and where they may remain till the tubers are wanted for starting next spring.

For soil, take light sandy turfy loam, peat, leaf-soil, and thoroughly decomposed cow-dung, in about equal proportions, to which add as much sharp sand as will ensure a free percolation of water through the whole materials. The loam and peat should be used in a rather rough state; the dung should be broken up and intimately mixed with the sand before it is added to the compost. All the *Achimenes* are very impatient of stagnant moisture at their root; therefore secure perfect drainage by using plenty of potsherds or lumps of charcoal; indeed, when pots are used, they may be one-third filled with draining materials.

S.

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### ORCHARD HOUSE CULTURE.

THERE is not much required to be done to the Peach trees you are supposed to have selected, further than to pinch back to one joint only any secondary growths which they may have made. You will now perceive, in looking into the axil of each leaf on the shortened shoots, that two or three buds are being produced at each joint. If such is the case it will be satisfactory, for these are the fruit buds; and if you can make them perfect by getting the wood to ripen well (which you will know by its turning a reddish brown in September), you may expect these small buds to give you fruit next season. Should any of the shoots which have pushed since the cutting back have the appearance of these buds at the top instead of forming leaves, let them remain; they will form a natural spur and produce fruit as certainly as the others. Mind the drier the weather is from the present time, the better chance have you for ripening your wood; therefore, do not water the plants on any account.

The loam which, as before advised, should have been procured, may be turned over and exposed to the weather, so as to become mellow and ready for use when wanted.

If it so happens that a stock of young trees were purchased and potted in the spring to grow on for next season, these will require the same pruning process as the former, *i.e.*, to have the ends of the growing

shoots pinched off as far back as they are soft and green; diminish water gradually to about the middle of the month, after when, if the leaves droop occasionally before the watering is repeated, it will rather benefit than injure them. If you have a dry pavement or gravel walk it will materially conduce to the ripening of the wood and the formation of fruit buds, if you lay the pots on their sides by day (or they may remain so if convenient); the radiation of heat from a hard walk or pavement is very great, and will greatly assist the ripening process of both wood and foliage. If the surface of the floor could be blackened, so much greater would be the temperature within a foot of its surface by the absorption and radiation of the sun's rays; the horizontal position of the wood also assists the perfect maturity of the fruit buds.

In our next we shall detail how to pot the trees and store for the winter.

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### ON THE CULTIVATION OF THE AURICULA.

TWICE this summer I have been asked for a modern treatise on the cultivation of the Auricula, and to each inquiry I have referred to the scattered papers on the subject in the *Florist* for the last twelve years, and to those of one or two other gardening periodicals. But as the most systematic account, and the only one which singly would be of use to a commencing cultivator, is one by Mr. Lightbody, published first in the "Scottish Gardener," and reprinted by permission in the *Florist* for 1852, page 32, I endeavoured to persuade Mr. Turner to supply the want. It would come better from him than from anybody else, because it has turned out upon trial that with this, as with almost every other plant he has tried his hand on, his success as a grower has distanced all competitors, in England at least, for Dr. Plant in Ireland and he have not yet measured their strength. But as my last querist is in no mood to wait, I have promised to write this for his especial edification.

It is rather late, but not too late, to commence a stock when this appears. Owing to a detention from home, by the serious illness of a member of my family, I shall not be able to repot my own till that time, and yet I hope to appear at the Botanic Gardens in London next spring with undiminished lustre. There is yet time with careful treatment after potting to procure a sufficiency of new root; before winter to ensure a good bloom. After trying all the prescribed times for repotting, I have come to the conclusion that the best time is *at the end*, not at the beginning of their summer rest; when vigour begins to show itself in a renewal of growth after the heats of summer are past; and that probably as soon after this as is convenient is the best; that is quite at the end of July or in the first half of August. The plants, which are slow in all things, will then have time to establish themselves before winter, which in the case of small, young, or weakly plants, is of great importance. Late potting is also said to diminish the number of

autumn trusses. I have not found this effect, but neither do I care about it. I do not believe in the general opinion of its injury to the spring bloom, though I am careful to save their strength all I can by pinching off the buds of such trusses as appear not later than October.

The soil is the next thing, and with that must be associated the size of the pot that is to contain it. In England the universal caution has been, "Do not overpot." And one most successful exhibitor, cultivator, and raiser (the late Mr. Dickson), rarely used larger pots than 4-inch; 5-inch pots are by most considered the utmost allowable size. And there is truth in this, if you will not take the most scrupulous and apparently unnecessary care about drainage, and to get the new roots to the sides of the pot before winter; for then you will stand a fair prospect of the tap and the old roots rotting. But the only cultivator who can get eleven pips on Booth's Freedom, and nine of two inches diameter each on a Fletcher's Ne Plus Ultra, and that on a column or stem in size proportionate to carry such a capital, as I can bear ocular witness, namely Dr. Plant, of Monkstown, uses much larger pots; and he says you *must* if you want his results. Mind the drainage, and the roots, and you may if you like.

For the soil, please to keep common sense in view, and you will succeed. All the "villanous compounds" of past times belong to the dark ages. Let them go. The plant in its native valleys has an abundance of vegetable earth, and no manure. Copy this. Let your loam be as rich as you like, provided it be native, the richer the better in clay and fibres of grasses. To this add one-half of decayed leaves, or if you like it better, what comes to the same thing, well-rotted cow-dung. Add sand enough to keep it open, if any is necessary, which it by no means always is; and you have what I have used now for some years, and have no intention of altering. If you put moss over your crocks do not let it be too lively, or it will grow up through the mould, and usurp the nourishment of your plants. The drainage being arranged, let the pot be filled to about two-thirds with the compost not in too dry a state. It should neither be dusty on the one hand nor visibly moist on the other, but in such a state that a handful taken up and squeezed will remain in a ball. Spread the roots out evenly over the mould, and fill in. Very little pressure, indeed a tap upon the potting table will be almost enough to settle the plant. The usual plan is to plunge the pot then to its rim in water till the soil is moistened, and it is good practice; but I am inclined to think, from some unintentional experiments, that new roots would be formed more quickly and satisfactorily if this were omitted for a time, provided the soil used were, as it always ought to be, in the proper condition of moisture when the plant is potted, and the plunging deferred till roots are formed. This is the time to take off all offsets that are rooted. If not rooted they should be allowed to remain attached to the parent at this season, however large. In February they may be removed without roots; and in May another artificial help to propagation may be practised, which will be mentioned in its place.

The plants should now be kept close for a few days, varying according to circumstances from three to ten; and then gradually accustomed to

the air, for no plant requires more of free air than the Auricula. When established the stages should face the north at all times, except from February till April, and the plants have all the air possible, and the night dews, but no rain.

As winter approaches, water should gradually be withheld till they go to their winter's rest, for the less succulence there is in the leaves the less will they suffer by the severity of cold. Still they must not become entirely dry, even in the winter; and therefore it is better to cover them entirely and efficiently during a frost, by mattings or frigi domo, as they are in their Alpine homes by their mantle of snow. It is of considerable importance during the autumn and winter to keep the plants free from decayed leaves, or dead matter will be taken into the circulation.

Nothing else is needed till the frost breaks up and returning life begins to show itself in early growth, usually soon in February. At that time turn the frames round full to the south, take out as much of the old soil from the pots as you can without disturbing the roots, and replace it with a top-dressing of the same compost as that used for potting, or if you please a little richer by the addition of a little well-rotted manure, provided it has also been exposed to the frost of the preceding season. If manure, either solid or liquid, is ever given, this and the succeeding two months are the time for its being done. Liquid manure is the best, and it should be one of these three kinds: either a peck of sheep droppings to 60 gallons of soft water; or a solution of superphosphate of lime; in either case the clear liquor only to be used, and that very weak, and not oftener than once a week or once in four days at the utmost; or a solution of saltpetre, an ounce to a gallon of water. And in watering be very careful, even with pure water, to avoid wetting the leaves. I use a watering pot made on purpose.

When the trusses are getting forward they must have all the air but no wind, and above all no north or east wind; for which purpose calico wings, to cover the sides of the open frames are of prime necessity; for the frames must be opened, though no rain must be admitted, a single drop of which would disfigure a blossom, and spoil the labour of a year. The cold east wind would sere the green edge with yellow; so would now a single degree of frost, which must therefore be carefully excluded by much more covering at night than is necessary in the depth of winter. At this time any offset that has any portion at all of stem, though without any root, may be taken off with the certainty of its growing. They now want watering three times a week.

When the trusses begin to separate their pips thin out those that are too full with a fine pointed scissors, and press the rest separate; they will need no other training. The Ringleader family, and those inclined to cup, will require the full power of the sun, under a handglass supported on bricks at the corners, to give air, in order to flatten. At this time, too, when the bloom begins to show, that pest greenfly will make its appearance, and must be kept under with a camel's-hair pencil.

As soon as the bloom is over in May a vigorous leaf growth takes place, during which it is customary to place the plants out of doors, under a north wall, or hedge, sheltering them merely from sun and

from violent rains. The summer's sun appears to me the only thing they will *not* bear. My own practice for the last two years has been to leave them in their frames facing the north, as they always do *from the time the first pip opens*; and I am satisfied with the result of this treatment, which, however, was adopted because I have no good place to expose them in.

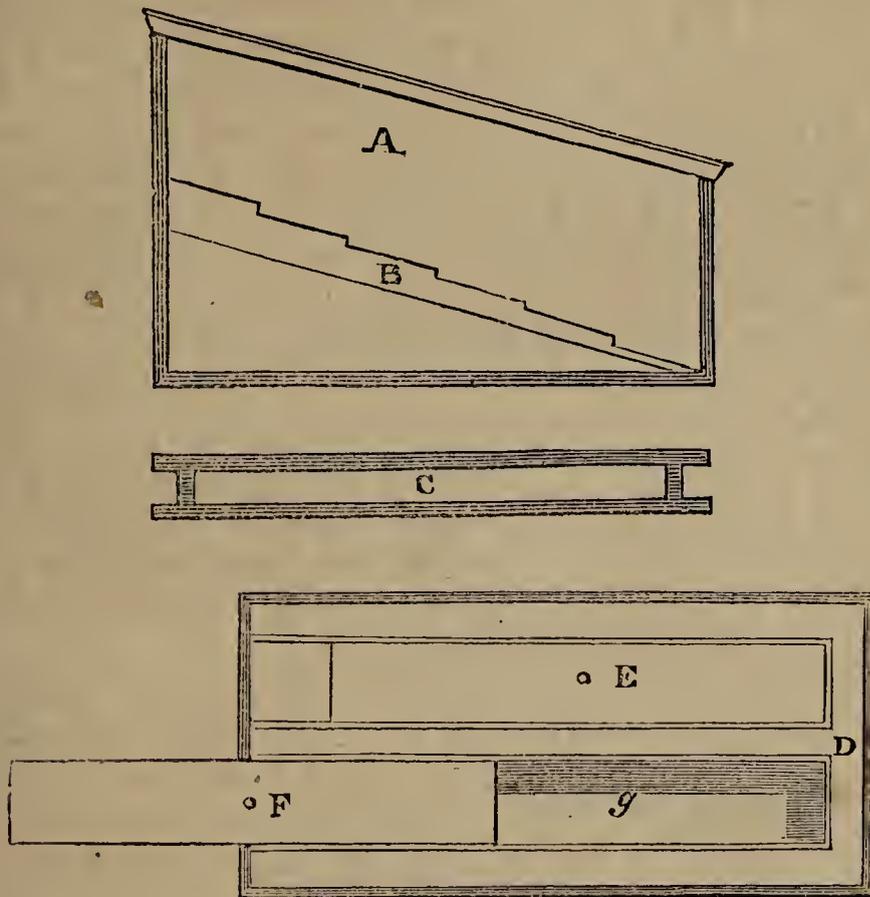
But now there is a *dodge* worth the attention of those who grow for profit. The Auricula is a slow propagator, and you cannot take cuttings as from a Dahlia. Nevertheless in May an approach to it may be made. If you find any plants *with offsets low down*, you may do what you cannot do with safety at any other time—cut off the head just above the offsets, and under a glass it will soon root, and of the offsets perhaps two, certainly one, will be a full flowering plant next season. I suffered for this in the case of an expensive plant by doing it in June, but it was late in June, when the plant was going to rest. In May I would not hesitate to decapitate Maria herself. (It was by this means that the late Mr. Weltjic, of Hammersmith, obtained his immense stock of Leigh's Colonel Taylor forty years ago.)

It is at this the summer period of growth that strict watch must be kept for a little black caterpillar, very small and very destructive; for if not discovered it will eat out the heart of the plant and destroy it. But they should be gone over once a week at least, to remove dead foliage, greenfly, and black caterpillar.

There are two diseases, or two forms of one disease, to which they are very liable—the rot, wet and dry; the former infectious, rapid, and sweeping; and the latter, unless taken early and treated with great care, destructive to the individual. The former attacks the foliage first, the latter the stem. When a leaf looks in part semi-transparent and dissolved (Mr. Lightbody says, when the plant hangs its head, but the disease will have made great progress when that is the case), and the peculiar spicy smell of the Auricula is intensified and coarse, beware as you would of a Potato field that emits a strong Potato smell. Remove at once every infected plant, or you may lose your whole collection in a month. But if you are early, you need not lose a single patient. If the soil is moist you must shake it out, take off every suspected leaf, and repot in soil nearly dry, consisting of loam and sand in about equal proportions, with one-fourth charcoal in coarse powder. It must be as nearly dry as is consistent with life to the plant, and kept so till recovery takes place; and the earliest indications of spreading disease must be watched for and removed. If the soil is tolerably dry when the discovery is made, and you are certain the fault is not in that, there will be no need of shaking it out. Remove every tainted leaf, and keep the plant as dry as it can be to live till healthy growth begins to return, and be very sparing of water then. It is said to be generally brought on by indiscriminate watering, or by suffering water to stagnate in the heart. And probably that may sometimes be the exciting cause; but I know that the mischief is often taken in at the root, and is due to other things than pure water. The worst and most destructive case I ever knew was clearly traceable to the misuse of stimulants.

The dry form of rot also gives out a strong aromatic smell of Auricula

from the infected parts, and is visible in the form of a darkened spot in the stem. When cut into the tissue is seen to be brown wherever the disease has penetrated, which is often very deep and wide, before it is discovered, though the stagnation of growth will probably have induced a suspicion of something wrong long before. If the plant is to be saved every particle of brown matter must be carefully cut out with a sharp knife, and the plant then treated as in the other case.



REFERENCES TO CUTS.

- A. The side-board of the frame, inner side.
- B. The rest nailed to the side-board, to support the shelves, and graduated according to slope of the top light.
- C. The shelf, formed of two pieces of strong laths, and fixed together at each end by short cross-pieces at the under-side.
- D. Outside view of the back-board of the frame, with its two sliding doors, E being shut and F g open, and having a small knob for handle.

The doors slide in a grooved beading of wood. The front board of the frame is similar to the back-board, D, now described.

I know of nothing else absolutely necessary. Indeed, if they are kept carefully from summer's sun and insects, every rational treatment seems to succeed with them. And well they are worth the care.

GEORGE JEANS.

LUCULIA GRATISSIMA.

THIS is one of the most beautiful and most deliciously fragrant of all our winter flowering plants. With a little management, it may be had in blossom from September to March; and, with the exception of

Pinceana, I am unacquainted with any plant which requires so little artificial heat, and so little care generally in its management, which is equal in respect of both beauty and fragrance. That it is not more generally cultivated is owing, I believe, to a somewhat prevalent, but mistaken notion, that it is difficult to manage. I must, however, admit that it is somewhat difficult to propagate, as cuttings, when not well matured, are apt to damp off in bottom heat; and when too hard, they frequently take so long to root that they exhaust the patience of the propagator; and it is difficult, if not absolutely impossible, to give instructions which would enable the inexperienced person to select cuttings in the proper stage of ripeness; but practice and careful observation will overcome this difficulty, and the *Luculia* will be found to root in bottom heat in a shorter time than is required by many of our favourite plants. Until this is the case, however, adopt the following method, which, if slow, has the recommendation of being sure.

Select cuttings of short-jointed pieces as early in the season as they can be had in a rather hard state. These may be obtained in May, if a plant is left without being cut down after flowering. Slip them off with a heel, and use the knife merely to remove any loose bark which may extend beyond the wood, and to divest them of superfluous leaves. Insert the cuttings thus prepared in small thumb pots filled with sandy peat, and give a moderate watering, to settle the soil, &c. But observe, with respect to the soil, that it should be in a rather moist state when used, as the cuttings are impatient of damp, which, in the event of repeated waterings being necessary, it is difficult to prevent. After potting, place them in a shady situation in a house, the temperature of which may average  $55^{\circ}$ , and cover them with a handglass. The only farther attention which they will require will be an occasional sprinkling of water; this should be applied towards the evening, the plants left uncovered until the following morning, and in cloudy weather it may be necessary to remove the handglass, or place it so that there may be a circulation of air, so as to prevent damp. If cuttings are properly attended to in these respects, and allowed to remain during the summer in some quiet corner, the probability is that nine-tenths of them will root. They should be carefully attended to during the winter, and should not be thrown away, even if after having been in the cutting pots the whole summer they should not be found rooted, give them the farther chance of a little bottom heat during next January. As soon as they are fairly rooted, they will grow away freely, and should be shifted into a size larger pots, and gradually exposed to a freer circulation of air. No advantage will be gained by keeping them in a temperature exceeding  $60^{\circ}$ , as, if they are kept in a warmer place, they will grow weaker, and will require so much stopping to keep them bushy, that the loss will probably exceed the profit. As the sun becomes powerful, it will be necessary to shade at least a few hours during the middle of the day, for this plant is exceedingly liable to suffer from the direct rays of the sun; and I have never been able to do any good with it, except when I could protect in this respect; and I have also found that sudden exposure to drying currents of air injures it more than most plants. With attention to its wants in these

respects, and if allowed plenty of pot room, and kept free from insects, the plants will form nice specimens by the end of the first season, and may each produce flowers, but this will greatly depend upon their having been stopped at the proper season. The weaker plants should not be stopped at all, and there will be nothing gained, as respects the production of blossoms, by stopping even the stronger plants more than once, and none should be stopped later than the middle of July, or the first week in August.

As soon as they have pretty well ripened the wood from which flowers are expected, they should be kept rather cool, or they may be removed to a shady, but airy situation in the greenhouse, or to any place where they can be assisted to harden their wood by a cool, dry atmosphere. Such of the plants as have never been stopped will probably show flower towards the middle or end of September, when they may be removed to a damper atmosphere and kept rather moist, so as to encourage them to develop their beauty and fragrance; and if the plants are removed from the greenhouse, or cool situation in which they were placed to ripen their wood, to a warmer situation, at intervals of about a fortnight, they will afford a succession of flower for at least three months. While in blossom they will be found to require a rather dry atmosphere; and unless this is provided, their beauty will be short lasted. I have found a sitting-room window to suit them exceedingly well at this time, but situations where the temperature will average from  $40^{\circ}$  to  $45^{\circ}$ , and where they can be protected from damp, is all that they require.

When they have done flowering, the plants should be rather sparingly supplied with water for a fortnight, previous to their being cut back, and they may be stowed away in any spare corner of the greenhouse or cold pit, where they will be safe from their great enemy—damp. After being treated rather hard for a fortnight, they should be cut back sufficiently to secure a compact, bushy growth, and now is the time when they can, with least trouble, be thoroughly cleared of insects. They are especial favourites with the black thrips, as most delicate plants are, and if these pests have a residence about the place at all, it may be looked for upon the *Luculia*, and they should now be carefully removed at any expense of time and labour; for if they are permitted to establish themselves they will do much injury during the ensuing season. After the plants have been cut back and cleaned, a portion may be encouraged to grow early in the season, so as to come into flower soon in the autumn; but it will be advisable to introduce them into heat very gradually, otherwise they will break their uppermost buds only, and will consequently become naked below. If the plants can be kept during their second season's growth in a moist growing atmosphere, where they will receive abundance of light and protection from the direct rays of the sun during the summer months, and also guarded against the attacks of insects, and allowed plenty of pot room, they will form handsome specimens, and flower abundantly during the dull months of winter.

With respect to soil, the *Luculia* is not difficult to accommodate. For its pot culture, I use about one-half turfy peat, and one-half light

turfy loam, adding a portion of silver sand, more or less, according to the nature of the other materials.

Those who have room for the *Luculia* in the conservatory border will find it a most eligible plant for such a situation. But it succeeds best, shaded from the direct rays of the sun from the beginning of May to the end of August; and in order to bloom it in perfection, it also requires to have the house kept rather close. It will not thrive in a temperature under  $40^{\circ}$  or  $45^{\circ}$ ; for where the temperature does not average this the flowers are liable to damp off. Planted out, it will thrive perfectly in any light soil, whether peat or loam. It will be found to require some attention, in order to keep it clear of insects, and also the same treatment, with regard to stopping and cutting back, as recommended for young plants; but as it cannot receive any assistance in the way of heat and moisture, never stop later than the middle of July.

S. J.

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### A HORTICULTURAL GALLOP.

YES! such a one as only the Iron Horse can enable one to take—Slough in the morning, Worton Cottage in the forenoon, Chiswick in the afternoon, and Sawbridgeworth in the evening. What floricultural gourmet would not be satisfied with such a day's feasting as that? Imagine taking your dejeuner at the Maison d'Or—dining at the Trois Freres—and finishing off with a petit souper at Verey's. What visions of ragout and fricandeau, of Johannisberg and Chateau Lafitte, would fill one's uneasy dreams. Would it be any wonder that Picotees and Carnations, new Pelargoniums, bedding plants of various hues, and fragrant Roses, should have given their colouring to mine? and although it is a very poor satisfaction to the hungry looker on to see the tempting morceaux that fill the window where some bon vivants are going to dine, yet I may perhaps give some gratification to the readers of the *Florist* if I tell them of a few things that struck me as worthy of notice in my pleasant though hurried journey. Need I say to any who have ever visited Slough that Mr. Turner's nurseries were as usual the very model of all that is clean, bright, and comely; and that in so favourable a season as this, the garden itself was specially gay on every side—foliage and bloom shewed how much attention had been paid to the proper arrangement and careful grouping of the various plants, ribands and beds vied with each other in beauty. I was most struck, I think, in the way of novelties, with a bed of ROYAL SCARLET Geranium, a very dwarf horseshoe kind of the Baron Hugel character, but having a very fine scarlet flower, and blooming very profusely; then FLOWER OF SPRING, variegated, with a fine pink flower, was also very good; it struck me, however, that REINE D'OR is not any improvement on the old Golden Chain, there being too much green in the leaf, a fault not compensated for by the superiority of the flower; the best of the new golden variegated ones seems to me to be CLOTH OF GOLD, though I question whether its foliage will be

quite as pleasing as the older flower, but it is a much better grower, and has a very good deep scarlet flower, not over freely produced. Dahlias, after a long and severe time, attacked as they had been by fly in a most alarming manner, were beginning to recover and to exhibit proofs that we may look for some grand blooms at the forthcoming September shows. Verbenas, too, were showy and fine; but as I promised myself a battue by-and-bye, I will say nothing of the sorts seen, only that I do not think that last season has added much to us in the way of novelty; but the to me treat of the day was the collection of Carnations and Picotees, for which Mr. Turner is so famous, and many of which were in their full vigour. Twenty years ago, what interest there used to be in these sweet and beautiful flowers; but these geometric gardens, and bedding plants, and mosaic patterns, were not in vogue. Well, "every dog will have his day," and I fondly hope to see the time when lovers of flowers will again have their collections of Carnations and Picotees, Pinks, Auriculas, &c. "There's a good time coming;" and although I do greatly admire the appearance of gardens at this season, yet I do long to see florists' flowers, properly so called, asserting their supremacy. The loss (by death and other causes) of such raisers of seedlings, as Puxley, May, &c., has made the hope of increasing the collections by many novelties rather faint; and, indeed, last season produced nothing worthy of notice in the way of Carnations, nor have I seen anything likely to come out this year. Not so, however, in Picotees; the class which was formerly most deficient in these was that of scarlet and rose edge; it bids fair, however, ere long to be quite as numerous as either of the others. Rutland's two parsons—the REV. H. and REV. A. MATTHEWS—are fine flowers, and so are PRINCESS ALICE and MISS MEEKING; the latter a very lively pink, and, what is better, of good strong habit. They are, however, surpassed by two flowers of this year, one a heavy-edged rose of great beauty—FLOWER OF THE DAY, a long-podded flower, the petals of good substance, and a clear pure white; the edge a very deep scarlet rose, very similar in colour to that old and *miffy* flower, Green's Queen, but whereas that is most difficult to keep, Flower of the Day is of the most robust habit. Another very beautiful flower was ROSY CIRCLE (Payne's); this is also a very vigorous habited plant, and a great addition to a very limited class, the light rose edges; the edging is very thin and does not run the least into bars, the pod is long and it opens well and flat, equalling Mrs. Barnard in her best state, and not having the tendency that that otherwise beautiful flower has of running into bars, so as at times to be undistinguishable from Miss Desborough; both of these charming varieties have received first-class certificates from the Floral Committee of the Royal Horticultural Society, and richly deserved it, too. I saw also MRS. HOLE (Turner), light edged red; a great improvement on Eugenie, which is itself a very favourite flower, although somewhat creamy in its bud, while Mrs. Hole is pure; this was also commended by the Floral Committee. LADY ELCHO (Turner), a light edged purple, was also very good; and Norman's FAVOURITE promises to be a full and useful flower. There was one point which struck me forcibly

in all these flowers, viz., their excellent habit of growth; it is very true we may have flowers nearly as good, but then these have habit, which is a matter of great consequence in all florists' flowers.

Having finished my survey at Slough, admired the beds of Phloxes, and the general arrangement of the bedding plants, I then got *into*, not *on*, the Iron Horse—a more wonderful one than the wooden one of Troy—and paid a long-threatened visit to Worton Cottage. Who has not heard of its former owner? who has not grieved over the kindly and Christian heart that, until this year, directed all its arrangements? who has not felt that, when the “old gardener” was gathered to his rest, English floriculture lost one who had done much to rescue gardening publications from the low personalities and vulgar jests that formerly disfigured them? Surely, at any rate, no reader of the *Florist* but recalls the name of Edward Beck with feelings of lively gratitude. Well, Worton Cottage and all its arrangements are still there, and under the care of its intelligent gardener. The flowers its owner loved will be fostered; and as Mrs. Beck takes a warm interest in them, the list of Pelargoniums will still contain seedlings with that honoured name attached to them. It was too late to see them; and one only had I a glimpse of, MAIDEN FAIR, which is in the same style as Fairest of the Fair, but improved upon it—will be, I doubt not, a very useful flower. My visit here was a very hurried one, but if God spare me for another year, I hope to go there when the collection of Pelargoniums is in full bloom.

The chief cause of my being in so great a hurry was to enable me to get to Chiswick in time to go through the work arranged for the Floral Committee, in deciding on the varieties of bedding plants and annuals which had been grown there for comparison; suffice it to say, that the new annuals were almost universally condemned, the Stocks considered a failure, the Phloxes many of them greatly admired, and the Geraniums and Verbenas hardly considered forward enough for a right decision to be come to on their merits. The main points of interest will be duly detailed in the Royal Horticultural Society's proceedings.

In the evening, escaping safely from the perils of the Eastern Counties Railway, I found myself at a place long known to me by name, and enjoying the friendly hospitality of its owner; for as a Rose grower in however small a way, I could not but have a lively interest in the Sawbridgeworth nurseries and their owner—for if the one has been famous as the place from whence so many new Roses have first found their way into the world, the other by his popular method of writing up the subject, has been no less successful in making it everybody's flower.

Having no orchard house, and not being an enthusiast on the subject of fruits, I could only, I fear with too little interest, receive the intelligence Mr. Rivers kindly gave. His *Curate's Vinery* struck me as being, however, an excellent idea. A Vine is planted in the open border, and a glass case is then put over it, raised on a loose brick at each end, slates are laid on the earth, and the Vine is then allowed to run along it; there is abundance of heat to ripen them, and ventilation of course secured. It will be also an excellent method for getting in a

few early Strawberries, not forcing them in the ordinary sense of the word, but pushing them a week or ten days earlier than those in the open ground. The inexpensive manner in which this Grape growing can be effected well entitles it to be called by the name which Mr. Rivers has given to it.

The beauties of Rose Hill have been so often described, that I shall not attempt to do what others have so much better done—give a general description of the grounds—but simply a few notes of the Roses. Last winter made here, as everywhere, most fearful havoc (by the by, not everywhere, for I hear in Ireland Roses suffered but little, and were never finer than this season), whole quarters which should have been one brilliant mass of bloom were now little better than a quarter of Stocks; here and there one had survived, but not one in fifty. One piece, however, of about five thousand dwarfs, budded on the Manetti stock, and on a piece of new ground, had survived, and here were to be found some grand blooms; amongst the old leading varieties, Mesdames Vidot, Rivers, Knorr, de Cambacères; General Jacqueminot, Prince Léon, Baronne Hallez, Géant des Batailles, and others, were very fine. While as to new Roses—I mean those of 1860—Mr. R. is decidedly of opinion that there is not one which can compete with GLOIRE DE SANTENAY—not even SENATEUR VAISSE. I saw both of them in bloom, and certainly the former was much finer; one flower of it was a most perfect gem. MADAME BOLL was also very fine, and so was also LOUIS XIV.; while amongst those of 1860, MADAME FURTADO and GENERAL WASHINGTON were apparently the two gems. But it is impossible rightly to decide on; all this season everything has come so out of character, that it will be very hard indeed to say which are to be thrown away and which kept. Just before I left home I found a bloom of ALEXANDRE BRETON, a Rose of 1859, which I have hardly heard of this season, quite a gem, and it is just possible there may be others which have been pooh-poohed that may yet astonish us. BOULE D'OR had not opened well with Mr. R.; it is evidently a good grower, and perhaps, when more chance is given to it, it may yet disclose its beauties; but its colour is so grand, that, as a house Rose even, it will be a great acquisition. We have nothing to equal it except the Persian Yellow. REINE DES VIOLETTES had not bloomed, but unless it comes out something better than it has done there is no loss. When I shall have had another opportunity of seeing the autumnal bloom of the Roses of 1859, I shall hope to give a few further notes on their merits.

Such was my gallop, and such the hurried notes of what I saw. Let me add, that I experienced what I have ever found, with very rare exceptions, that kindness and hospitality universally attend the love of flowers in either grower or amateur; whether it be that “one touch of nature makes the whole world kin,” or that the pursuit itself expands the mind and brings out the kindlier feelings of the heart, I know not, but so it is, and a grumbling, selfish horticulturist is an anomaly and a disgrace to the gentle craft to which he belongs. That there are such, I know, but he is a “*rara avis*.” May the sort become scarcer every

## ROSES:—A REVERIE.

“WHEN the dewy twilight lingers” is a time, we are told by the poet, peculiarly suited to lovers. How far this is correct we are scarcely prepared to say; there certainly is a dreamy influence, and something perhaps soothing about the hour; but, leaving the poet and the lovers to settle the matter in any way they think proper, as we are not disposed to argue; and taking our seat at that delightful time beneath the sombre branches of a Cedar—on the top twig of which is perched a thrush, pouring forth in cadence sweet a “song without words,” far more beautiful than Mendelssohn’s—we call to mind those opening buds which day by day add new pleasure to our toil, and delight us with their novelty. It is true we meet with disappointments; what lover does not? And we confess ourselves captivated by the winning charms of Flora’s Queen, for never was “Love among the Roses” more completely lost than we have been. At this balmy hour, as we said before, we take our seat beneath the tree, and fall into a reverie. There is something very charming in being lost to the world for a time, and letting the mind dwell unfettered on our heart’s desire. And first and foremost in the train which floats before our fancy like a fairy in a dream is that model of perfection, “the Countess;” her features cannot be surpassed, and the tint upon her cheek most lovely. Who can look upon her and not love her? Her character will bear the strictest scrutiny. Mr. Andrews has introduced her to the world and sent her portrait far and wide, perfect in outline, but a little less *rouge* we think would have suited her complexion better. A fit companion to the Comtesse de Chabillant, and worthy of her company, is Madame Boll; her eye perhaps may be a little prominent, but she is handsome notwithstanding; fine in habit, and in figure rather *embonpoint*. In Victor Verdier we trace the Margottin blood, and a very noble race it is; if such is the case, it has something to be proud of, and will no doubt be well received at all the courts her floral majesty holds a levee. What is that which looks so brilliant in the green foliage around it, and shines like a ruby set in emeralds? It is the “Senateur,” so exquisite in colour, and in form so singularly beautiful. It is painful to say the “General” is *OUT-generalled*; we have fought so long beneath his standard, won such glorious victories; he has so long taken command of our box, and unfurled his crimson banner with success, that to breathe disparagement now would be to act the traitor’s part, we therefore merely add, with all due deference to our hero, that the “civil” should take precedence of the “military,” and it is only etiquette that General Jacqueminot should stand aside, and allow Senateur Vaisse to lead the way. This is doubtless a great Rose era, and should be chronicled as such. We have arrived at great perfection, and the last-named flower, we think, has gained the highest pinnacle. In our imaginary moments we speculate on future possibilities—our rambling thoughts have no limit on such occasions—we hope to see another Cloth of Gold with the habit of that glorious Rose from Dijon. We do not despair of a Géant free from mildew, or a William Griffiths with the complexion of Sir Joseph Paxton. Sir Joseph we think the clearest

coloured Rose we ever saw, and only have to lament its shape. We should welcome something new of this class, instead of the purply slaty tint of Reine des Violettes. It is a matter of satisfaction to think of the impossibility of the production of a *blue* Rose, to which the Queen of Violets is the nearest approach; should, however, in this age of marvels, a thing so illegitimate be brought to light, we trust its reign will be of short duration. We would much prefer the "coal black one" of negro song celebrity. Whilst on a dark subject, our darker novelties occur to us, some of which we are much pleased with. Triomphe de Lyon, for instance, is a good flower, of a deep claret hue, petals stiff and shell-shaped, truthfully described as such in all the catalogues; a little more brilliancy would improve it vastly, as it is we do not think it superior, in fact not equal in colour to Francois Arago. Louis XIV., from all report, is the gem of 1860. We are glad to hear it so well spoken of, as we invested at a high price, but his majesty has not yet favoured us with a bloom, and to all appearance has no intention of doing so. What the catalogues mean by describing it as "free," we are at a loss to know; ours have been free *from bloom*, and so have all we have seen this season, and in habit like our own, dwindly and dwarf. Eugene Appert is of very different character; he is indeed a noble fellow, handsome in foliage and extremely rich in colour, which we think more permanent than many of its class. We are not acquainted with the genealogy of Eugene or the Duke of Cambridge, but we imagine both to be nearly allied to the Géant. The Duke has proved a great acquisition to our stock, the brilliancy of the flower (which we think a *true cerise*), renders it most attractive; and although the size is moderate, the bloom is nicely formed, and produced in great abundance.

We have "great expectations" from our pet Celine Forestier, and have been more polite to her, perhaps, than many of her companions; but all the attention we have bestowed upon her we do not now regret; she is indeed most beautiful, and destined, we think, to become the belle of many a floral fête next season; the colour, perhaps, is not so full as we expected, and certainly not so deep as Triomphe de Rennes, which the strong family likeness leads us to suppose to be the parent. We do not, however, object to the colour of Celine; on the contrary, we rather prefer it, and as our last addition (La Boule d'Or), promises to be *very* golden, we are glad to find Miss Forestier the delicate tint she is.

But in the midst of all our novelties, why do we forget our dear old favourites, such as Louise Odier, Jules Margottin, Devoniensis, and many others which were brought to our sick bed in early summer, all dewy and wet with the lately fallen shower? With what delight we hailed their return, like friends that had been dead and were alive again. How we revelled in their sweetness and refreshed our weary senses with their fragrance. We do not wish to be ungrateful, but we must think of these old favourites some future time, for the night is growing chilly, and the thrush having sung his little ones to sleep, has gone himself to rest. We beg to follow his example, and bid our friends good night.

## ALLAMANDA SCHOTTII.

THIS beautiful plant, coming from Brazil, requires for its successful cultivation a warm and humid atmosphere, and except where this can be obtained, it is useless to grow it. I have little accommodation for tropical subjects in winter, and as young plants occupy less room and form equally as fine specimens as old plants, I provide fresh stock every year. I select cuttings of short jointed pieces as early in spring as they can be obtained in a sufficiently ripe state, and insert them in sandy peat, covering with a bell-glass, and plunging the pot in a smart bottom heat. As soon as the cuttings are rooted, they are potted singly in small pots, replaced in the propagating pit, and encouraged with bottom heat in a warm moist temperature, until they become established in their pots. When they appear to have made plenty of roots they are shifted into 7-inch pots, in light, sandy soil, and kept warm and moist for a time.

If it is desirable to secure large specimens for flowering early next spring, they must be encouraged to make wood, and should occupy 9-inch pots before they have finished the present season's growth. It will, of course, be necessary to equalise the growth by stopping the stronger shoots; but this should be done carefully, as such branches, when removed while soft, are apt to bleed excessively, and seldom break again strongly. Gross shoots should be broken and bent down, so as to check their over luxuriance, and they may be removed after the buds behind the fracture have begun to push. Whatever size the plants may be induced to attain this season, especial care should be paid to get the wood thoroughly ripened. Small plants, with well matured wood, will be found greatly preferable to larger examples with soft ill ripened shoots, and they will speedily outgrow them when subjected to heat and moisture in spring. The plants should be freely exposed to light and air during the autumn months, and if they can occupy a situation in a house where the atmosphere is kept rather warm and dry, it will greatly assist to mature the wood. A pit, the temperature of which averages about 50°, will be a suitable place for them during winter; and they should receive but little water, just sufficient to prevent the soil from becoming quite dry.

As early in spring as possible place them in a moist, warm atmosphere, and encourage them to start into growth by frequent sprinklings with the syringe, and a close, warm temperature. When they commence growing, examine the state of their roots, and, if necessary, shift into larger pots, using soil composed of one-third loam, one-third peat, and one-third well decomposed cow-dung, with a sufficient proportion of silver-sand to render the compost porous. A quantity of broken bones or charcoal may be added with advantage, especially if the loam is of an adhesive character; water with care after potting, until the roots penetrate into the fresh soil. As the plants advance in growth they will require attention, in order to form them into compact bushy specimens; but bear in mind what has been stated above, respecting this operation. I do not stop until the plants have pushed considerably, and then I stop every shoot at once; this induces a finer mass of

bloom, as all the shoots produce flower at nearly the same time. With the increase of light which the advance of the season affords, I increase the temperature, allowing it to rise during bright days as high as 90° or 95°; shutting up early, and keeping the atmosphere as damp as possible. The plants should be sufficiently forward by the middle of April to require their final shift. I use 13-inch pots, and to the more promising plants I give 15-inch pots, with an extra stopping, so as to bring them in for late flowering. When the plants have commenced to grow vigorously, after their final stopping, they should be sufficiently staked to prevent injury from accidents, and they should be placed as near the glass as possible, which will assist to keep them dwarf, and hasten their flowering. If any shoots exhibit a disposition to outgrow the others, these should be checked by being nicked, or broken down, which may be done without farther injury than retarding their growth for a week or so.

As soon as I discover that the plants have filled their pots with roots, I water with clear manure water. As they approach the flowering state they are neatly trained, using as few stakes as possible, but as many as may be necessary to support the shoots in such a position as to secure a well formed specimen. When they commence flowering, they may be removed to a cooler and drier atmosphere, but they should not be subjected to sudden change. With proper management they will be in flower early in June, and may then be removed to the conservatory, where they will remain in great beauty during most of the summer season; that is, if the conservatory is kept rather close, and they are furnished with a place in the warmest corner of it. I avoid giving air opposite to my specimens of *Allamanda*, and I keep them as warm as is consistent with the general management of the house.

When their flowering season is over, the plants are thrown to the rubbish-heap; but if they can be kept over winter, they form large specimens for early blooming next season. If they are to be wintered, care must be taken to secure the perfect ripening of the wood, and such plants had better not be allowed to remain in the conservatory until late in autumn, as in that case they sometimes drop off at once. They should be removed to the stove, or some other place where the temperature will assist their ripening, and they should receive very little water. They will amply repay those who can give them a warm house, as they will grow and flower continuously from April to December.

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#### CALENDAR FOR THE MONTH.

*Azaleas and Camellias*.—Look over former Calendars, and attend to previous directions respecting *Azaleas*. Plants growing in heat must be very carefully and rather liberally watered at the root, syringing them freely overhead every evening, and sprinkling the floors, &c., sufficiently often to maintain a nice genial moist atmosphere. Black thrips will probably now be very troublesome upon plants growing in

heat, and means should be used, as soon as this is perceived, to effectually clear the plants of this pest, and, if many plants are infested, the cheapest and most expeditious means of clearing them will be to smoke the house rather strongly at night, and again the following morning. But care must be used to have the foliage of the plants and also the atmosphere of the house as dry as possible before smoking, for the foliage of these, when at all damp, is readily injured by tobacco smoke, but if perfectly dry will stand any reasonable amount. Some persons consider that sulphur applied to the under side of the leaves is a means of preventing the plants being attacked by this pest, and although our practice of syringing the plants, while making their growth, once or twice a day, renders this useless, judging from what we have seen elsewhere, it is worth trying where the syringe is not used so freely as to remove the sulphur almost as soon as it is applied. Plants which have their bloom buds well up should be removed to a cool house, but be satisfied that a plant is thoroughly well set for bloom before removing it to a cool house, for unless the plants are well set before winter there will be no chance of their blooming finely next season. Where there is the chance of keeping young plants in a moist warm situation until November, any plants which it may be desired to increase in size as fast as possible may, if setting for bloom, be stopped regularly over, and will with careful treatment make a nice growth, but plants stopped after this time need hardly be expected to bloom in anything like character. Any plants which may have been placed out of doors should be placed under glass immediately there is any danger of their buds getting sodden by heavy rains or their buds injured by frost, but should be kept cool with a dry atmosphere, and be rather sparingly supplied with water at the root. Camellias will require little more at present than attention with water, and any plants which may be infested with scale should be thoroughly cleaned. Plants which set their buds early and have been standing in a shady situation out of doors will now be ready to open, and if wanted in bloom may be placed in rather a close house, where they will soon be in full flower. Plants which it may be inconvenient to find room for under glass, must, if the weather prove wet, be protected against heavy rains, and the whole stock should, if possible, be under glass before the end of the month.

*Conservatory.*—Where Achimenes, Clerodendrons, Allamandas, and fine foliaged plants from the stove form the principal attraction here, the house should be kept as moist and close as can be done without injuring the permanent occupants, and on cold nights a little fire heat would be beneficial to such things as have been brought from the stove; but where greenhouse plants—as Camellias, Acacias, &c.—are planted in the beds, the house should be managed so as not to seriously injure these, and in this case Fuchsias, late-blooming Ericas, and the few greenhouse plants which bloom at this season, should be grown for decoration now, which, with Balsams, and many things well known to all plant growers, will, if grown in quantity, furnish a nice display. See that everything in the house is perfectly clear of insects, and endeavour to place each plant in its proper place, and keep all clean and in the most perfect order as regards arrangement.

*Cold Frames.*—Look over and attend to

previous directions. Plants which have made a satisfactory growth should be gradually exposed to a free circulation of air, so as to thoroughly ripen the young wood before winter; but this must be done carefully, for *Boronias*, *Gompholobiums*, &c., which have been induced to make a free growth by being kept rather close and moist, will not bear sudden exposure to thorough currents of air, but shading should be discontinued, giving top air freely on every favourable opportunity; but plants which are late and weakly should be kept close and moist, and afforded every encouragement during this month. See that everything here is perfectly free from insects, and apply sulphur on the first appearance of mildew upon any plant. Water cautiously, especially plants which are at all weakly, but when a plant is considered dry give sufficient to thoroughly moisten the ball. Primulas for winter blooming will now require careful attention, and must not be allowed to suffer for the want of pot room. The finer varieties of shrubby *Calceolarias* are extremely useful and effective plants for the summer decoration of cool houses, and where wanted for this purpose cuttings should be put in at once, and the old plants, after being cut back and breaking, may be shaken out and repotted into smaller pots, keeping them rather close until they make fresh roots, and these, if properly cared for, will form large effective plants next season. See, however, that they are perfectly free from green-fly, to which they are rather subject, and unless they are kept clear of this enemy no care will be sufficient to ensure good plants. Also attend carefully to the stock of plants of the herbaceous kind, repotting as may be necessary, and keeping the plants rather close and moist, and near the glass. *Flower Garden.*—Maintain the most perfect order and neatness here at present, removing decaying blooms as soon as they are perceived to be unsightly. Proceed as expeditiously as possible with the work of propagation, until there is an ample stock of everything prepared to meet the demand next spring, and the sooner the young plants of such things as *Verbenas* are fairly established, so that they can be freely exposed, in order to secure stocky, well-matured plants, the less trouble there will be in carrying them over the winter. Any alterations which it may be intended to make in planting next season should be noted, and stock provided accordingly; alterations involving the transplanting of trees and shrubs may be proceeded with, where this can be done without destroying the comfort of the garden, for the present is probably the safest month in the year for transplanting evergreens. Hollyhocks which have nearly done blooming, if cut down at once, will furnish a supply of prime cuttings by the beginning of next month, which, if put into a gentle heat, will soon emit roots, and form nice plants by next May. *Greenhouse.*—Any of the stock which may be out of doors without any other means of protecting them from wet, save laying on their sides, had better be placed under glass as soon as convenient, unless the weather should prove more settled than it has been lately; but if the weather should prove dry and fine, Heaths and other hardy greenhouse things may with advantage be left out until the end of the month. Plants which require to have their wood well ripened in order to get them to bloom in perfection, should, if they have made sufficient growth, be exposed freely to sunshine, and shading

after this must be used very sparingly. Take advantage of any spare time to repot and tie any specimens which may require this attention, and use every effort to have the plants neat and trim before the house is made up for the winter. After housing the plants give air freely, and keep the atmosphere rather dry. *Stove*.—Many of the principal ornaments will have done blooming, but care should be used to get the wood of such things as Echites, Ixoras, Allamandas, &c., well matured, by exposing them freely to light and giving a rather sparing supply of water at the root, just sufficient to keep the plants in health, but not to encourage their making more growth; and every care should be used to keep the foliage clear of insects, and plants ripening their wood should, where possible, be removed to a house where a drier atmosphere is maintained, and where this cannot be done, place them together at the driest end of the house. Continue to repot all young growing stock; keep them clean, and encourage free growth by a moist atmosphere and careful watering at the root. Also attend well to all plants intended for winter decoration.

*Hardy Fruit*.—Look over early Pears, and watch their ripening, as the generality of the early kinds require gathering before they are ripe; for if allowed to hang too long and ripen on the trees, the flavour will be greatly deteriorated, and the flesh dry and spongy. It is a good plan to go over the trees at different times, and gather them as they approach maturity, and store them in a cool room. The earliest dessert Apples are best gathered from the trees as they may be required for use. Judging from appearances, wasps are likely to be very troublesome during the present month; therefore, use every means to destroy them, as well as every other insect that is likely to damage wall fruit, trapping them, as before advised. Late Peaches should have a good soaking of water at the root in dry weather, and wash the trees occasionally till the fruit is ripening. Remove a portion of the leaves that cover the fruit, so that it may have full exposure to sun and light. As soon as any Peach trees are clear of the crop, go over them and clear away all dead leaves and useless shoots; afterwards wash them with the garden engine. Protect late Plums with hexagon net or tiffany, to preserve the fruit from flies and wasp, for use late in the autumn. Cut out the old canes, and tie up the bearing shoots of double bearing Raspberries. Water with liquid manure if the weather is dry. Continue to clear Strawberry beds from all weeds and runners. Dress and fork the ground between the plants, as before advised. This is a good time for making new plantations. If any plants are required for spring planting, the runners had now better be planted out a few inches apart in nursery beds. *Forcing Ground*.—Late Melons will not require much water after this time. Keep up a good heat if there is any convenience to do so, that plenty of air may be given through the day, otherwise make the best of sun-heat. Cucumbers bearing in frames should have the linings renewed when the heat declines; thin and stop the shoots so that they do not get matted together. Water with liquid manure once a week, and cover the frames with mats when the nights are cold. Those sown last month should now be planted

out in large pots, or in pits where a good command of fire-heat can be had; use free turfy loam, in a rough state, such that is not liable to get soddened. Keep the plants strong and hardy by admitting plenty of air through the day. Use fire-heat when the weather is chilly, and sow again for succession. *Peach House*.—Go over the trees in the late houses, and cut away all small shoots that are not required for fruiting next season or for filling any vacant space; this operation will greatly assist in ripening the wood, by more exposure to air and light. Remove the sashes, and water the inside borders if very dry. *Pines*.—All plants intended for fruiting next season should be potted at once if not already done; see previous directions. Pot crowns and suckers, and place them in a moist, close pit till they are rooted, after which the usual treatment for succession plants may be given. Those plants intended for fruiting in the spring should now be kept moderately dry, and the temperature steady. Keep a moist night temperature from 70° to 75° where the fruit is swelling. The day temperature may rise to 90° during sunshine. No growing plants or those in fruit should at any time suffer from drought. *Strawberries*.—These may yet be potted for late forcing. Clear away all weeds and runners from those potted last month, and water occasionally with liquid manure. Keep the pots in an open situation. *Vinery*.—Keep a dry atmosphere for ripe Grapes. If there is any damp in the house, or in very wet weather, a little fire-heat through the day would be beneficial, at the same time admitting plenty of air to dry the house. Cut out all decayed berries, and nail gauze over the openings if wasps are troublesome. Remove the sashes as soon as any of the houses are clear of the crop, and the wood well matured. Vines in pots that are intended for early forcing next season should now be taken out of the house; nail them to a warm wall, and cover the pots with litter till required for forcing. *Kitchen Garden*.—The past month has been very favourable for the destruction of weeds among all growing crops; still the hoe must be kept moving in every part of the garden during the present month, to get all clean before winter sets in. Take advantage of dry days to earth up Celery and Cardoons; and all the winter crops of Broccoli, Greens, &c., should now be earthed up. Hoe and thin advancing crops of Turnips and Spinach; the winter crop of the latter should be sown not later than the first week in the month. Plant out Green Curled and Batavian Endive, also last month's sowing of Lettuce. Make another sowing of some hardy sorts, and tie up those to blanch that are ready for use. Make another sowing of Endive early in the month. Make a sowing of Cauliflower, about the 10th, on a warm sheltered border or in a cold frame. Thin and stop Tomatoes, and expose the fruit to the sun, to hasten their ripening. Take up Onions as soon as they are ripe, and get them well dried before housing them. Potatoes may be taken up as soon as the tops are dead; but the *late* sorts had better remain in the ground for a time, to get well ripened. The dry warm weather of late has been very favourable, and no doubt will be the means of arresting the progress of the disease. Cut Box edging, and make all clean and neat.

## PLANTS FOR EXHIBITION.

*Pelargoniums*.—These should have been shaken out by this time—if not, it should no longer be delayed; and plants intended for early blooming should have their final repotting by the end of the month. Let the soil be in good condition for use, and the pots well drained, to allow the water to pass off, as this will tend to make the plants flower more freely. When the plants are potted, they should be kept close for a few days. Water carefully at first, after they have made fresh root. Water more freely, and give plenty of air at all favourable opportunities. Stop fresh struck cuttings, and repot young plants intended to make specimens as they advance in growth. *Cinerarias*.—Cuttings of these put in as recommended last month will now be ready to pot off into separate pots, and should be set about forthwith, using for the purpose a light rich compost, composed of good friable loam and rotten leaves or well decomposed manure; add a little silver or river sand, to cause the water to pass freely. Place in a cool shady situation in a close frame for a few days until established; sprinkle frequently and give air by degrees, when in a few days they will be ready to shift into larger pots. Look carefully after thrip and mildew, and sulphur or fumigate immediately on its appearance.

## WORK FOR SMALL GARDENS IN SEPTEMBER.

*Auriculas*.—Nothing but care and attention to cleanliness and watering is now required. Keep down green-fly by brushing it off with a camel's hair pencil. If any show signs of defective drainage see to it at once, as excess of moisture is death to the Auricula. Do not let them have rain. Buy in what you want. A drawing of Smith's *Lycurgus* in the September number of the *Floral Magazine*, by Andrews, will show what is doing in the raising of new sorts. *Carnations and Picotees*.—Take off rooted layers and pot them singly or in pairs. No better or safer compost than that which they have been growing in can be used, as wireworm is not likely to exist in it. *Pansies*.—These should be, if rooted, potted off into single pots; to stand the winter they require nothing but good loam and a little sand and leaf-mould, to keep it open. Many fine varieties have been exhibited this year. *Pinks*.—The store beds should now show a good deal of vigour in the plants, and the better they are now the more success may you expect in their winter quarters. I do not like too large plants—moderate sized ones are better. *Pelargoniums* should be repotted, and their growth encouraged, so as to be strong and well furnished before winter. *Bedding-stuff*.—The Geraniums, &c., put in last month should now be potted off, and left to harden, to stand the winter well. If you have room, pot into single pots; if not, two or three in a pot will answer well. See to cuttings of *Gazanias*, *Verbenas*, &c. The bedder-out must look a long way ahead.

Deal.

D.





Gladiolus.  
*M.<sup>s</sup> Reynolds Hole.*  
Plate 181.

## GLADIOLUS—MRS. REYNOLDS HOLE.

(PLATE 181.)

OUR present illustration represents one of the new varieties of Gladiolus, for which the Bagshot nursery of Mr. Standish has become famous. On a former occasion we figured two remarkably fine varieties from the same source, namely, *John Standish*, a rich crimson, with the highest quality of any variety we have met with; and *Mrs. Standish*, a very beautiful white, with feathered lip. The former of these, we regret to learn, was accidentally lost during last winter. That now figured, and named in compliment to the wife of the Rev. S. Reynolds Hole, is of a novel character, presenting well-defined richly-coloured bars on a white ground, which give it a distinctly striped character. It is very beautiful, of average size, with all the desirable qualities of form and substance, and is in all respects a perfect painted lady. The colour is white, marked with numerous bars and streaks of rosy crimson, the markings being more crowded and confluent towards the ends of the sepaline segment, so as to form richly-coloured variegated tips. The large upper petaline segment is longer than the sepaline parts, which it resembles in colour, but is rather less freely marked; while the two smaller lower petaline divisions which are rose flaked at the top, are dashed with a rich creamy buff lower down, and as well as the lowest sepal have a crimson feather-like marking up the centre. At the mouth of the contracted tubular part there is a rosy star. Our figure, drawn from some of the earlier blooms, does not show the flaked tips of the two small petaline divisions, nor the bold feather-like mark just described, which are present in the specimen from which our notes were drawn up. The flowers are arranged in two opposite rows so as to stand back to back, which is the least desirable quality presented by this otherwise charming new variety.

We need not here occupy space with remarks on the culture of these now favourite flowers, nor on their adaptability for the autumn decoration of flower gardens either in beds or borders, nor on their remarkable quality of endurance, and of continuous development when cut for the in-door flower vase. All these points have been already touched upon in our preceding volumes. We prefer rather to invite attention to some of the structural peculiarities of the race of hybrid Gladioli which is now bidding high for popular favour, with the view of directing into a proper channel the current which is setting strongly in the direction of raising new seedling varieties.

It will be found that the flowers of the hybrid Gladioli are formed on one of two models, which are tolerably constant and determinable in particular varieties. The flower is naturally made up of six divisions; its basis is a blunt-angled triangle; and the differences presented in the two groups just indicated, consist in the direction in which these imaginary or ideal triangles are set upon the stem.

In one of these two groups, which we call the **ERECT-FLOWERED**, the three outer segments—the sepaline divisions as a botanist would call them—form a triangle whose apex is erect, the upper division overlapping on the outside the two next, or petaline segments, and therefore occupying the position of a sepal. In these varieties the three petaline, or inner segments, form a triangle with its apex turned downwards, and the lower one is generally smaller and differently coloured, forming as it were a one-leaved lip to the flower. The following are fine varieties having these peculiarities of form:—

*Rembrandt*.—Rich crimson scarlet, with a small purplish feather on the lower petaline segment.

*Napoleon the Third*.—Orange scarlet, with the lower petaline segments (and frequently one of the others) creamy yellow about the centre, and marked with a crimson feather.

*Comte de Morny*.—Fine rosy crimson, with a creamy tint on the three lower segments, and somewhat white feathered.

*El Dorado*.—Light yellow, with rosy purplish feather. The best yellow is said to be Solfaterre, but we have not seen it.

*Princesse Clotilde*.—Clear salmon, with the lower petaline segment, or sometimes two, dashed and feathered with rich purple, the two lower sepaline divisions marked with a bar of the same colour. A finely marked variety.

*Jeanne d'Arc*.—Blush, with the lower petaline segments feathered, and the two lower sepaline ones barred with rich purple.

*Oracle*.—Deep salmony rose; the lower petaline segment creamy, feathered with purple; the two sepaline lower segments barred with purple; the markings are sometimes disposed irregularly, with respect to the sepaline and petaline divisions.

*Aglæe*.—Salmon colour, dashed with scarlet streaks; the lower petaline division rich crimson; the divisions pointed; the flowers along one side of the spike are sometimes reversed.

The other group to which allusion has been made is, we think, the more effective of the two, and has the flowers formed on an opposite plan. The two sepaline divisions which form the base of the (imaginary) triangle are on the upper side, and the one which forms its apex is on the lower, so that instead of pointing upwards, as in the first group, the sepaline triangle here points downwards. This group we therefore call **REVERSE-FLOWERED**. The petaline divisions are placed so as to have one large upper and two smaller basal segments, so that in these varieties the lip-like portion con-

sists of two petaline lobes instead of one. The upper or back segment of the flower, which in the erect-flowered group answers to a sepal, corresponds with a petal in this reverse-flowered group, to which some of the very finest varieties known, including the subject of our illustration, belong. Omitting, as in the previous list, the novelties which are yet hardly purchasable, we will mention a few examples from among the finer sorts of this section:—

*Vulcan*.—Brilliant crimson scarlet, with a flush of deep crimson on the lip-like segments. A much richer colour than *Brenchleyensis*, which is, however, probably one of the most useful for planting in masses, to produce a striking effect.

*Bertha Rabourdin*.—White, with all the lower segments flushed with clear rosy purple, through which runs a feathered marking of a deeper shade of the same colour. The marking of this variety is very rich and effective.

*Bérénice*.—Rosy salmon, marked with deeper, or salmony red streaks, the lower segments marked with rosy crimson, the petaline ones in a feather-like, the sepaline in a bar-like form.

*Vesta*.—Blush white, the two lower petaline segments of a rich creamy tint in the centre, and, as well as the lower sepaline one, boldly feathered with rosy purple.

*Empress*.—Blush white, blotched with rosy streaks; the lower segments with bold rosy purple feathers.

*Goliath*.—Deep salmon colour, with the lower segments feathered with crimson purple; similar in colour to *Princesse Clotilde*, one of the erect flowered group.

*Neptune*.—Salmony red, the lower segments with a faint dash of cream colour, suffused with rosy purple.

*Sulphureus*.—Creamy white, the lower petaline divisions straw colour, and, as well as the lower sepaline one, purple feathered.

*Calypso*.—Blush, with salmony streaks; the two lower petals yellowish, with a crimson purple feather; the lower sepal with a bold stripe of the same colour.

The foregoing memoranda were made from some finely bloomed plants in the collections of Mr. W. Barnes, of Camberwell, and Messrs. E. G. Henderson and Son, of St. John's Wood.

Both the groups above indicated are distinct enough in their aspect to be worth perpetuating; and by selection there is no doubt that such deviations of structure as are now occasionally though rarely met with, may be entirely obliterated, and the two groups rendered quite fixed and permanent. The deviations to which we allude, though occasionally to be seen are not frequent. Sometimes, however, it will be found that the lower and earlier flowers differ from the upper ones, which are developed later; and sometimes those situated on one side of the flower-spike will differ from those on the other side. These discrepancies might soon be removed by careful selection. In addition to the properties of colour, size, sub-

stance, and general form, which determine the selection of seedlings, we therefore strongly urge the rigorous rejection of varieties in which one or the other of these definite and special characteristics of form are not well marked. Those seedlings which throw out their flowers in two opposite rows should also be rejected, as being very much inferior to those on which the flowers are all turned to face one side of the flower-spike. In arranging cut flowers, this peculiarity of growth may nevertheless be turned to account, by placing in the vacant space between the two rows of blossoms, a spike of another variety in which the flowers face one way, and in this manner covering the unfurnished portion of the original flower-spike. M.

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### ORCHARD HOUSE CULTURE.

(Continued from p. 269.)

“In our next we shall detail how to pot the trees and store for the winter.” So we ended our last article, and from this point we should have commenced our present continuation, had we not since that was written paid a visit to Sawbridgeworth, to note what improvements the originator of Orchard Houses had introduced in their construction since our last visit; as well as to record anything new which might present itself in the way of treatment.

*Size of House.* We noticed one important fact,—which has doubtless forced itself on the practical mind of Mr. Rivers,—that as he progresses with building new Orchard Houses, they gradually increase in size. The first were very simple structures, “hedge-houses,” as he called them at the time; *i. e.*, they consisted of a mere glass roof with the ends boarded up, and the sides between the roof and the floor-line was planked with either a yew or arbor vitæ hedge. No other means for ventilation were provided for them, we presume, than opening the doors at the ends in very hot weather, if safety from frost could be guaranteed in these erections. When the trees bloomed it was found the fruit ripened in them; but they were rather too risky in that respect, and the internal atmosphere, which was kept sufficiently cool and congenial during the hottest days of summer by the circulation of air through the side hedges, was found rather too much so during March and April, with a low external temperature, and subsequently, Mr. Rivers improved his next batch of houses, by substituting *Louvre* boardings for the evergreen hedges, which could be opened or shut at pleasure; this step was an improvement, as it permits a control over the temperature of the house, which was out of the question with a mere hedge, through which the wind, which in March is frequently down to near the freezing point, rushed at pleasure, and was found to make sad havoc with the tender buds just then opening into bloom. In addition to boards as a substitute for

hedges for side walls, the houses were also increased in size, being built wider and loftier than the original ones. This step was adopted on sound practical deductions, for as the internal area of any building increases in comparison with its exterior or cooling surface, in proportion as it is built wider and higher, it follows that, when once filled with warm air, it would be longer in cooling in proportion to its size than in a narrow house; hence, by taking advantage of the sunny afternoons which usually precede frosty nights in the spring, you may collect a body of air in these houses sufficiently heated to maintain a temperature something higher than the freezing point through the night, even when it is several degrees lower than freezing externally,—a most important point in the erection of true Orchard Houses, as we term those where artificial heating is not applied, and should not be lost sight of by parties contemplating their erection. In confirmation of this fact, the houses now being erected by Mr. Rivers are still larger than those previously described; so that there has been a successive increase in their size from the commencement to the present time. I speak from recollection only, but I should say his last new houses are twenty-four feet wide (just twice the width of those first built), and of corresponding height, and something like 100 feet in length,—noble structures, and built on sound principles. We noticed that these houses, which are five feet high at least from the ground to the roof plate, are glazed down to the floor, the centre division being formed into large glazed squares or shutters running the length of the building, for ventilation. Glass all round gives an imposing appearance, and probably these may be intended for show houses; but on the score of economy the lower half of the sides might have been Louvre boarding, for which we have seen nothing better, or which more economically answers the purpose of ventilation and protection. These houses, 100 feet long by 24 wide, we were told, could be constructed for 150*l.* each. We shall, however, go into this subject more fully hereafter.

*Ventilation.*—A strong discussion is now going on in respect to the proper ventilation of Orchard Houses. We observe that Mr. Pearson, of Chilwell, considers that ventilation at the apex of the roof is indispensable. Now, if such is the case, it would materially interfere with the cost and details of construction, which on Mr. Rivers' plan is very simple. The roof being a complete fixture, ventilation being given only at the sides and ends, which, in the case of houses like those at Sawbridgeworth, are 100 feet long, would seem to most gardeners a long way apart; we must therefore look at this question more closely, for there cannot be a question but that in a span-roofed house the heated air will rise to the highest part of the interior, and that in such houses the air will increase in rarity and temperature from the floor to the angle of the roof. Mr. Rivers maintains that his mode of ventilation is amply sufficient to correct this to an extent that would render it no longer unfavourable to vegetation, or the production of red spider, which invariably attack vegetation exposed to an overheated atmosphere.

We critically examined all the Sawbridgeworth houses with an eye to this question, and are bound to admit that, so far as our observation led us to form an opinion, nothing could look better than the whole of Mr. Rivers's stock under glass; and we therefore conclude that what may *prima facie* look like a defect in the fixed roofed system for large Orchard Houses, is found in practice not to be so, and therefore a great fact in this simple mode of constructing them is established. Mr. Rivers' plan is to make each gable end of his houses in the form of a shutter, to open and shut as required, thus giving an opening to the admission of air exactly in a line with the hottest part of the house; and as we know that the rush of air through any opening connecting one temperature with another, will be in proportion to the difference between the respective density of each body of air, the flow of the external air into the house will be very rapid through these ventilators; and, indeed, so far as we could judge, was quite equal to keeping the air of the house in a healthy state, with a full side ventilation, and the doors open on very hot days.

*Treatment.*—We observed no deviation from the rules already laid down in respect to management; pinching back the current year's wood, more especially in young potted trees not yet in a bearing state, is strictly carried out, and is extended to all the stock of apricots and cherries in pots. The pyramids in pots of these two latter were admirably done,—perfect as regards compactness of form and abundance of bloom buds. In reference to the merits of pot *versus* planted-out trees, we believe, with good management, both plans may be considered equal. The system of lifting planted-out trees annually, and shortening the long roots which have made way into the border, would soon induce such a ball of short spongelets to be formed, that the operation would merely resemble re-potting a pot-grown plant, and as we think it possible to grow for very many years the peach and nectarine in 18 or 24-inch pots, by occasionally shaking the old worn out soil from the roots and replacing it with fresh, either plan may be adopted with the certainty of success, with this difference, that although the planting-out system may give the least trouble, there are advantages on the score of forwarding or retarding pot plants, as well as otherwise arranging them, that would lead us to give the preference, ourselves, to pot culture.

We now resume our cultural details, which will necessarily be brief. It is just possible, now rain has fallen in considerable quantities, that the wood of the trees intended for potting, and growing in the open quarters, will continue to make wood, which will prevent that intended to fruit from ripening. Continue therefore to stop all the lateral shoots as they appear, not leaving a joint untouched which will prevent the fruit buds from breaking. It will be a good plan to check any strong indication to grow at this season, to go round each tree with a spade or five-grained fork, and, after inserting it deep in the ground, raise the point slightly; this will give a check to the plant, prevent any future growth,

and assist the wood to ripen. If you have plants in pots preparing for next year, and have no glass, continue to lay them on their sides, as advised in our last article.

Potting and storing in our next.

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### THINGS TO BE DONE.

Now is the time to purchase a stock of bulbous roots ; if you do not want to force them very early, wait until you can have them from a second importation, as Hyacinths and Narcissus are larger and generally produce finer bloom from the second consignment than the first, which are taken up and packed off early by the growers to be in time for the first demand for forcing.

If you are fond of spring gardening, early Tulips, mixed Hyacinths, Crocuses in varieties, Anemones, and the pretty spring-flowering Scillas, should not be omitted ; nor *Lilium atrosanguineum*, *bulbiferum*, *chalcedonicum*, *aurantiacum*, *pyramidalis*, and the varieties of the martagon, for mixing in with herbaceous plants for the summer. *Gladiolus* may remain for the present.

Look round your walls and fruit quarters, and note where additions are wanted, and towards the middle of the month visit your nurseryman (we say personally) and make your selection ; you will have the whole stock to chose from, whereas if deferred you will not.

If possible go and see them taken up yourself : nursery-gardeners are frequently wholesale gentlemen with trees, and cut and slash the roots on taking them up as a matter of no consequence ; we advise you to have them taken up with a steel fork, by which you will have the roots entire, and your trees will start more vigorously in the spring.

If you grow your own briars for budding roses upon, give your orders for them early so as to have them planted in November, the sooner the better, and your man will also have the pick of the hedge-rows, which will insure you better stocks.

See that your frames, sashes, and pit-lights are washed and dried, so as to be ready for painting before the month is out, that the whole may be in good order for winter. Greenhouses should by this time be finished off in this respect.

Look also to your flues and heating apparatus generally, that all may be ready for work when wanted.

If you have not procured a stock of loam and peat, lose no time in doing so before they become saturated with wet, and stack up in a dry place.

Look over your flower-beds, and note down what alteration you require for next season, that you may propagate stock to meet your new arrangements.

If you are a Rose grower, and have either attended the shows or read our reports on them, you will by this be informed what to

purchase in the way of new kinds ; give your orders for these at once, or select them yourself. When they arrive, if they are worked, lay them in a sheltered spot till February ; if in pots, keep them protected till the same time.

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### VALLOTA PURPUREA.

THIS valuable and beautiful autumn-flowering bulbous plant is not so extensively grown as it deserves. Its culture is the simplest possible, which makes it the more surprising that it should be so little grown. A lady friend of our own has grown and flowered it successfully, in her parlour window. Like most other bulbous plants, a soil composed of loam, peat, a little rotten cow-dung, and plenty of sand, suits it admirably ; the pots should always be well drained. Good strong bulbs will flower well for several years in the same pots, by giving them a top dressing of the above compost annually, in spring. They will do well in any greenhouse or late vinery, where they can get plenty of light ; they should be well attended to in watering during the summer months, and early in September (in general) the flower stems will appear. It is scarcely possible to conceive anything more brilliant than a pot of five or six bulbs with a dozen flower stalks having five or six flowers, and all nearly fully expanded. They are most useful at this season, not only for in-door decoration, but also for out-door purposes. A friend of ours who grows them in quantity, uses them largely in this way. When vacancies occur in his mixed borders, he plunges the pots, and when the season is not very wet and stormy, they flower and look exceedingly well. After the plants are done flowering, water should be gradually withheld ; during the winter months they should be stored away on a dry shelf, or other situation in the greenhouse where they are safe from frost. They are readily increased by off-sets, potted and treated nearly as above, but more heat should be given them when growing.

M.

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### FRUIT TREE PLANTING.

THE season for planting being now at hand, a few words on the subject may not be altogether out of place.

We do not intend to enter fully on the subject, but merely to throw out a few practical hints, which if followed may save beginners some disappointment. The first thing to be considered is the soil and situation ; where the situation is low and the soil a strong clay, a very different practice must be followed from that where the situation is high and the soil of a light loamy nature, resting on a sandy or gravelly bed. In heavy retentive soils, trees generally throw out a great quantity of shoots after midsummer, which rarely get properly matured. To insure success in planting, all fruit tree borders should be well drained, especially those of a

retentive heavy nature. Strong soils should not have much manure put in them, burnt clay and lime rubbish will much improve them.

In planting, keep the tree's roots as near the surface as possible, so as to have the soil about the tree elevated a little above the general level of the surrounding border; it should not, however, be like a mound, but merely a few inches. Don't manure your fruit borders, is frequently the advice given to enquirers; under certain circumstances the advice is very good, such as in the new made borders of rich turf, strong soils, low situations, &c.; but to follow such advice on light sandy soils, or porous gravelly subsoils and high localities, would be wrong, and would lead to nothing but disappointment. Under these circumstances good rotten manure, I will not say *may* be used to advantage, but *should* be used liberally for fruit trees of every kind, and especially for Peach trees. It will be objected that this practice will encourage the trees to make stronger shoots than will get properly ripened; this is not the case. Where the soil is light and resting on a porous bed, and the situation a high one, over-strong shoots will only be produced in exceptional seasons, and then only under bad management. I have here for several years planted fruit trees of all sorts in borders made of fresh turfs, both with and without manure, and the result is, the trees planted with manure have in all cases grown better, borne better, and are in every respect better. Cherries, Plums, and Pears, have all done well with it. Peach and Nectarine trees planted with plenty of manure not only grow and bear better than those planted without manure, but they also always look better; they seldom suffer much, even the driest season, from the red spiders, whilst the others almost invariably suffer to some extent. I also find it of the greatest advantage to keep the soil about the roots on a level with the surrounding earth, and in many cases a little below—the trees here never suffer from *too much moisture* at the roots, but sometimes they suffer from want of it. I have seen such good results from a liberal application of manure to Peach trees, that I intend using it more freely than heretofore.

The satisfactory results stated at page 176, by the Rev. W. F. Radclyffe, were obtained by the use of new stiff loam and black dung. Whilst strongly recommending the use of manure on light soils for fruit trees, we would be very cautious in using it on stiff heavy soils.

*Stourton, Yorkshire.*

M. SAUL.

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## HOMES OF THE FLORIST, No. I.

RUSHTON VICARAGE, NEAR BLANDFORD.

WHAT reader of the *Florist* is there that does not know Rushton? what lover of the Rose is there that has not been profited and amused by the mixture of sterling common sense, quaint humour, and downright enthusiasm that have marked the articles written

by its owner? what friend of the Manetti is there who has not relished the trenchant blows that the Vicar of Rushton, one of its doughtiest champions, has levelled against all comers who would attempt to put any fair dame, Celina, Boursault, Briar, or anything else, on a par with *his* Dulcinea? Not one, I venture to say; not one, too, but would have gladly done as I did when the opportunity offered,—visit the little quiet vicarage, from whence have issued forth some of the best Roses that have been exhibited this season, and to whose tenant, the Rev. W. F. Radclyffe, the lover of the Rose and the readers of the *Florist* are so much indebted.

Last year, when I returned from Dorchester, where I had been as a deputation for the Irish Society, I found a letter from the Vicar of Rushton, rating me in good set terms for having passed him by, and a promise was then made that if called in that direction again, I would not do so. All idea of it had, however, been abandoned, when a letter brought me the intelligence that my services would be required, and having a day to spare, I wrote to say my promise should be fulfilled. At Dorchester I made the acquaintance of another florist, about whom I may have to say a word by and bye,—Mr. Millar, of Upway, the raiser of “Fox-hunter,” the best Verbena of the year; and on Tuesday, the 10th, found myself at Wimborne, the nearest convenient station for me, though not the nearest to Rushton. The drive from thence to my destination was very lonely, and to one accustomed to a neighbourhood where trees are sparse and foliage scanty, the delicious verdure and luxuriant shade were especially pleasing, particularly as I had no idea that that part of Dorset was so pretty. I soon found that like master, like man, held true in this case, and that “Will” was quite as full of roses as the Vicar himself, and had his tales to tell of many a well-fought field of victories gained and opponents vanquished. After a pleasant drive of seven miles I found myself at Rushton, and heartily welcomed by the Vicar. It is one of those quiet nooks, far away from noise and tumult, which lie scattered over our happy England; a centre of kindly influence and of benevolent regard, which so many of our country parsonages are, where, but for them, the poor would be, comparatively speaking, uncared for, and would never have the opportunity of seeing a life any way higher or more refined than their own. The house is an old and roomy one, which has many a tale to tell, could its old walls speak, of those who have entered often in happiness, of sorrow, and doubtless of death. The garden,—ah! there’s the point,—laying on the slope of a hill facing the S. and S.W., and exposed to the force of the latter winds; and as Rushton stands on the chalk, the ground is light, with a considerable mixture of flint in it. At Rawston, about half a-mile distant from the house, he has another small garden, sheltered from the S.W. winds, so that he has the advantage of all aspects, and here he grows in *perfection* four subjects,—amongst flowers, Roses, and amongst fruits, Strawberries, Raspberries, and Peaches. As I have already intimated, and as most readers of the *Florist* know, Mr. Radclyffe

is a most strenuous advocate for the superiority of the Manetti stock above all others, thus seconding Mr. Rivers in his recommendation of it. It has been said by its opponents, "Yes, it is all very well for such rich, deep, loamy soil as Sawbridgeworth, but it will not do on poorer land." Now its success at Rushton is a complete answer to this; there the soil is the very reverse of the Hertfordshire loam; shallow, instead of deep, hot and dry, instead of cool and moist, and poor instead of rich, and proves, I think, beyond question, that for hybrid perpetual and Bourbon Roses, there is no stock that excels it. But there are two points which Mr. Radclyffe insists upon with regard to it: 1st. That it must be grafted low, so as in transplanting to be able to cover the union of scion and stock, from whence generally roots will be sent out, and thus the plants acquire almost the vitality of one on its own roots; and, 2ndly, abundance of good stuff, or as he himself expresses it, my *roses live like the Lord Mayor*. In front of the house is a grand tree of Solfaterre, now full of its beautiful corymbs of golden flowers, from whence some may be cut at any time. The beauty of the trees has been somewhat spoiled by hacking off (for buds, &c., to give to friends) the lower branches. In a sheltered corner was a nice plant of Céline Forestier, but the Yellow Rose, to which Mr. Radclyffe trusts most, and of which he has thirty trees and upwards, is Triomphe de Rennes, which, too, he has exhibited in first rate order this season. "I wish," he said, "you could have come in the rose season!" "No," was my reply, "*then* one may see roses anywhere, but to see them *now is the treat*;" and there they were, glorious Jacqueminot, and vigorous Jules Margottin, brilliant Lion des Combats, and delicate Souvenir de la Malmaison, large and flashy Souvenir de la Reine d'Angleterre, and the sturdy Géant, charming Acidalie, and blooming Duchess of Norfolk; and despite of all the severity of last winter, growing vigorously and blooming freely. The situation, as may be readily conceived, was favourable to their withstanding the frost, and when the Vicar saw it set in, he further mulched the roots and covered up the stems. As we went round the garden, he pointed to several good-sized H. P. plants on the briar;—"These," he said, "are condemned, nothing now but Manetti for me," and in a note from him since, he tells me many of them have been cast into the river. He quite agreed with me that on their own roots was the best plan, but then he thought that they would take a great deal of time in making large plants,—a point I am not so sure about if proper management is adopted. We had, of course, our chat over the new roses, and his opinion is that of Mr. Rivers and myself, that of the roses of 1859-60, Gloire de Santenay is the gem, and that that year was unusually productive in good sorts, far more so than the present, or indeed than any rose year of which we are aware. The peach trees, of which he has frequently written in the *Florist*, are certainly the most glorious trio I have ever seen, upwards of half a century old, covering fifty-four feet of wall; there they were, clothed from top to bottom with fine healthy

vigorous verdure, and filled with their tempting and luscious produce, on which the rascal wasps were feasting themselves. From these trees Mr. Radclyffe gathered last year 750 peaches, the year before 179, the year before that 1040, and this year 480. Listen to that, ye wise gentlemen; with all your theories can ye match that? The strawberry plants were looking in first-rate order, and he did give me, according to his threat, strawberries and cream, the fruit being gathered off the long-enduring Hautbois. After much talk on the various claimants on the notice of Fragarians and the strawberry-eating public, he came to the conclusion that Rivers' Eliza, Trollopé's Queen Victoria, and Wonderful, were the best there for general use. He had also a French kind there of a wonderfully prolific character, from six plants of which he had gathered nearly a gallon of fruit, and that of the very best description; it is called Marquise: of its flavour Mr. Radclyffe could say nothing.

The raspberry canes also were magnificent. He does not allow the ground to be turned up, but feeds them high; with strawberries, immediately after they are done fruiting, he cuts off all layers and outside foliage, and gives them a thorough good coating of dung, not stirring the ground at all, but trusting to the rain to wash it in, and to the strawberry roots to go in search for it, and they will thus, as he describes it, acquire a good *head of hair* before the winter sets in.

It so happened that the 10th was the day before the grand Dahlia Show at Kensington, whither my good friend purposed sending a box of twenty-four Roses (trebles). Now, as I was bent Londonwards, and had moreover promised myself a peep at the Exhibition before I went home, and as Mr. Radclyffe did not like the fuss and trouble of going himself, I volunteered both, which is ever a delicate matter. Convey his flowers for him! this necessitated travelling all night, but then here was an enthusiastic rosacean in a strait, and so what could I do? At "dewy eve" we sallied forth, Will, master, and self; under the umbrageous shade of a lofty tree in front of the house the box was placed, and to different parts of the garden we went forth; from one place came Gloire de Dijon, another Triomphe de Rennes; now came Will, laden with three Géants, and I, carrying three Duchesses in my arms, while Master wouldn't entrust his three jewels to any but his own stalwart keeping; then off to Rawson we all three sallied, and came back laden with sweets for our box. Twilight began to settle round us before we had finished, and then all must have a look,—and all pronounced it the best box of the year. "Toby" is harnessed, and I am off, retaining a lively recollection of the hospitality and kindness of Rushton Vicarage, carrying with me a goodly box of the delicious peaches, and feeling assured that if I didn't carry Cæsar and his fortunes, I did carry what would gain the first prize at Kensington. The pleasures of night-travelling are not many, nor is it a very lively thing to get into London at half-past four; to be told at the hotel to which one drives, "No bed

but a four-story one," and when one declares no bed wanted, "No one here to boil any water if you want breakfast early:" however, I managed to get to Kensington safely with my charge. As the other boxes were brought in, I clearly saw, that if the judges were of my mind, where it would be placed, an opinion in which the other competitors coincided; it was certainly for the time of year a very fine box, and contained the following varieties;—

Triomphe de Rennes (three fine corymbs of flowers), Géant des Batailles, Céline Forestier (small blooms), Duchesse de Cambacères, Caroline de Sansal, Mrs. Elliott, Comte de Nanteuil, Duchesse d'Orleans, Octavie Fontaine (very small, but pretty), Souvenir de la Malmaison, Reveil, Madame Knorr, Lion des Combats (the finest bloom I ever saw of this variety was one of this trio), Jules Margottin (very good), Devoniensis, Souvenir de la Reine de l'Angleterre (fresh and lively), Général Jacqueminot (a grand trio), Solfaterre (very good and full), Mogador (damask, nice blooms of a by no means common rose), Elize Sauvage (small and pale), Duchess of Norfolk (splendid blooms), Gloire de Dijon, and Auguste Mié.

On my return, after having breakfasted, I eagerly sought the box, and gladly found it labelled *First Prize*, and when my time was up, I hurried off to Waterloo Station, and telegraphed to my friend a message which must have set me down in the eyes of the telegraph clerk as a sporting parson, "Won easily in a canter!"

*Deal.*

D.

Mr. Radclyffe has written much about the Rose and the goodness of Manetti; it may be well then to say, that as the proof of the pudding is in the eating, he has won this year the following prizes:—

Dorchester.....	June 13	.. 24 Singles	.. 1st Prize .
Salisbury .....	June 28	.. 24 Singles	.. 4th ,,
Royal Horticultural Society, Kensington.	July 10	.. 18 Singles	.. 1st ,,
Langport .....	Aug. 12	.. 24 Singles	.. 1st ,,
Shepton Mallet.....	Aug. 20	.. 8 Trebles	.. 1st ,,
Blandford .....	Sept. 5	.. 24 Singles	.. 1st ,,
Reading .....	Aug. 28	.. 12 Trebles	.. 1st ,,
" .....	"	.. 12 Singles	.. 1st ,,
Royal Horticultural Society.....	Sept. 11	.. 24 Trebles	.. 1st ,,

Well may he say, "Hooray for Manetti," and no wonder *Will* should say,—“Master, isn't it queer that *we* should take so many first prizes out of such a scratchy little place as Rushton?”

### LORD SUFFIELD APPLE.

ABOUT December last we obtained from Mr. Turner, of Slough, several young apple-trees, among them was one of the above. As the ground was not in readiness they were not finally planted until the end of February. This variety was the only one that had any fruit, which is not very surprising when thousands of old, and

generally fine bearing trees, have not a fruit this season ; but on this small tree of Lord Suffield there was five splendid fruit, which, when gathered about the middle of September, averaged in circumference at the largest part twelve inches, and a beautiful pale yellow colour all over.

The cook that used them spoke of the first-class quality for kitchen uses.

If a tree produced such fine fruit under these unfavourable circumstances, we may expect from established trees good crops of certainly one of the finest early kitchen apples in cultivation. The tree appears a very free grower, but as mine is intended for a pyramid, it has been kept stopped to a few eyes ; by so doing the tree is now well furnished with spurs, so I may expect a nice crop next year.

Perhaps some of your correspondents, growing the above variety, could favour us with their experience, if they can speak as favourably of it I have no doubt it will soon be more extensively grown.

S. T. C. C.

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### AYRES' BLACK SPINE CUCUMBER,

A SORT I have grown for the last two years, and intend to grow no other in future. I know no variety to equal it for a supply the whole year. The middle of September, 1860, I planted a pit for winter supply, the sorts were Sion House, Cuthill's Black Spine, and Ayres' Black Spine ; the pit is heated by a flue at front for top heat, and a lining of dung at back for bottom heat ; during the sharp weather of last winter it was impossible to keep heat in the linings, it would be quite cold for several days together.

The top heat was seldom above 50° by night, and often below that. Through the low temperature, and it being too cold to ventilate, the Sion House and Cuthill's mildewed badly, and the plants died away, one after another, without producing any fruit fit for table, while Ayres' continued to grow all through the winter, and from three plants of this sort I was scarcely without fruit all the winter, and quite without a spot of the disease so much complained of the last few years.

Last February I planted the same sort in a common three-light frame set on a bed of dung and leaves ; from these plants I began cutting fruit at the end of March, and have cut cucumbers from these plants every day since, and shall continue to do so for some time yet,—at any rate until I can cut from plants of the same variety in a flued pit, planted about the same time as last year.

It is one of the finest bearing varieties I know, showing two or three fruit at every joint ; and I generally leave on all the fruit that shows. I do not want fruit the enormous length some people like cucumbers ; from twelve to fifteen inches in length answer our purpose far better than eighteen inches or two feet, especially as we can always cut from the short growers, and only now and then from the long ones.

This variety cuts up quite back to the stem, and carries a beautiful bloom equal in winter to its appearance in summer. I found it very difficult to get this sort true, so obtained cuttings, and continued to work from cuttings until I saved some seed myself; and as I have this season grown but this kind I shall have no trouble that way in future, as I saved a good batch of seed.

S. T. C. C.

### ROSE INFORMATION.

CONSIDERING the severe winter which followed sixteen months of rain and sunless weather, roses have bloomed most nobly and continuously here, since the 6th of June, and I am glad that "D," of the *Florist* came here on the 10th of September and reviewed them.

I must here pause to return public thanks to him for placing my twenty-four trebles properly in my box, and for taking them to the Royal Horticultural Society for September the 11th, and not less for his thoughtfulness in sending a telegram the same day, conveying the gratifying intelligence of "triumph."

I have been fortunate this season, having, at seven exhibitions, won eight first prizes and one fourth prize. I owe these victories to the Manetti, chiefly; and I trust that the above victories will justify what I have said in public of that most noble stock. The propagators have hitherto been its chief hindrance, by budding it too high. I have just bought 112 plants of Mr. Gill, of Blandford, budded scarcely more than two inches above the radius of the roots, and I will undertake to say that they will do well. Being planted two inches over the point of union, they will root from the rose as well as from the stock.

To show the value of well-selected and accumulated roses on the Manetti stock, I may mention that I won six first prizes between August the 12th and September the 11th, viz., at Langport, Shepton Mallett, Reading (both the first prizes), Blandford, and South Kensington. Henceforth, having done my duty in defending the stock and in illustrating its excellence, I shall say no more about it. Not one word will I retract of what I have already said.

I will now recommend:—

1st. *Roses that are new, and yet not novelties.*—Eugene Appert, Empereur de Maroc, Comtesse Cecile Chabrilan, Dr. Brettoneau, Stephanie Beauharnais, Georges Dupont, George Peabody, Souvenir d'Elise (now in lovely bloom), Céline Forestier, Octavie Fontaine, Marie Thiéry, Monsieur Jard, Reine de la Cité, and Francis Arago.

2nd. *Roses of 1860 and 1861.*—Madame Furtardo, Triomphe d'Amiens (mottled lake, choice, distinct, and very fine), Washington, La Boule d'Or (for glass; it is perfectly hardy, very efflorescent, but it has not opened freely), M. Melanie, Parmentier, and Duc de Cazas. These are good, and the best, as far as I have

proved them, of the roses of 1861. It has been a bad year for small pot roses. Of the roses of 1860, I can highly recommend the following, and especially the three first, viz., Gloire de Santhenay, Senateur Vaisse, Madame Louise Carique, M. Charles Crapelet, Belle de Bourg la Reine, M. Bonnaire, Victor Verdier, and L'Elegant. These are all good roses.

Seeing nice plants of Lord Nelson and Vanqueur de Solferino in good bloom at Mr. Gill's, I have bought seven plants of them, but I will not recommend them from personal experience. Neither of them did well here this summer. No doubt others will do better when more established, and when propagated on stronger stocks. They are struck in shingly stuff and tied to willow and currant sprigs, which root faster than the plant, and the wonder to me is, that any of them do well.

All my pot novelties are now taken up and housed for the winter, which I think will be an early and severe one, as the robins began their plaintive notes in August.

In conclusion, Gloire de Santhenay and Chabrillan are the two most perfect roses that have come out since M. Regnier appeared. Triomphe d'Amiens is the most distinct of any; and, for its colour, Madame Bonnaire is the greatest acquisition. The catalogue description of new roses is correct.

*Rushton, Sept. 24th.*

W. F. RADCLYFFE.

## CRYSTAL PALACE AUTUMN EXHIBITION.

SEPTEMBER 4TH AND 5TH.

WE scarcely expected to see a very large display of either outdoor fruit or florist flowers this present autumn, for the former are in most places a failure, and the late extreme hot weather has stunted the growth of such autumnal-flowering Roses as had escaped the previous winter, and on dry soils we knew that the Dahlia was much infested with the thrips: such is the case at Slough, where it has baffled every attempt to keep it down; and Mr. Turner, whose collections usually held the post of honour on these occasions, could only master a single stand of 24 blooms and one of fancies; while Mr. Keynes' flowers from the damp cool soil of his Salisbury nursery were magnificent, and he was placed first in all the Dahlia classes, and for thirty-six cut Roses. Chinese and French Asters were unprecedentedly fine, the bright sun of the last fortnight having evidently improved both the size and markings of these popular autumnal flowers. Holyhocks, both in spikes and single blooms, were good, and included some striking novelties in the seedling way.

Our readers will remember in what laudatory terms we have before now written of the Gladiolus, the collections exhibited fully justified our observations, and the jump Mr. Standish has made in this class by his successful mode of cross breeding, is something to talk about; his group, which we understood consisted solely of

his own seedlings, eclipsed anything we have seen among continental varieties in brilliancy as well as perfectness of form and delicacy of marking ; some of those exhibited equalled the rich shades of crimson, violet, and lake belonging, as we thought, only to some species of Orchids ; but, as we hear one of the most striking of Mr. Standish's batch of seedlings is to be figured in your present Number, your readers will judge of the beauty of the class generally by your Mr. Andrews's accurate representation. Messrs. Youell, Paul, of Cheshunt, and Cattell were also contributors in this class. Mr. Perry's Verbenas were superb, and fully maintained his position as a grower and raiser of these "Everybody's flowers," as we heard them called. The season was too late to have Phloxes in perfection, and those exhibited were not very first-rate.

Fruit was well represented in some classes, in others not so. Pines as a class were inferior ; the heaviest Queen,  $5\frac{1}{2}$  lbs., is nothing very remarkable for September, and the best in the black class was a Jamaica, not quite so heavy. There were some other middling fruits of both Queens and Jamaica, and a curious looking Cayenne Pine, from the base of which spread an entire circle of small well-shaped fruit, each surmounted by a crown ; below these were a second cluster of sprouts, each with its fruit, forming altogether a novelty in the Pine way, and bearing about the same relation to an ordinary Pine as the Brussels-sprout does to the Savoy.

Several good collections were exhibited in the Class of Eight Dishes. Mr. Henderson, of Trentham, had a fine pine and grapes, including Muscat, Lady Downes, and Hamburg ; splendid peaches and good nectarines, evidently from under glass ; melons and cherries. The second prize was given to Mr. Tillyard, who had three bunches of the finest Muscat grapes in the Exhibition in his collection, and also a good pine, fine plums, peaches, cherries, and melon. A third collection was furnished by Mr. Young, of Havant. In collection of Six Dishes, Mr. Henderson was again first, with fruit very similar to the above ; Mr. Dawson, of Panshanger, second, and Mr. Page, third,—all of which were meritorious as regards the fruit they contained, and were noticeable for the absence of every thing below par, in an exhibition sense. If we could not conscientiously praise the pine class, we can safely do so with the grapes ; more magnificent Hamburg grapes, than the two dishes shown by Mr. Meredith, of Garston, could scarcely be provided : so good did they appear by comparison with their competitors that we observed the judges withheld the second prize, marking thereby their great superiority over the rest in the same class. Mr. Meredith exhibited also some superb Muscats, but owing to the berries being somewhat discoloured, they had only a second prize ; Mr. Frost winning with very fine clean grown bunches,

In the Market Gardener's Class Messrs. Meredith and Harrison were placed equal, first, for 12 lbs. Hamburgs. After our ob-

servations on the former grapes, our readers may suppose Mr. Harrison's were also very first-rate, and so they were. The second prize was awarded to a basket of good Muscats, contributed by Mr. S. Solomon; two other prizes were awarded in this class to Mr. Frost and Mr. Young. The prizes for the largest bunch were obtained by Mr. Dwerrihouse, for a monstrous bunch of the true Marchioness of Hastings grape, a large berried white grape, something intermediate between the Syrian and White Nice; but which has not much to recommend it besides its noble appearance. Mr. Meredith had the second prize, with a fine bunch of Black Hamburg. Mr. Snow's prize for the best dish of Muscat Hamburg, was awarded to Mr. Henderson, and second to Mr. Smith.

*Peaches* and *Nectarines* were more plentiful than we expected to see, but it is evident that orchard-house fruit will beat those from the open walls in size and appearance, and we think they should be separated, by making a distinct class for each. There also appears to be great confusion in the names of Peaches exhibited from open walls, many very different peaches being shown under the same names.

*Plums* very good and numerous; the "Washington" is extra fine, and proved itself the best plum in the Exhibition, not excepting the Jefferson; although we must except, as regards flavour alone, the Green Gage. Two veteran exhibitors, Mr. Snow and Mr. Whiting, found themselves side by side in the class for Three Dishes, and altogether the other classes were well contested.

*Figs.* Only one collection made its appearance.

*Cherries.* The Morello Cherries from Mr. Betteridge, were extremely fine, both as regards colour and size, but all the dishes exhibited were good. The Apples and Pears furnished two large tables, but call for no particular comment; Six Dishes of Dessert Pears were contributed in fine condition by Mr. Harrison, Oatlands, and we noticed some nice fruit in the class of Three Dishes, from Mr. Holder of Reading. In the class of Pears for flavour Beurré d'Amanlis was placed first, and Louise Bonne, of Jersey, second; so far superseding William's Seedling and the Jargonelle, which have hitherto usually held first place, but we understand one, if not both, of the two placed first were orchard-house fruit. A large quantity of Melons were exhibited, mostly very inferior in quality, from which we must, however, except the first prize fruit from Mr. Bailey, Shardiloes, and also the second prize, awarded to Mr. Pottle. In the Scarlet flesh class, "Gem" was placed first and second, and indeed was the only Scarlet shown.

In the miscellaneous class, Messrs. Lane & Son exhibited a collection of orchard-house fruit trees in pots, the fruit on which, although plentifully produced, was only half ripe, and scarcely in a state for exhibition. Sir Joseph Paxton had also half a dozen vines in pots, loaded with what appeared some kind of French Chasselas Grape, and several dishes of Peaches, Nectarines, and Plums, showing the quality of the fruit grown in his house for the million, which obtained the commendation of the judge, although

not placed for competition. In this class, we noticed several dishes of the Salway Peach in fine condition, and showing it to be not only an excellent late wall-fruit, but also a useful kind for houses, where it will ripen and keep long after the usual crop is gathered; indeed, from late orchard houses, we may expect to have this fruit good through November. Mr. Henderson obtained a prize for a dish of the Guava, and Mr. Young, of Havant, for a nice dish of the Banana, which included all that we considered noticeable in the class.

## LIST OF PRIZES AWARDED.

## DAHLIAS.

**Class 1.—48 Blooms, dissimilar varieties :—**

- 1st Prize, 7*l.* Mr. J. Keynes, Salisbury.  
 2nd ,, 5*l.* Mr. C. Kimberley, Stoke Nursery, Coventry.  
 3rd ,, 3*l.* Mr. H. Legge, Edmonton.  
 4th ,, 2*l.* Mr. J. Walker, Thame.

**Class 2.—24 Blooms, dissimilar varieties :—**

- 1st Prize, 5*l.* Mr. J. Keynes, Salisbury.  
 2nd ,, 3*l.* 10*s.* Mr. C. Turner, Slough.  
 3rd ,, 2*l.* Mr. J. Walker, Thame.  
 4th ,, 1*l.* 10*s.* Mr. C. E. Allen, Shacklewell.  
 5th ,, 1*l.* Mr. J. Cattell, Westerham.  
 6th ,, 10*s.* Mr. C. Kimberley, Stoke Nursery, Coventry.

**Class 3.—12 Fancies, dissimilar varieties :—**

- 1st Prize, 2*l.* 10*s.* Mr. J. Keynes, Salisbury.  
 2nd ,, 1*l.* 10*s.* Mr. C. Kimberley, Stoke Nursery, Coventry.  
 3rd ,, 1*l.* Mr. C. Turner, Slough.  
 4th ,, 10*s.* Mr. H. Legge, Edmonton.

**Class 4.—(Amateurs only) 24 Blooms, dissimilar varieties :—**

- 1st Prize, 5*l.* Mr. W. Dodds, Salisbury.  
 2nd ,, 3*l.* 10*s.* Rev. C. Fellowes, Norwich.  
 3rd ,, 2*l.* Mr. C. J. Perry, Castle Bromwich.  
 4th ,, 1*l.* 10*s.* Mr. W. Corp, Salisbury.  
 5th ,, 1*l.* Mr. A. Moffatt, gardener to Lord Maynard, Dunmow.  
 6th ,, 10*s.* Mr. T. Leslie, Ramsgate.

**Class 5.—(Amateurs only) 12 Blooms, dissimilar varieties :—**

- 1st Prize, 3*l.* 10*s.* Mr. T. Charlton, Market Harboro'.  
 2nd ,, 2*l.* 10*s.* Mr. T. Woodward, Stoke, near Coventry.  
 3rd ,, 1*l.* 10*s.* Mr. W. Dodds, Salisbury.  
 4th ,, 1*l.* 5*s.* Rev. C. Fellowes, Norwich.  
 5th ,, 1*l.* Mr. H. Glasseock, Bishops Stortford.  
 6th ,, 15*s.* Mr. J. Sladden, Ash, Kent.  
 7th ,, 10*s.* Mr. W. Corp, Salisbury.

**Class 6.—(Amateurs only) 12 Fancies, dissimilar varieties :—**

- 1st Prize, 2*l.* 10*s.* Mr. C. J. Perry, Castle Bromwich.  
 2nd ,, 1*l.* 10*s.* Mr. W. Dodds, Salisbury.  
 3rd ,, 1*l.* Rev. C. Fellowes, Norwich.  
 4th ,, 10*s.* Mr. W. Corp, Salisbury.

## SEEDLING DAHLIAS.

**Class 7.—Three Blooms of each variety.**

- Certificate of merit for "Minnie Dodds," Mr. W. Dodds, Salisbury; for "Black Prince," Mr. J. Keynes, Salisbury; for "Lord Derby," Mr. J. Pope, Chelsea.

## ASTERS.

**Class 8.—24 German Asters, dissimilar, single blooms (quilled) :—**

- 1st Prize, 1*l.* 10*s.* Mr. R. H. Betteridge, Milton Hall, Steventon.  
 2nd ,, 1*l.* Mr. L. Besley, East Hendred.  
 3rd ,, 15*s.* Mr. T. Westbrook, Abingdon.  
 Extra Prize, 10*s.* Mr. D. Lewis, Wantage.  
 ,, ,, Mr. C. Sandford, gardener to T. Thomasset, Esq. Walthamstow.

**Class 9.—24 French Asters, dissimilar, single blooms tasselled :—**

- 1st Prize, 1*l.* 10*s.* Mr. C. Sandford, gardener to T. Thomasset, Esq. Walthamstow.  
 2nd ,, 1*l.* Mr. C. Wyatt, gardener to H. Willes, Esq., Epsom.  
 3rd ,, 15*s.* Mr. J. Walker, Thame.  
 Extra Prize, 10*s.* Mr. W. Sandford, Woodford.  
 ,, ,, Mr. R. Penwill, gardener to T. Browning Esq., Leyton.  
 ,, ,, Mr. J. T. Hedge, Colchester.

## ROSES.

**Class 10.—36 Roses, distinct varieties, one Truss of each :—**

- 1st Prize, 3*l.* Mr. J. Keynes, Salisbury.  
 2nd ,, 2*l.* Mr. R. Laing, Twickenham.

**Class 11.—24 Roses, distinct varieties, single blooms :—**

- 1st Prize, 2*l.* Mr. R. Laing, Twickenham.  
 2nd ,, 1*l.* Messrs. Perkins & Sons, Coventry.  
 3rd ,, 10*s.* Mr. J. Cattell, Westerham.

**Class 12.—18 Roses, distinct varieties, single blooms (Amateurs only) :—**

- 1st Prize, 2*l.* Mr. J. Hollingworth, Maidstone.  
 2nd ,, 1*l.* Mr. J. Dennis, gardener to H. Hayward, Esq., Folkington.  
 3rd ,, 15*s.* Mr. J. T. Hedge, Colchester.  
 4th ,, 10*s.* Dr. Cooper, Slough.

## HOLLYHOCKS.

**Class 13.—12 Hollyhocks, distinct varieties, in spikes :—**

- 1st Prize, 2*l.* Messrs. Laird and Laing, Forest Hill.  
 2nd ,, 1*l.* Mr. Wm. Chater, Saffron Walden.  
 3rd ,, 10*s.* Mr. W. Bragg, Slough.

**Class 14.—24 Hollyhocks, distinct varieties, single blooms :—**

- 1st Prize, 2*l.* Messrs. Minchin and Son, Hook Norton.  
 2nd ,, 1*l.* Mr. Chater, Saffron Walden.  
 3rd ,, 10*s.* Messrs. Laird and Laing, Forest Hill.

**Class 15.—12 Hollyhocks, single blooms, distinct varieties (*Amateurs only*):—**

- 1st Prize, 1*l.* Mr. H. Glasscock, Bishops Stortford.  
 2nd ,, 15*s.* Mr. W. Plester, gardener to Mrs. Rush, Bishops Stortford.  
 3rd ,, 10*s.* Mr. T. Anstiss, Brill, Bucks.

**VERBENAS.****Class 16.—24 Verbenas, distinct varieties, five Trusses of each variety:—**

- 1st Prize, 1*l.* Mr. C. J. Perry, Castle Bromwich.  
 2nd ,, 15*s.* Messrs. W. Minchin & Son, Hook Norton.  
 3rd ,, 10*s.* Mr. G. S. Patey, Steventon.  
 4th ,, 7*s.* 6*d.* Mr. C. Grimby, Stoke Newington.

**GLADIOLUS.****Class 17.—For the best collection:—**

- 1st Prize, 2*l.* Mr. J. Standish, Bagshot.  
 2nd ,, 1*l.* Messrs. Youell, & Co., Great Yarmouth.  
 3rd ,, 10*s.* Messrs. Paul & Son, Cheshunt.  
 4th ,, 7*s.* 6*d.* Mr. J. Cattell, Westerham.

**PHLOX.****Class 18.—18 Spikes, distinct varieties:—**

- 1st Prize, 1*l.* Mr. N. Lawrence, Chatteris.  
 2nd ,, 15*s.* Mr. J. Cattell, Westerham.

**Class 19.—Miscellaneous.**

- Extra Prize, 10*s.* Mr. G. S. Patey, Steventon.  
 ,, ,, 10*s.* Design.—Mr. T. Sparkes, gardener to W. Joynson, Esq., St. Mary's Cray.  
 ,, ,, 7*s.* 6*d.* Mr. J. Burley, Limpsfield, Surrey.

**FRUIT****Class A.—Collection of eight dishes, distinct kinds:—**

- 1st Prize, 6*l.* Mr. A. Henderson, Trentham.  
 2nd ,, 4*l.* Mr. G. Tillyard, gardener to J. Kelk, Esq., Great Stanmore.  
 3rd ,, 3*l.* Mr. G. Young, gardener to W. H. Stone, Esq., Havant.

**Class B.—Collection of six dishes, distinct kinds:—**

- 1st Prize, 4*l.* Mr. A. Henderson, Trentham.  
 2nd ,, 3*l.* Mr. T. Dawson, gardener to Earl Cowper, Panshanger.  
 3rd ,, 2*l.* Mr. T. Page, gardener to W. Leaf, Esq., Streatham.  
 Extra Prize, 10*s.* Mr. W. Kalle, gardener to Earl Lovelace, Ripley.

**Class C.—Pine Apple, single fruit, any variety but Queen:—**

- 1st Prize, 2*l.* Mr. T. Young, gardener to C. Bailey, Esq., M.P., Aberdare.  
 2nd ,, 1*l.* Mr. G. Young, gardener to W. H. Stone, Esq., Havant.  
 3rd ,, 10*s.* Mr. T. Page, gardener to W. Leaf, Esq., Streatham.

**Class D.—Pine Apple, Queen, single fruit:—**

- 1st Prize, 2*l.* Mr. T. Page, gardener to W. Leaf, Esq., Streatham.  
 2nd ,, 1*l.* Mr. R. Dalrymple, gardener to C. H. Leigh, Esq., Poutypool park, Monmouthshire.  
 3rd ,, 10*s.* Mr. T. Young, gardener to C. Bailey, Esq., M.P., Aberdare.  
 Extra, 10*s.* Mr. W. Bull, King's-road, Chelsea.

**Class E.—Grapes, boxes of 12lbs. weight:—**

- Equal 1st Prize, 3*l.* Mr. C. F. Harrison, Weybridge.  
 Equal 1st ,, Mr. J. Meredith, Garston, Liverpool.  
 2nd Prize, 2*l.* Mr. S. Solomon, Peckham-rye.  
 Equal 3rd Prize, 1*l.* Mr. T. Frost, Aylesford.  
 Equal 3rd ,, Mr. G. Young, gardener to W. H. Stone, Esq., Havant.

**Class F.—Grapes, Black, two dishes, distinct kinds:—**

- 1st Prize, 3*l.* Mr. J. Meredith, Garston, Liverpool.  
 2nd ,, 2*l.* Withheld.  
 3rd ,, 1*l.* Mr. T. Simmonds, gardener to J. Smith, Esq., Mickleham Hall, Dorking.

**Class G.—Grapes, White, two dishes, Muscat or any other variety:—**

- 1st Prize, 3*l.* Mr. T. Frost, Aylesford.  
 2nd ,, 2*l.* Mr. J. Meredith, Garston, Liverpool.  
 3rd ,, 1*l.* Mr. T. Reid, gardener to T. N. Farquhar, Esq., Sydenham.

**Class H.—Grapes, the largest bunch of any kind:—**

- 1st prize, 1*l.* Mr. J. C. Dwerrihouse, gardener to Viscount Eversley, Heckfield.  
 2nd ,, 15*s.* Mr. J. Meredith, Garston, Liverpool.

**Class I.—Peaches and Nectarines, four dishes, two kinds:—**

- 1st Prize, 3*l.* Mr. A. Henderson, Trentham.  
 2nd ,, 2*l.* Mr. W. Kaile, gardener to Earl Lovelace, Ripley.  
 3rd ,, 1*l.* Mr. G. Tillyard, gardener to J. Kelk, Esq., Great Stanmore.

**Class J.—Peaches and Nectarines, two dishes:—**

- 1st prize, 2*l.* Mr. O. Goldsmith, gardener to Sir W. R. Farquhar, Bart., Dorking.  
 2nd ,, 1*l.* 10*s.* Mr. H. Packman, Ewell Castle.  
 3rd ,, 1*l.* Mr. W. Kaile, gardener to Earl Lovelace, Ripley.  
 Extra Prize, 10*s.* Mr. W. Holder, Eton College.

**Class K.—Melons, green-fleshed, single fruit:—**

- 1st Prize, 2*l.* Mr. T. Bailey, Shardeloes Garden, Amersham.  
 2nd ,, 1*l.* Mr. J. Pottle, gardener to B. D. Colvin, Esq., Woodbridge.  
 3rd ,, 10*s.* Mr. T. Westbrook, Abingdon.

**Class L.—Melons scarlet-fleshed, single fruit:—**

- 1st Prize, 2*l.* Dr. Cooper, Slough.  
 2nd ,, 1*l.* Mr. T. Blair, Kingston.  
 3rd ,, 10*s.* Mr. T. Bayley, Shardeloes Garden Amersham.

**Class M.—Figs, two dishes, 12 fruits each, distinct:—**

- 1st Prize, 1*l.* 10*s.* Mr. E. Spivey, gardener to J. A. Houblon, Esq., Hallingbury Park, Essex.

**Class N.—Cherries, two dishes, in fifties:—**

- 1st Prize, 2*l.* Mr. R. H. Betteridge, Milton Hall, Steventon.  
 2nd ,, 1*l.* 10*s.* Mr. T. Dawson, gardener to Earl Cowper, Panshanger.  
 3rd ,, 1*l.* Mr. S. Snow, gardener to Countess Cowper, Wrest Park, Silsoe.

**Class O.—Plums, three dishes, distinct kinds, 10 fruits each :—**

- Equal 1st Prize, 2*l.* Mr. J. B. Whiting, Deepdean Gardens.  
 Equal 1st ,, 2*l.* Mr. S. Snow, gardener to the Countess Cowper, Wrest Park, Silsoe.  
 2nd Prize, 1*l.* 10*s.* Mr. J. Enstone, gardener to Sir J. Duckworth, Bart., Exeter.  
 3rd ,, 1*l.* Mr. T. Turnbull, gardener to Lady Lambert, Thames Ditton.  
 Extra ,, 10*s.* Mr. T. Simmonds, gardener to J. Smith, Esq., Mickleham Hall, Dorking.

**Class P.—Apples, dessert, six dishes, distinct varieties, 12 fruits each :—**

- 1st Prize, 2*l.* Mr. J. Mortimore, gardener to Miss Browne, Carshalton.  
 2nd ,, 1*l.* 10*s.* Mr. J. Newton, gardener to G. Graham, Esq., Enfield Chase.  
 3rd ,, 1*l.* Mr. T. Turnbull, gardener to Lady Lambert, Thames Ditton.  
 Extra ,, 10*s.* Dr. Cooper, Slough.

**Class Q.—Apples, kitchen, six dishes, distinct varieties, 12 fruits each :—**

- 1st Prize, 2*l.* Mr. R. Heather, gardener to R. Pulsford, Esq., Ember Grove, Kingston.  
 2nd ,, 1*l.* 10*s.* Mr. J. Mortimore, gardener to Miss Browne, Carshalton.  
 3rd ,, 1*l.* Mr. J. Newton, gardener to G. Graham, Esq., Enfield Chase.  
 Extra ,, 10*s.* Mr. T. Frost, Aylesford.  
 Extra ,, 10*s.* Mr. J. Holder, Reading.

**Class R.—Pears, six dishes, distinct varieties, 12 fruits each :—**

- 1st Prize, 3*l.* Mr. C. F. Harrison, Weybridge.  
 2nd ,, 2*l.* Mr. W. Holder, Eton College.  
 3rd ,, 1*l.* Mr. P. Nickles, Hammersmith.

*Judges of Flowers* :—MESSRS. JOHN EDWARDS, W. HOLMES, F. R. KINGHORN, JOSEPH ROBINSON, AND CHARLES EDMONDS.

*Judges of Fruit* :—MESSRS. ANDREW STEWART, LEWIS SOLOMON, AND JOHN SPENCER.

**Class S.—Pears, three dishes, distinct varieties, 12 fruits each :—**

- 1st Prize, 1*l.* 10*s.* Mr. J. Holder, Reading.  
 2nd ,, 1*l.* Mr. D. Hutchinson, gardener to H. Cotton, Esq., Quex Park, Margate.  
 3rd ,, 15*s.* Mr. W. Holder, Eton College.

**Class T.—Pears, single dish, for weight :—**

- 1st Prize, 15*s.* Mr. C. F. Harrison, Weybridge.  
 2nd ,, Mr. G. Grover, Hammersmith.

**Class U.—Pears, single dish, for flavour :—**

- 1st Prize, 15*s.* Mr. D. Hutchinson, gardener to H. Cotton, Esq., Quex Park, Margate.  
 2nd ,, 10*s.* Mr. C. F. Harrison, Weybridge.  
 3rd ,, 5*s.* Mr. J. Beer, Hammersmith.

**Class W.—Miscellaneous.**

Prize 3*l.* Fruit Trees, in Pots—Lane & Son, Great Berkhamstead. Prize 1*l.*—Bananas—Mr. G. Young, gardener to W. Stone, Esq., Havant. Prize 1*l.*—Salway Peach—Mr. J. C. Dwerrihouse, gardener to Viscount Eversley, Heckfield. Prize 10*s.*—Mammoth Gourd—Mr. S. Bennett, gardener to S. Fenton, Esq., Penge. Prize 10*s.*—Cucumbers—Mr. J. Horwood, gardener to G. H. Turnbull, Esq., Downe. Prize 10*s.*—Guavas—Mr. A. Henderson, Trentham. Prize 10*s.*—various Gourds—Mr. Salter, gardener to A. Sillems, Esq., Sydenham.

**Class X.—Snow's Muscat Hamburg Grapes.**

- 1st Prize, Mr. A. Henderson, Trentham.  
 2nd ,, Mr. James Smith, gardener to Lord Tenterden, Hendon.

*The Judges highly commend a Collection of Grapes in Pots, and various fruit grown in Glass Houses for the Million. Exhibited by Sir Joseph Paxton, M.P.*

## ROYAL HORTICULTURAL SOCIETY'S EXHIBITION, SEPTEMBER 11TH.

IN two great shows following so close one upon the other, there must of necessity be a great similarity, the same exhibitors well-nigh in each place, the same flowers, and the same prizes. As "the Palace" Show has been reported, I shall merely mention a few of the more notable things that struck me in the Florist's "way."

As the Exhibition was called a "Grand Dahlia Show," we must first begin with those favourite autumnal flowers, which, despite the "classical's" epithet of "lumpish," we shall still consider A 1. The exhibition missed the presence, as a competitor, of Mr. Charles Turner, of Slough, for the *thrips* had so completely conquered him that a few days before, when I was there, he had taken away all his shades, stands, &c., and had determined to submit to the invasion of *blacks*, which had made fast quite on one side.

Mr. Keynes, of Salisbury, stepped into the front rank, and took the three first prizes offered to nurserymen. The best box of Dahlias in the Show was his. It contained admirably done blooms of

D'Israeli, Chairman, Lady Pennant, Golden Drop, Andrew Dodds, George Elliott, Sir G. Douglas, Lilac Queen, Perfection, Mrs. Trotter, Lady Franklin, Kimberley's Queen, Lord Palmerston, Jenny Austin, Triomphe de Pecq, Hugh Miller, John Keynes, Flower of the Day, Pandora, Mrs. Dodds, Mauve, Juno, Earl of Shaftesbury, and Colonel Wyndham. Amongst amateurs, the best box was decidedly, I thought, Mr. Fellowes, 24's—the Beauty of Hilperton, Norfolk Hero, Bravo, Lord Palmerston, Pre-eminent, and Clara Novello, were very fine. The finest seedling in the Show, and indeed, so far as I have seen, the finest of the year, was Pope's Earl Derby, a flower of wonderfully grand build. This received a first-class certificate from the Floral Committee, and will pass into the hands, we believe, of Mr. Turner, of Slough.

Of Roses I have already said something in another paper, but there was one collection, sent in by Mr. Mitchell, of the Piltown Nurseries, which deserves especial praise. He not only sent in the only box of 48 trebles, but also a very nice collection of nearly 100 varieties besides. His box of 48 contained H.P.'s Alexandrine Bachenstaff, Auguste Mié, Abd-el-Kader (a son of General Jacqueminot, brilliant scarlet, with a dark velvety-crimson shade in the petal), Baronne Prevost, Caroline de Sansal, Cardinal Patrizzi, Colonel Cambriels (a flower I did not know, shaded crimson, of fine form), Comtesse Cecile de Chabrillan, ex. ex., Doctor Guillard, Duchess of Norfolk, Duchess of Sutherland, General Jacqueminot (some fine blooms in excellent character), Gustave Coraux, Jacques Lafitte, Jules Margottin, Lord Raglan, La Reine, ex. ex., L'Oriflamme de St. Louis (very good), Madame Charles Crapelet (a fine and brilliant flower), Madame Masson, Madame Knorr, Madame Furtado (a lovely rose, one of the *toppers* of this year), Monsieur de Montigny (very large), Norma, Orderic Vital, Ornement de Jardins, ex., Pauline Lausezeur, Prince Léon, Sénateur Vaisse (a magnificent flower), Souvenir de la Reine d'Angleterre, Triomphe des Beaux Arts, Victor Verdi (good), and William Griffiths, B. Acidalie, Dupetit Thouin, Docteur Berthet, General Blanchard, Paxton, Souvenir de la Malmaison (as usual, good and large), Novello, Narcissie, and Triomphe de Rennes (the latter very fine), Teas, Gloire de Dijon (as ever, grand and fine), Homere (large and good), La Pactole, Louise de Savoie (very fine), Madame de Lartas, and Souvenir d'Elise. It will be seen that the H.P.'s, as usual, contribute the largest quota to the autumnal blooms. Mr. Keynes had also a nice box of 26's, and there were some fine Teas in Mr. Hollingsworth's stand. Phloxes in pots were contributed by Mr. Cattell, of Westerham, and Mr. Standish, of Bagshot, the former taking first prize, thus justifying what I ventured, in speaking of a visit to his nursery this year, to say, "that he was pushing his way up as a grower." His Phloxes were certainly as fine, and probably finer, than most of the frequenters of the Show were in the habit of seeing in the open grounds.

There can be no doubt but that the revival of the Horticultural Society, its transference to Kensington Gore, and its wisdom in

securing the services of Mr. Eyles, have given a great stimulus to floriculture; and as now there are three grand series of flower-shows every year, the Crystal Palace, Royal Botanic Society, and Kensington, I do hope it will bring many new competitors into the field. One does not like to see the "old stagers" running off with all the prizes, and the infusion of new blood will tell favourably in every respect.

The Gladioluses were perhaps the most attractive feature of the Show, and although they were a *leetle* better at Sydenham, yet Mr. Standish's collection was again the object of general attention,—the variety of tints, the purity of some, and the gorgeousness of others, were exceedingly interesting. What could be more lovely than Lady Caroline Legge, with its pure snowy petals, and its brilliant feather of purplish-crimson? what, again, more brilliant than Achille? Then, how novel the colour in Egerie, and how delicate the markings in Mrs. Hole, for which see Mr. Andrews' admirable figure in this number. Look again at the deep vivid crimson of Ketterii, and the delicate primrose of Goldfinch. Miss Graham and Susan Ingram, snowy and pure, fit to be the bridesmaids of a Queen; and J. W. Lane, and Rev. Joshua Dix, brilliant, and worthy of the names they bear. Amongst others, there were Colonel Hood (deep scarlet), Madame Leselbe (white, with purplish-crimson or plum-coloured feather), Colleen Bawn (striped carmine), Tippoo Saib (orange), Rose of England (bright cerise), Mr. Rucker (beautiful deep cerise, white throat, and cerise feather). In fact, there seems to be no end to the variety which this flower is capable of running into, and as it seeds so freely, and hybridizes well, we may expect every year still further novelties; and as decidedly it has become the *fashionable* flower, those who have, like Mr. Standish, hit upon a good strain, will have every encouragement to proceed with their hybridizing. My own experience with it has been that it does not require a poor soil, but that any light soil will answer for it; that in my own garden is good, but light and friable, and they seem to thrive wonderfully well in it.

Having thus touched on some of the more salient points of the Exhibition, one cannot close it without testifying to the admirable manner in which the whole arrangements were carried out under Mr. Eyles' superintendence. Every attention was paid to exhibitors, and there was as little confusion as could well be on such an occasion. There were of course, as usual, some complaints as to the judging, and in one or two instances, perhaps, well founded. Class S.—a box of six dahlias obtained one of the prizes in that class, although it had *two yellows* in it; a want of variety which ought to have condemned it. But these things will always happen,—the only pity is when people lay it to the charge of unfairness or incompetence, as was done in a notable case this year, and when gardening publications allow their columns to be made the vehicle of attack on a set of men whose task is never an enviable, and often a most difficult one.

Deal, Sept. 20th.

D.

## ROYAL HORTICULTURAL SOCIETY.

FRUIT COMMITTEE.—F. J. Graham, Esq., in the chair. At this Meeting prizes were offered for the best three dishes of Peaches, Nectarines, and Plums. Mr. Dwerrihouse, gardener to Lord Eversley, at Heckfield, sent Royal George, Noblesse, and Salway. The first was briskly flavoured, but not sweet; Noblesse was very rich and sugary, and remarkably highly coloured for that variety; while Salway was very flat in flavour, though large and remarkably handsome fruit. The merit of this variety is in its lateness; and from this exhibition it was evident that it does not do to force, but requires to be ripened gradually. This being the only collection exhibited, Mr. Dwerrihouse was awarded the First Prize of 1*l*. Mr. Dwerrihouse also exhibited a dish of very fine Violette Hâtive Nectarines. There were no competitions for the Nectarines.

In Plums there were three competitors, of whom the most successful was Mr. Francis Dancer, Little Sutton, Turnham Green, who obtained the First Prize of 1*l*. His collection consisted of Jefferson, Pond's Seedling, and Poupart's Seedling. The Jeffersons were remarkably large and handsome, having a bronzy tinge, and most deliciously flavoured. Pond's Seedling was also large, but the flavour, though good for that variety, was only that of a cooking Plum. Poupart's Seedling is the size of an Orleans, quite black and lined all over with bronzy tracings. The flavour is rich, and it appears to be a very desirable Plum. The Second Prize of 15*s*. was awarded to Mr. John Newton, East Lodge, Enfield Chase, for Jefferson, Red Magnum Bonum, and Coe's Golden Drop; and the Third Prize of 10*s*. to Mr. Henry Eyre, gardener to A. F. Slade, Esq., Chiselhurst, for Green Gage, Jefferson, and Bleeker's Yellow Gage. The last is an American variety, about the size of a well-grown Green Gage, of an amber colour, but not particularly rich in flavour.

There was a very nice collection of Grapes exhibited from the garden at Chiswick, among which were Muscat Noir Hâtif, Hâtif de Jura, and Rouge de Rolle. These seemed all to be very much alike, and appeared to be the same as our old Early Black July. There was not the slightest trace of Muscat in the Muscat Noir Hâtif. Muscat Hamburgh was well exhibited, the bunches being of good size and very well set. The flavour was most excellent. Burchardt's Prince, grown in the Vine-pit in a pot, was very well developed. The bunch was large and long, and the berries as black as Sloes, while the flavour was that of the finest Black Hamburgh. The true Esperione, as exhibited, is a short bunch and not very well set, the stalk and pedicels very stout and warted, and the berries perfectly round. The skin is jet black and thick; and the flavour is good, and between the Black Hamburgh and Black Prince character.

A Seedling Grape of a remarkable character was received from

Mr. William Melville, of Dalmeny Park, near Edinburgh; it was obtained by crossing Champion Hamburgh with the pollen of Canon Hall Muscat. The result is a Grape producing a very large bunch, with enormous roundish or rather oblate berries of a grizzly colour, having the flesh of the Mill Hill Hamburgh impregnated with a distinct flavour of the Muscat. The Grape had evidently been produced under some disadvantageous circumstances, and there is no doubt when well grown it will prove a very valuable acquisition.

Mr. Graham, of Cranford, also sent a Seedling Grape of the White Frontignan class, and in the way of Chasselas Musqué; but, as it was not quite ripe, Mr. Graham was recommended to bring it up at the next Meeting.

A fine, large, and well-set bunch of a Muscat Grape was received from John Ruck, Esq., Sutton Court, Surrey, under the name of Muscatel Jesus. This, in the opinion of the Committee, proved to be Muscat of Alexandria.

Mr. Drummond, gardener to J. J. Smith, Esq., Beechwood, exhibited a basket of very large berries of Mill Hill Hamburgh Grapes. They were beautifully covered with bloom; but, as they were not allowed to be tasted, the Committee could not give an opinion upon them.

Mr. F. Joynes, of Bourton, Berks, sent a shoot of a Vine bearing two bunches of Grapes, the produce of different crops: one was ripened in June and the other in September. From the condition in which these were exhibited, the Committee were of opinion that there was no advantage to be gained by this mode of culture; but that, on the contrary, the result, which is after all an unsatisfactory one, must be obtained at the expense of the vigour of the Vine. Mr. Busby also exhibited a shoot of the Golden Hamburgh grown under similar circumstances.

Mr. Rivers, of Sawbridgeworth, brought fruit of a Seedling Peach called Early Albert; it is of good size, of a pale, creamy white on the shaded side, and a lively crimson where exposed; the flesh is quite pale at the stone. The flavour was excellent. The same gentleman also exhibited good specimens of Crawford's Early, a large yellow-fleshed American Peach of excellent flavour, and another of the same race and origin called Bergens' Yellow, which is larger than the former, but was flatter in flavour. Princess Marie is of rich flavour, as is also Grosse Mignonne Tardive, a variety a fortnight later than the old Grosse Mignonne.

Mr. Rivers' greatest triumph is the production of a Seedling Nectarine, which has all the merits of the Stanwick, and none of its defects. It was raised from the Violette Hâtive, impregnated by Stanwick. The fruit has all the appearance and richness of flavour of its male parent; but with the deep stain of red in the flesh where it surrounds the stone like the female. *It is a month earlier than the Stanwick*, and a fortnight later than the Violette Hâtive. Perhaps the most remarkable feature in the whole is, that the fruit being altogether that of the Stanwick, the kernel is

bitter, showing how very decided the cross has been. Here, then, is a bitter-kernelled Stanwick, for both the leaves and flowers as well as the fruit are Stanwick. It is called the Victoria Nectarine, and it was awarded a First-class Certificate.

Mr. Rivers also exhibited another Seedling Nectarine called Pine Apple, which was not quite ripe; and another from the New White, which was very rich in flavour.

George F. Wilson, Esq., of Gishurst Cottage, Weybridge, sent a dish of magnificent Louise Bonne of Jersey Pears, among the largest we have ever seen of that variety. They were grown in pots in an orchard-house, but moved out of doors during the summer months, where they were brought to the excellent condition in which they were exhibited. The flesh was very tender, melting, and juicy, and the flavour delicious. Mr. Wilson also exhibited a large specimen of Melon Apple.

A Seedling Apple called Jedburgh Abbey, was received from Mr. William Deans, Nurseryman, Jedburgh, N.B. It is of medium size, conical shape, and with a smooth, yellow skin. The flesh is briskly flavoured and tender. It is said to be a very regular and abundant bearer. The opinion of the Committee was that this might be considered a good summer kitchen Apple; and from its tender flesh and agreeable brisk flavour would be valuable for apple jelly, the Keswick Codlin being the variety which is now most used for that purpose.

Mr. Newton, of East Lodge, Enfield Chase, exhibited specimens of Devonshire Quarrenden, Kerry Pippin, and Yellow Ingestrie.

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## TRADE LISTS.

*List of Bulbs cultivated and imported by E. G. Henderson & Son, Wellington Road Nursery. Autumn, 1861.*

The Bulb List is classified and described with the Messrs. Henderson's usual care. There is, in addition, several novelties in the miscellaneous class, in the way of Caladiums and fine-foliaged plants (becoming more popular every day) which parties interested in ornamental gardening should avail themselves of. In this department, as well as in bulbous rooted plants, the List is rich and complete.

*Catalogue of Bulbous Roots and Tulips imported and sold by Charles Turner, Royal Nurseries, Slough.*

A very complete and select Bulb List. Respecting the Tulips offered, we can only say that, as Mr. Turner's collection is decidedly unique, the List also comprises the gems of the celebrated Slough collection, as well as those of all our best growers, and it should be in the hands of every Tulip fancier.

*Autumn Catalogue of Dutch and Cape Flowering Bulbs offered for sale by Butler & McCulloch, Seedsmen, Covent Garden Market.*

Here we have a Catalogue filling fifty pages of closely printed matter, comprising a list and description of all kinds of Bulbs and their allies, with directions for culture, forming altogether a complete *vade-mecum* to the subject of which it treats.

*Select List of Hyacinths and other Bulbs recommended and sold by William Paul, Cheshunt Nurseries and Seed Warehouse, Waltham Cross.*

A very choice selection, got together with the author's usual discrimination, and which we vouch for may be relied on for correctness.

*Paul & Sons' Rose Catalogue, 1861-62. The Old Nurseries, Cheshunt, Herts.*

The Messrs. Paul's Rose List has been well weeded of all second-rate and doubtful kinds, and the selection contains, so far as a hasty perusal enables us to judge, all the really good things worth growing.

*Catalogue of Imported Bulbous Flower Roots. Sutton & Sons, Reading.*

This contains an excellent collection of Bulbs, &c., and useful lists of a few popular plants. The Messrs. Sutton have also appended a short list of vegetable seeds, saved this present favourable season, and of which many will be glad to avail themselves for sowing this autumn.

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### CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—Plants of the former which are backward in forming their bloom buds, should still be kept as close and warm as can conveniently be done; and any specimens which incline to make a too free growth instead of forming bloom buds, should be sparingly supplied with water at the root, giving no more than may be deemed necessary to prevent the foliage being injured, and if these could be placed in a warm, dry, airy house, this would greatly assist in checking growth, and inducing them to set for bloom. But any plants which have made but a poor weakly growth should be treated as kindly as circumstances will allow, syringing them overhead every afternoon, keeping the atmosphere moist, and attending very carefully to them with water at the root until a fair growth and moderate sprinkling of bloom buds are obtained. Young plants which have been recently stopped must also be afforded every possible encouragement until a nice regular strong growth is obtained; but unless in the case of

new kinds which it may be desirable to bloom for the purpose of judging as to whether they are any improvement upon older kinds, we would not recommend forcing young plants which have been stopped recently to set for bloom, for they will grow much more freely next season if allowed a long rest, and spared the drain upon their energies of blooming. Plants in heat, which are well and regularly set, should be removed to a cool house, but do not expose them suddenly to currents of cold air. See that the whole stock are perfectly clear of black thrips, and this pest will probably be very troublesome on plants growing in heat, after this season. Take advantage of every minute which can be spared for such work to tie the plants, so as to make them all as neat and trim as possible for the winter. Any of the Camellias which are still out of doors had better be placed under glass at once, for there will be considerable danger in allowing the balls to get saturated by heavy rains, which they will be very liable to do if left out of doors any longer. Such of the plants as were grown in heat and set their bloom buds early should be ready to open their blossoms, and these should be placed in prominent situations in the stove-house, and those which are rather backward, if wanted in bloom, may be placed in a house where a little warmth is maintained. Examine the whole stock carefully, to see that the drainage is right, and well clean the foliage of any which require this attention. *Conservatory.*—Thin out twiners on the roof, especially such as have done blooming, so as to admit all the light possible. Give the beds and borders, if at all dry, a liberal soaking of water, but those occupied by plants in a partially dormant state should be kept rather dry, especially in the case of plants which are scarcely hardy in this house. See that everything is perfectly free from insects, and endeavour by judicious and tasteful arrangement and perfect cleanliness, to compensate as much as possible for the want of any great display of bloom. Endeavour to place the more valuable hardwood plants near to the glass, and in the best situations. Ventilate freely on every favourable opportunity, save in cases where the gaiety of the house principally depends upon plants brought from the stove, when it will be necessary to keep the house rather close, and to use a little fire heat when the weather is cold and damp. If not already done, Hyacinths and other Dutch bulbs should be procured and potted, using light very rich soil, and placing the pots in a cold frame or on a well-drained spot out of doors, covering them some three inches with sand or old tan. These are exceedingly useful for blooming in winter and early spring, and should be largely grown wherever there is an extensive demand for flowers at this season. *Cold Frames.*—Most of the hardwooded plants will have completed their season's growth, and such things as Boronias and other subjects which are found to be difficult to winter safely, when their wood is not thoroughly well-ripened, had better be placed near the glass in the greenhouse, keeping the atmosphere dry, and exposing them to whatever sunshine we may experience; but do not expose them suddenly

to draughts of cold or drying air. Water very carefully, and more sparingly as the plants become less active. Give air freely on every favourable occasion to heaths and other hard-wooded plants remaining in the pits, but shut up at night whenever there is any danger of frost. Proceed with re-potting and tying any of the plants which require this as fast as time can be spared for such work, and endeavour to have the whole stock as trim and neat for the winter as they can be made. Many growers have an objection to shifting hard-wooded plants at this season, but, with careful watering, heaths may be shifted as safely now as at any period of the year, and we greatly prefer re-potting any thing now, or at any time in the winter, which may be suffering for the want of pot room, to keeping them longer stunted for the want of pot room. See that all are clear of aphids and mildew, and plants infested with scale should be thoroughly cleared of the scale, and their foliage and wood well-washed first possible opportunity. *Flower Garden.*—Pot off rooted cuttings of Verbenas, &c., and endeavour to get the whole stock of such things well-established in their winter pots as early as possible. If the stock of anything is found to be short, no time should be lost in putting in as many more cuttings as may be necessary. Calceolarias, or some other plants largely used in bedding, do not require to be rooted before the winter; but care should be taken to secure an ample stock of cuttings of these before they are injured by frost. Also get up Golden-chain, and other variegated Geraniums, before the points of their shoots are frost-bitten, for if this happens they are very troublesome to carry over the winter, especially the more delicate kinds—as Golden Chain. Avoid lifting anything, however, as long as can be done with safety, and be prepared to cover the beds any evening when frost may appear likely. For this purpose a thin sprinkling of straw, or any dry litter will answer. See to putting in a good stock of Hollyhocks, if not already done, and afford these the aid of a gentle bottom heat, without which they will hardly root after this season. Any alterations projected about the grounds should be proceeded with as fast as possible, especially those involving the removal of large shrubs or trees, for which work the first half of this month is a very suitable time. *Greenhouse.*—If any of the inmates of this house are still out-of-doors, they should be placed in their winter quarters without delay. First, however, have the house thoroughly cleaned, well washing the glass so as to admit all the light possible. Do not stand the plants too close, and rather than be forced to run the risk of injuring fine specimens by this means, get out by some means as many of the less valuable as will allow of giving ample space to those retained. Ventilate freely, on every favourable occasion, and aim at getting the young wood well matured before winter, but close the house at night when there is any danger of the thermometer falling below 40°. Look out for mildew and insects, and spare no trouble to have the plants perfectly clean for the winter. Water cautiously, especially plants which are in a rather

dormant state; but when a plant is watered give enough to moisten the ball throughout. Re-pot any of the specimens which require more pot room, and get all nicely tied as soon as possible, in order that they may be trim, as for the winter. *Stove*.—Variegated and other ornamental foliaged plants should now be brought into prominent situations, and these, if in good condition, will be generally admired, while specimens in bloom are not over plentiful. Attend carefully to the stock of plants for winter blooming, report any that require this attention, and afford them the most suitable situations at command, and see that these are all perfectly free from insects. Many plants, as Allamandas, Clerodendrons, &c., may be removed to an intermediate house, where, if the temperature is not allowed to sink below 50°, and a dry atmosphere can be maintained, they will do better during their season of rest than in the ordinary stove. See that the whole stock is free from insects, and spare no labour which may be necessary to effect this.

*Hardy Fruit*.—Nothing could be more favourable to the ripening crop of Apples and Pears than the warm dry weather which we have experienced in this part of the country for some time past; therefore, most of these will be ready for housing earlier than usual. All Apples may be gathered during the present month, leaving the late kinds till the last. Late Pears, such as Beurré Rance, Prince Albert, Ne Plus Meuris, &c., should remain on the trees as long as the weather favours their ripening, but if they will not hang without dropping they had better be gathered. The finer sorts of dessert Pears should be gathered very carefully, so that the skin does not get rubbed or otherwise injured; lay them singly on shelves in the fruit room, where they ought to remain without moving till they are fit for use. Admit plenty of air and light to the fruit store for some time after the fruit is housed to allow the moisture given out by the fruit to pass away, after which time the house should be kept closed.

Continue to clear out all runners, &c., from Strawberry beds, if not already done, and get the ground forked over before the month is out. All kinds of fruit-trees may be planted toward the end of the month, or at any time after the leaves are partially fallen; large trees, especially, should not be moved before the leaf drops. Mulch the surface of the soil about the roots after planting. Plant Raspberries, Gooseberries, and Currants; the latter may now be propagated.

*Forcing Ground*.—Keep up a night temperature from 65° to 70° to Cucumbers, and admit plenty of air through the day, to strengthen the plants, that they may better withstand the dark foggy weather we may expect next month. Shift those sown last month into large pots, or plant them out in pits where there is a good command of heat; use rough turfy loam, mixed with rotten manure. Be very careful in watering, so that the soil does not get soddened; it is better to allow them to get dry occasionally, after which give them a watering with liquid manure, especially those growing in pots; sow again for succession. Munroe's Cucumber is an excellent kind for winter work.

*Peach-house.*—As soon as the leaves are off the trees in the early house they may be pruned, and if the trees are weakly, the borders should be forked over at once, and dressed with a good coat of fresh loam and dung.

*Vinery.*—The vines may now be pruned in the early house, and if very early Grapes are required, prepare to close the house by the end of the month. Still continue to give a little fire heat in bad weather to late Grapes that are not properly matured. Also a little through the day in damp weather to those that are ripe, at the same time giving air to free the house from damp. Look over the bunches often, and remove all decayed and unhealthy berries.

*Strawberries.*—Cut away all runners and clear the pots of weeds. Keep the plants fully exposed and moderately dry, so that they may finish their growth before sharp frost sets in.

*Pines.*—Those plants growing in dung pits should now have the linings renewed; cover the pits if the nights are cold. Plants intended for fruiting next season on ridges, may now be planted out on a good bed of leaves. See previous directions in regard to plants in fruit, &c.

*Kitchen Garden.*—Plant out a good breadth of cabbage early in the month for spring use, and prick out the small plants on a sheltered border to stand the winter for planting early next spring. Plant out Hardy Green and Brown Cos Lettuce, sow under glass for spring planting. Plant Cauliflower under hand-glasses, and some may be planted on the sunny side of small ridges; if the winter is not too severe they will do very well. Prick out what small plants remain in a cold frame, for planting out in the spring. Those heading in should be protected from frost, by breaking down the leaves over the heads, otherwise taken up and placed under cover. Prepare a piece of rich soil for planting out Tripoli Onions that were sown last month; this should be done at the end of the month. Take advantage of dry days to earth up Celery and Cardoons. Take up late Potatoes. Carrots and Dioscorea roots should be packed away in sand. Tie up Endive as it may be required for use. Earth up all winter Greens and Brocoli, and use the hoe in every part of the garden in dry weather, to check the young weeds before bad weather sets in.

*Pelargoniums* should by this time all be housed, and if the plants intended for specimens are not yet selected, and have not had their final repotting, both should be done without delay. Be careful in repotting that the soil should be in good condition, and that the ball of the plant be in a good state, especially with regard to moisture. Let the house in which the repotted plants are placed be kept for a time tolerably close, in order to encourage fresh roots. A good start in growth is essential to their becoming fine plants. Water at first very carefully, and give none unless it is needed; fumigate thoroughly to destroy the green fly, and the plants being thoroughly established, they should, whenever the weather is sufficiently favourable, have air in abundance.

*Cinerarias.*—These, if potted as recommended last month, will

now require shifting into a size larger pot, taking care to well drain the pots with potsherds or other loose material. The compost best suited for this purpose is two-thirds good friable loam with one of good rotten horse-dung or leaf mould, add a little silver or river sand to cause the water to pass freely. Keep them in a cool shady situation, and, if bright weather, sprinkle frequently. Should thrip or green-fly appear, fumigate immediately on its appearance, and sulphur such as have the mildew.

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### WORK FOR SMALL GARDENS IN OCTOBER.

A VERY important month in gardening operations, rendered still more so by the fact of early frost having occurred during the past few years with great intensity, so that I should strongly advise everything being made snug as soon as possible in the month.

*Auriculas.*—As they are now fast approaching their season of rest, be careful that all is right as to drainage; if the mould in any pot seems *soddened*, look to it at once, for something is wrong, and if the plant has not made roots, re-pot it into a small pot, give water less often, pull off all decaying leaves, and give abundance of air.

*Carnations and Picotees.*—This season has been the very reverse of the last, layers have rooted well, and the grass looks very flourishing; all should be potted off early, and, where it can be done, in single pots. I find the compost in which they have been growing aided by a little loam to answer very well.

*Gladiolus.*—As the foliage decays, the roots should be taken up, cleaned, and dried *quickly*; this I believe to be the great secret.

*Pansies.*—These should now be in pots for wintering; some advise to put them into their blooming pots now, but the general, and I believe the best plan, is to keep them in small pots all the winter, and pot again early in February: watch for mildew, and keep the plant clean and dwarf.

*Pinks.*—As early as possible in the month make up the blooming beds, let the soil be rich and friable, and then they will give no further trouble till April, except to keep the bed clear of weeds.

*Roses.*—It is desirable, if possible, to prepare your ground now; in most gardens they will have to be brought in, and I should again advise, where practicable, to get them on their own roots, or grafted low on the Manetti. November is generally considered the best month, but the end of October answers very well.

*General Work.*—Plants must now be arranged in the little greenhouse, (if such there be), bedding stuff be safely housed, bulbous roots planted, such as Ranunculus, Anemones, &c. Lilliums laid on their side to dry off, and, in fact, one's eyes must be everywhere, and hands always ready. At this season of the year, the weather is most favourable for all gardening operations.





Verbenas.

1. *Ecchunter*. — 2. *Fairest of the Fair*.

Plate 182.

J.A.

## VERBENA FOXHUNTER.

(PLATE 182.)

THE novelties which have appeared this season amongst Verbenas have been very few, owing no doubt to the unpropitious nature of the summer of 1860, which must have prevented the maturation of seed, except under very favourable circumstances. Indeed, with the exception of that which forms the leading feature in the accompanying plate, none of a very remarkable character have appeared as novelties at the meetings in London. This variety, however, which from its colour has been appropriately named Foxhunter, is one of remarkable merit. It was raised by John Miller, Esq., of Upway, Dorchester, to whose courtesy, and that of the Messrs. Low, of Clapton, into whose hands it has passed, we are indebted for the opportunity of figuring it.

Our first acquaintance with Mr. Miller's Verbena was made at a meeting of the Floral Committee of the Royal Horticultural Society, held on the 9th of July in the present year. On that occasion its large size and brilliancy and attractiveness of colour secured for it the award of a First-class Certificate, to which it was well entitled. The trusses then produced were bold and well furnished, and the flowers were remarkably large, some which we measured being over an inch in diameter; they were, moreover, of excellent form and firm in substance: they had, in fact, all the qualifications of a fine Verbena. Add to this, a colour of the richest and brightest scarlet, which of course the pigments used by artists utterly fail to imitate, and imagine each flower to be relieved by a yellow eye. Such was the Foxhunter Verbena, as exhibited on the occasion referred to, the flower-trusses sent for examination having been cut from an unprotected plant in the open ground. The variety is stated to be one of robust habit, and the samples we have seen bear out this statement, this characteristic being indeed sufficiently indicated by the foliage introduced into our figure. We have no hesitation in speaking of this as the finest scarlet Verbena yet made known.

## VERBENA—FAIREST OF THE FAIR.

The other variety we have represented is called Fairest of the Fair. It was raised by Mr. G. Smith, of the Tollington Nursery, Hornsey road, and was sent out last spring. It is certainly one of the best in its class; indeed we have met with none at all equalling it in the purity of its ground colour, and the brilliancy of the rosy-coloured ring which surrounds the eye. As to its merit, it may be stated that when shown as a seedling, it received commendation from the

tribunal already referred to. We regard it as one of the most chaste-looking and pleasing varieties in cultivation.

There is a growing opinion unfavourable to the Verbena as a subject for bedding out in high class geometrical gardening, especially where, for the sake of regulating the development of other plants, it is necessary to avoid a tolerably stimulating soil; but despite this, the flower will, we are sure, continue to hold its place as a garden ornament applicable to a variety of uses, and affording almost endless variations of colour, some of which cannot yet be dispensed with, even in the style of gardening to which allusion has been made. We have, therefore, much pleasure in presenting our readers with portraits of two varieties which will be found to possess high-class qualities, rendering them desirable for general cultivation.

M.

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### SPUR-PRUNING OF FRUIT TREES.

FRUIT trees are now in a very different state to that which they were in at this time last year. The young wood and buds were then not half ripened, and the trees were exhausted from the heavy crop of fruit they bore. The prospect of a fruit crop was then anything but cheering. Now, however, the case is different. The crops of the past season being in general light, and, in many places, a failure, and the weather being hot and dry, the wood and buds of all trees are, in consequence, thoroughly matured; indeed, it is not often that the blossom buds are so plump and prominent as they are at the present time. The prospect of a good fruit crop next year is most encouraging. If the weather next spring be favourable, the crop will be a very heavy one.

Overbearing is an evil to be guarded against as much as possible, as it enfeebles the constitutions of trees and brings on premature decay. Spur-pruning and thinning of the fruit are the best means of preventing this. We would, therefore, strongly advise that all trees should be carefully and judiciously spur-pruned, when the state of the weather permits it to be done. Through the almost total neglect of this, one of the most important operations in fruit-tree culture, we generally see trees one year bent to the ground with the weight of fruit, and the following year no fruit at all; and this goes on year after year. One season a heavy crop of inferior fruit, the next year none.

When the trees bear these heavy crops, the fruit is never so fine as it would be if it had been properly thinned, and the trees are thereby greatly debilitated. It is very bad management to allow trees to become exhausted by over-bearing. The thinning of the blossom and fruit is an operation which cannot be properly carried out to a very great extent, as it is in general a busy season when such work requires to be done. Spur-pruning should therefore be regularly attended to and carefully performed. Go where you

may you will find old trees generally full of old long spurs, with ten times more buds than are necessary for a good crop of fruit, and so crowded that scarcely any sun and air can get to them. The flowers are in general small and the greater portion of them imperfect. When allowed to expand they rob the trees of their powers, and even of those that set a great quantity not unfrequently drop off. Spur-pruning is, therefore, a work of the first importance.

When the spurs are crowded, all the longest and weakest should be cut clear away ; and on those that are left the buds should be well thinned out ; all the weak buds and those on the ends of the spurs should be cut clean off, leaving the roundest and most plump, and taking particular care of those at the base of the spurs. When pruned the buds should be left at such a distance from each other that the sun and air should have full influence on them. On old trees that have been neglected, spur-pruning can hardly be too freely carried out. We have ourselves operated largely on old trees of all kinds a few years ago. Since then the trees have regained fresh vigour, and they bear much finer fruit than they did previously. Some apple trees here were so exhausted by over-bearing and by profuseness of flowering, that the fruit—when there happened to be any—was wretchedly poor and malformed. But since they have been regularly and properly spur-pruned, the fruit has been all that could be wished for.

It may be here objected to what we have said, that to carry out spur-pruning properly in large gardens and orchards, necessitates a great amount of labour. Our answer to this is, that where trees have been neglected it requires considerable labour to bring them into a proper condition, but when once got into this state, the labour yearly required to keep them so is not very great. It is quite lamentable to see the neglected state of orchard trees in general, and too often of garden trees also, crowded to excess with wood and spurs ; one year an excessively heavy crop, the following year none at all ; and so it goes on, year after year. The fruit never attains its proper size or quality, and the trees in time become so enfeebled that the fruit produced is almost worthless. When the fruit crops fail people generally blame the seasons, not their own bad management. They say our springs are so precarious that it is almost hopeless to expect a good crop of fruit—a very great fallacy, by the way. If fruit trees are properly managed from the time they are planted, by timely thinning of shoots, pruning of the spurs, thinning of fruit, never over-bearing, &c., there is an almost certainty of getting a fruit crop in nine seasons out of ten, excepting such extraordinary seasons as the last. We do not say that spring frosts will not destroy the fruit blossoms ; but we do fearlessly assert that trees that have been well managed, and whose buds will in general, owing to the amount of light and air they receive, be bold, round, prominent, and plump, will bear more fruit and of better quality, on an average of years, than trees full of wood and spurs. Many of the flowers of the latter will, in

general, be imperfect, and will drop off after expanding. The greater part of the blossoms on Apricot and Peach trees last spring was imperfect and dropped off. Young trees will, in general, bear regularly for some years. When, in the course of time, they become covered through neglect with wood and old spurs, they only bear a crop every alternate year—one season a heavy crop, and the next season none at all.

About fifty yards from where we are writing there is an apple tree, by no means a very large one, from which we had a cart load of wood cut out a few years ago; the fruit has since been much finer than before. We have just had gathered forty stone of fine fruit from this tree. If spur-pruning were regularly carried out on orchard and garden trees, we should not so continually be hearing of the failure of our fruit crops. And not only should we have crops more regularly, but the fruit would be much finer also.

It is neglect of trimming, and pruning, and over-bearing, which has so enfeebled the constitution of the Golden and Ribston Pippin apples, and other fruits; and the propagation from a debilitated stock that has led to the fallacy that such sorts were fast wearing out. To us it is no wonder that these trees should be dying out under such bad management as they are generally subjected to. The wonder is that there should be found any healthy trees of these kinds in the country. All trees that have been any way neglected should at once be gone over. The centre of the trees should be well cleared out, and all shoots when crowded should be well thinned; this done, the shoots should then be carefully spur-pruned, leaving the best buds. The result will be next year a crop of fruit much superior in size and quality to what has been produced for years.

*Stourton, Yorkshire.*

M. SAUL.

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#### PRIMULA SINENSIS FIMBRIATA.

THIS useful plant is seldom seen to the perfection it should be, as there are very few winter flowering plants that can be had in flower for four or five months with so little trouble as the Primula. It is both adapted for cutting from, or a display in the conservatory. A few words on cultivation might be interesting to some of your correspondents, if you think it worth a space in your valuable paper. I begin with sowing the seed, I think, earlier than it is generally sown, about the first week in March. I sow in pots and place them in a cucumber frame, or any other warm place. As soon as the plants are up and large enough to transplant I prick them out into shallow pans, keeping them close and warm till they get established, when I put them in a cold pit where they remain till about the middle of May, when I pot them off into 3-inch pots, and place them in a cold frame under a north wall. The soil I use is about two-thirds rich turfy loam, and one-third equal parts well-decayed manure and leaf-soil, with silver sand enough to keep the soil open. I use the soil in a dry state, pressing it in as

firm as possible. In the early part of July I re-pot into 6-inch pots, using soil as before, still keeping them under north wall with plenty of air, when they make plenty of nice, short, stocky leaves. About the end of October I place them in a cold vinery, where they get plenty of light and air. I do not let young plants flower before January, by which time they make fine plants from twelve to eighteen inches through; a complete mass of flowers, and continue flowering till the end of April, when they are placed in a cold vinery near the glass, where they get plenty of light and air to ripen the seed, which is worth any trouble it takes to ripen it properly, as there is always a demand for good *Primula* seed. As soon as the seed is gathered I cut off all decayed leaves and flower stems from as many of the best plants as I want to save, and re-pot them into 10-inch pots, using soil, and treating them the same as young plants. I let them begin to flower lastly in November, by which time many of them will be from twenty-four to thirty inches through, and continue to flower till the young plants are strong and large enough. A great advantage *Primulas* have over most winter and spring flowering plants, they are never infested with green fly, or any other insect, so it is no trouble to keep them clean. As I save my own seed every season, I get none but the brightest colours and best fringed flowers.

S. T. C. C.

### THE ISABELLA GRAY ROSE.

GRAVE doubts have been expressed that this rose would not bloom in the open air of this climate, in which up to the present time I have partially shared; but as I happened to see the veritable plant which furnished the subject for your plate at the time, I was so enamoured with its beauty, that I purchased it at once, and have grown it ever since; but it is only just now that I have been fortunate in getting it into bloom—in a small way certainly, but still as it affords the key to future success, I cannot longer delay withholding what I believe will insure its blooming (as freely, at any rate, as the Cloth of Gold) from the readers of the *Florist*, in whose pages it was first made known to the public.

I have tried the plant in several situations, but the one now blooming with me is on a due south wall and dry situation. The blooms are produced on short spurs, breaking away from the best ripened shoots of this present season, and it is a fact to be remembered that while the most forward spring shoots, which of course ripened earliest, have broken out into blooming spurs, there is no indication of their doing so on the later shoots, although much more vigorous. My plan, therefore, for next season will be to cut back hard this year's wood, and to induce the trees to break and make wood early, which I shall lay on thinly that it may get all the benefit of the sun and light, and at the same time prevent any secondary or latter season shoots from being formed, as I imagine they only rob those from which blooms may be expected.

I strongly advise your readers who are rose growers to try this plan, and to plant only on very shallow and dry soils, to curb the tendency of the plant from making gross wood, which, as it cannot ripen, will not produce blooms. If we can get the current year's wood tolerably hard and firm by August, then I have no doubt but that each eye, or a good number of them, will throw out spurs, producing from one to three on each bloom, as mine have done. I am of opinion that a month's fine dry weather in July or August, is what this rose requires to prepare for blooming, and during that period I recommend all artificial waterings to be withheld, until the wood assumes a reddish brown hue, and cuts firm, after which water may be given frequently, and even manure water to encourage vigorous blooms. It is quite probable also (an experiment I am now about trying), that ripened buds taken from these shoots, and inserted in the Banksian, Boursault, or any congenial stock growing against a wall, may succeed in producing clusters of bloom earlier in the season, possibly as early as May or June. I will merely add, that when in perfection it is the queen of yellow roses, being a bright golden yellow, and possessing a most delicious and powerful perfume. S.

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#### CORSHAM COURT, NEAR CHIPPENHAM,

THE seat of the Right Honourable Lord Methuen, is a place very little known, although situated close to a railway station, and but nine miles from the first-class stations of Bath, and four from Chippenham. It is not five minutes' walk from the town of Corsham, from which it is quite concealed by large trees, principally yews, formed into high banks. The principal entrance is on the south side by a carriage drive through an avenue of fine old elms. A distance of about 300 yards between the entrance gates and the front of the mansion adjoining the drive are several very fine specimens of trees, especially Cedar of Lebanon; the most handsome *Salisburia adiantifolia* I have seen, about thirty feet high, and a very fine *Catalpa syringæfolia*; some very large Myrtles and *Magnolia grandiflora*, growing against the south wall, which, with a slight protection in winter, had not been injured for many years, were last winter killed to the ground, and to all appearance quite dead until about midsummer, when they all began to throw up some very strong shoots from the bottom, and now promise to soon fill the wall, if we escape such seasons as the last.

The inclosure in front of the mansion is thickly planted on one side, to shut out the sight of the farms, and on the other the parish church, which joins the pleasure-ground wall.

The mansion is a large and beautiful pile of buildings of the mixed style of architecture. The north front was re-built about fourteen years ago, has a noble appearance, and shows plainly the skill of Mr. Velemy, the architect. From this side is seen the

pleasure ground, about eighteen acres in extent, of close-mown turf, containing many fine specimens of Cedars of Lebanon and Deodara, some of the latter well-grown plants of twenty feet high, and fine grown trees of *Taxodium sempervirens* and *Cryptomeria japonica*, &c. Among deciduous trees are very large and handsome Copper Beech, Tulip trees, Planes, and a very fine American Hickory. Holly, Yews, and tree Box have been very extensively used, all of which grow remarkably well.

A deep sunk fence divides the pleasure ground from the park, which is very extensive and thickly wooded. A short distance from the house is a fine piece of water. A bank of evergreens on the west side of pleasure ground shuts in the flower garden, which is small and nicely laid out, and with beds and borders gay with flowers, has a very pleasing appearance. A brick wall, which divides the flower and kitchen gardens, looks rather unsightly this season, the roses and climbers with which it was covered being killed last winter, and will take two or three years to get covered again.

The kitchen garden contains about five acres within the walls, divided into two parts by a high wall, which gives a good space for wall trees, although but little fruit has been obtained for several seasons; and this year, as at most other places, the fruit crop, both on walls and standards, have been very small. Peach trees have suffered so much the last two winters that many of them are almost dead. Much of the soil is very shallow, in some parts not more than eighteen inches to the rock; it can be worked in any weather, as the rain sinks direct through it as it falls. Vegetables of all sorts do extremely well, if attended to for water while growing. Peaches under glass have this season been a fine crop. Grapes, of which a supply is kept up for nine or ten months of the year, are very fine. Early and late melons, and winter cucumbers are grown in a lean-to pit, heated by a brick flue, and in summer both are grown in dung frames, and are found to do better than with fire heat; and in winter the frames are used for lettuce, and other salads, and for forcing asparagus, seakale, potatoes, carrots, radishes, &c.

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## REMINISCENCES OF THE AUTUMN FLOWER SHOW AT BRIGHTON.

I WAS a good deal annoyed at first to think that the length of my autumnal holiday would only allow me time enough to visit Brighton, but I learnt a good moral lesson by it, for I was afterwards quite pleased to think that circumstances caused me to be staying for few a days at *London-super-Mare*. I had a great horticultural treat there, at the autumnal exhibition of the Sussex Floricultural and Horticultural Society, on the 18th and 19th of September. My readers will be kind enough to recollect that I was holiday keeping, and will not, therefore, expect a formal report of that show at my hands—that would have been too much like

work. Of course I took notes of anything which struck me, and these I now transcribe from my note-book.

I may first of all say, that I had no idea that the show would have been such a good one; I have never seen anything equal to it out of the metropolis; there were many individual plants, and some whole collections quite equal to anything ever seen at the Palace, or the Park, if not indeed superior to them. The large rooms of the Pavilion are well suited for this purpose, but they were not large enough, for in the grounds adjoining there were several tents all full of Ferns and other plants. Among the Ferns, by the by, there were but few novelties, except in regard to the nomenclature; and I was rather amused to see *Nephrodium molle*, one of the commonest of the family, called *Asplenium Braziliense*. There were many other mistakes of a like character, which is greatly to be regretted, and is the more to be wondered at now-a-days, when so many ladies are scientifically proficient in this subject. But enough of grumbling! it was the only thing in the whole place I could see to find fault with, and, like a genuine Englishman, I have brought it forward at once.

The entrance-hall gave a foretaste of what the Exhibition was to be; it was very tastefully decorated with groups of Palms, and other plants, possessing remarkable foliage. This is something like the continental style of decoration, and is a step in the right direction. Brighton followed the example set by the Royal Horticultural at Kensington last spring, and offered a silver cup of the value of 10*l.*, for the most tastefully arranged set of three stands of fruit for the dessert. We often find fault with the Railway Companies, let us also do them justice, when they are deserving of praise; this beautiful piece of plate was presented for this purpose by the L. B. and S. C. Railway Company. And this is not the only way in which the Railway Company promoted the interests of the Exhibition, for, I believe, they also brought the plants to Brighton free of cost. I walked round and round the table where the eight sets of stands were placed for more than an hour, and then, being ashamed to be seen for so long a time in one place, I walked away, but came back again several times. I never in my life enjoyed anything so much as I did these groups of fruit and flowers; no flower show will ever be complete without the addition of this feature in future. I shall never again despise one of the commonest of Ferns, which I must say has not had justice at my hands before; it is *Pteris serrulata*, a mere weed in every stove, which comes up upon the soil, the paths, or even on the walls, if its spores can only find a moist and undisturbed footing. The long narrow pinnæ of this fern, hanging from the vases, looked quite as beautiful as those of any other plant, and much more graceful than those of many others. It was also shown how well the variegated leaves of the new *Begonias* are adapted for mixing with flowers and fruit. There was another bouquet, which will for ever remain photographed upon my memory, it was a flat glass dish, filled with dark crimson roses, the spaces between

them being occupied by the simple, little white flowers of a Clematis, and edged with the fronds of *Adiantum cuneatum*—the effect was charming.

The collections of stove and greenhouse plants were very good; one seldom sees such a specimen of *Aphelandra cristata* as that there exhibited. This is a very old and familiar plant, but still few people seem to appreciate it as it deserves to be; it is, as we there saw, capable of being made a first-rate show plant. We are sadly in want of variety among the plants which are exhibited under the title of "stove and greenhouse." One sees, year after year, the same kinds of *Ixora*, *Allamanda*, *Echites*, *Rondeletia*, *Stephanotis*, *Vinca*, and the like, and we shall still continue to see them until some new arrangement is made in the schedules of prizes. Why may not prizes be offered for collections containing the greatest number of new plants, or of old plants which are seldom met with? It would give an ever-increasing interest in our flower shows, and nothing which can promote their popularity should be omitted. Plants suitable for the purpose are plentiful enough, but, of course, they cannot in a year or two be grown into such large specimens as we are accustomed to meet with, and novelty, rather than size, should be the point aimed at. Such soft-wooded, easily-grown plants as *Vinca*, *Pentas*, and such like, should also be excluded from first-class collections, and only such plants as really require skill and attention to grow, should be looked upon as worthy of receiving the highest prize. Our floral exhibitions have been much enhanced by the introduction of the so-called foliage plants. There were splendid sets of these at Brighton. The new *Caladiums* came out well, but I am inclined to think that the variegated *Begonias* do not look so bright and attractive when grown into immense specimens as they do when comparatively small and growing quickly.

The whole suite of apartments in the Pavilion was filled with plants and fruits, the latter being very fine; but I was so much engrossed with the plants that I did not pay so much attention to it as I ought to have done. There were also collections of the cut flowers of stove plants, annuals, and hardy perennials. Among the latter, for instance, were sets of *Phloxes*, *Pentstemons*, *Salvias*, and so on. I was well pleased among the *Salvias*, to meet with an old acquaintance which I had not seen for many years. It was *Salvia ianthina*, a plant with a bad habit of growth it is true, but it would be invaluable in the hands of a careful hybridizer. *Celosia aurea pyramidalis* has already been done justice to in these pages; some beautiful plants of it were shown by one of the Brighton nurserymen. There were also seven *Fuchsias*, the like of which I never saw exhibited in London; and on the same table there was a funny little seedling *Fuchsia*, it was only remarkable for having yellowish foliage, which, to my thinking, gave it an unhealthy appearance.

I cannot say that I am an admirer of those models of gardens which one is almost sure to see in a provincial show. Some of these

were laid out with natural turf, and the beds, only an inch or two in diameter, filled with full-blown flowers, this produces an incongruous appearance. They are called "Designs for flower-gardens," but designs should be shown on paper, they would look much better, and by this means they would escape the character of childishness which some critics freely applied to them.

One gentleman, a real benefactor to his race, exhibited the results of a series of experiments on the improvement of wheat. These experiments have occupied several years, but the result appears to be highly satisfactory. Among other things worthy of note at this show I observed a plant of *Gunnera scabra*, the flower of this curious Chilian plant is inconspicuous, but the leaves are gigantic. It makes a remarkable object when planted on the lawn.

DELTA.

## ORCHARD HOUSE CULTURE.

(Continued from p. 295.)

*Potting and Storing.*—The warm weather and rains of the past month, and the absence of frost, have kept the stock of Peach and Nectarine trees growing too freely for us to think of lifting them before the middle of November; the best guide for this, however, will be the state of the wood, and if the leaves commence falling off the lower part of the shoots, or turn yellow even, we may safely lift them for potting; never mind the few green leaves which will remain on the upper ends of the shoots, they will assist in keeping up the circulation of the sap, and enable the roots when potted the more quickly to re-start into growth.

As a rule all nursery stock should be taken up with the fork in preference to the spade; in fact, we would do all we could to banish the spade from this branch of the nursery business altogether had we the power; but at any rate, where the preservation of every root is indispensable to success, as is the case with our present subject, nothing but the steel fork should be employed in lifting the trees. When out of the ground, if they have far to travel, wrap the roots in some damp material, or puddle them, to prevent them becoming dry before they get into their pots.

The pots required will be of twelve-inch diameter for the maidens, and fourteen or fifteen-inch pots for the two-year olds. The roots should go in with as little pruning as you can help, and therefore if the plants are at all strong the above sizes will not be too large.

At page 227 we gave a few directions as to soil or compost, and if our advice was then taken this will be now in good condition for potting. Observe, that for the trees to succeed well, they must be potted firm, and this will inform you that the compost must be dry when used; further, as other compost will have to be filled in between the roots, it must not be too coarse and lumpy, and therefore the manure, turf, and more earthy portions should be well mixed, and made tolerably fine to fill up the interstices

between the roots; an oyster shell or flat crock over the hole of the pot, on this one inch of smaller drainage, and then half a handful of soot to keep out worms, completes this part of the business. Next one inch of the compost, and then the plant, set in the pot, and its roots arranged regularly all round, with as little pruning as can be dispensed with. I only stipulate that the highest roots have half an inch of soil over them, and that the pots are filled to within half an inch of the rim. The compost should be slowly added, and placed carefully betwixt the roots, making it quite firm as you proceed, with two or three knocks down on the board at finishing to consolidate the whole.

The application of bottom heat to newly-potted plants of this class, is now become a regular routine in first-class nurseries, and although in warm situations and a sunny exposure, the trees now potted would commence to make roots at once, this operation would be greatly accelerated if the newly potted plants could be plunged in the open air in a warm bed of leaves, or leaves and dung, for a month, allowing the heat to decline towards the middle or end of December, when the pots must be removed to a situation where protection can be given them in severe frost.

Should this bottom heat be difficult to procure, then place your plants under a south wall, to get the benefit of what sunshine may be obtained for the rest of the season.

Trees which have been growing in pots all the season, and to whose management allusion has already been made, if the wood is ripe, or nearly so, may for the next month remain fully exposed, taking the precaution, however, when frosty nights occur, to place some half decayed litter, or other protective material, round the pots, to preserve their roots, a remark which will equally apply to the former lot, if not plunged in a warm bed to forward their rooting.

R. T. O.

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#### NOTES ON THE MONTH.

I HAVE only recently returned to England from a two months' tour on the Continent, which must account for contributions being suspended. I also find I am quite in the dark as to the gardening gossip during my absence. There is, however, much to congratulate my countrymen upon,—in the magnificent weather you have had for harvest operations; and the recent rains and unusual high temperature of late, is doing wonders for the root crops. The season, though not marked by any unfavourable features on the Continent, has produced only scanty crops, and hence there is a deficiency in grain, and a mere average in roots, which by no means occupy so important a position there as at home. Flower gardens continue still in considerable beauty, and we hope may remain so for some time to come; the first frosts of autumn always give a pang to the lovers of gardening, by the sudden destruction which follows its effects on our summer favourites, which this

season have gladdened our hearts and enriched our homes with the glowing colours of a tropical climate for some months.

Britain, or London rather, can barely hold her own in the competition for decorative gardening with Imperial Paris, whose squares, gardens, and boulevards have immense pains—and we should say immense sums—expended on them to make them attractive, and a great success they are. I have only had time to walk through Hyde Park and the Kensington Gardens since my return; the former, though greatly in advance of former years, is much behind the artistic arrangements of the Parisian gardens; the space between the two walks appears to want more of such things as tree box, hollies, yews, cypresses, junipers, and pillyreas, as well as vases, &c., to relieve the flowers in summer, and to give expression to the scenery in their absence. We should also like to see some of the bare earth in front of the shrubbery covered with ivy, periwinkles, or St. John's wort. We presume the above would stand the London atmosphere, with its sooty impregnation, or what is to become of the rare trees in the new gardens at Kensington, when every available yard round the area becomes built upon, which will soon be the case, and when it will be worse for trees in this respect than Hyde Park is at the present time.

I notice your contemporary, the *Chronicle*, has an article on the trees of Paris, which I frequently examined when staying there. In my opinion the early ripening of the foliage arises simply from drought, and neglecting to renew the soil sufficiently when planting new ones, by which the growth is arrested early in the season; the soil in which the trees grow, from its being so constantly walked over, prevents the rain from penetrating to their roots; all the rain which falls on the surface should, therefore, be contrived so as to pass to the roots, and not run off to the water channels. I would also arrange a series of two-inch pipes, with outlets at short intervals, just beneath the surface, which I would connect with the water mains, and charge them frequently in dry weather sufficiently to saturate the soil about the roots, when I have no doubt the foliage would continue green much longer, and the trees grow more vigorously; besides, I believe a much greater variety might be grown by so doing than now. The underground pipes would also water the trees without incommoding the paths for pedestrians.

I see the *Saturday Review* is again dealing hard blows at the Exhibition building, the hideousness of which, it states, becomes more apparent as it progresses towards completion. It is so far a pity that its proximity to the new Horticultural Gardens gives it the appearance of enveloping their best frontage with a pall of deformity; it is somewhat lucky, however, for the Royal Society of Gardeners, that they have retained Chiswick, for as we know not how soon they may be forced out of Kensington, either by the smoke, or the veto of the Royal Commissioners, they may again require it for their head-quarters, and, probably, last resting-place.

G. F.

## RELATING TO ROSES.

I SHOULD apologise for writing so soon another article relative to roses, were it not the fact that nothing interests the public generally so much as the premier flower of England. If a Floricultural Editor were to exclude rose information, or only publish it sparingly, or infrequently, a great number of persons, who now take it in, would soon give it up; the reason is, that while one man here or there takes an interest, either in tulips, pansies, hollyhocks, dahlias, pelargoniums, and such like, all feel an interest in and admire the National flower. When a periodical comes out without a word about roses, how quickly does the disappointed reader put it down again. This, however, is hardly fair, because we ought to feel an interest in that which interests others, and rejoice to see the diverse noble works of God, "made in wisdom," highly cultivated and written about. Still, it cannot be denied that the British public, whether they cultivate roses or not, are always greatly pleased to see them, read about them, and possess them. At all the shows that I have attended the last few years, I have always been struck with the earnest petitions of all classes, especially the lower and middle classes, for a few withered blooms at the close of the Exhibition. After the National Rose Show, I was loudly entreated at the Waterloo Station, by persons who were going by the mail train, to give them a rose or two, to which, of course, I acceded. In my passage to Reading, persons learning from my fogleman "Will" that my boxes contained roses, begged me to open them, and let them have a view; again, though the weather was torrid and adverse to the exposure of cut flowers, I acceded, "Will" loudly proclaiming that "we" (*ego et rex meus*—enter the king and two fiddlers solus), had won four "First Prizes." Even the cottagers here are budding roses, the favourites being, General Jacqueminot, Géant des Batailles, Baronne Prevost, and Jules Margottin, thus showing their good tastes in selecting four of the best roses in England for good habit, beauty, and continuity of blooming. They are roses which are good on all stocks, in all situations, in all seasons, wet or dry, and early and late in the year. To this lot, Gloire de Dijon may be well added. I may also observe, that my school children ask as a great treat, that they may be permitted to go down into the garden and have a look; and, I must say, they are among the best judges of the flowers, for they do not admire the rose that is simply large, but the rose that is symmetrical, and of a clear and decided colour, and of well disposed petals. Of the value of thick petals, they cannot be expected to be aware. Permit me here to say, that judges of roses should do as the judges of cattle in Baker Street do, who award the gold medals to the most level animal,—award the prize to the box of roses which are most level in excellence, rather than to that which contains large flashy unlevel roses. If these premises be admitted, my conclusion also must be admitted,

viz., that I shall not be doing an unpopular thing if I write a few things which affect the interest of the Rosarians of England and of the National flower. And

First. *Of the time suitable to a National Exhibition.*

I am well aware that the Royal Society were peculiarly situated this last year, and equally am I aware, that they only wish to know what time would be best to hold the meeting; and this they cannot know, unless some one expresses the mind of the nation at large. This year was an abnormal year, and can form no precedent. The National Exhibition, for one cause or another, was held much too late. It was held but a few days before the second bloom here. The show was respectable, but it was not a good one. The absence of choice summer roses, of delicate and dark tint, was much felt by me; I mean those roses which help to vary a show-box, and break the monotony of rose coloured and crimson roses. Some, however, of the boxes had a fair sprinkling of light coloured roses, chiefly Teas. It is plain that if the Rose Show is to be national, the nation by deputation should express their mind; and it is equally clear, that if the meeting is to be held in July at all, we must move our roses in the south and west. I think that the day should be a permanent fixture (excluding Mondays and Saturdays, as inconvenient to the clerical florists), to suit the north and east one year, and the south and west the next year. I believe that, taking an average of seven years, the 30th of June would suit the former, and the 20th of June the latter; or the day might be fixed, say the 25th, permanently. All persons worthy of the name of Rosarians could manage to get their roses ready by that time. This would put an end to individuals waiting to see which way "the cat jumps!" If roses cannot be got ready to show in June, let us no longer talk (poetical absurdity) of the rosy month of June. If the roses of England (H. P.'s and autumnals), cannot be produced either by the 20th, 25th, or 30th of June, then I naturally ask, when are they going to give us two other series, which as "*Perpetuals*" they ought to give, besides the interstitial ones. I get (with rare exception) from such sorts as I keep, three series. If I cannot get this, then such a rose as Boule de Nanteuil, which will cost 100 fine roses per tree, in a prolonged bloom of five or six weeks, is infinitely superior to H. P.'s. To myself it is immaterial what time the rose show is held, provided I know it in time to move such trees as are likely to need it. I would just as soon have it in July, August, or September, as June, provided the day was a permanent fixture. I should then, from knowing the habits of roses, be able to decide whether it would be advisable to move them, and when to cut them back; but this cannot be done if the time is fixed after it is advisable to remove them. Only fix the day at the fall, say November 1st, and you will have double the number of roses that you have ever yet had. If the above be not approved, the following suggestion may obtain; let five nurserymen and five amateurs (changing them annually), from the north, south, east, west, and midland counties, meet an-

nually not later than January, before the acutest eye can see which way "*the cat jumps, or is likely to jump,*" and settle the day, and if their votes be even, let the Royal Society appoint a Fellow to give a casting vote. At present people are not "*nationally*" satisfied with waiting to see "which way the cat jumps." When the day is fixed too early for the north, they must let in the sun with Parkes's fork, and when it is too late for the south they must move the trees and cut back later. It is difficult to fix any day that would suit small roseries, but it is ridiculous to say that large roseries could not find roses, either the 20th of June, the 25th, or the 30th. If people will not work hard, and make it their business to get their roses ready, it is plain that they are not Rosarians. But if the day of show is kept in the dark, till it is impossible for them to hasten or retard their trees, men are not to blame for not "putting in an appearance." There are, however, it is to be feared, many winners of prizes that are no Rosarians. What is their history? They plant roses in November, with a shovel full of manure, never fence against frosts, aphides, or mildew; but having run a rent charge on Providence, they bide their time, wait to see which way "the cat jumps," and settle the day accordingly; and when the day arrives, they cut what roses they have ready, and if they have none ready, they say Providence has "a spite at them," and that it is a bad year for roses. How came the rose plants all over England to be nearly annihilated? The answer is, ignorance and neglect. I should like to give them three dozen from the tail of another "cat," that, having no eyes, could not have the pleasure of seeing which way "they jump!" This would quicken their senses, and cause them to be Rosarians in substance as well as in name only. However, I must now turn to another subject not unimportant.

Secondly. *To the Rose Box and the Roses.*

(1). *The rose box.* It is desirable that there should be uniformity, and that the size should be settled at once, that we may alter our boxes at once. The Royal Horticultural Society is entitled to settle this point. True, there were regulations on this point, but people felt that they might be liable to further alterations, unless the Society called a meeting of members. The result was, that the rule was not obeyed. The same tribunal might settle this point, as well as the day of exhibition.

(2). *The classes for exhibition, and the number of Roses.* I think it would be a good thing if amateurs were allowed to compete, say for twenty-four singles or trebles of Tea Roses, Moss, Bourbons, and Noisettes in the same box. They cannot be expected to face the nurserymen. A good box might be got up out of these four families, whereas now the exhibition of Tea and Moss Roses is bad. I have never yet seen at any exhibition a good pan of Moss Roses.

The nurserymen's prizes should be open to the amateurs, but it is useless to open the amateur prizes to the former. When I saw twenty-four single roses (open), I said to myself, there is a "bonus"

for Mr. J. K. With regard to the number of trebles exhibited, I think 100 singles, 48 trebles, and 24 trebles, would be more convenient than 96 trebles. Where such a large number of trebles are to be accumulated, if the weather is adverse, you get possibly one good rose, one indifferent and one bad one (more or less overgone), and that one really good rose by itself would to a critical eye be more charming than an indifferent trio. This, however, is a matter for nurserymen to consider; to skin their rose trees at the time they want buds must be inconvenient. The chief good of trebles is to keep the great fish from swallowing up the smaller ones, and to show that a particular rose can be grown good. A man may produce one splendid bloom from an undesirable variety, but if he can produce three good ones, it is a *primâ facie* evidence that the sort is generally growable, and therefore such as the spectators may go home and buy. Nurserymen should be consulted on this point, as it affects their interests. This year I see by the judges' book, there were only five entries for ninety-six trebles. Had the number of roses been ninety-six single varieties, other men might have contended who have not stock enough to cut ninety-six trebles. Moreover, the five distinguished men who did contend, would have brought ninety-six single roses much better than selections from these they carried, because no doubt they had many trees that would have turned out one good rose, but which would not, at so late a season as 10th of July, produce three. I fancy another reason for large quantities of trebles is "effectiveness," but if the trebles are not all good, where, then, is the "effectiveness?" I suppose trebles, with one good, one bad, and one indifferent one, act as "effective" foils to each other. They positively make my eyes ache. Notwithstanding the comments on the National this year, I must say that at such an inconvenient season as the 10th of July (between the stools), I felt proud of the nurserymen and amateurs, who managed to produce such large quantities of trebles, containing so many good roses.

Thirdly. *Preparing for the Show.*

When you have made up your mind in what class you mean to contend, you must get your note book, and write down the names of such trees as are likely to be ready. If you want trebles (a difficult thing to get in great numbers), and see that your buds do not synchronize, you must disbud in order to get the lagging bud up to the foremost ones. These roses you must especially attend to; you must see that they are sufficiently watered in dry weather, and you must stir the ground to let in sun if the weather is cold. If the show day is so fixed that it suits a large rosery of well-selected and accumulated sorts (not varieties), of course you will have little of this to do. At the fall of the year, when the true Rosarian proves himself to be distinct from the hybrid Rosarian, you must open your eyes five or six weeks before the day, using your pruning knife judiciously, and pursuing the same plan as before stated. As the days get shorter, and the mornings and evenings colder, you will find it no easy matter, at times, to get

twenty-four trebles, varied in colour and character, and good in outline, substance, and condition, in the month of September.

When I say that you must disbud, let me explain that I mean where no contrary rule exists. I did not disbud for either of the shows at Kensington, as it was forbidden; but had no such rule existed, I think that I could have hastened some better roses. The bud rule is inconvenient to every person at times. Moreover, at a National Show judges have no time to take roses out of the cups to see if the rule has been obeyed. Were they to do this, they would cause "disaster;" for they would not put the rose back exactly in the same natty position, and down would go the petals of a loose rose, that has been "*inadvertently*" propped with moss, like the leaves of a table. I wish all H. P's., at least, bloomed single roses like Maxime, a fine rose of good constitution. All, I think, that can be reasonably asked is, a good circular rose in good condition, with its foliage. I would by no means exclude buds, but tolerate and not command them; they are useful, as well as leaves, to stuff into the clefts of unsymmetrical roses, which, if they were removed, would look little better than an unilateral horse shoe. If the rule is not enforced (and enforced it is not), an honest man has no chance with an unconscientious person. The effect of the rule is to shut out the roses of honourable men. As long as the rule stands, I shall obey it, but I hope that it will be reconsidered, and, if unrepealed, that it will be enforced without favour or affection. There was barely time at the National in July to count the good, the bad, and the indifferent roses in each pan, and strike the difference. To continue a rule that every one finds inconvenient, and which is neither obeyed nor enforced, is, to use the pithy saying of Talleyrand, "a blunder worse than a crime."

There is one more thing that I wish to call attention to with regard to trebles. They should not be separated. In a large sea of roses to be adjudicated, there is not time to trace them out, and it gives a dishonourable competitor the plausible excuse of "*inadvertence*."

Once more let me hope that the day of our National Exhibition will be fixed before any human being can see "which way the cat jumps, or is likely to jump!"

*Rushton Rectory.*

W. F. RADCLYFFE.

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### THINGS TO BE DONE.

THOSE who have greenhouses or forcing-house, will find it to their advantage to purchase their fuel in the summer months, say August or September, or even at this time, if they have not already done so. Coke is much the same in quality at all seasons, but should be kept dry, as also should coal; the latter, when fresh from the pit, is always damp, and is all the better for being kept in stock under cover for some months before using. Damp fuel is not

nearly so effective as when dry. The water of course is driven off by the process of combustion, and takes with it a certain amount of heat, which passes off as waste; in addition, the volume of smoke is increased thereby, and the space round your boiler, and the interior of your flues, are quickly choked up with soot.

Procure your seeds at once for next season; and if you are not fully satisfied as to their quality, sow a certain number of each kind in pots, and watch how many germinate out of the number sown. This will be a guide for you when the season for sowing them arrives, and save you disappointments. Observe, all seeds should be kept in a dry airy apartment, and not shut up in close drawers or boxes, when they frequently get damp and lose their vegetative property, and then the seedsman gets the blame. In damp situations, such seeds as lettuce, celery, radish, onion, parsley, &c., should be placed in coarse canvas bags, and suspended from the ceiling of a room. Cucumber, melon, dahlias, balsams, larkspurs, stocks, marigolds, zeninas, and similar seeds, will be greatly improved by placing them loose in bags as above, and hanging them near the kitchen chimney, where there is a considerable warmth; this will thoroughly ripen them, and, in the case of the two former, induce greater fruitfulness, and of the latter, a much larger proportion of double flowers. Age will have the same effect; and, as a rule, seeds of composite flowers are more difficult to keep than others.

Evergreens should now be planted. The soil is warm, and the weather favourable. The sooner, therefore, they are planted, the better chance have they to become established before winter. Mulch after planting. October and early in November is also the best season for pruning evergreens, as the wounds will heal before winter. If pruned too early, they are frequently disposed to make a new growth, which is as frequently killed by the frost of the succeeding winter, and the trees are disfigured.

Six inches in depth of dry sawdust, or charcoal dust, placed over the floors of pits and frames, where half hardy or bedding stuff is to be wintered, will prevent the damp from rising, and probably save scores of plants, which would, without such an absorbent, fag off.

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### THE LORD SUFFIELD APPLE.

MR. ABBOTS, Market Gardener, of Knaresborough, grows this apple. He speaks of it as one the best early kitchen apples in cultivation. He says it is larger, a little earlier, and a better baking apple than the Keswick Codlin. The tree is a strong free grower. When its merits become better known it will, no doubt, be planted largely.

M. SAUL.

## FORTHCOMING NEW ROSES.

As I knew that amongst the readers of the *Florist* were to be found some of the most enthusiastic rose growers in England, I thought that the best service I could render them during my recent visit to France, was to obtain such information upon the subject of the forthcoming roses as might gratify my own curiosity, and be somewhat of a guide to them. I have made the best use of my eyes and ears that I could; have visited Margottin, Verdier, Marest, Touvais, Troulliard, Portemer, &c.; have obtained lists of the new varieties, and, in fact, done my best to get together some information on the point, and the conclusion that I have come to is, that we are not to expect any very *striking* addition to our lists this season. (I do not here allude to Troulliard, which will not be forthcoming till 1863.) There are some which promise well, but when I say that there are, I verily believe, nearly a hundred new ones to come out, it will be seen how difficult is the task of selection, especially as one feels that under the most favourable circumstances not one-tenth of these will be retained in our lists; in such a case one must rely more on the known characters of the vendors than on anything else. Men like Margottin and Marest will not wilfully deceive; they may be mistaken, but they regret it as much as the public when it is so. The name of Margottin reminds me that he was the sender out of Boule d'Or, and that that rose may be cited as a proof of a mistake. I think we must bide a bit before we condemn it. I saw it in twenty different places in the raiser's ground, and in every case it had opened freely, and was most brilliant in colour; perhaps like some other Teas, it may prefer a wall, but at any rate, what I saw of it would make me say, do not condemn it yet; the whole subject of seedling roses is one on which a good deal of light was thrown, for me at least, by Margottin; he says that he has generally 20 to 30,000 of them, and that rarely any really valuable seedling flowers before the fifth or sixth year, and that those that flower the first and second, however taking they may seem to be, are so delicate that they die off after blooming. He showed me great gaps in his seedling department, which had arisen from this cause. Again, he says that roses which are very double as seedlings, never open when they are budded; and that many which seem to be valuable in the seed plot, are good for nothing when put upon stocks. He thus never sends out a rose which has not been through a long series of proofs, and if after that it disappoints, I believe in his case and that of some others, it is not a matter of wilful deception. We had a long talk on the subject of shape, and he seems fully alive to the fact that it is that that we want on our side of the water. Louise Odier was raised by him, and is the parent of some seedlings which promise well for next year. There was another matter in the cultivation of roses which I heard from Troulliard of Angers, which struck me forcibly as one likely to be of service to us, and that is to graft

low on stocks of the Dog Rose raised *from seeds*. However excellent the Manetti may be for strong, vigorous growing kinds, I think no one can say that it is equally good, especially on strong soils, for the more delicate constitutioned kinds; for they, not having power to receive the sap, are soon overpowered, the stock begins to throw up suckers, and the rose languishes and dies; while stocks of the Dog Rose taken from the hedges, are, on the other hand, generally so defective in root, that they answer badly for that purpose, but by sowing seed of the Dog Rose you obtain nice healthy stocks, with abundance of fibrous roots, not too vigorous in character, and giving a fine healthy start to the rose, and is also more permanent than it is likely to be on the Manetti: it is, at any rate, worthy of the consideration of rose growers, and I am not aware that it has yet been tried in England.

The demand for roses in France this season has been very great, and, in fact, of the newer and more approved kinds, it is almost impossible to obtain anything; the English growers, having lost so many, have been compelled to buy largely in France, and as the frost was very severe there also, the stock has not been equal to the demand; they have consequently somewhat increased in price, so that rose amateurs must not be surprised if they find a large price is demanded. There is a singular difference in the estimation in which they are held, or rather in their character; thus *Reine des Violettes* has come well with them, while *Duc de Cazes* is good for nothing, and they pronounce *Triomphe d'Amiens* to be a veritable *General Jacqueminot*, but *Madame Furtado* and *General Washington* seem equally appreciated on both sides of the Channel. The same causes which affect us do not affect them, and as we find a difference in the value of some sorts in one season compared with another, so here also, in giving the names and descriptions of the sorts now announced, I can only say, that save in the case of *Margottin's*, they are the owner's own; his three I saw in bloom, and the description of them is such as they appeared to myself to merit. The season is very late, and had it not been for the excessive fineness of the weather, even these would not have been in flower. Instead of giving an alphabetical list, I shall put them under the growers' names, so that their value may be somewhat appreciated by that means.

Victor Verdier, père, et Charles Verdier, fils, announce the following:—

1. *François Lacharme*, H.P.—Vigorous, flowers medium size, full, globular in form; lively carmine in opening, passes into red, reverse of petals lighter; said to be in the style of *Senateur Vaisse*.
2. *La Brilliante*, H.P.—Vigorous, medium size, light transparent carmine, blooming in clusters; blooms well in the autumn.
3. *Olivier Delhomme*, H.P.—Vigorous, flowers nearly full, medium size, brilliant lively red in colours; like *Bourbon Souchet*.
4. *Turenne*, H.P.—Vigorous, flowers medium size, petals large and somewhat crumpled at the edge; brilliant red.

5. *Viscomte Vigier*, H.P.—Vigorous ; flowers medium size, very full, lively violet red ; blooms well in autumn.
6. *Vulcain*, H.P.—Vigorous ; flowers not quite full, lively deep purple violet, shaded with black, blooming in clusters ; very free flowering, and producing a fine effect ; a seedling of General Jacqueminot. They also let out,
7. *Adolphe Noblet*, H.P. (Ledechaux). — Vigorous ; flowers medium size, well formed and slightly cupped, brilliant light red ; flowers well in autumn ; a seedling of Souvenir de L'Exposition.

Of these François Lacharme, Olivier Delhomme, Viscomte Vigier, and Vulcain, were said to be the best.

Monsieur Margottin, of Bourg la Reine, has but three to send out ; and these all I have, as I have said, seen in bloom.

The best rose probably of this season is—

8. *Souvenir de Comte Cavour*, H.P.—A very vigorous free grower ; flowers large, full, and well made ; fine bright crimson, shaded with velvet black. Also,
9. *Alexandre Dumas*, H.P.—A remarkable looking rose, very nearly black, with dark maroon dashes in it. Darkest rose yet out. It obtained the first prize for seedlings and silver medal at the Exhibition of the Imperial Society of Horticulture at Paris, in June, 1860.
10. *Comtesse Ouvaroff*, Tea.—A vigorous growing plant, well shaped, standing very erect, and an improved Souvenir des Ami. A rose of hardy constitution.

Monsieur Eugène Verdier, fils aîné, advertises twelve ; of these one—Mrs. Charles Wood—is likely to prove good. They are—

11. *Mademoiselle Félicité Truillot*. —A Bourbon ; vigorous ; flowers full, in clusters ; lovely rose.
12. *Eugène Boucier*, H.P.—Vigorous ; flower large, full, cup-shaped ; velvety purplish red.
13. *James Dickson*, H.P.—Vigorous ; large ; not quite full ; crimson shaded with purple.
14. *Jean Baptiste Guillot*, H.P.—Vigorous ; flower medium sized, very full, globular ; bishop purple, shaded with reddish purple.
15. *Madame Caillat*, H.P.—Vigorous ; flowers large, nearly full ; lovely cerise rose.
16. *Mrs. Charles Wood*, H.P.—Very free growing ; flowers very large, full, large petals ; brilliant red, passing into lively rose, reverse of petals whitish ; superb.
17. *Prince Camille de Rohan*, H.P.—Plant vigorous ; flower medium full ; crimson maroon, velvety, shaded with blood red.
18. *Professor Kock*, H.P.—Vigorous, flower medium, globular ; rose cerise, shaded with lively carmine.
19. *Richard Smith*, H.P.—Plant vigorous ; flower medium, nearly full, flowering in clusters ; purplish red, shaded with violet, reverse of petals whitish.

20. *Wilhelm Pflger*, H.P.—Vigorous ; flower large, full ; brilliant fine red.
21. *James Mitchell*, Moss.—Vigorous ; full, well formed ; rose shaded with slaty lilac.
22. *John Cranston*, Moss.—Vigorous ; flower medium-sized ; crimson violet, shaded with lively red.

Monsieur Touvais, of the Rue Boulard, announces no less than ten ; in justification it may be stated that he is retiring from his present place, and is desirous of disposing of his stock. I do not hear of anything remarkable among them. They are—

23. *Madame Julie Daran*, H.P.—Very vigorous grower ; flower very large, full globular ; form and appearance perfect ; colour, vermilion red and shining.
24. *François Sourat*.—Very vigorous ; flower very large, full globular ; handsome form and appearance ; colour, lilac red.
25. *Archevêque de Paris*.—Very vigorous, and flowering freely in autumn ; flowers medium-sized full ; form and appearance perfect ; very velvety purple, back of petals shaded violet.
26. *Richesse de Couleur*, H.P.—Very vigorous ; flower large, well made, good appearance ; lively purple, velvety shaded, very dark at centre, back of petals, lightly violet shaded.
27. *Couronne de Parterre*, H.P.—Very vigorous, and fine flowering ; flowers large full ; form perfect ; colour, clear lively velvety crimson.
28. *L'Eblouissante*, H.P.—Very fine ; flowers very large, full ; colour, clear dazzling red.
29. *Bicolor Incomparable*, H.P.—Very vigorous ; flower medium, perfectly imbricated ; centre black, edge of the petals very delicate rose. Very original in appearance.
30. *Beauté Seduisante*, B.—Very vigorous, with beautiful foliage ; flowers very large, well made ; colour, red maroon. Very beautiful.
31. *Mademoiselle Claudine D'Offroy*, H.P.—Flower very large, very full, globular, opening well ; colour, clear red ; plant vigorous.
32. *Aurore*, H.P.—Flower nearly full, guard petals, very large ; clear rose, coppery at the centre, reverse of petals red. New colour among hybrid perpetuals.

Monsieur Jamain, of the Rue Cendrier, announces two, of one of which—*Madame Boutin*—I heard from other quarters good accounts.

33. *Madame Boutin*.—Very vigorous ; flower large, full, well made, opening easily, of a beautiful lively cerise red ; very sweet scented ; beautiful appearance.
34. *Maréchal Vaillaint*.—Very vigorous ; magnificent foliage ; flower large, full, well made, opening well ; beautiful lively purplish red, reverse of petals red, blooming in clusters.

Lartez fils, of Bordeaux, announces two tea-scented ones from Gloire de Dijon, but no one seems to say much on their behalf, though his description of them is very magnificent.

35. *Gloire de Bordeaux*, T.—Very large, imbricated; perfect form; silvery white, reverse of petals, lively rose; very vigorous.
36. *Belle Chartronnaise*, T.—Very large and full imbricated; perfect form; colour, lively red passing into velvety crimson, shaded with flame colour. Also,
37. *Madame Lamon*, H.P.—Very vigorous; flowers very large, opening well, well formed, cup-shaped; cerise red, shaded with violet.
38. *Belle Brune*, H.P.—Vigorous; flower large, full, opening well; violet lightened with white. A new colour in hybrid perpetuals.
39. *Mademoiselle Amaud*, T.—Cerise red, passing into an indescribable colour.

Pradel, père, et fils aîné, of Montauban, announce,

40. *Madame Maxime Bouet*, B.—Flowers large, well imbricated; carmine cerise; very vigorous and fine flowering.
41. *Madame Charles Ségurét*, B.—Blooming in clusters, imbricated, very full; clear crimson; very fine flowering.
42. *Madame Adelaide Ristori*, B.—Flower medium, in clusters, very full; cerise, with back of petals coppery; very vigorous.
43. *Madame de Monseignat*, B.—Flowers large, opening well; purplish cerise.
44. *Comtesse de Mosbourg*, B.—Flowers large, petals regularly arranged; lively satiny rose.
45. *Maréchal Niel*, H.P.—Flowers large, full; clear rose.
46. *Mademoiselle Gabrielle Loanville*, H.P.—Flowers medium, full, perfectly imbricated; tender coppery rose.
47. *Mary Lafon*, H.P.—Flowers large, imbricated; velvety purple, centre cerise.
48. *Mademoiselle Louise Dessayre* —Flowers full; white ground, petals imbricated.

Lenegue et fils, of the Boulevard de l'Hopital, Paris, announce,

49. *Duc de Rohan*, H.P.—Very vigorous, flowers very large, full, opening very well, globular, lively red, shaded with vermilion.
50. *Comtesse de Sequier*, H.P.—Very vigorous, flowers large, globular, velvety red shaded with violet. Obtained second prize at the Paris Exhibition.
51. *Maurice Bernaudin*, H.P.—Very vigorous, flowers large, well imbricated, in clusters, beautiful clear vermilion red.
52. *Souvenir de M. Rousseau*, H.P.—Vigorous, flowers large, full, imbricated, lively red shaded with carmine.
53. *John Frazer*, (Perpetual Moss).—Vigorous, calyx covered with beautiful green moss, flowers large, lively red shaded with carmine.

M. Troulliard has the following four, which have passed into the hands of Mr. John Standish, but will not be sent out until the following year. I saw the plants at Angers, and nothing could be finer, even on poor ground, than their growth.

54. *André Leroy*.—Very free growing flower, large; maroon velvety black; magnificent plant, one of the most beautiful of the day.
55. *Margaret of Anjou*.—Very free growing, flower large, very well made, sweet scented; red, shading into violet, edged with white, seedling of General Castellane.
56. *Mrs. Dombtrain*.—Very free growing, flower large, very beautiful red shaded with velvety black, good effect, seedling of General Jacqueminot.
57. *Goliath*.—Very free growing, flower large, dark rose edged with white, in centre, shaped like a peony, a large flower, seedling of Louis Bonaparte.

I have not been able to obtain any account of the Lyons roses; if there are any coming out; it will be seen that neither Portemer, the raiser of Marie Portemer, or Marest, the raiser of two of the best roses out, Prince Leon and Comtesse Cecile de Chabrilland, have any to let out this season; time only will show which of this numerous family will be retained in our rose lists.

*Deal.*

D.

## REVIEWS.

*The Ladies' Assistant in the Formation of their Flower Gardens.*  
By JOSHUA MAJOR & SON, Landscape Gardeners, Knows-  
thorpe, Leeds. London: Longman & Co. 1861.

THE Messrs. Major, we understand, have an extensive practice as landscape gardeners in the midland and northern counties, and submit to the public under the above title a series of plans for flower gardens, accompanied by letter-press descriptions as to the details of each design, and a brief introduction (under the heading of general remarks) to the art and science of landscape gardening. In this the authors inform us, as to the plan of their work, that —“Besides giving a scale to each plan, we have named pretty nearly the size of the plot of ground required for its adaptation, so that in making choice of a design it will be necessary to consider the extent of ground, and determine accordingly, and should the choice happen to fall upon one too small for the plot, and the plot be considered large enough for a design twice the size, the same plan might with perfect propriety and increased effect be repeated with a good bold walk between, by way of centre.” Further on we meet with the following observation on a class of geometric gardens,—“Parterres formed of beds, gravel walks, box edging, &c., without any grass, ought always to be laid out in compartments, removed from the view of the windows of the house, and to be shut out from the natural or English style of pleasure ground, for in such situations their fantastic shapes would be inappropriate and exceedingly cheerless in the winter months. If we were to consult our own taste, we would not introduce the box edgings (after the Dutch style) at all; but as it is gradually

creeping into fashion, and as we do not wish to appear singular, we have given two plans which may be edged with box, but at the same time we must say that we prefer neat edgings of earthenware, cast iron, wire, &c." We presume the authors have seen *La Blondel, La Theorie et la pratique du Jardinage*, as well as some of Nesfield's designs, where edging, embroidery, and scroll work, are seen in all the elaborate finish of high art, and which belong to the French school, rather than to the Dutch, the principal features of the latter consisting of sloping banks, straight canals, and clipped hedges, a modification of the French style certainly, but with sufficient distinctness to constitute it a separate school. We quite admit that geometrical gardens should be shut out from natural scenery, or at least should be separated from it by some broad line of demarcation; but that the geometrical style is unsuited to be looked upon from the windows of the house, will depend on what the authors' views of a geometric garden consist of. We are pretty well read in geometrical gardening, and our own idea on the subject is, that geometric gardens are especially adapted to accompany architectural features, and of course to be looked upon from the windows of the house; but if the figures of the design take the fantastic shapes our authors allude to, by which we presume they have in their minds' eye, the stars, hearts, cross swords, and the many nondescript-shaped beds too frequently seen even in otherwise good gardens, then we say, the sooner they are banished,—not only from the vicinity of the house, but from every part of the ground,—the better; they constitute an offence against good taste which should render their removal an imperative act on all who have gardens, and who value either *art* or *nature*. In reference to edgings, we hope in time, and as fashion is now a-days everything with professional men, that the authors' scruples as to the use of box as an edging will be overcome, especially when they consider, as a matter of taste and beauty, how much superior it is to any manufactured article. Of the designs themselves, twenty in number, many of them give very pleasing combinations of easy flowing lines. We prefer ourselves No. 1, more particularly if the centre figures were less complicated; the centre division of No. 8, which would be a gem planted with good taste; No. 10; No. 14, which is a good modification of an original French design; and No. 19. The length and narrowness of the beds may be considered objectionable to some by not allowing for large breadth of colour; and for these reasons, we should have preferred the centre or key beds to have been larger and less complicated. The work, however, will afford many useful ideas for laying out grounds to those engaged in this subject, and we can therefore well recommend its perusal and study.

*The Wild Flowers of Great Britain.* Illustrated by CHARLOTTE GOWER, and botanically and popularly described by R. HOGG, LL.D., F.L.S., and GEORGE W. JOHNSON, F.R.H.S., editors of the "Journal of Horticulture and Cottage Gardener."

London: "Journal of Horticulture and Cottage Gardener"  
Office, 162 Fleet Street. Parts I. to VI., 1s. each.

THE expensive nature of former works on British botany has proved a great hindrance to a more general knowledge of British plants than unfortunately exists amongst us; we say unfortunately, for no science is really more popular, or deserves more to be encouraged, as a delightful source of pure unalloyed pleasure and recreation, than collecting and studying the habits and forms of our native Flora. A few months back we had to notice in favourable terms the completion of an abridgment of Sowerby's *Botany—British Wild Flowers*, arranged in one vol.; the figures given were, however, necessarily small, and some of them difficult to identify by the tyro in botanical science. The present work is got up on a larger scale—in fact equal to the expensive work alluded to, and on a much more popular scale. The plates are life-like, botanically correct, and the colouring sufficient to convey a truthful character of the original; while the descriptive letter-press is divested as much as is possible of technical terms, and rendered as popular as such descriptions to be accurate can be made. Under the head of "history and uses," the authors have given us valuable information on the uses, as well as much interesting matter on classic, as well as domestic plant lore. The work is published monthly, price 1s., each number containing Four Plates, with the accompanying letter-press. We most cordially recommend this cheap edition to all concerned in promoting a love and knowledge of British plants in their respective circles.

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#### TRADE LISTS.

*Charles Turner's Catalogue of Fruit Trees, Roses, Coniferæ, Hardy Trees, Shrubs, Climbing Plants, &c. Royal Nurseries, Slough, and Salt Hill. Autumn, 1861, and Spring, 1862.*

To speak of Mr. Turner's establishment as the head-quarters of floricultural productions, would be superfluous; but in addition the Slough Nurseries contain a very general as well as excellent selection of nursery stock, of which the present Catalogue enumerates and describes the particulars of each. The Slough Nursery possesses a pure air, and fine soil for fruit trees and shrubs, and Mr. Turner's good management, with the above advantages, has made his stock second to none in quality and good condition for planting.

*William Paul's Rose Catalogue. Cheshunt Nurseries and Waltham Cross, 1861-62.*

The name of *William Paul* and *Roses* are most fitly associated together, for there are very few individuals who have done so much to make the Rose popular as Mr. W. Paul. We have

therefore much pleasure in recommending Mr. Paul's Rose Catalogue to the notice of all interested in the queen of flowers, feeling sure they will neither be disappointed by the descriptions given, nor in the stock Mr. P. here offers for sale.

*Retail Catalogue of New Plants offered by W. Bull, Nurseryman and New Plant Merchant, Kings Road, Chelsea.*

Mr. Bull here presents to the public a goodly list of rare and new plants, of home and continental origin, which well deserves the inspection of connoisseurs in new plants.

*Catalogue of Hyacinths and other Bulbous Roots imported and grown by B. S. Williams, Paradise Nursery, Holloway, London.*

Very complete and very good, with a capital list of Gloxinias.

*Catalogue of Hyacinths, &c., imported and sold by Robert Parker, Exotic Nursery, Tooting, Surrey.*

Another excellent assortment of Bulbous Roots, &c., by Mr. Parker, late partner with Mr. Williams, and now established at Tooting, where we wish him every success in his undertaking.

*Barr & Sugden's Autumnal Catalogue, comprising choice selections of Dutch Cape Flowering Bulbs, &c., by Barr and Sugden, 12, King Street, Covent Garden.*

The Catalogue of this new firm appears to have been got up with care, and the various articles offered for sale well selected and described.

*Prix Courant des Plantes des Serres et de Pleine Air, de Louis Van Houtte, Horticulteur a Gand, Belgique.*

A vast collection of plants is here offered to purchasers, cultivated at M. Van Houtte's establishment, which has a world-wide celebrity for old, new, and rare plants. There is a capital index arranged for Nos. 87 and 88 of the *Prix Courant*, as well as the current issue, which will make these numbers valuable lists for reference.

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#### CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—The greater portion of the stock of Azaleas will probably be well set for bloom, and all which are so should occupy a cool airy house. The plants will appear to be at rest after having set their bloom buds, but the roots will nevertheless be active, and the plants must be carefully attended to with water, keeping the soil in a healthy state, otherwise the bloom will not be what it should be. We aim at keeping plants which are making no perceptible progress at the top rather on the side of dryness at the root, but use every care to avoid any injurious excess, and especially against getting the soil too wet. Any plants which are still backward in the way of forming bloom buds should be kept

in the warmest house in which accommodation can be found for them. Our own practice is to keep plants in heat until Christmas, unless they are properly set for bloom. Look over and attend to last month's directions regarding plants being kept in heat, and be especially careful to keep them free from black thrips. Plants which set their bloom buds early in the season, and have had a period of rest, may, if necessary to provide a supply of bloom, be placed in a warm moist house, and may be had finely in flower by Christmas; but they must be afforded a moist atmosphere, syringing them over head daily, keeping them perfectly clear of black thrips, and be carefully attended to with water at the root. Some of the Camellias which set their buds early will be in bloom, and should be placed in a dry airy situation, and be assisted with weak manure water; especially plants which may have been allowed to carry rather too many flowers for their strength, and where the supply of flowers is not equal to the demand. A selection of such plants as have well swelled their flower buds may be placed in a moist gentle warmth, which will very much forward their blooming. It is not advisable, however, to subject Camellias to much artificial heat for the purpose of forcing them to open their buds, as the result generally is that they bloom much smaller, &c., than their natural size; but by the aid of gentle heat they may be forwarded very much without sustaining the slightest injury. And in all attempts at forcing these the roots must be properly supplied with water, otherwise the buds will drop prematurely. Keep the general stock cool, giving air freely on mild days, and see that the foliage is clean and bright, and water very carefully.

*Conservatory.*—Where this house is occupied by plants from the stove, the greenhouse, and any other house which will furnish a plant in bloom, as is too frequently the case, it will be very difficult to manage it so as make it suitable for its various occupants. In houses containing a mixture of this kind slight fires will be necessary to keep the atmosphere rather dry, and also for the sake of warmth, when the weather is not very mild for the season. Use fire heat, however, as sparingly as will answer the objects in view, and endeavour to arrange the plants requiring warmth as much together at one end of the house as can conveniently be done, and give air against these very sparingly. When the Chrysanthemums and winter-blooming Heaths and Epacrises, &c., are introduced, these must be afforded a free circulation of air on every favourable opportunity, and then it will be advisable to dispense with such things as require warmth; for it is impossible to manage a house so as to make it suitable for these and Chrysanthemums, &c. See that everything about the house is perfectly clean; and do not overcrowd the plants, and endeavour to arrange those in bloom to the best advantage. But where valuable hard-wooded plants have to be wintered in this house, these should be afforded the situations most suitable for them, keeping them near the glass, &c. Look over and attend to last month's directions, if not already done.

*Cold Frames.*—Where hard-wooded plants have to be accom-

modated here at this season, they will require very careful management to prevent their being injured by damp, &c., especially things which are rather tender, or others, the young wood of which is not well ripened. Give air freely whenever the weather will permit, and endeavour to water on the mornings of bright days, so that the superfluous moisture may be dried up before shutting up for the night; and keep the plants rather on the side of dryness, giving them water only when it is absolutely necessary. Be prepared with efficient covering in the case of frost, which may be expected any night now. Calceolarias, both the herbaceous and shrubby kinds, will now be growing freely, and these should receive every attention, not allowing them to feel the want of pot room, keeping them as close as can be done without injuring them by damp, and perfectly free from their great enemy, aphis. Water cautiously, and endeavour to do so on bright mornings, so as to get the foliage dry before shutting up. *Flower Garden.*—Where a spring display is to be attempted, the beds should be cleared at once, prepared and planted with bulbs, &c. And even where the beds are not intended to be filled with things for blooming in spring, they should be cleared and neatly trimmed up, in which state they will look better than with the remains of their summer occupants. Any alterations which may be in hand should be pushed forward while the weather continues favourable. Give air freely on mild days to Verbenas, and other autumn-struck cuttings, and endeavour to get these well established and hardened before winterly weather sets in. Look over the stock of Calceolarias and other recently put in cuttings, and make up any deficiencies, either by putting in more cuttings, or potting up some of the old plants. Be particularly careful to keep the whole of the bedding-out stock perfectly free from aphis. *Greenhouse.*—Use every dispatch to get the whole stock here nicely tied, repotting any plants which require more pot room, so as to have all as trim and neat as possible for the winter. Place Leschenaultias, Boronias, and other plants, which are impatient of currents of cold air, together at the lightest end of the house, and give front air against these only on very mild days, and where necessary to dispel damp, from which these are very liable to suffer during winter. See that the whole stock is perfectly free from aphis, and other injurious insects. Water very cautiously, and only when it is positively necessary; but when a plant is watered, give sufficient to moisten the ball throughout, and the watering should now be done in the morning. If damp is troublesome use a little fire heat in the morning, with a free circulation of air; but use fire heat at night only when necessary to keep the temperature from falling much below 40°. *Stove.*—Advantage should be taken of every hour which can be spared from other work to get the stock in this house thoroughly cleaned. Ixoras, and many other plants which have done blooming, may be cut back, when they should be thoroughly cleared of scale, well washing the foliage, &c., re-potting such as require this, and nicely tying the shoots, and every effort should be used to get the whole

stock perfectly free from insects, while they are in a comparatively dormant state, and will be uninjured by washes, &c., which would disfigure them when their foliage is young and tender. Attend to last month's directions as to winter-blooming things, and afford these every attention.

*Cinerarias*.—We will suppose that such of these plants as are required for early flowering or exhibition to be now ready for their final shift into their blooming pots, the size best suited for this purpose being eight-inch ones, well drained with potsherd and other loose material, such as rough turf, &c. The compost best suited is two parts good friable loam and one each of rotten manure and leaf mould, add sand to cause the water to percolate freely. Keep a little close for a few days, then give air gradually; look well to mildew and green fly, and sulphur or fumigate immediately on its appearance; keep tolerably close of nights, as the least frost is very injurious to these tender foliaged plants; stand them, and keep as near the glass as possible.

*Pelargoniums*.—If previous directions have been attended to, with early specimen plants little can be done this month. Avoid crowding the plants, and also be careful in watering; at this season only water those that are really dry, and give plenty of air at all favourable opportunities to prevent them getting drawn. Keep the plants clean of decayed foliage, especially the fancies, and re-pot any that require it.

Train and stop back, if long enough, the shoots of young plants that it is intended to make specimens, and when the weather is wet and cold give a little fire-heat and air at the same time to dry up damp, and in cold nights the temperature of the house should average about 40°.

*Hardy Fruit*.—This is perhaps the best time for planting all kinds of fruit-trees; and in the renewal of wall-trees, where the borders are old, the ground should be well trenched to the full width of the border, and fresh loam mixed with the old soil as the work proceeds. Mulch the trees after planting with rotten manure to encourage them to root at once. Large trees that are unfruitful or growing too strong may now be lifted with advantage; if standard trees, take care to secure them to stakes after re-planting. Go over peach and nectarine trees with a soft broom, to remove a portion of the leaves, that the wood may get well ripened. Any other fruit-trees that have shed their leaves may now be pruned. Give air to the fruit store till after the sweating process is over, after which time the room should be closed; a dry, cool, close atmosphere is best adapted for the long keeping of fruit. Look over the fruit often, and remove all those going to decay. If any late apples or pears still remain on the trees they should be gathered at once.

*Forcing Ground*.—Mushroom beds intended to produce the winter supply should now be made; sprinkle the beds lightly that are coming into bearing, and keep up a moist atmosphere in the house. If Asparagus is required early, the roots may now be

lifted and placed in the forcing house or in pits, where a moderate heat can be maintained; place the roots thickly together, and cover them with about six inches of light earth; keep the pits close till the heads appear, when air should be given. Sea-kale may be forced in a similar way, by covering the crowns with coal ashes to blanch the heads; some in the open ground may also be covered with pots, and a good bed of leaves placed over them. A few roots of Rhubarb should be placed in the forcing house for early use, also a few pots of Tarragon and Mint. Basil can be propagated from cuttings through the winter, which is a better way than growing from seed. Take up Chicory roots and place them in the mushroom house, or some other dark place to grow and blanch. Cucumbers will now require every care to keep them healthy; a night temperature of  $75^{\circ}$  should be maintained, with air through the day at every favourable opportunity; use water rather sparingly at the root for the present. Plant out those sown last month.

*Cherries and Plums.*—This is the best time for potting young trees for succession, and all pot plants intended for forcing by-and-bye should be examined; see that the drainage is perfect, and those requiring more pot-room should be shifted, and when finished plunged in a bed of leaves or litter, to protect the pots and roots from frost.

*Strawberries.*—The pots should now be protected from frost and drenching rains. Those intended for *early* work had better be placed under glass in a cold frame to get dry; others for later crops may be plunged sideways in ridges of coal ashes or litter.

*Peach House.*—Place the sashes on the early house, and finish tying the trees. If early Peaches are required, the house should be closed at night, but do not apply fire-heat for the present, except the nights are cold and frosty, when a little fire-heat may be given towards the end of the month. Surface the inside border with a mixture of fresh loam and dung.

*Pines.*—Give air at every favourable opportunity to the succession plants, but close the pits early in the afternoon. Keep a steady bottom heat from  $75^{\circ}$  to  $80^{\circ}$ , and a night temperature of  $65^{\circ}$ , with a rise of  $10^{\circ}$  to  $15^{\circ}$  during sunshine. Less water will now be needed. Plants swelling their fruit should be kept a little warmer than the succession plants; keep the atmosphere moist, and give air every mild quiet day. Collect plenty of leaves to be in readiness for filling pits when they may be required.

*Vinery.*—Look over ripe grapes frequently, and cut out all decayed berries; give fire-heat during the day in damp weather, giving air at the same time to dry the damp. If the early vinery was closed last month, a little fire-heat may now be given in cold weather, so that the night temperature does not fall below  $45^{\circ}$ , and keep about  $60^{\circ}$  through the day; use the syringe every day, and keep a moist atmosphere by sprinkling the pipes and floor of the house; give air in fine weather, and raise the temperature  $5^{\circ}$  by the end of the month. Prune the vines in the succession house

as soon as the leaf has fallen. Pot vines intended for *early* fruiting should now be placed in the forcing house; these will require a higher temperature than established vines, on account of both root and branch being in the same temperature.

*Kitchen Garden.*—Cauliflowers and Lettuces under hand-glasses or in cold frames should have full exposure through the day in dry weather; small plants of these may still be pricked out, either in frames or in a sheltered situation to stand the winter. Tie up Endive to blanch, and take up a quantity, and place them under cover either in cold frames or in sheds for present use in case of frost. Take advantage of dry weather to finally earth up Celery and Cardoons. Take up Carrots, Parsnips, and Dioscorea roots, if not already done; look over those in store, and remove all that are decayed. Plant out Tripoli Onions in light rich soil, if not done last month, and go on with digging and trenching all vacant ground when the weather favours that operation.

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#### WORK FOR SMALL GARDENS IN NOVEMBER.

*Auriculas.*—The present lovely autumn weather may, perhaps, have an injurious effect in causing these plants to throw up flower stems; if so, pinch them off, and keep the plants as dormant as possible; give plenty of air, pick off all decaying leaves, and be careful as to the watering. Get the manure for top-dressing into a sheltered place ready for spring.

*Carnations and Picotees.*—Here give air constantly, and let no moisture stand round the plants; if possible, give them plenty of room. I believe a northern aspect to suit them better than any other during winter. See to the compost for spring potting.

*Dahlias* ought now to be safely housed, the great enemy to the roots is damp. A well-ventilated dry cellar, free from frost, is the best place for them.

*Pansies* should now be in their winter quarters, and will require much the same care as Carnations and Picotees.

*Pelargoniums* should now be re-potted for blooming; if left until later, you get quantities of leaves and little bloom. After January, all that is required for them ought to be given in the shape of liquid manure.

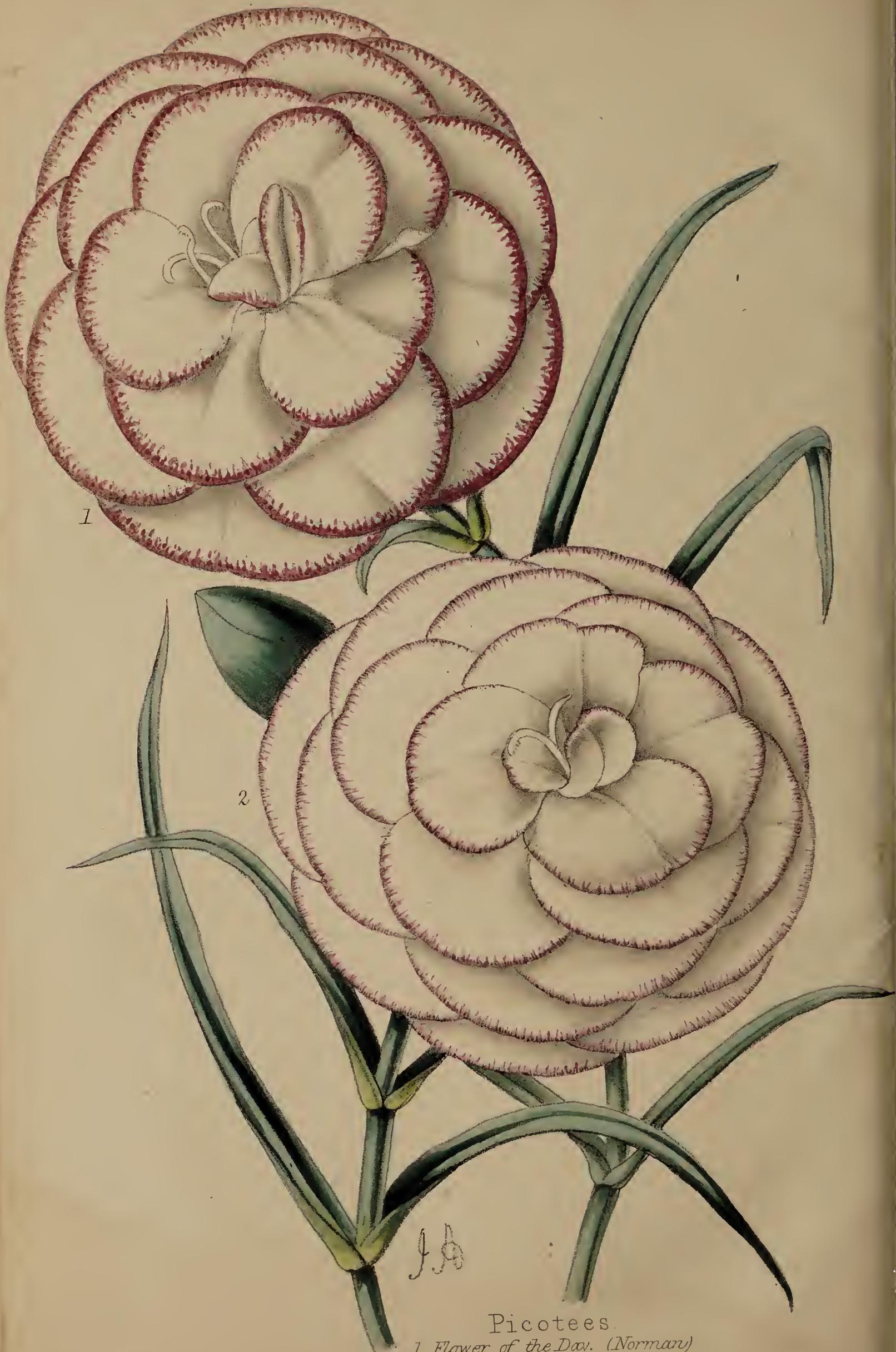
*Pinks.*—Keep the beds clean; and if the weather be very severe, protect; but at present they are in fine condition.

*Gladiolus* should be lifted when the leaves are decaying, and dried quickly off; some of them are blooming now (October 19) in fine condition.

*Tulips* ought to be planted early this month, and every care taken of the bed in severe weather.

*Greenhouse.*—Here everything will be (as it has to do so many duties) necessarily somewhat crowded, but give as much room, light, and air as possible. Clear the garden of rubbish, plant roses, and make such alterations as may be necessary; and take care to procure manure, leaves, &c., for next year's supply of compost.





Picotees.

1. Flower of the Day. (Norman)

2. Rosy Circle. (Payne)

Plate 183.

Printed by C. Chabot.

## NEW PICOTEES.

(PLATE 183.)

THE good old Clove Gillyflower of our forefathers, together with the races into which it has sported in the hands of the Florists, enjoys a position to which few other flowers, excepting always the Rose, can lay claim, that of being an universal favourite; for while there are none to whom the old fashioned Clove Pink is not acceptable, there are none who do not prize the Carnation and the Picotee, which are the forms into which the fine old garden flower has diverged under cultivation. They are, indeed, appreciated in different degrees, and in a different manner, by different classes. Thus in the genuine Florist they excite a glowing enthusiasm, and a keen and searching criticism, which, while admiring every point of excellence, leaves none of the "properties" of the flower unchallenged; while in the rest of the body floricultural they rather give rise to a feeling of calm but deep appreciation of their beauties and their sweets, both optic and olfactory nerves finding a sense of gratification. In all this public favour the Picotee shares at least as largely as the more freely painted Carnation, what is wanting to it in gaiety being made up by the peculiarly chaste character of its flowers.

The Illustrations we now place before our readers represent some novel varieties of the Picotee, which combine in themselves the peculiar features of merit which have progressively been stamped upon the flower, namely, size, fulness, smoothness, and perfection of colouring; they may therefore be recommended without hesitation. Both varieties have been submitted to the censorship of the Floral Committee of the Royal Horticultural Society, and both obtained First-class certificates. They were exhibited by Mr. Charles Turner, of Slough, in whose hands we believe they now are.

Of the individual peculiarities of the two novelties now figured, a better general notion will perhaps be conveyed by our Illustrations than by any descriptive remarks. The flowers themselves have been greatly admired wherever they have been seen, and in regard to their position from a Florist's point of view, there can be no question that they are both varieties of first-rate excellence; while the bright attractive colouring of the one, and the chaste subdued marking of the other, as displayed respectively on the pure solid-looking white ground of the petals, are qualities which will command general admiration. They are both stated to be of vigorous constitution, which in itself is no small recommendation.

Fig. 1. *Flower of the Day* (Norman), is a splendid variety, of the heavy-edged scarlet class, in which it is the brightest

and best yet obtained; the general form is excellent, the size is large, the petals bold, firm, and remarkably smooth, the white pure, and the marking, which is of a rosy carmine, strong and bright (and, as it should be, confined to the edge), so that altogether this forms a very attractive flower.

Fig. 2. *Rosy Circle* (Payne), is of the light-edged rose-class, a very constant and delicate variety, standing at the head of its class; this also is a large full flower, of fine form, with firm smooth broad petals, very pure, and having the marking confined to a thin even thread-like line of rose-colour, resembling Mrs. Barnard, to which, however, it is much superior.

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### ROOT-PRUNING OF FRUIT TREES.

HAVING in the last number offered a few remarks on the spur-pruning of fruit trees, we now take up the subject of root-pruning, which we regard as nearly of equal importance. Notwithstanding all that has been written on root-pruning of late years, we do not find it so generally attended to as it ought to be, especially on wall trees. Most, if not all, the failures in fruit-tree culture are owing to something wrong at the roots. We hear, year after year, of fruit trees gumming, cankering, and dying off; this arises entirely through allowing the roots to strike too widely and deeply into the cold soil. What should we think of the plant grower who bestowed much labour and attention in tying out and training of his plants, but paid no regard to the state of the roots or the soil? We would at once say that such a person was ignorant of the first principles of scientific gardening. Successful plant cultivation depends in a great measure on the care and attention given to the preparation of the soil, the drainage, and potting of the plants. To succeed in fruit-tree culture we must always pay the greatest attention to the state of the roots in the soil, &c. Between the roots and leaves the action is reciprocal. If we allow the roots to strike deep into a highly enriched, strong, retentive soil, we must naturally expect robust luxuriant growths, which will never get properly matured in our climate. And yet how common it is to see young trees in this state. How often do we see even young peach trees encouraged to make robust shoots, which, for want of the high and warm temperature of the American summers to ripen, after a few years die of canker. Then people say it is no use attempting to grow the peach in open air in this country, it requires the aid of glass. Unsound tissue is the result of rapid growth. If trees are allowed to grow rapidly for a few years without any check, sooner or later the evil will show itself; they may tide over a few mild winters, but the first severe one will either kill them, or so completely injure them, that they never do much good afterwards. We have this season seen hundreds of apple trees, even, which were so injured by the frost last winter that they will never recover.

We strongly advise, then, that before planting young fruit trees the soil should be so prepared that no robust growth may result ; always aim at moderate-sized wood which will stand a chance of getting ripened, particularly peach, nectarine, and apricot trees ; by this means, and by not over-cropping whilst the trees are young, you will, in a few years, get a wall of well-ripened sound wood, which will stand any ordinary winters we may have, and will bear good crops regularly, with proper attention, for a number of years —What a pleasure to the gardener !

When young trees make too strong wood, they should be root-pruned ; and with young trees this is best done by lifting them, shortening the longest roots, then carefully planting them anew. All large trees on walls, such as pears, which it may be inconvenient to lift, are best operated on by opening a trench a few feet from the bole, then lifting the roots and cutting back the strongest.

By root-pruning we check robust growth in young trees, and we bring robust unproductive trees into a bearing state. By operating freely on large, robust, unproductive trees, we stop the supply of nutriment, the growth of the branches is arrested, organisable matter accumulates, and fruit buds are formed. A single root-pruning will in general bring large unproductive trees into a permanently fruitful condition. When trees are in a good bearing state they will not require root-pruning ; and as all excessive pruning shortens somewhat the life of a tree, we should not do anything that would in the least degree affect the continued productiveness and longevity of the trees. With regard to orchard trees, we would strongly advise caution in root-pruning. All large, robust, unproductive trees may be root-pruned with advantage, but young growing trees should be cautiously root-pruned—just sufficient to check robust growth—as it is better to wait a few years, than by root-pruning to bring them prematurely into bearing. Whilst striving by every means in our power to get well-ripened wood and fruitful trees, we must do nothing to enfeeble their constitution, as the ultimate value of all orchard trees depend on the size, longevity, and productiveness of the trees.

*Stourton, Yorkshire.*

M. SAUL.

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## THE FLORAL COMMITTEE OF THE ROYAL HORTICULTURAL SOCIETY.

Since our last notice of this body, its meetings have been held in the Council Room, at the new gardens, South Kensington. The present season has been tolerably prolific of novelties, and we propose here to offer a *resumé* of those which have obtained awards, besides which, however, many other interesting flowers have appeared. The following memoranda refer to the meetings held between March and July inclusive, up to the commencement of the Dahlia season :—

### FIRST-CLASS CERTIFICATES.

AGATHÆA CÆLESTIS FOL. VARIEGATIS.—March 12, Mr. W.

Bull, Chelsea.—A pretty, variegated, form of the well-known *Agathæa*, or *Cineraria amelloides*. The neat roundish foliage is margined with creamy white, and when properly developed the marking is well defined and characteristic. It, however, occasionally becomes less decided, apparently from over excitement, or too great luxuriance. The flowers are of the ordinary character.

AZALEA FLAG OF TRUCE.—March 26, Mr. Todman, gardener to R. Hudson, Esq., Clapham. A large semi-double white, in the way of Leviathan, but with fuller, better-shaped flowers, the small petaloid filaments being more compact and even. It is a vigorous-habited and very desirable sort.

AZALEA KINGHORNII.—April 9, Mr. Kinghorn, Richmond.—The flowers of this variety are of exquisite form, and remarkable for their smoothness and substance. It is one of the bright rose-colours, and a very beautiful sort.

CALCEOLARIA CANARIENSIS.—May 28, Mr. G. Smith, Hornsey-road.—A fine dwarf bedding variety, of shrubby habit; certainly one of the best, if not the very best known. The flowers are large, and of a rich, clear yellow.

CAMPYLOBOTRYS REFULGENS.—April 9, Mr. Bull, Chelsea.—A beautiful-leaved dwarf stove herb, with a short stem, and numerous large, obovately oblong leaves, reddish-tinted and velvety with whitish ribs and veins and a singularly ridgy surface above; which shows off the satiny colouring to advantage. This is probably the finest of the species yet made known.

CATTLEYA GUATEMALENSIS.—March 26, Messrs. Veitch and Son, Exeter and Chelsea.—A curious and pretty orchid, with smallish pale rosy flowers, having a singular flush of orange colour, and a deep purplish-red lip. It was sent from Guatemala by Mr. Skinner, and is an interesting plant.

CLARKIA PULCHELLA FLORE-PLENO.—July 9, Messrs. Carter and Co., Holborn.—The flowers of this variety, which are of the deep rose-colour of *C. p. pulcherrima*, are made up of three or four rows of petals, forming a tolerably compact double flower.

DELPHINIUM ALOPECUROIDES.—July 9, Mr. G. Wheeler, Warminster.—A handsome double-flowered hardy perennial larkspur, remarkable for dwarfness, being not more than 2 to 2½ feet high, and for its dense compact spike, upwards of a foot long, slightly branched below, and covered with small double bright blue flowers, paler and reddish towards the centre.

DRACÆNA FERREA VARIEGATA.—June 25, from the Society's garden.—A fine broad-leaved plant; evidently differing in this peculiar feature from the ordinary *D. terminalis*, which it resembles in rich colouring—the *D. ferrea variegata* being much the finer, on account of the breadth of its foliage.

EURYA JAPONICA LATIFOLIA VARIEGATA.—June 11, Mr. Standish, Bagshot.—An elegant variegated shrub, recently sent from Japan, by Mr. Fortune. It has moderate-sized, elegantly acuminate Camellia-like foliage, broadly-margined, and more or less

blotched inwards with white, the young leaves being also fleshed with a rich orange tint.

FUCHSIA MAMMOTH.—June 25, Mr. G. Smith, Hornsey-road.—A fine habited variety, with very large double flowers, having bright red sepals and violet corolla. It is a very effective decorative plant.

LOMARIA CYCADIFOLIA.—April 23, Messrs. J. and C. Lee, Hammersmith.—A fine bold pinnated fern, closely related to *L. magellanica*, and, like it, producing two forms of fronds. It is hardy and evergreen, but worthy a place in any greenhouse collection.

LOMARIA FLUVIATILIS.—April 23, Messrs. J. and C. Lee.—A fine New Zealand fern, with the evergreen sterile fronds dark green, with roundish pinnæ, similar to those of *Platyloma rotundifolium*, the fertile pinnæ being linear. An elegant cold greenhouse species.

LOMARIA FRASERI.—May 28, Mr. Standish, Bagshot.—A slender dwarf tree fern, of remarkable beauty, and quite unique among Lomarias, having the sterile fronds bipinnatifid, with small oblong segments, and the fertile ones being of similar form. It is a hardy greenhouse plant, native of New Zealand.

OSMANTHUS AQUIFOLIUS VARIEGATUS NANUS.—June 11, Mr. Standish, Bagshot.—A dwarf Japanese shrub, with flat, deeply-toothed holly-like leaves, elegantly margined with white.

PELARGONIUM (ZONALE) HERALD OF SPRING.—April 23, Mr. C. Turner.—A variety of moderately-vigorous habit, the leaves broadly and heavily zoned, the flowers large, finely-shaped, of an orange cerise colour.

PETUNIA INIMITABILIS FLORE-PLENO.—May 14, Messrs. Veitch and Son, Chelsea.—A charming double-flowered variety of *Petunia violacea*, exceedingly well adapted for pot culture for decorative purposes, being of excellent habit, dwarf and stocky, and producing abundantly-close, well-shaped, double-flowers, variously blotched with large patches of white on a rosy-purple ground.

PICOTEE FLOWER OF THE DAY.—July 23, Mr. C. Turner, Slough.—A full-sized, heavy rose or scarlet-edged variety, of excellent properties, probably the highest coloured of its class.

PICOTEE, ROSY CIRCLE.—July 23, Mr. C. Turner, Slough.—A light rose-edged, constant and delicate, the marking forming an uniform wire edge.

PIMELEA ELEGANS.—May 14, Messrs. Veitch & Sons, Chelsea.—A very elegant greenhouse hard-wooded shrub, producing freely large globular heads of white flowers, from which large orange-coloured anthers project. The contrast between the corollas and the anthers is charming.

PINK DELICATA.—June 25, Mr. C. Turner, Slough.—A large well-formed flower, heavily and evenly laced with a delicate purple, the blotches at the base of the limb being of a deeper purple.

PINK LADY ROKEBY.—June 25, Mr. W. Bragg, Slough.—A full petaled variety, evenly laced with purple.

POLYSTICHUM VESTITUM VENUSTUM.—April 23, Messrs. J. & C.

Lee.—A very handsome evergreen hardy greenhouse fern, with dark green bipinnated fronds, having the pinnules prettily toothed. It is a New Zealand fern.

PTERIS CRETICA ALBO-LINEATA.—March 26, Messrs. Veitch & Son, and Mr. Bull. One of the most beautiful of recent additions to the fern family, and a remarkably handsome variegated plant. The long ribbon-like divisions of the frond have each a broad central band of white. It will succeed in a greenhouse, though better in a stove.

RHODANTHE MACULATA.—June 25, Mr. W. Thompson, Ipswich.—A beautiful new species of *Rhodanthe*, with the habit more vigorous and the flower-heads considerably larger than in the old *R. Manglesii*, which it resembles in general character. The coloured involucral scales are stained with a deeper rose towards the base. It is a first-class new annual.

ROSE (H. P.) BEAUTY OF WALTHAM CROSS.—June 11, Mr. W. Paul, Waltham Cross.—A fine English rose, of vigorous habit, with bold foliage and rosy crimson cupped flowers, which are about medium size and of fine form and substance.

TODEA SUPERBA.—May 28, Messrs. Veitch & Sons, Chelsea.—This is a charming fern, sometimes called *Leptopteris superba*. It is of filmy character, and amongst the most lovely of greenhouse species. The fronds are lance-shaped, with the pinnae cut into a multitude of narrow crowded segments, which bristle up over the whole surface. It is nearly related to the handsome *Todea hymenophylloides*, often called *T. pellucida*, but is yet quite distinct from it.

VERBENA FOXHUNTER.—July 9, John Miller, Esq., Upway.—The most remarkable scarlet verbena yet raised. The flowers are large, bright rich scarlet, and having a small yellow eye; especially brilliant and attractive.

#### COMMENDATIONS.

ADELASTER ALBIVENIS.—April 23, Messrs. Veitch & Son, Chelsea and Exeter.—A fine warm greenhouse or cool stove climber, from Peru. It has dark olive green leaves prettily marked with white veins, and in the form of young dwarf plants, before the climbing habit is developed, forms a very useful decorative plant.

AMARANTHUS MELANCHOLICUS RUBER.—July 23, Messrs. Veitch & Son, Exeter and Chelsea.—A curious looking annual of dwarf habit, obtained from Japan, accompanied by the other forms of *Amaranthus* known as *A. bicolor*, *tricolor*, and *tricolor splendidissimus*. The leaves are broad and roundish in form, and of a deep sanguineous purple. It is interesting for the colour of its foliage, and may be useful in out-door gardening, Messrs. Veitch stating that the colour is improved by exposure in summer.

ARALIA SIEBOLDII VARIEGATA.—May 28, Messrs. Veitch & Son, Chelsea.—A stout greenhouse shrub, with bold long-stalked palmatifid leaves irregularly tipped and edged with white.

AURICULA, REV. G. JEANS.—April 9, Mr. Turner, Slough.—A useful second-class grey-edged variety.

**CALANDRINIA SP.**—July 9, Messrs. Veitch & Son, Exeter and Chelsea.—A pretty dwarf rock plant from South Chili, stated to be perfectly hardy; something in the way of *C. umbellata*, but larger-flowered; the leaves narrow, greyish, with appressed hairs; the flowers rich bright rose purple or deep magenta.

**CINERARIA PRAIRIE BIRD.**—March 26, Mr. C. Turner, Slough.—A deep clear violet, with a white ring around the dark disk. It is a pretty sort, of good general properties.

**CINERARIA MAID OF ASTOLAT.**—March 26, Mr. C. Turner.—A well-formed variety; white, with narrow marginal belt of rosy purple.

**CINERARIA ROSEA PLENA.**—May 14, Mr. A. Kendall, Stoke Newington.—A dwarf compact-habited tufted growing sort, with the flower-heads rosy crimson, many of them full double, and others semi-double. If the double-flowered character is unimpaired it will be a pretty plant for decorating small flower-vases.

**COBÆA SCANDENS VARIEGATA.**—June 25, Mr. Bull, Chelsea.—This differs from the common sort in having the leaves edged with creamy white, and forms a pretty variegated climber.

**COLEUS VERSCHAFFELTII.**—June 25, Mr. W. Bull, Chelsea.—A very richly coloured free-growing soft-wooded branching stove plant, having as shown, the leaves of a pale green tint, with a blotch of rich reddish chocolate. With the advancing season this colour becomes richer and more extended, until, as exhibited at the Dahlia Show, September 11, the whole surface of the leaves was clothed with this rich warm tint. In this state it is a very fine plant for decorative uses. The habit is that of *C. Blumei*, but the leaves are larger.

**CUPANIA PINDAIBA.**—June 25, Mr. Bull, Chelsea.—A graceful pennate-leaved, large-growing, conservatory shrub, from Brazil.

**EPACRIS VESTA.**—April 9, Messrs. Veitch & Son, Chelsea.—A very pretty and distinct variety; the flowers white, tipped with bright pink.

**ERODIUM GUTTATUM.**—April 23, Mr. Wicks, Gardener to W. Wilson Saunders, Esq., Reigate.—A pretty half-hardy herbaceous plant, with purple geraniaceous flowers, spotted with black in the centre; it is suitable for rock-work as a summer plant.

**HYPOLEPIS DISTANS.**—July 9, Mr. W. Dean, Bradford.—An elegant, slender, drooping-fronded, greenhouse, New Zealand fern, suitable for baskets. It has a creeping caudex and bipinnate fronds, a foot or a foot and a half long, finely divided; the stalks and main rachis rough, with small raised, often prickly points.

**ILLICIUM ANISATUM VARIEGATUM.**—June 11, Mr. Standish, Bagshot.—A greenhouse shrub, introduced from Japan, and apparently a variegated form of *I. anisatum*.

**NEMOPHILA DISCOIDALIS ELEGANS.**—July 9, Messrs. Charlwood and Cummins, Covent Garden.—A pretty and effective variety, the flowers being distinctly bordered with white around a bright chocolate or bright reddish maroon centre.

**PANSY PRINCESS ALICE.**—May 28, Mr. W. Dean, Bradford.—

A large flowered fancy sort, white marked on all the petals with a broad ray—margined purple blotch; very pretty and effective.

PELARGONIUM AMAZON.—May 28, Mr. W. Beck, Isleworth.—A decorative variety, of vigorous free blooming habit. The flowers are large deep purple-rosé, with a violaceous eye.

PELARGONIUM FLORIBUNDUM.—April 9, Messrs. F. and A. Smith, Dulwich.—A forcing variety, of free habit, the flowers light rose-pink, with a dark spot on the orange-rose upper petals. Useful for decoration.

PELARGONIUM LADY CHURSTON.—June 11, Messrs. Veitch and Son, Chelsea.—A rich and fiery orange-scarlet, with dark spotted petals; a very bright and effective decorative sort.

PELARGONIUM MRS. PONSONBY MOORE.—May 14, Messrs. Veitch and Son, Chelsea.—A dwarf-habited variety, very free flowering, the flowers bright rose-crimson, with black spots on all the petals. It is very handsome as a small decorative plant.

PELARGONIUM SNOWDROP.—April 9, Messrs. F. and A. Smith, Dulwich.—A blush-white forcing variety of free habit.

PELARGONIUM (ZONALE) FIREFLY.—July 23, Mr. G. Smith, Hornsey.—A very dwarf short-jointed sort, with small distinctly zonate leaves, and orange-scarlet flowers, freely produced, and elevated on long stout footstalks. It was found to be superior to *Scarlet Queen*.

PELARGONIUM (ZONALE) PRINCE OF HESSE.—April 23, Mr. C. Turner, Slough.—A moderately vigorous variety, with a deep-coloured zone, and large well-formed flowers of a salmon pink, paler at the edge.

PELARGONIUM (VARIEGATED) CLARA.—April 23, Mr. C. Turner, Slough.—A handsome variety, having the leaves dark centred, with yellowish margin, and marked with a dark coloured zone, which is orange tinted while young; the flowers are large, deep crimson-scarlet, of fair shape. It was thought a highly promising sort likely to improve.

PHLOX REINE BLANCHE.—June 25, Messrs. Downie, Laird, and Laing, Sydenham and Edinburgh.—A handsome vigorous summer-flowered variety, with large pure white flowers.

PHLOX LYDIA.—June 25, Messrs. Downie, Laird, and Laing.—A summer flowering sort, vigorous in growth, the flowers French white, with bold purple eye.

PICOTEE, MRS HOLE.—July 23, Mr. C. Turner, Slough.—A pretty light red-edged variety, of good properties.

PRENANTHES ARBOREA.—April 23, Mr. Wicks, gardener to W. Wilson Saunders, Esq., Reigate.—A greenhouse shrubby plant, of the composite family, having elegant pinnated foliage, with fine narrow segments.

PRIMULA SINENSIS NIVEA PLENA.—March 26, Mr Bull, Chelsea.—A neat double-flowered or semi-double, white fringed Chinese primrose, not equal to other varieties in individual merit, but stated to be reproducible in the double form from the seeds, and hence valuable because accessible for decorative uses.

PRIMULA SINENSIS RUBELLA PLENA.—March 26, Mr. Bull.—This is similar to the preceding in its habit and general character; but the flowers are of the ordinary rosy or reddish hue. The plant is very much inferior in itself to *atro-rosea*, the finest of all the double kinds, but has a certain value on account of its ready increase by seeds, as stated.

PRIMULA SINENSIS FILICIFOLIA.—March 26, Messrs. E. G. Henderson and Son, St John's Wood. A very distinct form, with elegant foliage, and red or white fringed flowers. The leaves are oblong, elongated, and pinnatifid, so as very much to resemble fern--leaves.

PRIMULA SP.—July 9, Messrs. Veitch and Son, Exeter and Chelsea.—A dwarf hardy Chilian primrose, tufted in habit, the leaves wedge-shaped with the ends evidently toothed; the flowers small, pretty, purplish rose, with a yellow eye, growing in umbels at the top of the peduncle. A pretty rock plant, or suitable for growing in pots with alpiners.

RHODANTHE MACULATA ALBA.—June 25, Mr. W. Thompson, Ipswich.—A pretty variety of *R. maculata*, in which the flower-heads instead of pink, are of a silvery white; very desirable for contrast.

RHODODENDRON PRÆCOX.—March 12, Mr. Davies, Wavetree.—A dwarf, and perfectly hardy bushy evergreen, of hybrid origin, having been bred between *ciliatum* and *atrovirens*. It has distinct rosy-lilac flowers, and will be valuable as an early flowering shrub, either for the open garden, and for pots within doors.

SYMPHYTUM TUBEROSUM VARIEGATUM SUPERBUM.—April 9, Mr. J. Salter, Hammersmith.—A bold-leaved and very effective hardy variegated plant, the leaves finely margined with rich creamy yellow.

VERONICA CHAMÆDRYS PULCHERRIMA.—April 9, Mr. J. Salter, Hammersmith.—A dwarf hardy herbaceous variegated plant, with small oval toothed leaves, margined with creamy white, and forming a neat and pretty tuft.

We shall complete our record at the close of the floral season, in the first number of our new series. Meanwhile, among the subjects which, during the period embraced in this notice, did not obtain awards, the following are more especially worthy of mention.

CINERARIA TOM THUMB.—May 11, Mr. Kendall, Stoke Newington.—A race of very dwarf compact tufted growing varieties, very free-flowering, with the flower heads of various shades of rose and purple. They are pretty small decorative plants, and may probably be improved in quality and variety.

DIANTHUS HYBRIDUS MULTIFLORUS.—March 12, Messrs. E. G. Henderson and Son, St. John's Wood.—A very pretty and useful dwarf hybrid pink, with a tufted habit, green carnation-like leaves, and abundant double rosy-red (or in-doors in spring, deep rosy-pink) flowers, on shortish branching stems; being a continuous bloomer it is both a good pot and border-plant.

RHODANTHE ATROSANGUINEA.—June 25, Mr. W. Thompson.—

A distinct small-flowered species, branching more abundantly at the base than *R. Manglesi*, and bearing smallish rose-coloured flowers with a dark-coloured disk.

ROHDEA JAPONICA MACROPHYLLA AUREO MARGINATO.—March 26, Mr. Bull.—A broad-leaved form of the *R. japonica*, a herbaceous plant, with the leaves finely margined with yellow. A good pot-plant.

ROSE L'ENFANT TROUVÈ.—June 4, Mr. B. R. Cant, Colchester. An old English Tea Rose; supposed to be generally lost, grown as *Aurora*, which it is not, and subsequently published in the *Floral Magazine*, under the foreign name above quoted. It is near *Madame William*, and is a beautiful and charming rose, very full, and of a rich creamy buff colour.

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### THINGS TO BE DONE.

WHERE tender trees or plants are frost-bitten, they should be immediately covered with mats or tiffany, and syringed several times with cold water, keeping on the shade for a day or two. Frequently plants usually hardy are killed or injured by being exposed to a bright sun suddenly, after a sharp frost, which would not be injured if allowed to thaw gradually. The best means of preserving pot plants caught with frost is by immersing them over head in spring water, the colder the better.

Dust currants and gooseberry bushes well over when they are wet with quick lime and soot; a good portion of it will lodge about the buds, and prevent in a great degree the depredations of sparrows and finches, which have a great partiality for the buds of these trees in hard weather. The dose must be repeated occasionally. We have tried a weak solution of aloes, by syringing the bushes over head, which was effectual.

Standard Tea and tender Noisette Roses in cold situations, should be taken up (preserving the roots carefully), and laid in, in old tan, leaf mould, or any light earth, keeping their heads about a foot from the ground. In frosty weather shake a little straw or fern over their heads and stems, which will preserve them, and you may plant them again in February or March. An old and extensive rose grower always treats his tender roses in this way, and last winter lost not a bud even. Tender H. P.'s may be similarly treated. Dwarfs of the two former classes should have their roots protected by saw dust or old tan, and dry straw or fern packed in among the branches in severe frost; or where these are objectionable, *Spruce fir branches may be substituted*. Never prune, transplant, or train any tree or shrub when frozen, or for several days afterwards. The conservative effect of dry straw spread loosely over tender vegetables is very great. Lettuce, Cauliflowers, Parsley, Strawberries, &c., may frequently be found unhurt after a frost, when others not so protected are killed. Mind, the straw should be fresh and new, and not stable litter. A shallow coating of new straw, laid on the ground evenly, if

only two or three inches thick, will keep out more frost than twice that thickness of litter; the reason is, that the hollow stems of fresh straw are uninjured, and are so many tubes of air, acting as non-conductors, which tubes or cells are partly destroyed when the straw has been used for bedding down cattle. As a protective material straw should always be used fresh from stack.

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#### RELATING TO ROSES.—No. 2.

First. *Dressing up.*

I am afraid that I go to the other extreme, and put moss roses into the box as zig-zag and awkward as I can do, trusting to the roses to speak for themselves. Extremes, it is said, are bad; anything, however, is better than an attempt to make roses look good that are really not good, nor worthy of a place in a rosery. It deceives the public, who are not versed in roses, and whose instruction is one of the principal objects of a Rose Exhibition. My impression has often been, when at exhibitions, that Rosarians keep a valet and lady's-maid, well stored with "wimples and crimping pins." Moss, though it is the best thing to convey roses upon, is nevertheless objectionable, as it enables persons to set off a worthless rose, and to support a rose that is in a state of flaccidity, and which, being out of condition, should not be shown. Roses that are good need not the aids and supports of foreign substances, and you may truly say of them, as of beauty, that "when unadorned they are adorned the most." If roses were to be taken out of the boxes and their mode of location examined, how often would the examiner find a "moss prop," or a hole scooped to support "a falling cause." If roses were allowed to rest on nothing that supports the bloom, how few of the roses that now figure at our exhibitions would dare to show their faces. There is one other objection to moss, viz., the inequality of its quality in different localities. Here it is little better than a brown door mat. Tree moss, which is scarce, is the best; and if we are compelled to show on moss, I must say that I envy those who can get good green moss. Tree moss is of mosses the best for propping, and when I see it look "wavy" or uneven, I always suspect the roses. My plan is to damp the moss, and press it flat with my hand, and if a rose placed on it does not look well, I replace it with another, but I never "prop." I saw the following plan adopted at a country show a few years back. The roses, six in number, were placed in two tiers, on a white painted stand, in white glass bottles filled with water. I never saw roses look better; I could see the stems through the water. The roses were as perfect as I ever saw show roses; they were, General Jacqueminot (quite full and cupped), Caroline de Sansal, Jules Margottin, Lamarque, Comte de Nanteuil, and Malmaison. They justly won the first prize in that class, and were the production of my friend Charles Ingram, Esq., an amateur general gardener of no ordinary merit. This mode of exhibition could not be practised on a large

scale; moreover, it would be inconvenient for distant exhibitions; but if it could be adopted, it would defeat unworthy practices. At country exhibitions, when persons are appointed to adjudicate who are not well versed in the points of excellence and defects of roses, "*dressing up*," and, what is very like it, corymb showing of several expanded blooms on stalks, jammed together, may obtain; but at the National Society's Exhibitions of Roses, "*dressing up*" is useless, because none but experienced men are appointed to adjudicate,—men who will not be led to prefer any amount of "*effectiveness*" to circularity of outline, to disposition and substance of petals, to smoothness of the edges, to decision and fixity of colour, to a sufficiently full centre, and to a generally symmetrical and level aspect. Substance of petal is, indeed, a most important point, and no one ought to know this better than the persons who are in the habit of exhibiting cut flowers. Among the older roses, La Quintinye, Empereur de Maroc, Prince Léon, Duchesse d'Orléans, Eugene Appert (micro-petalous), and Devoniensis, are excellent for substance. Among the new ones these are distinguished for the same virtue, viz., Victor Verdier, Gloire de Santhenay, Belle de Bourg la Reine, Madame Charles Crapelet, Madame Louise Curique, and Madame Metanie. These are all good roses, and will stay some time in the catalogue, as, in addition, their habits are good. Baffen is also good, but it appears to be identical in leaf, bloom, habit, and in every respect, with my two Le Princes, sent to me some years ago as the free climbing Géant des Batailles. They are both here, and I have compared them, when in bloom, with Baffen.

Second. *Handicapping.*

In a National Exhibition I think mileage should be marked on the card on each box, that the judges might make some allowance for condition when roses are brought a great distance, if they are fine and well grown. It is ridiculous to suppose that persons living in Cornwall or Northumberland can bring roses to the Exhibition in as good condition as persons living in the counties contiguous to London; or that they will travel roses such distances unless some allowance is made. Travelling is most expensive, and any fair indulgence that would induce far distant Rosarians to compete, would of course greatly advance the rose cause "*nationally.*" We want recruits from all parts of England; let me hope yet to see representatives from every county in England. The grand obstacles are, I fear, the expenses, and the hopelessness of snatching a prize from the good people of Edmonton and Tooting. Roses which are brought from such a distance as to entail a day and night's travel, should, at any rate, receive, as far as condition goes, some indulgence, where the other points of excellence are equal. As I am only 107 miles distant from London, I ask no favour. My roses are cut from five to seven o'clock P.M., the box lies open to catch what dew may fall till nine o'clock, and being travelled in the night, they have nothing to complain of; indeed, they will be in better condition for show than if they are cut in

the morning, full of water with the night's dew, which is always heavy in proportion to the excessive heat of the preceding day.

Thirdly. *The Day before the National.*

When you have to carry several boxes of roses, or say twenty-four trebles (which roses ought properly to be placed separate, in triangles, the two biggest at the top and the smallest at the bottom), you should settle in your mind how you mean to place them, with a view to a horizontal and also perpendicular contrast; in order to do this quickly, the best way is to write down the names of the roses on paper as they should stand contrasted in the box. You should then write the cards, and place each card in *loco*, and then go and cut the roses and put them at once in their places. When weather is humid or doubtful you will, perhaps, have to cut much earlier. Supposing you have trebles to make up, you must cut them and put them into wine bottles filled with water, and standing as if they were trebles in the box. You can thus if you please rehearse location without too much handling. In deciduous weather you had better label the roses, as many of the rose-coloured ones will otherwise soon confuse you. If the weather is hot and dry, a dairy is a good place to keep them in. If the weather is dry, but cloudy, place them in the bottles under a shady tree, with a sheet over their heads. If the weather is hot and misty (the elements of maturity and also of dissolution), you will be much tried. The best place then is a room with a fire in it, and the door and window left open to let the heated damp escape. There is no wind (provided you keep a wet sheet over your box) so good to travel roses in as north or east wind. I never wait, like Mr. Micawber in the Fleet Prison, to see "what good thing will turn up," and therefore, when the weather is unsettled, or likely to be so, to secure the adequate number, I cut at once, even two days before, availing myself also of Mr. Micawber's "future prospects." The public, who see and admire our roses, little know what difficulties we have in producing twenty-four trebles (the combination of the horse-shoe and nails) in good condition and well contrasted, in critical weather. Before I finally locate these frail creatures (they are well called madames!) I lift the bloom high over my head, switch it with considerable violence to my knees. If it stands that it will assuredly travel and go through the show-day. You must always take a surplusage; and if the weather is hot and misty, you must not depend upon fully expanded blooms, but take also with you some roses just beginning to expand, and at your journey's end they will probably be your best and brightest roses. The cover of your box should not be painted, as paint greatly attracts heat. In all cases you should have a wet cloth over it. Your expanded roses should be put as near the engine (or the centre of the train) as you can get them, and your unexpanded ones as near the tail of the train as you can, as the vibration and oscillation, which are greater there than elsewhere, will probably cause them to expand, and these will be your best roses. I won both the first prizes at Reading by taking a

large surplusage of unexpanded roses. I left Wimborne at half-past twelve P.M. the day before; I never travelled on a hotter day, I never remember a worse night for decay. The guard at Wimborne said, by way of comfort, "Your roses, sir, must go at the tail of the train (Mail train), and they will be beaten to atoms before they get to Basingstoke;" but they had undergone the previous "switch," and bore the journey well, but the night was a smoker. I consider that travelling cut flowers in good condition to a distant show, in critical weather, to be a most first-rate thing. As evaporation takes place through the leaves, you must stop the pores. Gum water will effect this, but it must be washed off before the judges enter, as it is a foreign substance. A little spirit of camphor put into the water in the cups will tend greatly to preserve the bloom. In some of the above remarks, I have forestalled the next head.

Fourthly. *The night of travel before the National.*

After two days of labour in shading roses from the sun, and in fencing against wind and rain, you will not be very "*fresh*," but it is the National, and you bear the fatigues patiently. You will have to travel with a talkative gentleman, or with an old lady who has no real malady but "an imaginary spider in her heart," and who will insist upon going through the "diagnosis" of her endless complaints. This is simply a nuisance, and you will get no rest. The great source of anxiety will be the porter at the railway stations, who, if you do not look out, will throw out your box as if it was a sack of oats, and before you can get in a word of caution to carry it level, he will catch up the box, and put it upon his back at an angle of forty-five degrees; and "cabby," too, will lay hold of it, and put it "perpendicular" on the top of his Hansom! You may threaten the former with a *fi. fa.*, and the latter with *ca. sa.*, but the mischief is done. Of course the water will be all spilt, a shaky rose will be crumbled to atoms, and you must replace it with another. With tin teapot with a "snipe" spout you must fill your pipes again with water, or your roses will be quickly withered with other breath than that of popular applause.

Fifthly. *Night travellers, or a little fun to please your children readers at Christmas.*

(1.) *An American—a funny fellow.*

After the Exhibition of 1858—the best that I have ever yet seen—I returned from the Waterloo Station to Southampton with an American traveller. His loquacity, his love of his country, his greater love of hyperbole, I shall never forget. Allowing for but little hyperbole, or "wroughting up," on my part, the following may amuse, and is substantially true. As soon as I was in the train, I pulled a cap over my eyes, and was about to try and go to sleep, but, alas! no such luxury was to be indulged in. He began the vigils. "Been in the States?" "No." "Then you don't deal in cottons?" "No." (I might have said, I spin a couple of first class yarns every week.) "Heard of Virginny, or South Carolina?" "Yes," I said; "and as you mention S. Carolina,

I should be glad if you can tell me something of Isabella Gray. We think the glorious Cloth of Gold to be the best yellow." "The Cloth of Gold," said he,—“Phoo!” and he blew the Cloth of Gold into the Lake Ontario; adding, “we have another yellow, Jane Hardy, that will lick all the yellows in England.” “Well, sir,” said I, “your’s is a great nation!” “Nation, sir,” said he, “why, there is no such nation. We have the biggest ships, the fastest sailers, the best and bravest soldiers in the world:”—(not being a clairvoyant, of course I could know nothing of the future glorious battle of Bull’s Run, so worthy to be chronicled with Waterloo, Austerlitz, and Marengo)—“America, sir, can lick the whole world, English and French, and I would not mind throwing in the ‘Rooshians.’ We have the highest mountains, the largest rivers, and the noblest lakes in the world. Phoo!” and he blew the Duke of Wellington into the vasty deep with an imaginary broadside from the Orinoco. Well, he talked without ceasing till we arrived at Southampton, and I got no sleep. I kept my gravity outwardly, but I laughed inwardly till my sides and ganglions ached. At parting, I shook hands with him, and invited him to Rushton, if ever he should come that way. He replied, “When you come to ‘Virginny,’ come and see me; I can’t stop, the ‘tug’ will be gone!”

(2.) *An Englishman—a very funny fellow.*

“Will,” honourably noticed in your last, is a short, thickset man, about five feet six, and is an industrious fellow. With the help of sheets he will grow peaches out of doors by the rivulet side, in ground that was originally a swamp, with any man in the world. So persuaded is he that the blossoms must not be wetted, that, if the weather looks fickle, he will not go home to dinner without putting up the sheets. The result of the last four years is given correctly in your last. “Will” is very fond of going to rose exhibitions. When it gets near the time, he fishes to know whether he is to go with such questions as these, “Had I better shave? Must I put on my best clothes?” and no peace is there in him till I announce the fact that he is to go. I took him to Langport with me, and both forgot to take the keys of the boxes; but with borrowed keys we unlocked our boxes, and won what he calls a “Fust Prize.” He has a great horror of third and fourth prizes, and when we win a second prize, he says, “I do not know how it is, but go where we will they always cheats ‘us,’ the nation gets wickeder and wickeder;” but if we win a “Fust,” he declares the nation is converted, and thinks that the millenium is set in. I sent him, solus, to Shepton Mallet, where he won a “Fust,” and on his return home in the night, in order that I might see the victory as soon as I was up, he stuck a notice on a stick opposite my door, which looked very like, “Fust Prize wind, holler agin.”

His delight at winning a “Fust” in London was so great, that he tipped “Cabby” so handsomely, that “Cabby” hoped to have the honour of driving him and the winners next year. At the

Waterloo Station I found him exhibiting my roses to English, French, and Jersey travellers (the two last could not have been less than 100), who divided the spoils, 188 roses. "Will" was uncommonly amused with the "furriners," who made faces and talked gibberish. He gave a bunch of Solfaterres to a "lady furriner," who, in reply to the gibberish of her companion, cried out, as fast as lightning, "we" "we" "we!"

Well, the spoils having been disposed of, the whistle blew, and off we went. I thought, of course, that I should now hear no more of "Will" and his "Fusts," but no sooner did he arrive at Southampton than he went to the only eating house open at half-past one A.M., and proclaimed "our" fame; so that when I went to get what he calls a "sanwig," I was accosted by the innkeeper, "Are you the gent that wonned a Fust in London?" I made a low bow, which, interpreted, meant, "I am that same,"—a similar bow to that of a heroine at a penny theatre, who hurls a look of defiance at the enemy of her lover, beginning at his shoe ties and ending at the top of his head! The issue was, I was intreated to send him some roses. I said, "Sir, I have skinned my rosery, and think that for some days there cannot be another 'Fust,' but you shall have some in the course of time." The next day, however, I cut from fifty to sixty as good roses as you would wish to see, and better far than my winners. These and a basket of Trollope's Victorias were sent to him, and I received a civil letter, and "Will" a present of stamps, which made him cry louder than ever, "There is nothing like a Fust in Lunnun; don't you think, sir, they will all be afeard on us next year?" adding, "who'd a thought that 'me' and you, going out of this scraggledy hole, could have wonned a 'Fust' in Lunnun? look at the rabbit scratches!" I replied, "A scraggledy hole, Will! there is but one nation, the Rushtonians, all the others are but so many populates. Henceforth, let London and Paris be abolished, and let Rushton be the metropolis of the whole world!" My fuggleman was not to be stopped, and as I bolted towards my room, I heard him say, "I shall dream all night we wonned a Fust!"

Sixthly. *The result of victory at the National.*

As money is soon spent, I shall buy two silver cups, of the value of 3*l.* and 4*l.*, and place them on my drawing room table, with the honours marked on them. Visitors will ask, What mean these cups? I shall then explain the National victories, and perhaps create another Rosarian, more able and more successful, but not more grateful to the Royal Society for their courtesy and liberal prizes, nor more friendly to the rose and the rose cause, than

*Rushton Rectory, Oct. 8, 1861.*

W. F. RADCLYFFE.

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ROYAL HORTICULTURAL SOCIETY'S FRUIT AND  
CHRYSANTHEMUM SHOW, NOV. 6TH AND 7TH.

THE display of fruit at this Exhibition was magnificent, and, con-

sidering the untoward nature of the 1860 season, remarkably so. The greater part of the hardy fruit exhibited was large and well grown, possessing those clear, mellow tints which indicated that they had ripened under a kindly sky; and doubtless very much of the excellence exhibited in the hardy fruit classes, was owing to the high temperature and bright sun of the past two months. In fact, the effects of climate on such fruits as the apple and pear was practically demonstrated by Mr. Lewis Soloman's collection. Such pears and apples had probably never been seen in Britain before; and, if we understood correctly that they had been produced some in Algiers and others in the south of France, we see at once what a favourable climate will effect (other circumstances being equal) in increasing the size, and giving those warm tints of colour which characterised the fruit in question—specimens of Uvedales St. Germain weighing considerably more than 3 lbs. each, Catillacs nearly 3 lbs., and Beurré Diels upwards of 2 lbs. each.

We must, however, bear in mind that such fruit as the above is the result of an extra degree of cultivation. Large showy pears and apples are valued in France much more for their appearance than their flavour, and are in great demand for dressing up the windows of the more celebrated "restaurants" in Paris. In some instances the rivalry between different establishments as to which can produce the finest display in this line, has led to their giving almost fabulous prizes for large pears and apples and other productions, and this has stimulated the French fruit growers to pay particular attention to their size and appearance, and has, doubtless, led to their selecting the most congenial soil and climate for their production. These helps, with well thinning the fruit and supplying the trees plentifully with water in dry weather, have resulted in bringing the culture of the pear to the highest perfection yet attained as regards appearance. Very probably, however, this overfeeding has tended to deteriorate their flavour, which, if subjected to the scrutiny of a taste, would have led the judges to have pronounced in favour of fruit grown by such exhibitors as Messrs. Ingram, Harrison, Dwerrhouse, and others.

The classes of Grapes, both black and white, were very superior—more particularly the Black Hamburgs and Frankenthals of Mr. Henderson, of Trentham, and the Black Hamburgs of Messrs. Hill, of Keele Hall, and Kay, of Finchley, all of which presented the best evidences of high culture—fine regular bunches, well-swelled berries, and the most exquisite bloom. There was also in the class for Black Grapes a good dish of the Lady Downe's grape and Black Barbarossa, with larger berries and a more compact bunch than is usually seen in this variety. The Lady Downe's grape is fast becoming a favourite late variety, and it certainly possesses many qualities to recommend it. A free setter, with good-sized berries of an intense black in colour, it has a fine appearance on the table, and, moreover, it keeps fresh and plump for a very long time after being ripe—we have, indeed, seen it very good in

March. The only drawback in our opinion to it is, that the flesh is somewhat hard, and deficient in the peculiar vinous flavour presented by the Black Hamburg and the St. Peter's grapes.

There was a dish of black grapes, wrongly marked Black Damascus, which struck us as being closely allied to, if not the identical, Black Tripoli, of Speechly—a grape we have not seen for many years. Perhaps Mr. Tillery may still retain it at Welbeck, or it may be found at Willersly Castle, in Derbyshire, or Donnington Park, in Leicestershire. We name this, as our recollection of it induces us to think it would be found a useful late grape. It must not be confounded with the Welbeck Tripoli, which is a synonyme of the Frankenthal Hamburg, and very different.

The Muscat Grapes, especially those shown by Mr. Tillyard and Mr. Hill, were equally on a par with the black grapes noticed above; as was also a dish of Mr. Mead's, except a defect in the colouring, which told against them.

In other white grapes Mr. Hill had very fine Trebbiano; Mr. Meredith, White Nice; and Mr. Tillery, Trebbiano. This was also a good class.

The Pine class was good on the whole, but not extra so. Some fine Cayenne were exhibited by Mr. Ingram, of Frogmore, but not equal to what he has shown on former occasions. The heaviest was contributed by Mr. Floud, a smooth Cayenne, nearly 8 lbs. Mr. Ingram came next with a similar variety, and Mr. Tillyard followed with a handsome Ripley Queen. We noticed also two or three handsome Jamaicas.

We have only space to notice that the most meritorious collection of Pears came from Oxenford Castle, Scotland, contributed by Mr. Anderson, and the fact that they were placed first will encourage our friends in the north to follow up this success. This collection contained twenty-two distinct kinds, well and evenly grown, and correctly named, and, although there were many finer dishes individually in other collections, yet we consider the judges acted correctly in placing them first on the list. The other principal exhibitors in the Pear Class were Mr. Ingram, many of whose specimens were finely grown and beautifully coloured; Mr. Dwerrihouse the same; Mr. Harrison ditto; Mr. Cox and Mr. Spivey, Mr. Tranter and others. The highest flavoured pear in the class of single dishes was the Glou Morceau, the next Marie Louise, and the third Beurré Diel. Some fine dishes of the Seckle pear were exhibited. This exquisite but short-seasoned pear, however, was too ripe to stand a chance with the above.

The class for Uvedales St. Germain, and Catillaes was well filled. That for Kitchen Pears appeared to have been misunderstood by exhibitors and judges—at least by some—or why should the Catillac, of which a fine dish was exhibited, have been excluded?

Apples we can only notice by saying how much they exceeded our expectations. The quality, as before observed, was every-

thing that could be desired, and the quantity exhibited very large. Cox's Orange Pippin maintaining its ground as the best dessert variety, by taking all the prizes in its class.

Plums were not altogether so fine or so largely shown as on previous occasions. The Reine Claude de Bavay looked promising, but the judges preferred the Imperatrice.

Decidedly the finest dish of autumn Strawberries we ever saw were the Sir Harry's, exhibited by Mr. Widdowson—they would have been creditable at a May show.

Mr. Dwerrihouse's Melon—Heckford Hybrid—was extra fine for flavour, and we should like to know how Mr. Dwerrihouse manages this so late in the season.

In the class for Pears Stewed simply, it was the condition that the stewed pears in glass jars for which prizes were to be given should be prepared without any other admixture than their own juice, as the only way in which their respective merits could be ascertained correctly. On this occasion the highest flavoured and richest jar was composed of the Swan's Egg pear, and prepared by Miss Ingram; a second jar of the Vicar of Winkfield was also nearly equal to the above, by the same lady; the second prize was awarded to the Chaumontel, prepared by Mrs. Powell, of Old Windsor.

In the Miscellaneous Class was a very interesting collection of thirteen varieties of Grapes, exhibited by Mr. Hill, which obtained the first prize. There was also a fine dish of the Salway Peach, sent by Mr. Ingram, and some Chinese yams by Mr. Ivery; and, in conclusion, let us ask, What real merit belongs to the Eugenia Ugni, which we saw in several instances exhibited? Surely this is not worth house room.

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### TREES APPARENTLY KILLED BY FROST RECOVERING.

BE cautious in cutting down trees which were apparently killed by last winter's frost. Rather late in the day to talk about this, seeing that hundreds of trees and shrubs have long ago been consigned to the fire; nevertheless some may yet be standing, and if not, the caution is worth naming, if only to afford a hint to be treasured up till the next visitation. I am old enough to remember the frost of 1838, and the havoc it made with evergreens; at that time many of my Cypresses, Junipers, and Arborvitæ, suffered greatly, as well as Bays and other things. At that time I did not cut them down, but allowed them to stand, brown and scorched as they were, most of the summer. By and bye many of them indicated a move in the sap, which first showed itself by the bark becoming greener, from the lower part of the trees upwards, and after a time, in the case of the Thujas and Cypresses, the central or mid-rib of the leaf became green; and this vitality gradually spread, following the large channels for the ascent of the sap which accompany the venation of the leaves, and ultimately

spreading itself over the entire surface. With some specimens it was not until late in the year 1839 that the edges of the leaves became green, others recovered more quickly; and excepting losing the extreme points of the shoots of some of my trees, nearly all recovered, while my neighbours' trees of similar kinds were grubbed up and lost. The last winter was even more severe in its effects than that of 1838; and as since that period the introduction of Coniferæ and evergreen shrubs has greatly increased, our losses have been correspondingly great. I, however, allowed all my trees to stand, to see what power they possessed to regain that vitality, which although I felt sure was quite destroyed in many instances, might only be paralyzed in others, and hence susceptible of recovery. I have a number of the Italian Cypresses which to all appearance were dead, and finding the bark quite black down to near the ground, I gave them up for lost, but still allowed them to stand; to my great delight, in June, I observed the bark of some of them was regaining its green appearance, and soon after a number of the trees produced several live shoots from the mass of dead spray, and this living growth has spread itself so far upwards, that the trees are green to within two feet of their tops; but as these parts were quite soft and unripe, I do not expect they will regain their vitality; others worse injured are now commencing a similar growth, and I see that, with only one exception, the bark of the rest—dead, so far as we could discern in the spring—is becoming green, and I am in hopes all, with probably one exception, will yet revive, although they may not entirely recover themselves until next season. I mean if the next winter is severe to cover them with a double tiffany-screen, as a second frost of any intensity may kill them outright in their present weak state. Bays, Evergreen-oaks, Arbutus, and several species of Mexican Junipers, and other evergreens, are gradually recovering, as are most of my Cupressus Macrocarpas, though I fear some are dead.

When recovery takes place, I conclude the frost has not penetrated to the centre of the plant, and consequently the sap-vessels then are uninjured; and as the sap-vessels in the roots are also preserved, when the season for growth arrives the upward flow of sap takes place as usual, and gradually forces itself upwards, filling the cells, to all appearance dead, with a living fluid, and spreading itself horizontally to the outer bark. I observe the progress of this new life upwards is gradual, which may arise from its having to reorganize the cells through which the sap must pass upwards; but whether I am right or not the phenomenon is a curious one, and worthy the attention of physiologists. One thing is certain, vegetable tissues, to all appearance dead and incapable of performing their functions, revivify and regain that power supposed to have been destroyed.

The effects of frost on the same species of plants affords striking evidence how even the same batch of seedlings will differ in their power of withstanding the effects of cold. I have a large

*Pinus Insignis* here, near, if not quite, 60 feet high, which has given me many cones from which numerous seedlings have been raised. The parent tree was a very young plant in 1838, yet it was not then injured, nor has it been in subsequent years, although I have lost others growing near it. It is now intensely green, going through the last winter unscathed, and yet most of the seedlings raised from it were killed, although more sheltered than the parent tree, which is fully exposed. This fact furnishes us with another physiological problem not easily solved.

J. T.

### A WORD OR TWO ABOUT WATERING PLANTS.

THE following cursorily written remarks are not intended for practical gardeners, but for inexperienced amateurs and young gardeners; indeed, principally for a portion of the latter. For, whilst we bear willing testimony to the conduct of a numerous class of young men, who are deeply anxious to learn thoroughly everything appertaining to their profession, and solicitous to discharge properly the duties confided to them; there is also, we must (however unwillingly) confess, a large class who take but little interest in their business. Watering is one of the most important operations in plant culture, and yet how often is it most improperly performed by the latter class of young men. I believe I do not in the least exaggerate when I say that more plants are killed by improper watering than from all other causes put together. No matter how perfect the drainage may be, nor how carefully the soil may be prepared, if watering be improperly performed failure is certain.

Often and often have I taken considerable trouble to explain to young men the requirements of different kinds of plants, and of plants in different states of growth; and yet, most annoying, the next watering has been performed as indiscriminately as former ones, without any regard to the condition of the plant or the state of the soil in the pot.

In small places, where a gardener can himself daily inspect everything under his charge, no very serious injury can occur under his experienced eye, but in places of large extent the case is different. The carrying on of new work or other improvements in a distant part of the grounds, will often for several days prevent the gardener from minutely inspecting matters of this nature, and the consequences are often serious before detected.

Heaths may be beyond recovery before the evil is found out; even soft-wooded plants will often suffer from a similar cause. You go into your stove some morning and in looking round see a fine plant of *Clerodendron* dropping its flowers before they are expanded; you examine the surface of the soil in the pot and all seems right, but give the pot a good rap with your knuckles and you at once discover the cause; you call your man, John Careless, and ask him why he has not followed your directions by properly

watering the plants? His answer is, he has done so, regularly; which, so far as wetting the surface goes, he perhaps has done, but so far as wetting the entire ball of earth, it has not been done for weeks, hence the cause of mischief. Take the plant and immerse the pot in a cistern of water—you see it bubbling for an hour or two. After the ball of earth has become thoroughly moistened, return it to its old quarters in the stove, and in a week or two you will see an improvement in expansion of the flowers, &c.

Young men, generally from want of thought, fall frequently into the error of giving some plants too much water, whilst others get too little. Succulent plants and bulbs require little or no water in winter; most plants not in active growth require to be carefully watered during winter. All plants in active growth require good supplies of water during the summer months; when watered, sufficient should be given to moisten the entire ball of earth, and not little drops sufficient merely to moisten the surface.

AN OLD GARDENER.

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### TRADE LISTS.

*Descriptive Catalogue of Roses, by Thomas Rivers, Sawbridge-  
worth, 1861.*

The name of Rivers has long been a household word with rose growers on all matters pertaining to the queen of flowers; and the present Catalogue yields to none of its predecessors in that accurate perception of the properties and habits of new roses which make the author's descriptions invaluable to purchasers, who may safely rely on the characters here given, should they not have seen the roses in bloom themselves. The different selections have been well weeded out, so as to have none but good and distinct flowers in each class.

*William Paul's Rose Catalogue. Cheshunt Nurseries and  
Seed Warehouse, Waltham Cross, 1861-62.*

Mr. William Paul here gives us the result of his own close observation on the respective merits of the roses he has inserted in each class of his very carefully prepared Catalogue; after this we need scarcely say that Mr. Paul's judgment of the rose will stand the strictest scrutiny, and that therefore purchasers may safely rely on the description given of each flower, should they decide for Mr. Paul to select for them.

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### CALENDAR FOR THE MONTH.

*Azaleas and Camellias.*—Plants of the former which have been kept in heat until now must not, when removed to a cool house, be exposed at once to currents of cold air, but should be placed, for a fortnight or so, where they can be kept rather close. If not already done, get the whole stock neatly tied as soon as possible,

and the plants nicely arranged, giving each ample room, and keeping them near the glass. Ventilate freely on every favourable opportunity, but through ventilation during cold winds only tends to brown the foliage and cause it to drop prematurely; and this should be avoided as long as the plants appear to be making up, giving air on cold rough days on the sheltered side of the house only, and this but sparingly. Attend carefully to the plants with water, for although they will require but comparatively little for some time, they should be examined twice a week so as to avoid the chance of any of them being neglected, and when a plant is found to be dry it should be watered thoroughly, giving enough to moisten the ball throughout. Plants which set their bloom buds early in the summer, and have had a long rest, may, if wanted in bloom as soon as possible, be placed in a moist warm house, where, if properly attended to, they will bloom as finely as could be desired, and may be had in flower by the new year, or even by Christmas, if a high moist temperature can be maintained. But plants forced into bloom in a high moist temperature must not, if they are expected to last long in beauty, be removed to a house where the temperature falls much below  $50^{\circ}$ , for the flowers would soon perish in a cold dry airy house. Camellias in bloom must be carefully guarded from drip, and should also be afforded a free supply of air on every favourable occasion, using fire heat whenever this may be necessary to expel damp, for these soon droop in a close damp atmosphere. If any of the plants of these are infested with scale, these should be thoroughly cleaned before the bloom buds are so far advanced as to be liable to be injured by the operation, and if too late for this, see that they are thoroughly cleaned before the wood buds push. Attend carefully to the plants with water, particularly those well furnished with bloom buds, as any excess, either way, might cause these to drop prematurely.

*Conservatory.*—Every possible effort should be used to maintain a good display of bloom here, for as flowers in the open garden are destroyed, and the weather not likely to be favourable for outdoor exercise, this house will be more resorted to, and its inmates, if attractive, valued much more than they would be at any other season of the year. At present the house will be gay with Chrysanthemums, but the beauty of these will, in most places, have passed away before the end of the month, and every means should be used in order to be prepared to occupy their place with equally showy plants. And where there is a good stock of Camellias properly prepared for winter blooming, Azaleas, Epacrises, Acacias, Daphnes, Chinese Primulas, Mignonettes, Tree Violets, and the many other plants which might be named, it will not be difficult to keep this house well furnished with gay plants in full beauty for some months to come. If not already done, trim the twiners, cutting back freely such things as Passion-flowers, and reducing the dimensions of all as far as can consistently be done, so as to admit as much light as possible. Such things as Camellias, Acacias, Luculias, &c., planted in the borders, which bloom about

this season, should be liberally supplied with water at the root, but plants which are comparatively dormant, and especially deciduous things, and such as are found to be scarcely hardy in the temperature of this house, cannot be kept too dry at the root while in a dormant state. Give every attention to properly arranging the plants in bloom, and see that the house and all its inmates are perfectly clean and arranged to the best advantage. Keep the temperature about  $45^{\circ}$  by fire heat, and give air on every favourable opportunity, but sparingly, and so as to avoid cold currents; and during damp cloudy weather, when the atmosphere is too damp, a little fire heat should be used during the day, giving a little top air, so as to dry the house. *Cold Frames.*—Give air freely here whenever the weather will permit. Water very cautiously, and on the mornings of bright days, especially hard wooded plants, which it may be necessary to winter here, keeping these rather on the side of dryness. Cold Frames are not, however, suitable places for wintering tender greenhouse plants, and such things as *Boronias*, *Leschenaultias*, *Gompholobiums*, &c., should be removed at once to safer quarters. Be prepared with efficient covering, and whenever there is any indication of frost let the glass and sides of the frames or pits be well protected. Keep a sharp look out for aphid and mildew, and apply the proper remedies directly either of these pests make their appearance. *Greenhouse.*—Proceed as fast as possible with tying and trimming up the plants, and heaths and many other hard wooded plants, if in want of more pot room, may be shifted. But in re-potting at this season, great care should be used to have the ball of the plant, and also the fresh soil, in a proper state as to moisture. *Pinelia Hendersonii*, *Leschenaultias*, and many other hard wooded plants, are liable to the attacks of aphid at this season, and if any of the stock seem to be infested with this pest, the house should be smoked, otherwise every suspected plant removed and well smoked. Water very carefully, but examine the plants frequently, and when one is found to be dry give sufficient water to moisten the ball throughout. Ventilate freely on mild days, but cautiously, and on the sheltered side of the house only, during cold frosty winds; and the front lights against such things as *Boronias* should not be opened at present. Use fire heat only when necessary to prevent the temperature falling below  $38^{\circ}$ , and occasionally, during damp weather, a little may be necessary to dry the atmosphere. *Flower Garden.*—Look over and attend to last month's directions. If not already done, get spring flowering bulbs planted at once. Roses which are at all tender, such as *Teas* and *Chinas*, should be afforded the protection of a good thick coat of dry litter, or fern over their roots, and after last winter's experience we intend to give hybrid *Perpetuals* on their own roots—and we neither have nor intend to again have any plants of these worked above the soil—similar protection. If this cannot be done where the plants stand without causing a littery appearance where it may be objectionable, they may be removed and laid in rather thickly where they can be

hooped over and well covered with mats, &c., in case of severe frost. *Stove.*—Look over and attend to last month's directions as to cleaning the plants, and as many of these may now be cut back and thinned, cleaning will be much more easily accomplished than at any other season. Cut over *Ixoras*, well clean their foliage, and tie out their shoots into the desired form; also prune *Dipladenias*, *Allamandas*, &c., well thinning out the wood, and towards the end of the month these may be shaken out and re-potted, placing any of the plants wanted to bloom early in the warmest end of the house. Water very sparingly after re-potting, particularly plants that have been partially disrooted, until the roots get hold of the fresh soil, but sprinkle such with the syringe, as the state of the atmosphere may render necessary. Use fire heat as sparingly as possible, and keep plants which are in a dormant state rather dry at the root.

*Cinerarias.*—Little can be said regarding their general treatment other than that recommended last month. Large plants that are intended for exhibition should now have every attention paid them. Remove all superfluous leaves and small suckers, and peg down the strong shoots and foliage. To admit of the light and air freely to their centres, stand them thin and place as near the glass as possible; give air freely on every favourable opportunity, and be careful to avoid as much as possible all cutting and frosty winds.

*Pelargoniums.*—At this season water only when absolutely necessary, and ventilate as freely as the weather permits. Let the plants stand as thin as your room will allow, and carefully train and tie out the shoots, a process which will materially strengthen them. It will be impossible for you to pay too much attention to cleanliness; pick off every dead leaf as it appears, and examine the plant frequently for insects. Avoid giving too much heat, as, at this season, it is quite sufficient if frost and damp be entirely excluded.

*Hardy Fruit.*—It is very probable that in many parts the soil was too dry during the early part of last month for the operation of removing and planting fruit trees as previously advised; therefore no time should now be lost in forwarding this work early in the month, before severe frost sets in. Proceed with the pruning and nailing of Pears, Plums, and Cherries, at all times when the weather is mild. See that the trees are free from scale and moss; if any require dressing, they had better be unnailed and painted over with a mixture of soft soap, tobacco-water, and urine, thickened with clay. Strong lime water will destroy moss.

All small fruit-trees, with the exception of Gooseberries, may now be pruned, and embrace the first opportunity to wheel rotten manure on the quarters, in readiness to be forked in about the trees when the weather is open. Trench and manure ground intended for new plantations, as well as for planting Strawberries in the spring. Protect Figs from frost, either by covering with fern or by tying them in bundles and binding them with hay-bands. It

is also a good plan, when the trees are trained in the fan form, to unnailed them, and bring the branches to the bottom of the wall, and cover them with stable litter. Attend to the fruit store and see that all decayed fruit is removed. No air or light is needed after this time, except the store is damp; if so, it should be ventilated in dry weather.

*Forcing Ground.*—Give air to Asparagus as soon as the heads appear above the soil, and introduce a succession of roots in the forcing pits, treating them as previously advised. If these are forced in the open ground, the linings should be turned or renewed so that a good heat be maintained; cover the frames at night with mats or litter. A fresh supply of Seakale and Rhubarb roots should also be brought in; the latter may be grown in any dark part of the forcing house. Sow French Beans in succession, and keep a good heat to those in a forward state; top the plants as soon as they have made the second leaf. Small salad should be sown at regular intervals, according to the supply required.

Keep up a moist temperature of about 60° in the Mushroom house; collect fresh droppings, and place them in a heap under cover to heat, in preparation for making new beds at the end of the month. Still continue to keep up a steady night temperature of about 75° in the Cucumber house, and give air through the day at every favourable opportunity. Stop and tie the plants as they progress; do not allow the leaves and shoots to get crowded together, if so, they will soon get yellow and unhealthy. Water sparingly in dull weather, and when liquid manure is applied, it should be given when the soil is dry.

*Peach House.*—Apply fire heat with caution to the early house, and do not allow the night temperature to exceed 50°; the day temperature may range 10° to 15° higher, with plenty of air when the weather is favourable. Syringe the trees occasionally in clear weather, and close the house early in the afternoon. This treatment should be continued till the blossoms begin to expand. Protect the outside borders from frost and drenching rains, by covering with fern or straw. Get the trees tied and dressed in the succession house in readiness for starting by the end of the month.

*Cherries.*—If early fruit is wished for, the trees should be placed in the early house by the end of the month. Admit plenty of air through the day, and keep a moist night temperature of 45° to begin with. Plunge the pots, and top dress them with loam and rotten manure. The May Duke is the best kind for early work.

*Strawberries.*—Attend to previous directions in regard to keeping the pots dry and sheltered from frost. Some of the early kinds, such as Keens' Seedling and May Queen, may be placed in the forcing house toward the end of the month. No water should be given for a time, except they are very dry.

*Pines.*—Collect plenty of leaves in dry weather, and place them together, to be in readiness for renewing the beds in the spring.

Where succession plants are growing in dung-pits that are not heated in any other way, they should have the linings turned or renewed, according as it may be required, so that a temperature of  $65^{\circ}$  is maintained, and the bottom heat should not fall below  $75^{\circ}$ . These will not require any water or syringing for the present. Give a little back air in good weather, and cover the pits early every evening, especially if frosty. Plants in fruit should not suffer from drought; keep up a moist high temperature, and close the house early after bright days, and if much fire-heat is used syringe the plants, with the exception of those in flower. Water should now be withheld from those plants intended for starting into fruit next month. The temperature should be increased to  $80^{\circ}$  or  $85^{\circ}$ , with a dry atmosphere, and if the bottom heat is on the decline, and the plants are in pots, the bed should be turned and the plants re-plunged. If any strong suckers are making their appearance on these plants, they had better be removed at once.

*Vinery.*—If the early house was started last month, the temperature should be gradually increased. At present the night temperature may range from  $50^{\circ}$  to  $55^{\circ}$ , and  $60^{\circ}$  by the end of the month; do not hurry them in dull weather, but during sun heat the temperature may range  $15^{\circ}$  higher, with air at every opportunity. Keep up a moist atmosphere by syringing and sprinkling the floors, especially if the house is heated with flues. Thin and tie in the shoots as they advance in growth, and stop them as soon as the bunch is visible. Dress and tie the vines in the succession house, and prepare for starting them by the middle of the month. All vines in late houses should be pruned as soon as the crop is clear.

*Kitchen Garden.*—If severe frost sets in, Celery, Cardoons, and Artichokes should be covered with straw or litter. Endive may be taken up and placed thickly together in pits or sheds to blanch. Go on digging, manuring, and trenching all vacant ground, to be in readiness for cropping when required; this is the principal work to be done in this department for the present. A crop of early Peas may be sown, Sangster's No. 1 is a good early kind. A small sowing of Mazagan Beans should also be got in; choose a warm sheltered situation. Give air every fine day to Lettuce, Cauliflowers, and other plants under glass. If slugs are troublesome in the frames dust the plants over with slacked lime.

J. P.

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#### WORK FOR SMALL GARDENS IN DECEMBER.

*Auriculas.*—Quite a time of rest for these; still keep the plants clean, pick off dead leaves, and give only so much water as will keep them from flagging. Cover up at night, so as to keep out frost.

*Carnations and Picotees.*—The same applicable here. Damp is the great enemy: when black spots appear on the leaves, clip them off with a pair of scissors, as it is apt to spread.

*Chrysanthemums*.—Cut down blooming stems, and keep the pots where frost will not injure them. Discard second rate varieties, and make notes of good ones to fill up their places by and bye.

*Geraniums*.—The roots should now be filling the pots, so that all after work should show in the plant itself; fumigate to keep down green fly.

*Dahlias*.—Look over the roots to see that damp does not reach them.

*Pansies*.—Keep clean, and only water as really needed.

*Pinks*.—Frosts such as we are having now, after so much wet, will probably loosen them; see to their being firm in the ground, and when the weather is fine gently stir the surface of the beds.

*Roses*.—All planting should be over by this time, and if the weather be severe they should be protected. It is a good plan to lay tiles round the roots of those on their own bottoms, as it keeps them dry, and prevents frost getting at them so readily.

*General Work*.—Now will be the time to see that stakes, labels, &c., are ready for next season; during the dull part of the year it is well to be employed in work which can ill be done at the more busy season.

*Deal.*

D.

#### OBITUARY.

Died on the 30th October, at Derby, Thomas Adams, Esq., a kind, generous, and Christian Florist, for many years an ardent cultivator and exhibitor of the Tulip.

#### TO OUR READERS.

AND now, kind readers, Farewell! With this volume we close a goodly career of fourteen years, during which "THE FLORIST" has maintained an honourable and we believe an influential position in garden literature. With it, too, we terminate the present series of this work, but only to re-appear on the first day of the new year in a new and more attractive form, under the designation of "THE FLORIST AND POMOLOGIST." We trust that the smiles that have attended us during the past days of our existence will then be ready to cheer us on in the course which lies before us—Farewell!

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