

PREFACE.

IN presenting our readers with the **SECOND VOLUME** of the **FLORICULTURAL CABINET**, which is completed with the present Number, we feel that a heavy debt of thanks is due from us, and which we unfeignedly offer to our numerous subscribers and contributors; for we believe no other periodical work on Floriculture or Horticulture has ever reached so extensive a circulation, or enjoyed so large a portion of public patronage as our own.

At the conclusion of our First Volume, we pledged ourselves that, with the valuable assistance of our numerous contributors, we would endeavour to render this our Second Volume still more worthy of the support of our friends; and we think the increasing demand which our work experiences is sufficient evidence that our pledge has been fulfilled, and that our labours are approved; and we have no hesitation in affirming, that such a body of Floricultural intelligence as is contained in the **CABINET** will not be found in any other existing publication.

For a large portion of the valuable and important information which our pages contain, we are indebted to our numerous kind and liberal contributors. We are grateful for their assistance, and respectfully solicit their continued aid; feeling quite confident that, with such support, the succeeding Volumes of the **CABINET** will be presented to our readers equal, and in some respects superior, to those already published, and still more deserving of their patronage.

Wortley, Nov. 20th, 1834.

THE
FLORICULTURAL CABINET,

JANUARY 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On Forcing the Rose, more particularly the Rose du Roi, or King of the Roses.* By Mr. WILLIAM WOOD, Nurseryman and Florist, Woodlands Nursery, Maresfield, Sussex.

On a perusal of the *Floricultural Cabinet*, I observe one of its correspondents requests information on the best method of forcing Roses, (Vol. I., p. 163,) and other persons I see wish to know the best sort of Rose for the purpose. I feel much pleasure in not only having it in my power to communicate a method of culture which I am certain will amply repay for the attention given it, but also to add my first mite of contribution to the deservedly popular *Florist's Magazine*.

Before I detail my mode of culture, I beg to remark that the Rose du Roi, or King of the Roses, is perhaps the best Rose known for the purpose of forcing; in fact, out of twelve hundred kinds which I grow, I have not one more deserving of general cultivation, nor do I believe a better Rose exists in any other collection. It continues to bloom in the open border for eight successive months; the flowers are of a fine bright deep red, very showy, with a fine dark green foliage, closely attached to the flower, two of which will form a beautiful bouquet; the flowers are also

very fragrant. With attention a succession of flowers may be obtained, so as to have them all the year. This rose ought to have a situation in every flower-garden.

TO HAVE THEM IN BLOOM AT CHRISTMAS.

Culture.—About the first week in November, I plant them in pots of the 24 size; the soil I use is a good strong Melon mould. After potting, I give them a good watering, in order to settle the soil around the fibrous roots. Having a deep frame provided for the purpose, a quantity of old tan or rotten leaves is thrown into it; the pots are then plunged therein, taking care to plunge them so deep that the rims are two inches at least below the surface. The frame is formed with sides like lattice-work; it is constructed in this manner for the purpose of admitting heat to be applied. No bottom heat is required.

After having plunged the pots, I keep the frame-lights off for ten or twelve days, and during that time, if no rain falls, I give them two or three good waterings. At the end of that time, I cut the shoots back to two buds. In performing this operation, care is taken to hold the plant firm, so that the roots are not disturbed by it. The sashes are now put on, and covered with mats; a good lining of hot stable-dung is also placed round the frame. I allow the mats to remain on ten or twelve days. By this time the plants will have pushed shoots two inches long. I then take the mats off in the day-time, and raise the lights about two inches, for the admission of air; this is increased as the strength and growth of the plants advance, observing to give the most air when the weather is fine and mild. In five or six weeks from the time of applying the lining of dung, I have the plants in full and vigorous bloom. Water is applied when found necessary, using it in a tepid state.

WILLIAM WOOD.

Woodlands Nursery, Nov. 17th, 1833.

ARTICLE II.—*On Forcing Roses.* By Mr. J. R. WILLIS, jun., at Messrs. WHITLEY, BRAMES, & MILNES'S, Fulham Nursery, near London.

I am much pleased to observe that the culture of that universally esteemed genus of plants, in all its fragrant and brilliant

varieties—the Rose, begins to occupy a place in the pages of the *Floricultural Cabinet*. From the vast extent of species and varieties which the genus includes, the splendour and abundance of the flowers, and their exquisitely refreshing fragrance, we may very certainly calculate that remarks upon their culture, &c. will occasionally be presented for insertion in the *Cabinet*. To add my mite on the subject, I herewith transmit some brief particulars on forcing the Rose, elicited by the query of a correspondent which is given at page 163, (Vol. I.)

In the first place, collect an equal portion of good substantial loamy soil, well-rotted leaves, and very rotten dung from an old cucumber-bed, mixing them well together; having done this, procure some pots from nine to twelve inches in diameter, placing three plants in each pot. The plants that were forced in January and February I repot about the latter end of August. I then let them remain in the open air till December, when I remove them into the hothouse. Before I take them to that situation, I cut back the young shoots to two or three eyes from the old stem. After being thus pruned, for the first three weeks I keep the house to from 60 to 70 degrees of heat, and then increase it to from 80 to 90 degrees. The plants have plenty of drainage given in the pots at the time of potting, so that water will pass off freely; thus a proportionate supply of fresh water being required, the plants are benefited by it. Whilst in high temperature, it is advantageous to the plants occasionally to syringe them over the tops.

I would advise not to force very rapidly at the commencement, otherwise the buds will push weakly shoots, which will produce few, if any, flowers, and those even very weakly. Begin with the low temperature, and gradually increase to the degrees stated in the period above described. If this, with the other particulars, be attended to by the correspondent who, in page 163, asks for information, he will be amply repaid with a good bloom.

Oct. 25th, 1833.

J. R. WILLIS, Jun.

ARTICLE III.—*On Striking Pelargoniums*. By SNOW-DROP.

Cuttings of Pelargoniums and Geraniums succeed well under very simple treatment, and, although complicated means are gene-

the shape of a regular pyramid. Those who have seen this tree in its native soil, blooming with its large white fragrant flowers disposed amidst the rich foliage of the tree, agree in considering it one of the most beautiful productions of the vegetable kingdom. In Carolina it blossoms in May, and the seeds are ripe in October. In its native climate it grows only in cool shady places, where the soil is composed of brown mould, and is loose, deep, and fertile. The most northern point in which this tree passes the winter in the open air, is about Nantes, in lat. $47^{\circ} 13'$; but it begins to bear ripe fruit about Grenoble, in lat. 45° . In England the *Magnolia grandiflora* is more injured by being planted in an ungenial soil than from the severity of the climate; the fact is, the soil should be that above described, but not an insulated portion, as is mostly the case in practice, by digging a hole and supplying it to the plant merely to that extent, whereas it should be general over a large extent of surface, so as to affect the atmosphere by its peculiar exhalations, thus acting on the leaves as well as on the roots. The *Magnolia grandiflora* was introduced into England about 1731.

Magnolia cordata, Heart-leaved Cucumber Tree, in its native soil of the banks of the river Savannah, in Upper Georgia, attains to forty and fifty feet in height, and from twelve to fifteen inches in diameter. The leaves are from five to six inches in length, and from three to five in width. The flowers, which appear in April, are yellow, and are nearly four inches in diameter. The tree is very hardy and ornamental. Introduced into England in 1801.

Magnolia tripetalæ, Umbrella Tree, is found in soils deep and fertile in the northern parts of New York, and is common on some of the islands of the river Susquehanna. Near the great swamps of South Carolina and Georgia, it is almost invariably accompanied by the *Magnolia grandiflora* and Swamp Chesnut Oak. It is of humbler growth than the *M. grandiflora*, seldom attaining to thirty-five feet in height, with a diameter of six inches. The leaves are eighteen or twenty inches long, and seven or eight broad. The flowers are white, and seven or eight inches in diameter. The fruit is four or five inches long, and two inches in diameter. The tree is highly ornamental, and very hardy. Introduced into England in 1752.

Magnolia glauca, Glaucons-leaved.—This tree is found common in Lower Jersey, but is also found in latitude 45° 50', near Cape Anne, in Massachussets, North America. It generally attains to 30 feet in height. At New York it yields fruit at the height of six feet. The flowers are fragrant, and the bark of the roots has an aromatic odour and a bitter taste. Introduced into England in 1688.

Magnolia acuminata, is common in all parts of the United States of America, where it is generally known under the name of the Cucumber Tree. Its stature is similar to the *Magnolia grandiflora*, rising to seventy feet, and sometimes even as high as ninety feet. It is found as far north as the 43rd degree of north latitude. The trunk is perfectly straight, of an uniform size, and often destitute of branches for two-thirds of its length; the summit ample, and regular shaped. The flowers are from five to six inches in diameter, of a bluish white, having a feeble odour; but as they are so large, and are numerous, they have a fine effect in the midst of the upper foliage. In England this tree is perfectly hardy, and attains to a considerable size. Introduced into England in 1736.

Magnolia auriculata, Long-leaved Cucumber Tree, is equally remarkable with the *Magnolia tripetalæ*, for the beauty of its foliage and the size of its flowers, which are also of an agreeable odour. It is found only in a small tract far retired in the country, at the distance of 300 miles from the sea, on a part of the Alleghany mountains. In its native soil it attains to fifty feet, and a diameter of fifteen inches. The leaves are of a light green colour, of a fine texture, eight or nine inches long, and from four to six inches broad. The flowers are white, and from three to four inches diameter. It is a hardy tree, and very ornamental for pleasure-grounds. Introduced into England in 1786.

Magnolia macrophylla, Large-leaved Cucumber Tree, is more remarkable for the superior size of its leaves and flowers than any other species of this genus. It resembles most the *Magnolia tripetalæ* in its general habit of growth, and is generally found growing in company with it. The leaves are sometimes thirty-five inches long, and nine or ten inches broad. The flowers are white, fragrant, and larger than those of any other species of *Magnolia*, being sometimes eight or nine inches in diameter. The buds are compressed, instead of being rounded at the end, as

in the *Magnolia tripetalæ*, and they are covered with a soft, silvery down; this circumstance affords a ready distinction between these species at that season when the flowers and leaves are absent. The tree is highly ornamental. In its native soil it grows to the height of forty feet. Introduced into England in 1800.

The other species of *Magnolia* in the gardens of England come at present, or as far as experience of their habits in this climate indicates, exclusively under the head of dwarf ornamental plants or shrubs, and for the present they are omitted in this enumeration, but I will ere long send you a few remarks upon them; also, at the same time, I will give you my opinion of the method which should be adopted in planting the seven varieties already enumerated.

MAGNOLIACEÆ.

ARTICLE VI.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

I have very frequently felt the want of a list of Roses, which should contain a description of the colour of the flowers, &c. This deficiency, I am pleased to say, I had most agreeably made up a few days since, by having a catalogue put into my hands of a thousand sorts cultivated by Mr. WOOD, Nurscryman, Woodlands, near Maresfield, Sussex, and of Paris. The description in the catalogue pleased me so much, and afforded me information at once so useful and interesting, that I resolved on arranging the kinds alphabetically, which is not done in the catalogue, and forwarding the list for insertion in the *Cabinet*, believing it would be found of use to a great portion of its readers.

GARDEN VARIETIES.

| NAMES. | DESCRIPTION. |
|----------------------------|------------------------------|
| 1 Aberge..... | Light blush. |
| 2 Abundant | Blue purple. |
| 3 Achates | Small purple. |
| 4 Achille | Beautiful globe, bright red. |
| 5 ——— | New, bright pink. |
| 6 Actavit | Fine cherry red. |
| 7 Adelaide d'Orleans | Large bright pink. |
| 8 Adèle Heir | Fine close deep crimson. |
| 9 A Feuille de Letus | Bright pink. |
| 10 A Fleur renoncule | Small drooping. |
| 11 African Black..... | Deep crimson. |
| 12 Agathe | Fine deep blush. |

| NAMES. | DESCRIPTION. |
|----------------------------------|-------------------------------------|
| 13 Agathe carnée..... | Small pink blush. |
| 14 ——— des Dames | Bright shaded crimson. |
| 15 ——— de Francfort | Fine light crimson. |
| 16 ——— du Portugal | Scarlet and purple mottled. |
| 17 Aimable Ami | Very pretty light pink. |
| 18 ——— beaute | Pale blush. |
| 19 ——— Noir..... | Deep dark velvet. |
| 20 ——— Princesse..... | Large deep pink. |
| 21 ——— violet | Good violet. |
| 22 A la creme | Cream colour. |
| 23 A la mode | New, red. |
| 24 ——— de Paris..... | Very brilliant red. |
| 25 ——— nouvelle..... | Fine purple. |
| 26 A l'Angloise | Pinkish red, very double. |
| 27 Alaturzi nouveau | Light and dark purple. |
| 28 Alexandrine | Fine spotted purple. |
| 29 Alexandrian | Beautiful fine red, very double. |
| 30 Alphonse..... | Fine double, bright small red. |
| 31 Altum | Light red purple. |
| 32 Amalade | Delicate and changing pink. |
| 33 Ambroise de Lamela | Red. |
| 34 Amœna | Variegated red. |
| 35 Amine | Light purple. |
| 36 Amora | New, crimson. |
| 37 Anna Marie..... | Blush. |
| 38 Anemoniflora | Small pink blush, pretty. |
| 39 Augustine | Large double red. |
| 40 Aninon | Pale blush. |
| 41 Autrobus | Light red and crimson. |
| 42 Archevé que de l'Amberge..... | Purple and scarlet, dark. |
| 43 Arcie | Scarlet. |
| 44 ——— Superbe..... | Beautiful large red. |
| 45 Aristide | Light pinkish red. |
| 46 Assyria..... | Small fine pomponé blush. |
| 47 Athalante | Pale blush. |
| 48 Athenien | Beautiful pale large blush. |
| 49 Atrosanguinea | New, very dark. |
| 50 Aurelius | Fine bright crimson. |
| 51 ——— prudens | Red. |
| 52 Aurore | Large pale blush. |
| 53 ——— superbe | Large mottled red. |
| 54 Bacchus | Fine light red. |
| 55 Barbanegre | Changeable scarlet mottled. |
| 56 Baron de Stael | Close light double blush. |
| 57 Beau bicolor | Bright crimson and light blush. |
| 58 ——— bijou | Fine bright red. |
| 59 ——— rouge | Fine light crimson, late, clusters. |
| 60 Beaute | Large splendid rosy scarlet. |
| 61 ——— Hortensia..... | Elegant flesh colour. |
| 62 ——— Surprenante | Ruby. |
| 63 Beauty of Flora | Beautiful large lilac. |
| 64 Belle Augustids | Pretty blush. |
| 65 ——— Armoine | Fine purple. |
| 66 ——— arsene | Light and dark purple. |
| 67 ——— Antoinette | Pale blush. |
| 68 ——— Bichoune | Fine dark purple. |
| 69 ——— Bleu | Light blue purple. |
| 70 ——— Brilliante | Beautiful blush, very double. |
| 71 ——— Camille | Deep pink. |
| 72 ——— Cатель | Large red. |

| NAMES. | DESCRIPTION. |
|-------------------------------|---|
| 73 Belle couronne | Semi double purple. |
| 74 ——— cramoise | Exquisitely fine bright crimson. |
| 75 ——— d'Auctroi | Semi-double blush. |
| 76 ——— Dauphine | Double crimson. |
| 77 ——— d'Autiene .. | New, fine small light pink. |
| 78 ——— de Beauce..... | Fine double. |
| 79 ——— | New, fine crimson. |
| 80 ——— Beauvais | Cherry red. |
| 81 ——— Dieppe | Beautiful blush. |
| 82 ——— Fantaisie | Fine deep pink. |
| 83 ——— Hessc..... | Deep blush. |
| 84 ——— Kennedia | Curly, fine red. |
| 85 ——— la borde | Fine pink mottled white. |
| 86 ——— Chine | Fine pale red. |
| 87 ——— d'Olymphe | Large double rose colour. |
| 88 ——— de Passi..... | Fine double bright red. |
| 89 ——— Province | Pale red. |
| 90 ——— Trian | Semi-double deep scarlet. |
| 91 ——— Trianon | Pretty small pink. |
| 92 ——— Tunis | Rich crimson. |
| 93 ——— Tyre | Pinkish crimson. |
| 94 ——— Elize | Fine double bright deep pink. |
| 95 ——— Escarmoise | Singular semi-double pink purple. |
| 96 ——— et Bienfaite | Fine large semi-double purple in clusters. |
| 97 ——— Fille | Beautiful large blush. |
| 98 ——— gracieuse | Light changeable purple. |
| 99 ——— Helene | Cherry red. |
| 100 ——— Hermoine..... | Large bright red and pink. |
| 101 ——— Leloise | Very double red. |
| 102 ——— Liloise | Fine light blue. |
| 103 ——— Nanette nouveau | Large fine bright crimson, changing purple. |
| 104 ——— Negre | Dark crimson, nearly black. |
| 105 ——— noire..... | Nearly black. |
| 106 ——— Porcie | Purple. |
| 107 Bellerophon | Purplish light crimson. |
| 108 Belle Rosine | Semi-double red. |
| 109 ——— rouge | Bright scarlet. |
| 110 ——— sans flatterie..... | Variegated pale blush. |
| 111 ——— victoire..... | Fine double purple. |
| 112 Bicolor varie | Close scarlet and purple. |
| 113 Bijou..... | Fine small red. |
| 114 Bijoux des Amateurs | Red. |
| 115 Black Brunswick | Nearly black. |
| 116 ——— Damask | Very dark velvet. |
| 117 ——— Mottled | Very fine. |
| 118 Blancard | Fine deep red. |
| 119 Blanc changeable | Changeable white. |
| 120 ——— de Belgic | Good white in clusters. |
| 121 Blandine | Fine large deep pink. |
| 122 Blas de Santillaæ | Large rich velvety crimson. |
| 123 Bleu atheral | Pretty curious blue. |
| 124 Boila..... | Light rosy purple. |
| 125 ——— de la Faye | Gay scarlet globe. |
| 126 Bolina | Fine large bright pink. |

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

REVIEWS.

A Treatise on the Artificial Growth of Cucumbers and Melons, conjointly with that of Asparagus, Mushrooms, Rhubarb, &c.

Comprehending Observations on the Methods now in use for the Growth of Cucumbers, with a full Explanation of an Improved Mode of Culture, by which, with a much less quantity of the fermenting substance, and a tithe of the care and attention which is generally bestowed upon them, not only is success rendered certain, even in the most adverse season, and Fruit of the finest appearance produced, but Asparagus, Mushrooms, Rhubarb, &c. are at the same time produced, of excellent quality, and with the greatest possible celerity; to which are added, brief observations on the Growth of Early Potatoes. With three plans of a Hot-bed.

By Mr. JOHN SMITH, nearly 20 years Gardener to DYKES ALEXANDER, Esq., Ipswich.—12mo. pp. 58. Price 7s. 6d. bds.

We noticed this publication, and made an extract from it, in our December Number of the *Gardener's and Forester's Record*. Our opinion is, that on the subjects treated upon, the remarks and instructions are plain, sensible, and excellent. If the directions be followed, there will be no disappointment.

The Irish Farmer's and Gardener's Magazine, and Register of Rural Affairs. Conducted by MARTIN DOYLE, Author of "Hints to small Farmers," "Practical Gardening," &c., and EDMUND MURPHY, late Acting Secretary to the Horticultural and Arboricultural Societies for Ireland. No. 1., November, pp. 56. Price 1s. (To be continued Monthly.)—Curry and Co., Dublin; Simpkin and Marshall, London.

That Horticulture has not made greater progress in Ireland, is not for want of a suitable soil or climate, such advantages being ample for the successful operations of gardening in all its branches; yet under the most favourable circumstances, generally speaking, little has been attempted beyond the cultivation of ordinary fruits and vegetables. We therefore hail with pleasure the appearance of this publication, and from its being under the management of such eminently practical individuals, the result of their efforts, we are per-

sueded, will fully justify us in asserting that they will prove essentially useful, and give a rapid taste for Horticulture, Floriculture, Arboriculture, &c. in their more refined operations in that country. What we know of Farming operations is from observation, consequently theoretical; but in the Number before us there are some useful hints, and from being connected with Gardening in the Magazine, perhaps one may assist to make known more extensively the other, and be a greater advantage to Ireland than if published separately.

The contents consist of four papers on Horticulture, two on Arboriculture, four on Agriculture, with Miscellaneous Remarks, Accounts of Horticultural Society's Meetings, &c. &c.

Hortus Woburnensis: A descriptive Catalogue of upwards of Six Thousand Species and Varieties of Ornamental Plants, cultivated at Woburn Abbey. With numerous illustrative Plans for the Erection of Forcing-Houses, Green-Houses, &c.; and an Account of their Management throughout the Year. By JAMES FORBES, A. L. S., C. M. H. S., &c., Gardener to his Grace the DUKE of BEDFORD, K. G. 8vo. pp. 440. 26 Lithographic Prints. London, 1833. Medium paper, 21s.; royal paper, with proof prints, £2 2s.; royal paper, with proof prints, coloured, £2 12s. 6d.

In looking through this publication we have been much pleased, and we think the object with which the Author sets out, as stated in the prefatory observations, is most fully and satisfactorily accomplished. Mr. FORBES says, "The first part of the work contains a descriptive catalogue, in abbreviated terms, of the *generic* and *specific* character of upwards of 6,000 plants, such as are best adapted for the green-house, plant stove, or decoration of the pleasure-ground, or such as appear the most interesting to the botanist and amateur in the British flower garden;" the descriptions of which, although much compressed by being within a small compass, will render considerable assistance in the identifying of the numerous genera and species. These distinguishing peculiarities will, it is hoped, characterise the arrangement of the plants in this work, from those of any other catalogue. The accompanying Glossary (of terms used), will elucidate the various abbreviations in the catalogue part of the Work. The Second part of the Work, comprises the Plans of the Parterres, Pleasure Grounds, Greenhouses, Plant Stove, Heathery, and other erections, with a description of the different subjects enumerated; the soil, and the general management best adapted for the growth of the Cape, Botany Bay, and other exotic plants. The Third part is confined to the plans and details relative to the Kitchen Garden department, with lists of the fruits cultivated; and comprises numerous designs for the erection of Forcing Houses,

Culinary Pits, &c. with an account of the materials best adapted for their erection, and mode of heating by hot water, &c.; and lastly, the general routine of culture pursued throughout the year, in the Forcing Department.

The Title Page expresses that "the Catalogue contains the description of upwards of 6,000 ornamental plants, which are cultivated at Woburn Abbey." It is arranged according to the Linnæan system of classification, and in the following manner:

| Systematic name. | English name. | Form of leaves. | Colour of flower. | Month of flowering. | Native country. | Year of introd. | Soil and propagation. |
|------------------|---------------|--------------------|-------------------|---------------------|-----------------|-----------------|-----------------------------------|
| CANNA | Indian Shot. | Calyx of 3 leaves. | Cor. of 6 petals. | Style, club shaped. | Stig. obtuse. | Indica. | Indian. acum. nerv. smooth. |
| | | | Red. | 1—12. | W. Inds. | 1580. | 8 P. Sandy loam, seed & cuttings. |

As a catalogue of the plants it contains, it is, as our readers will perceive, very clear, expressive, and well arranged. The species and varieties being alphabetically placed, makes the reference to individual species easy to be found. This attention is not paid in any other catalogue we have seen. We hesitate not in stating that it is every thing the author professes it to be.

In the second part of the book are fifteen remarkably well-executed copper-plate and lithographic impressions. The subjects are—1. South-West View of Woburn Abbey; this is placed as a very neat frontispiece.—2. Entrance Gate, &c. to the Park.—3. A Plan of the Pleasure-Ground. Letter-press illustrations, descriptive of—A covered Walk 1342 feet long, open on one side, supported by pillars adorned with creepers; Sculpture Gallery, Greenhouse for Pelargoniums, Riding House, Tennis Court, Stable Courts, Chinese Dairy, Larders, Rock-work, Willow Garden, American Bank of an acre extent, Garden for Hardy Heaths, Cape Heaths when exposed, collection of Hollies, Rosarium Scoticum, Grass Garden, Menagerie, Canary Room, &c.—4. The Duchess of Bedford's Flower Garden, in front of the private apartments, and Parterres in front of the Libraries. The description consists in detailing the disposition of plants, &c. in the garden.—5. Parterres in front of the Sculpture Gallery; description of plants disposed in the beds.—6. Ground plan, front elevation, and section of the Greenhouse. Description of the construction of the Greenhouse. Management of the Greenhouse and Conservatory.—7. Ground plan of a Pinery, of two pits heated by one boiler; section and ground plan of the Plant-Stove,—Description. Construction of the Plant-Stove. Management of Hothouse Plants.—8. Plan, elevation, and section of the Heath House,—Description. Management of the Heaths. Propagation.—9. Hardy Heath Garden; List of Heaths, &c.—10. Menagerie, Description of.—11. Outer and Inner Entrances to the Menagerie—12. Gardens of the Duke's Children when young, designed by Mr. REPTON,—Description of.—13. Drakeloc Pond, the Chinese Temple and Evergreens, Description of. Holly Hedge 500 yards long, &c.—14. Henry the Seventh's Cottage (Gothic), at the extremity of Apsley Wood, Description of.—15. Labyrinths at Apsley Wood.

The descriptive remarks following the plates are very interesting. The observations on the management of plants are judicious, concise, and useful. We subjoin an extract, on the propagation and culture of Heaths, that our

readers may judge of the propriety of our remarks. The descriptions of the plant houses, mode of heating by hot water, are also practically plain, and contain some valuable hints, and other particulars, which would be found of much utility to persons constructing houses.

The third part of the work is Horticulture. (This we shall extract from and insert in our *Record Magazine*.) There are eleven plans of hot-houses, &c., with remarks on heating and otherwise constructing them. The letter-press descriptions consist of details concerning the buildings, management of them, planting and pruning fruit trees, forcing the cherry, strawberry, &c.

The instructions given relative to the culture of the fruits and vegetables included in the third part of the work, are plain, sensible, practical remarks, and, as implied in its Title, they are doubtless the results of the practice of Mr. FORBES, and, we confidently add, of a very clever gardener; and we hesitate not to assert, that those who follow them will not be disappointed. We most cordially recommend the work, as being both interesting and useful.

“ON THE PROPAGATION AND CULTURE OF CAPE HEATHS.—Cape Heaths being of much shorter duration than most other cape plants, it is necessary to have constant recourse to propagation, in order to keep up the collection, which should be increased by cuttings, and seeds; the latter forming the only means of procuring new varieties. They should be both introduced direct from the Cape, and saved from those plants that perfect their seeds in the heathery or greenhouse, in this country, collected as they ripen, and a general sowing made in the ensuing February, or March. The pots intended for the seeds should be filled about half full with the drainage, and the remaining space with the soil, which should be intermixed, so as it may consist of half peat and half sand, finely sifted, for the depositing of the seeds, and rendered perfectly level, when the seeds may be sown, but observing not to bury them too deep in the soil; a very slight covering will be quite sufficient. In short, if they are merely covered, it will be all that is necessary. After the seeds are committed to the soil, they should have a gentle sprinkling of water, to settle the soil about them; which must always be given to the seed-pot by a very fine rose on the watering pot. The seed-pots should then be placed in a cool frame, where they can be shaded from the mid-day sun, and the soil in the pots kept in a moist and vegetating state. As soon as any of the seeds begin to vegetate, and make their appearance through the soil, a little air ought to be given, which will prevent the young plants from being drawn up weakly, and damping off. When the seedling plants have attained the height of two or three inches, they should be put into small-sized pots, in the same soil as was mentioned for the sowing of the seeds in. Five or six plants may be round the edges of each pot, which should be again replaced in the frame, and kept shaded, until they begin to strike root in the fresh soil, when they may be gradually exposed to the sun and air; and after they appear to have got well rooted, and are growing freely, they should be put out singly into small-sized pots, with as much of the soil attached to the young fibres as possible. When the plants are young, they will require to be frequently shifted; but this operation must be performed according to their growth, and as they fill their pots with young roots.

“But the most general method of increasing the Heath in this country, is by propagating from cuttings of the young shoots, which should be taken off when the wood becomes of a firm texture, when it will not be so liable to be injured by damp, as is frequently the case when put into the cutting pot in a tender state. The best season for putting in Heath cuttings, is from March to July; but the operator must be guided in this by the state of the shoots which are intended for this purpose. In fact, most of the species will strike root if put in at any time of the year, provided the cuttings are taken off when in a fit state. To procure shoots of the less free growing sorts, they may be as-

sisted by placing the plants in a little artificial heat, at the early part of the season, which will be the means of furnishing good cuttings; when they should be carefully stripped of their leaves to about half the length of the cutting, with a sharp knife or scissors, and the end cut clean across. They will then be ready for inserting into the cuttings pot, that should be previously prepared, and filled within a couple of inches to the rim with the drainage; and then have a layer of the fibrous parts of the soil placed over the cracks, when the remaining space should be filled up with sharp pit sand, well washed, and cleared from all earthy matter, &c. The sand should, lastly, be well watered, and made perfectly firm and level, when it will be fit for the reception of the cuttings, which should not be inserted deeper in the sand than is necessary for the fixture of them, to avoid being displaced in the watering, which should be liberally supplied while they are striking root.

"Many of the sorts will have formed good roots in the course of eight or ten weeks, whilst others will require as many months. In autumn and spring the cuttings should be placed in a shaded part of the stove; but in the summer season, they will succeed equally well in a cold frame, shaded from the mid-day sun. Mr. MUIRHEAD, a very successful propagator of the *Ericææ*, formerly plunged his pots in coal ashes, behind a north wall, in the summer season, where they were covered with hand-glasses, and removed in autumn to the pine stove. The cuttings will, in general, strike root more readily by being covered with bell glasses, the size of which should be regulated by the pots, and be occasionally wiped when there appears an accumulation of moisture on their inner surface; but these glasses may consist of those with holes in their tops, which will permit the moisture to evaporate, and prevent it, in a great measure, from injuring the cuttings. Mr. M'NAB, however, and the Messrs. LODDIGES, both consider these glasses unnecessary, except for a few sorts. When the cuttings begin to grow freely, it is generally a sure sign of their having made roots; they should then be taken carefully out, and put into the smallest sized pots that are made, placing four or five round the sides of each, and then placed under a hand-glass, and shaded, until they begin to make young roots in the fresh soil, when they may be gradually exposed to the sun and air; and when they appear to be of sufficient strength, and their roots well established in the soil, they should be planted singly into small pots, and afterwards treated in every respect the same as was mentioned for the seedlings.

"The culture of the *Ericææ* is rendered more easy by their being seldom attacked with insects; the green fly will occasionally infest some of the plants, but it is easily eradicated by fumigation, or by dipping the infested shoots into a decoction of tobacco-water. Some of the species are also subject to mildew; but this is likewise readily subdued, by dusting a little sulphur over the affected parts; the most effectual preventative for the latter disease, however, is a free circulation of air amongst the plants."

(TO BE CONCLUDED IN OUR NEXT.)

EXTRACTS.

Plants figured in the following Periodicals for December:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Lupinus incanus*, Hoary Lupine. Class, Diadelphia; order, Decandria; natural order, Leguminosæ. The beautiful genus of Lupine, of which the greater number of species, hitherto enumerated in our Universal Floras, are natives either of the South of Europe or of the Andes of Peru, has been greatly increased by the discoveries of Mr. DOUGLAS on the north west coast

of America, where that indefatigable naturalist has detected no less than 17 species in his first visit to the shores of the Columbia, and several have rewarded him on his second visit, as well as in California. Thus the genus may be considered to have its maximum on the western side of the Cordillera of North America. The present very handsome species is a native of South America, and was raised by Mr. NEILL, from seed sent by Mr. TWEDDIS of Buenos Ayres, and flowered freely in the greenhouse at Canonmills, in Jane, 1833. The plant is suffruticose, (somewhat woody,) erect, branched. Leaves (about six inches across) digitate, leaflets about nine, linear-lanceolate, silky on both sides. Flowers: corolla, pale lilac; vexillum, orange, and slightly spotted in the middle; keel, of a deep purple at its point. Culture: hardy, growing in any good garden soil. Increased by seeds, or division of plant. Lupinus from Lupus, a wolf; supposed to destroy the fertility of the soil.

2. *Anthyllis Webbiana*, Rose-coloured Kidney-Vetch, or Lady's Finger. Diadelphia, Decandria. Leguminosæ. Root, perennial. Stems, one or more from the same root, erect, six to eight or ten inches high, branched. This species was communicated by Mr. CAMERON in May last, from the Botanic Garden of Birmingham. It has been introduced from Teneriffe by PHILIP BARKER WEBB, Esq. It is indeed an extremely delicate and pretty plant. Flowers: terminal, in compound heads, rose coloured. It is hardy. Culture: increased by division. Soil: it should be cultivated on a dry soil. *Anthyllis*, from *Anthos*, a flower; and *ioylos*, a beard, or down, in consequence of the hairy or downy calyces. The most popular of its English names has been given from a fancied resemblance in the bractæas to the fingers of the human hand; hence Lady's Finger (not Ladies' Finger, as commonly written), the fingers of our Lady, the Virgin Mary, to whose honour many plants were dedicated by our forefathers.

3. *Grevillea arenaria*, Sand Grevillea. Tetrandria, Monogynia. Proteacæ. This plant is an old inhabitant of the English gardens, flowering freely in the spring months, only requiring the shelter of a well-lighted greenhouse. It is found in the alluvial, sandy banks of the Hawksbury River, in the colony of New South Wales, where, however, it appears to have a limited range.—Flowers: bluish purple. Culture: increased by seeds or cuttings. Soil: loam and sandy peat. *Grevillea*, in compliment to C. F. GREVILLE, a patron of natural science.

4. *Andromeda salicifolia*, Willow-leaved. Decandria, Monogynia. Ericacæ. This plant is an inhabitant of the tropics, and not in elevated situations. It was first discovered in the Mauritius by COMMERSON, and we are informed by Mr. TELFAIR that it is plentiful in the woods of BelomPre. Messrs. HELSINGBORG and BOJER gathered it in hilly places on the banks of rivers in the province of Emirena, Madagascar. It was introduced to the garden of the late ROBERT BARCLAY, Esq. by the late Mr. TELFAIR. (The latter gentleman died, after an illness of five days, on the 14th of July.) The plant is of a low shrubby growth, glabrous throughout. The colour of the flowers is of a greenish hue, partaking little of the fine purple so remarkable in drawings from living native specimens. Culture: it requires the protection of a warm greenhouse, and should be cultivated in soil containing a considerable proportion of peat. Increased by layers. *Andromeda*, from the Virgin *Audromeda*.

5. *Nuttallia Papaver*, Papaver (Poppy) like *Nuttallia*. Monadelphia, Polyandria. Malvacæ. This plant, it appears, has been sent from the Southern States of North America. There are three species now introduced into this country, (see page 125, Vol. 1.) The species are hardy, ornamental, and perennial, "appearing to afford an additional link of connection between the Genera *Sida* and *Malva*;" for whilst the present species has all the habit of the other *Nuttallias*, there is the involucre of a *Malva*. The plant has numerous stems arising from the crown of the root, ascending, slightly hairy. Flowers: corolla of five petals, campanulate, large, red purple, pale towards the centre of the flower. *Nuttallia*, in honour of Mr. THOMAS NUTTALL, Professor of Mineralogy, Cambridge.

6. *Pimelea graciliflora*, slender flowered. Decandria, Monogynia. Thymelææ. Of this genus the species are very difficult to be distinguished, and at first sight, the easily taken for the *P. sylvestris*, (see Vol. 1.)

p. 231,) it flowers at the same season; but the leaves of the present species are narrower, are marked with impressed dots on the upper surface, and the flowers are pure white, with a much slenderer and more filiform tube. It is extremely pretty, flowering freely in the greenhouse in common peat soil, and retaining its snowy blossoms for a considerable length of time. It was raised from seeds sent by Mr. BAXTER, from King George's Sound. *Pimelea*, from Pimelea, fat.

7. *Marsdenia flavescens*, yellowish flowered. Pentandria, Digynia. Asclepiadæ. This species was found by Mr. ALLAN CUNNINGHAM, who discovered it in New Holland, on the sea shore, at the Illawana district, in lat. $34^{\circ} \frac{10}{2}$, whence living plants were imported to his Majesty's gardens at Kew, where they flower throughout the summer months. It is a climbing plant, with yellowish green flowers, of little merit, *Marsdenia*, so named by Mr. BROWN, in compliment to WILLIAM MARSDEN, Esq., an encourager of botany, and the able author of a History of Sumatra.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany, in the University of London. 4s. coloured, 3s. plain.

1. *Libertia formosa*, handsome *Libertia*. Monadelphia, Triandria, Iridææ. This plant was found by Mr. JAMES ANDERSON, in the Island of Chiloe, growing on the sea shore, within reach of the waves. It is a half hardy herbaceous plant, flowering in May; stem, rises about one foot four inches high, with about three stem leaves; root leaves from half to one foot long, sword shaped. Flowers capitate, from eight to ten in each head, white. The plant is increased by dividing the root stock. *Libertia*, so called in compliment to Mademoiselle M. A. LIBERT, a learned Belgian botanist.

2. *Combretum grandiflorum*, large flowered. Decandria, Monogynia. Combretacæ. This is one of the many noble plants in which the colony of Sierra Leone abounds. It is not a climber, as it is sometimes called, but rather a scrambling plant, raising itself upon other plants by means of a very curious kind of hook with which it is supplied. At first sight one would wonder what this hook can be; for nothing like spine or prickle, or teudril, can be discovered upon the branches; for want of these, it is necessary that their place should be supplied by some special provision, which is of the following kind. When the leaves are first fully formed they are seated upon a footstalk of a very common appearance; but after a time they fall away, leaving the leaf-stalk behind; the latter does not wither up, but gradually lengthens, hardens, sharpens, and curves, till at last it becomes a powerful hook, admirably adapted for catching hold of the branches of any tree that it may be near, and thus elevating the plant from the earth.—In this country it can only be cultivated in the stove, where it forms a bush of a few feet in height; and where its hooks are not produced—they appear only in its native woods, where it is more vigorous, and where alone it has occasion for them.—It flowered at the Duke of Buccleugh's, in 1832, for six weeks at least, producing at least one hundred clusters of its splendid red flowers. It is a most desirable plant, and ought to be in every collection of stove plants. Culture, increased very readily by cuttings. Soil: a rich mould. *Combretum*, a name applied by Pliny, to a climbing plant.

3. *Pultenæa subumbellata*, Subumbellate *Pultenæa*. Decandria, Monogynæa. Leguminosæ. It is a hardy greenhouse plant, a native of Vau Dieman's land. It is cultivated in Mr. LOWE's nursery, at Clapton. A pretty small narrow-leaved plant, producing its yellow flowers in terminal heads of numerous blossoms. Culture increased by cuttings. Soil: sandy loam and peat. *Pultenæa*, in compliment to Dr. WILLIAM PULTENEY, a botanical author.

4. *Passiflora kermesina*, crimson Passion flower. Monodelphia, Pentandria. Passifloræ. This species was brought to the London Horticultural Society's Garden, by Mr. BENTHAM, in 1831, from Berlin Garden. It has been almost ever since in flower. It is beyond all comparison the most beautiful species in cultivation, except *P. racemosa*. Its flowers have a purple crimson richness of colour which art cannot imitate; they are produced in great abundance at almost all seasons. Unfortunately it is propagated with considerable difficulty, no part of the stem striking from cuttings except what is very woody and completely formed; and this, which is always at the bottom of the stem, can scarcely be procured without cutting down the whole plant. The plant requires a hot and damp stove. *Passiflora*, from Flos, flower, and passio, passion; flower appendages.

5. *Passiflora gossypifolia*, cotton leaved Passion flower. Monodelphia, Pentandria. Passifloræ. A native of several of the tropical parts of America. It has been found by Dr. HAMILTON in the West Indies, and by Messrs. DEFFE and SCHIEDE, in Mexico. About Lima, in Peru, it seems to be common. It is grown in the Horticultural Society's Garden, where it flowered in 1832. It is not a plant of much interest, unless minutely examined. Flowers: white, small. A perennial stove plant, increased by cuttings. *Passiflora*, see No. 4 above.

6. *Anthurium gracile*, slender. Pentandria, Monogynia. Aroideæ. Synonyms, *Pathos*, *gracilis*. This species is a native of the tropical parts of America. It has been sent from Demerara to Mr. RICHARD HARRISON, through the assistance of THOMAS MOSS, Esq. of Liverpool. It has little beauty when in flower, but its spikes of crimson berries give it rather a pretty appearance when in fruit. It requires a stove heat, and a treatment similar to that of epiphytal orchideous plants. *Anthurium*, from *anthos*, a flower, and *rium*, a tail; in allusion to the form of the spadix.

7. *Gesneria Suttoni*, Captain SUTTON's *Gesneria*. Didynamia, Angiosperma. Gesnereæ. For the communication of the drawing and following account of this new plant, we are obliged to Mr. W. B. BOOTH, Gardener to Sir CHARLES LEMON, of Carclew. We owe the introduction of this fine plant to Captain SUTTON, of his Majesty's Packet Establishment, at Falmouth, who informs us that he found it growing in a wood, on a sloping hill, near the Bay of Bomviago, Rio de Janeiro, at an elevation of between 30 and 40 feet above the level of the sea, and not exceeding 40 yards from the water. Its beautiful flowers attracted his attention, and induced him to dig up the plant and bring it home. On his arrival in England, in March, 1833, he presented the choice collection of Orchideous, and other interesting plants he had found, to Sir CHARLES LEMON, Bart. M.P., and GEORGE CROKER FOX, Esq. Grove Hill, Falmouth, in whose garden the present plant flowered under the judicious management of Mr. FRIEND. It has some resemblance to *Gesneria bulbosa*, but differs from it in foliage, as well as in the flowers, which are larger, and have a broader outstretched upper lip. Flowers: of a fine scarlet outside, inside of a yellowish red. It is named in compliment to CAPTAIN SUTTON. Culture: it requires the constant heat of the stove, and a strong rich soil. Increases by cuttings.

8. *Cyrtochilum flavescens*, straw coloured. Gynandria, Monandria. Orchideæ. A native of Mexico, whence it was imported by Mr. TATE, about three years ago. It flowered for the first time in the collection of RICHARD HARRISON, Esq. of Aighburgh, to whom we are indebted for a specimen, along with a sketch from Mrs. ARNOLD HARRISON. Flowers: sepals, yellow; labellum, yellow, with blood-coloured spots. *Cyrtochilum*, from Kurtos, convex, and cheilon, a lip; in allusion to the form of the labellum.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Clematis campaniflora*, Bell-flowered Virgin's Bower. Polyandria, Poly-

gynia. Ranunculaceæ. This very distinct species was discovered by the late Professor BRONNER in hedges on the road leading from Coimbra to Oporto, flowering in June and July, and first recorded by him. Its habit is entirely that of *C. viticella*, to which it also comes nearest in affinity, but the much smaller flowers, and pointed sepals, connivent below, will readily distinguish it. The plant appears to be perfectly hardy. Flowers: fragrant; white, with a slight shade of purple. Increased by layers or seeds. Clematis, from Klema, a vine branch, in allusion to the climbing habit of most of the species of this genus.

2. *Gilia aggregata*, Tufted flowered. Pentandria, Monogynia. Polemoniaceæ. A native of the north-west coast of America, whence it was introduced to the Garden of the London Horticultural Society by Mr. DOUGLAS, in 1827. When in blossom, few plants of this family surpass it in beauty. Leaves, deeply pinnatifid. Flowers: copious, fasciculate, often disposed in a diffuse panicle; of a scarlet colour, with the mouth of the tube marked with numerous white spots. It is a very desirable plant for the flower-garden. The drawing was taken from Mr. KNIGHT's collection at Chelsea, in July last. The plant is biennial, but will bloom the first year, as well as the second. *Gilia*, so named after Signor GIL, a Spanish botanist.

3. *Salvia angustifolia*, Narrow leaved. Diandria, Monogynia. Labiatæ. Synonyms, *S. virgata*, *S. virgalá*. A native of dry mountainous places in the temperate parts of Mexico, whence it was introduced into the Royal Gardens at Madrid in 1795. Flowers: of a deep azure blue. It grows well in any light soil, and is readily increased either by seeds or cuttings. It will flourish in the open ground in summer, but requires protection in winter. If not taken up, it perishes. *Salvia*, from *salvas*, safe, medicinal qualities.

4. *Calceolaria sessilis*, Fragrant Slipperwort. Diandria, Monogynia. Scrophularinæ. Synonyms, *C. sessilis suffruticosa*. We are indebted to Mr. KNIGHT, of the Exotic Nursery, King's-road, Chelsea, for the fine specimen from whence the drawing was taken. It had been raised from seeds collected in Chile by Mr. CUMING. It requires a light sandy soil, and is easily increased by seeds and cuttings. This species is nearly related to *C. integrifolia*. The flowers are yellow, crowded into a thyriform panicle; they are also fragrant, with a faint resemblance to that of the Garden Hyacinth. *Calceolaria*, from *calceolus*, a slipper, referring to the form of the corolla.

The Botanical Cabinet. Edited by Messrs. LODDIGES's. Coloured, 5s.; partly coloured, 2s. 6d.

1. *Aconitum Stoerckianum*, Stoerck's Aconitum. Polyandria, Trigynia. Ranunculaceæ. A native of Austria; hardy perennial; and a very showy plant, flowering in August. In a pot it grows a foot and a half in height, but planted out in the open border, will attain to twice or thrice that size. The flowers are of a blue purple colour. It may be increased by separating the roots, which are knobby, and will grow in any good-garden soil. *Aconitum*, from *Acona*, several varieties being plentiful about *Acona* in Bithynia. *Stoerckianum*, from Baron VON STOERCK, a celebrated physician.

2. *Erica Ewerana pilosa*, Ewer's pilose-leaved. Octandria, Monogynia. Ericæ. A native of the Cape of Good Hope, introduced in 1800. The flowers are a beautiful pink, with green ends; they come out in July and August, and last a considerable time; in a pot it will attain the height of two or three feet. It requires the usual airy greenhouse protection, will increase by cuttings, and should be potted in sandy peat earth. *Erica*, from *Ereicks*, to break; fragility of the branches.

3. *Erica procumbens*, Procumbent Heath. Octandria, Monogynia. Ericæ. A native of the Cape of Good Hope, introduced a few years since; it produces its pleasing pink flowers during the summer months. It requires the same treatment as the above variety.

4. *Villarsia Chilensis*, Chili Villarsia. Pentandria, Monogynia. Gentianæ.

This plant is a native of Chili, and has been very lately introduced. It flowers in June, with a stem about a foot in height; the flowers are very pretty, of a sulphur colour, and open a few at a time in succession, each lasting but a short while. It will increase by separating the root, and should be potted in rich loam, with a pretty large allowance of water. Villarsia, from VILLARS, a distinguished French botanist.

5. *Hibiscus Liliflorus*, Lily-flowered Hibiscus. Monadelphia, Polyandria. Malvaceæ. This elegant plant, of which there are many varieties, was introduced a few years since by Mr. BARCLAY. It is necessary to preserve it in the stove; it grows freely, and flowers during the summer. The flowers are of a bright rosy lilac; it is necessary to preserve it in the stove, as it is a native of the Mauritius. It will increase readily by cuttings, and should be potted in loam and peat soil. Hibiscus, from Ibis, a stork; said to chew and inject as a clyster.

6. *Linum Cumingii*, Cuming's Flax. Pentandria, Monogynia. Caryophyllææ. This pretty little plant is a native of Chili; it was introduced in 1830, by Mr. CUMING. It is very dwarf in its growth, not much exceeding six inches from the ground; and its brilliant yellow flowers are produced during nearly the whole of the summer. It requires the greenhouse, may be propagated by cuttings or seeds, and should be potted in light loam. Linum, from Llin, a thread.

7. *Lantana involucrata*, Involucrate Lantana. Didynamia, Angiospermia. Verbenaceæ. A native of the West Indies. It has been long known and cultivated, but has never become very common. It requires the stove, and bears its pretty flowers throughout the spring and summer; the colour of the flowers is lilac, with a yellow eye. There is no difficulty in increasing it from cuttings; the soil should be rich loam.

8. *Leptospermum ambiguum*, Ambiguous Leptospermum. Icosandria, Monogynia. Myrtaceæ. A native of New South Wales, and was among the early introductions from that productive country; it grows to the height of four or five feet, and is well furnished with pendulous branches, which, loaded with its pale yellow flowers, are very ornamental; the season of flowering is June and July. It requires the greenhouse protection, and is increased with facility by cuttings; the soil should be loam and peat. Leptospermum, from Leptos, slender; and sperma, a seed.

9. *Cirrhaea Warreana*, Warre's Cirrhaea. Gynandria, Monandria. Orchidææ. This is a native of Brazil; it was discovered by Mr. WARRE, who kindly communicated it to Messrs. LODDIGES's. It bears a strong resemblance to the other species; they are all highly interesting and curious plants, well deserving every care and attention. Flowers: yellow, red, and dark purple. The plant succeeds well in the stove, planted in moss, with potsherds, and a little sandy peat soil. Like the others, it will admit of occasional increase by dividing the bulbs. Cirrhaea, from Kirrhos, yellow, flowers.

10. *Cynoches Loddigesii*, Loddiges's Cynoches. Gynandria, Monandria. Orchidææ. This extraordinary plant is a native of Surinam. It was sent to Messrs. LODDIGES's in 1830, by Mr. LANCE; and it flowered in May, and again in the winter of 1832. Flowers are green, whitish, with chocolate spots, very singular in its appearance, and very handsome. It is cultivated in the stove, suspended from a rafter, and planted in moss and broken bits of pot. It has not yet increased.

The Botanic Garden. Edited by Mr. B. MAUND, F. L. S.
Coloured: 1s. 6d. large; 1s. small.

1. *Madia elegans*, elegant Madia. Syngenesia, Superflua. Compositæ. This newly introduced annual is a native of America; and though not of an exceedingly splendid character, attracted considerable attention during the last summer. It was introduced in 1831. Its flowers are really pleasing; of a yellow colour, with a circle of red towards the centre; its petals, when fully exposed to the sun, curl and twist, exhibiting a curious though half withered

appearance; it usually grows to the height of two feet; and flowers from July to September. It requires only the usual treatment of annuals, giving it a shady situation, that its flowers may the more regularly continue expanded. The generic name, *Madia*, is from the word *Madi*; a term employed by the Chilians, to distinguish one of the species of this genus.

2. *Pentstemon Richardsonii*, Richardson's Pentstemon. *Didynamia*, *Angiosperma*, *Scrophulariæ*. A native of Colombia, introduced in 1825; perennial; grows to the height of eighteen inches; flowers from July to August, of a pinkish purple colour. It does not admit of division at the root, and should be increased by cuttings, about Midsummer, which readily strike root. *Pentstemon*, from *Pente*, five; and *stemon*, stamens. *Richardsonii*, from the name of an English botanist.

3. *Centaurea Crocodylium*, blush Centaury. *Syngenesia*, *Frustranea*. *Compositæ*. A native of Levant; introduced in 1777; grows to the height of eighteen inches; flowers, July to August. This plant, as an annual, affords a pleasing variety in the borders, continues long to produce its delicate pink flowers, and does not become straggling and obtrusive. It requires only usual treatment. *Centaurea*, from the Greek *Kentauros*, signifying a centaur. *Crocodylium*, is said to have been applied to this plant from some fancied resemblance of the spines of its calyx to the claws of a crocodile.

4. *Delphinium Consolida*, branching Larkspur. *Polyandria*, *Trigynia*. *Ranunculaceæ*. A native of England, grows in corn fields; rare; annual, grows two feet high; flowers, from June to August. *Delphinium*, from the Greek, *Delphin*, dolphin; supposed resemblance of the nectary. *Consolida*, from the Latin *consolidare*, soldering, or closing up a wound.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

I am afraid you will think me troubling you too much, concerning the cultivation of plants; but your Magazine is so entertaining, and has created such a zeal for flowers in me, that I cannot resist requiring it. Would some of your correspondents favour me with the best manner of cultivating that beautiful class of flowers, the *Bignonias*, and *Staphelias*. I should feel much gratified also, with the proper quantity of water, on an average, Greenhouse plants ought to have in winter, and the best temperature of the house during that season.

X. Y. Z.

I shall feel greatly obliged to any of your readers who will inform me, through the medium of your Magazine, the manner of propagating the *Bignonia*, as I have tried several ways without success.

E. J. B.

Limehouse, Nov. 15th, 1833.

Will any of your readers be kind enough to inform me what culture *Myrtles* require, so as to make them produce their fragrant blossoms?

Oct. 22nd, 1833.

T. G. S.

I frequently see, in the *Floricultural Cabinet* and other works, mention made of 48's and 60's sized pots. It would be very satisfactory to myself, and perhaps to many others, if thyself or some correspondent of the *Cabinet* would inform us the size in inches of 32's, 48's, 60's, &c. &c. &c.

Truro, 11th Mo. 7, 1833.

A SUBSCRIBER.

I should feel obliged if you or any of your readers would describe the best way to cultivate that noble flower the *Dahlia* from seed—I mean the most

approved method to obtain fine double flowers—whether cross fertilization should be resorted to; if so, what kind of blossoms should be made choice of, and how the pollen is to be applied, and whether any dependence can be placed on the progeny partaking of the properties of its parent. Being fond of a garden, but not having much skill in the science, I am anxious to acquire a little knowledge therein.

A LEARNER.

August 9th, 1833.

I shall be obliged if the Conductor of the *Cabinet*, or any of its readers, would give a few instructions on the culture of the Double Anemone.

Norwich, Nov. 28th, 1833.

B. C. L.

ANSWERS.

In your last Number of the *Floricultural Cabinet*, I see a Query signed AMICUS, in answer to which I beg to call his attention to a very pretty yellow, dwarf, free blooming flower, the *Linum arboreum*. It would look well in a bed, and would form a very pretty variety with the *Verbena Meliudris*, and the *Lobelia Gracilis*.

VAN THOL.

In reply to the inquiry of AMICUS, in your Number for November, allow me to say, that I visited the nursery grounds of Messrs. MILLER and Co. at Clifton, and found one portion of their garden was laid out in small compartments, each allotted to a particular plant; such as the *Anagallis monelli*, *Verbena melindres*, &c. &c. Amongst the rest, the *Thunbergia alata*, attracted my attention, as I had only seen this plant previously trained as a climber, but there it covered the whole bed, and flowered profusely.—If the delicate yellow of this beautiful plant, would afford the contrast your correspondent desires, I should recommend the plan, of having slight willow rods bent across the bed, at a few inches above the surface, and training the plants along them; this would prevent their flowers being so much dashed by the soil in wet weather.—I feel greatly interested in the success of your useful little *Cabinet*, with which I am much pleased.

Nov. 5, 1833.

META.

REPLY ON GRAVELLY SOIL.—I beg to inform Mr. STEPHEN CANNON, that the cheapest and best way of rendering the soil he mentions productive, is to cover it over a foot thick with mud and marl; about three parts of the first, and one of the latter, with a good coat of rotten dung, and afterwards to spade it over three or four times before planting it. This will last but a certain number of years, unless fresh soil be added with every coat of dung. When brisk earth and rotten horse litter in equal parts, and well mixed, are the best that can be used.

Dec. 9, 1833.

INNOVATOR.

REMARKS.

NEW AND SUPERB DAHLIAS.—We have made applications to the most renowned Dahlia cultivators, for information as to which are the most perfect and splendid kinds that will be offered for sale the coming season. For this Number of our Magazine we insert a list of sorts which are in the possession of Mr. WIDNALL, Grantchester, Cambridge. Mr. WIDNALL informs us that he has proved all the kinds, and that the descriptions as to height and colour are correct, and that the kinds enumerated possess a superiority of properties. From a knowledge of Mr. WIDNALL's judgment of a Dahlia flower, we can most confidently recommend the kinds in the annexed list to our readers.

| Names. | Description. | Height in ft. |
|---------------------------------|---|---------------|
| Alba fimbriata | Delicate white, with fringed petals | 3 to 4 |
| — purpurea | White and purple | 3 |
| Belladonna | Ruby, purple and white | 3 |
| Felgatis's Negro | Very dark | 3 to 4 |
| Foster's Erecta | Crimson, with black stripe | 3 |
| — Negress | Fine dark | 3 |
| Grand Duke of Tuscany | The finest black ever seen | 3 to 4 |

| NAMES. | DESCRIPTION. | HEIGHT IN FT. |
|----------------------------|---|---------------|
| Jeanne Insurmountable | Fine yellow | 4 to 5 |
| King of the Yellows | Primrose yellow | 4 |
| Lady Grey | Striped shaded rose and white | 3 |
| Lord Liverpool | Fine dark peuce | 5 |
| Marchioness of Abercorn | White and purple, mottled | 3 |
| Metropolitan | Fine rose | 2 to 3 |
| Neptune | Superb large lilac (best known) | 3 to 4 |
| New Scarlet Turban | Fine deep scarlet | 4 |
| Pencilled White | Beautiful cupped petals | 3 to 4 |
| Pothecary's Queen of Sheba | Fine violet | 3 |
| Picta formosissima | Bright pale orange, with bright scarlet stripe | 4 to 5 |
| Queen of Dahlias | Pure white, with beautiful rosy lilac edge— a very superior kind | 3 |
| Shannon | Dark crimson | 4 |
| Sir Robert Peel | Fine buff | 4 to 5 |
| Springfield Rival | Dark rosy crimson, beautiful globular shaped | 4 to 5 |
| Widnall's Black Prince | Rich crimson, with black stripes | 3 to 4 |
| ————— Carna | Large beautiful purple | 4 to 5 |
| ————— Cleopatra | Beautiful French lilac | 3 to 4 |
| ————— Comus | Fine primrose yellow | 3 |
| ————— Diana | Fine rose, with beautiful cupped petals | 3 to 4 |
| ————— Duchess of Bedford | Fine vivid scarlet | 3 to 4 |
| ————— Enchanter | Shaded buff and lilac | 3 to 4 |
| ————— Golconda | Beautiful mottled white and purple | 3 |
| ————— Granta | Dark claret, extra fine shaped, with beautiful cupped petals | 4 |
| ————— Iris | Purple, shaded or striped with red | 4 to 5 |
| ————— Jason | Bright golden yellow | 5 |
| ————— Othello | Superb dark peuce, very fine | 4 |
| ————— Perfection | Superb bright rosy crimson | 3 |
| ————— Remus | Fine light scarlet | 3 to 4 |
| ————— Rising Sun | Large dark scarlet, extra fine | 4 to 5 |

ON CORNUS CAPITATA, OR BENTHAMIA FRAGIFERA.—I send you a few seeds of the *Cornus capitata* of Dr. WALLICH, or the *Benthamia fragifera* of Dr. LINLEY. This very valuable addition to our collection of hardy shrubs was raised in the garden of J. H. TREMAYNE, Esq. at Heligan, Cornwall, by Mr. ROBERTS, the gardener, from seed sent from Nepal, by Sir A. BULLER. It is a most beautiful evergreen shrub. The largest plant of it in Europe is now at Heligan, growing most profusely in the shrubbery at that place. It is seventeen feet high. It has flowered for several seasons, but was more magnificently in bloom this summer than I ever saw it before. In autumn the shrub has a most splendid appearance, by being loaded with large, globular shaped, reddish fruit. The shrub is readily propagated by seeds, cuttings, or layers, put in under a hand glass, having a light loamy soil. The berries ripened, for the first time, at Heligan, last autumn, and Mr. ROBERTS has some young plants raised from the seeds. I should feel pleasure in seeing a coloured figure of the plant in the *Cabinet*.

St. Austle, Sept. 23rd, 1833.

RICHARDUS.

[NOTE.—We have the figure in the course of preparation.—CONDUCTOR.]

ON THE PROPERTIES OF THE HYACINTH.—1. The stem should be strong, tall, and erect, supporting numerous large bells, each suspended by a short and strong peduncle or foot stalk, in a horizontal position.

2. The whole should have a compact pyramidal form, with the crown or uppermost bell perfectly erect.

3. The bells should be large, and perfectly double, well filled with broad bold petals, appearing to the eye rather convex, than flat or hollow; they should occupy about one half the length of the stem.

4. The colours should be clear and bright, whether plain, white, red, or blue, or variously intermixed or diversified in the eye; the latter gives additional lustre and elegance to this beautiful flower.

REFERENCE TO PLATE.

LEVICK'S BEAUTY OF SHEFFIELD.—This very handsome and most profuse blooming Dahlia was raised from seed in 1832, by that most successful cultivator and raiser of this King of flowers, Mr. LEVICK, of Sheffield. We saw a number of the plants beautifully in blossom last August. It grows from two to three feet high.

MONTHLY FLORICULTURAL CALENDAR FOR JANUARY.

DAHLIAS.—When it is desired to propagate extensively any particular sort of Dahlia, the root should be excited by being placed in a hot-bed frame or a hot-house, by the middle of the month, or even earlier where practicable. Dahlia seeds may also be sown by the end of the month; the best method to adopt, is to sow the seeds in pots, place them in moist heat till the plants are up, and then gradually inure them to the greenhouse temperature.

DIRECTIONS FOR THE PLANT STOVE.—This department very often contains plants of a large size, handsome flowering, &c. As the houses are constructed on a variety of principles, the inmates of course require different modes of treatment. Some cultivators grow the plants plunged in tan, others on stages or shelves. Some houses are heated by means of fire flues, others by steam or hot water. In all cases, however, the temperature should be kept from 60 to 65 degrees by night, and from 70 to 75 by day, during this month. The surface of the pots should frequently be disturbed by means of a flat peg. All filth that may accumulate or gangrene on the top of the pots must be cleaned off as soon as perceived, and some fresh soil be given if required. Upon attention to these particulars in a great measure depends the healthiness of exotic plants. Watering should be carefully and duly attended to, never suffering the plants to droop for want of it. If the plants are plunged in tan, they will require less water than when placed on a stage, for if too much be given the plants will rot. Care must be taken not to water the tan in the least degree, or it will be an encouragement for worms, and these gaining admission into the pots, are very injurious to the plants. If any plants be infested with the mealy bug, white or brown scale, let them be washed with a weak infusion of sulphur and tobacco, and after applying it, be instantly removed, and be well syringed with clear water of the same temperature as the house. When air has been given during the day, let the house be closed early in the afternoon, whilst a portion of the warm air remains.

DIRECTIONS FOR THE GREEN-HOUSE.—Very variously constructed are the buildings in this department, but the best mode of heating them is by means of fire flues, as the least damp is very hurtful to the plants. The temperature should be regulated by the outward atmosphere, air being given at all times when mild, in order to keep the plants from being drawn; even in severe weather, admit a little air in the middle of the day, particularly after the house has been heated during the night. At night the front sashes should be covered with mats to exclude the cold air, and when frosty, or very foggy and damp, fire heat must be applied, keeping the heat from 43 to 48 degrees. Watering during the month must be very carefully performed, none being watered but what necessarily require it, taking care, however, not to allow any to droop. The same attention to cleanliness must be given as directed for the stove plants.

PLANTS IN FRAMES.—These require air at all times in dry weather, unless in intense frost, when the lights must be covered with mats and long litter; but if the nights be mild, the lights alone will be sufficient protection. Water must be given very sparingly. All appearance of mould or rotteness must be instantly removed. Bulbs that have been put in pots, may this month be removed to the stove, be regularly watered, and tied to suitable sticks as the flower-stems push forth.

The Flower garden requires little or no attention this month, excepting that Tree Pæonies and other gross plants should be protected from frost by means of mats.

F. F. ASHFORD.

Dec. 13th.

RIDGE, PRINTER, SHEFFIELD.



THE
FLORICULTURAL CABINET,

FEBRUARY 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Auricula.* By
INNOVATOR.

In forwarding you for insertion in your Magazine my method of treating the Auricula, I must confess I do it with reluctance; but as none of your other correspondents have treated on it, and requests are made for a mode of culture, I send it, hoping it may prove serviceable. My reluctance arises from the ill success that attended the first seven or eight years of my growing; this I attribute to the excessive richness of the compost I then used, being composed principally of old night-soil, sugar-bakers' scum, blood, and old cow and goose dung, with a small proportion of loam and sand. I had generally to buy in a fresh stock every year; some few lived to flower two years, but they generally died off in the autumn, after they had been repotted. They certainly flowered superior to any I have since had, but they were sure to die. This loss, added to the advice of a Lancashire grower, induced me to alter my compost, and render it more simple; and I believe mine are now as healthy as any grower's in England. The situation where I keep them is an airy part of the garden, where I have built a wall six feet high, and eight yards long; this I have ornamented at the top, which is a great improvement. This wall runs from south-east to north-west. At 18 inches from the ground are built in five cross pieces of three-inch deal, and 7½ feet

long, so that they project 3 ft. 3 in. on each side; the ends of these are morticed into ten upright posts $2\frac{1}{2}$ ft. long; these stand a foot above the cross pieces, and are connected together at their tops by a long rail; this serves for the lower edge of the lights to rest upon. At four feet from the ground are built in a sufficient number of wood bricks, in each of which is an iron hook; to these are hung glazed lights 4 ft. by 3 ft. Across the pieces that project on each side the wall are nailed six splines, 3 in. broad and $1\frac{1}{2}$ thick; these should be of sufficient length to reach from one end to the other, as they will bear the weight of the pots better. The space that remains open below the lights may be closed by shutters, or a piece of thick canvass, in case of severe frost or wind. I hope I have made this intelligible, as it is by far the most convenient of any repository I have ever seen, for it serves both as a summer and winter situation; besides, the south-west side serves to flower many plants in after the Auriculas are removed to the north-east. A building of this sort costs about £10, but they can be made to any size, and are cheaper than any other repository.

The compost I now use is made as follows:—Fresh and rather sandy maiden loam, two barrowful, finely powdered; two-year-old night-soil, a barrowful; leaf mould, white sand, and rotten decayed bean-stalks, of each a barrowful; mix these well, and they are fit for use. All Auricula composts should be kept dry, as they retain their goodness longer.

The beginning of August shift and repot your plants; remove as much of the old soil as possible, and where the tap root is long, shorten it; remove all such slips as have got roots, but no others; put in the bottom of the pot a small oyster-shell, and upon this a handful of small cinders; then a sufficient quantity of compost, that when the plant is put in and moulded up, there is near an inch of the pot without mould. Water them, and return them to their places, where they may remain till December, keeping them moderately moist with rain water. In giving this, be careful not to pour it upon the leaves; and if, after you have given them the benefit of a gentle rain, any should settle in their crowns, extract it with a common syringe. About the beginning of December, remove them from the north-east side to the south, where they may remain till the end of March or beginning of April. During December and January, give but very little water; the drier they

are kept the better. They will now require to be covered at night with mats; this must be continued till after full bloom, as any frost would injure the colours, and spoil them. Give them all the warm rains that fall in February, but not longer than six hours at a time. About the middle of February top-dress them with the following compost:—Take of two-year-old night-soil and cow-dung, of each a barrowful; old hotbed leaf-mould and sand, of each half a barrowful: mix these well together. Remove as much of the old soil from the tops as can be done without disturbing the roots, and fill up close to the leaves with the above compost. Cut off all offsets, and pot them in sixties. Once a week in March and April, give them manured water, made by steeping pigeons' dung and sheep-droppings in rain water. By the middle of April the flower-stems will have risen sufficiently to thin out the pips to five, seven, or nine; this must depend upon the sorts; the middle pips are those to be clipped out. As soon as the bloom is over, unless you wish to save seed, break off the flower-stem, but leave at least two inches attached to the plant. If any of your flowers bloom in the autumn, pinch off the pips, but leave the stem to wither; for if broken close to the plant, it is a great chance but you lose it. Supply them with plenty of rain water all summer, and you will succeed.

There are some few particulars that I did not mention in the description of the repository, such as having a piece of thin board on each light to overlap the space, to prevent the rain dropping through; besides hooks and eyes, &c., to fasten the light up and down. But these things will easily suggest themselves.

Dec. 2nd, 1833.

INNOVATOR.

ARTICLE II.—*On the Culture of Justicia flavicoma, and interesting Remarks connected with its Botanical Character and Habits.* By the Author of "The Domestic Gardener's Manual," C.M.H.S.

Justicia, as a genus, has derived its name from an eminent horticulturist of Scotland—JAMES JUSTICE, whose work, "The Gardener's Director," was published in 1784. It contains a great number of species, above sixty of which are enumerated in the

latest publication of "The Hortus Britannicus." The genus, or family, forms one of the members of the tribe Acanthaceæ, constituting the 145th order of the sub-class Thalamifloræ, in the natural classification.

Acanthus is the type of the order, and the term is derived from a Greek word which signifies a plant or shrub abounding with thorn ($\Delta\kappa\alpha\theta\alpha$). The plants of this tribe, however, are peculiarly noted for the elasticity of their seed-vessels (capsules), and the curiously hooked processes by which the seeds are attached. Their stems also are swollen just above the axils of the leaves, and these swellings give them a very peculiar appearance; cuttings at these joints strike with facility; generally speaking, this may be considered as the fact.

In the Linnæan system *Justicia* belongs to Class II. Order I. Diandria Monogynia; and is found in the second section of that order. The flowers are inferior, monopetalous, and irregular. The calyx is five parted, tubulous, equal. Corolla ringent, or gaping, divided into two nearly equal parts; the upper part or lip arched, and often reflexed; the lower lip divided into two or three equal parts, which are more or less reflexed or curled backward and inward. Antheræ, two-celled; style, long and protruding. Capsule bilocular, elastic, with two seeds fixed by little hooks.

Justicia flavicoma, or rather, I should say, *flavocom*—that is, "Justicia with a yellow lock," or yellow tufted,—presents all the above essential generic characters, with the specific peculiarity of having the divisions of the calyx terminated by very long bristly points. Its flowers are produced in a close terminal spike, the whole of which is of a pale, yellowish, slightly green tint. This, with the tufty form of the spike, gives the name to the species. The spike is formed of a series of spikelets; each pair is opposite, the one to the other, and the pairs are in alternate order, at a right angle with the pairs above and below. The leaves also are in pairs, and in the same cross or rectangular order with themselves and with the flowers that terminate them. These leaves, in the plant at least now before me, assumed an appearance of similar interest. As the flower-spike advanced, and became well developed, from being flat and extending horizontally, they gradually curled in a curious direction towards the stem, some even bending almost spirally downward. They are large, very handsome, ovate-cordant,

highly glazed, and somewhat resemble the leaves of the Horn-bean, with the gloss of the Beech.

The plant is a ready flowerer. Mine is now scarcely six inches high: it showed bloom when less than half its present size, but as the roots were feeble, the shoot failed, and another was produced. I kept it in the pine-stove, wherein, throughout October and November, the heat during night ranged between 53 and 62 degrees. Late in November, I perceived that several unopened flowers fell off: I therefore removed the plant to a sitting-room. Some blossoms expanded in the course of a day, and now, exposed as it is to vicissitudes of temperature,—open windows in the morning, confined close air in the evening, &c.,—it continues in health and bloom. Thus, this *stove* plant appears to be semi-hardy; and being of ready culture, growing well in a mixture of sandy loam two parts, old decayed wood-earth and leaf-soil each one part, it merits general culture and attention. In Loudon's "Hortus Britannicus" it stands as an under-shrub of the stove, growing two feet high, with yellow flowers: introduced from Brazil in 1825.

Dec. 7th, 1833.

G. I. T.

ARTICLE III.—*Interesting Remarks on British Ferns,* No. I. By M.

This beautiful tribe of plants has until lately obtained but little attention from those who pursue the study of Botany merely as a relaxation, or as imparting additional interest to a residence in the country. One reason has been that the Ferns, as well as the other orders of the Cryptogamous class, present greater difficulties to the botanical student from the nature of their fructification than most other classes; and another obstacle has arisen from the circumstance, that the terms used in defining the Ferns were so vague and scientific—botanists themselves differed so widely in the names they assigned to them, that how was the student to decide "when doctors disagreed?"

But the progress made in the science of Botany has extended even to the formidable 24th class, each order of which has in its turn received elucidation, while microscopic observation has detected the mystery of their reproduction. The seed of the Ferns,

though very evident by the aid of a microscope, is so minute, that it was formerly considered invisible, or "only to be discovered at the precise hour of the night on which ST. JOHN the Baptist was born"; while superstition invested it with the power of rendering its possessor himself invisible. SHAKSPEARE, and other poets of the "olden time," allude to this :

" We steal as in a castle, cock sure :

" We have the receipt for fern-seed—

" We walk invisible." SHAKSPEARE.

" I'll seek the shaggy fern-clad hill,

" And watch, 'mid murmurs, muttering stern,

" The seed departing from the fern,

" Ere wakeful demons can convey

" The wonder-working charm away." LEYDEN.

But though the investigations of science have stripped the Ferns of their magic influence, they have acquired far higher attractions ; and it is to our countryman, the late Sir J. E. SMITH, that we are indebted for an arrangement which greatly facilitates their classification : and the elegance and variety of their forms, and minuteness and beauty of their structure, will amply repay a little trouble bestowed upon their investigation. They also present another inducement to those who are fond of collecting and preserving botanical specimens : for while the gayer daughters of Flora lose much of their beauty of form and brilliancy of colour when preserved in the Hortus Siccus, these retain both, and are not subject to the attacks of those insects that frequently commit devastation in the Herbarium.

To the gardener I would plead, that the British Ferns would occupy and ornament those shady nooks and banks in his demesne, that are shunned by the brighter denizens of the parterre, while the numerous and beautiful species of foreign ones would diversify the collections of his stove and greenhouse.

If you consider the subject worthy a place in your pages, I will send a few hints upon the cultivation of Ferns, as well as some remarks upon SMITH'S arrangement of the British species ; and I offer the foregoing observations in the hope that some of your correspondents may favour us with *their* practical suggestions upon the cultivation and propagation of Ferns, both those of our own country and the beautiful strangers from warmer climes.

ARTICLE IV.—*On the Culture and Propagation of Plants, arranged according to the Natural System.*
 No. I. By MR. F. F. ASHFORD.

I have for some time past fostered the intention of commencing a series of communications on the propagation and cultivation of plants arranged according to the natural system, but until now have been deterred from so doing by private and unforeseen events. To the practical man they may probably be of but little use, but to the rising generation of young gardeners, and those persons who take delight in watching Flora in all her stages, from the vegetating of the seed to the maturation of the fruit,—to this class of persons they may be of some utility in the management of plants committed to their care; and if you think they merit insertion in the valuable pages of the *Floricultural Cabinet*, they are entirely at your service, and shall be followed up by others as opportunity permits.

As the great Author of the Universe created nothing in vain, surely he must be an unconscious observer of nature that does not discover in every walk, and every where, the goodness of an all-wise Providence in clothing the fields with verdure and the earth with beauties innumerable, for the support of animated nature—all tending to the advancement of our thoughts to that Being who created them.

I do not propose taking the orders as they are placed in the system, but to notice those first that are the most extensive, or containing genera most worthy of notice: commencing, therefore, with the order of Leguminosæ, ranking the 67th in the system of Jussieu, not only being the most numerous in genera and species, but one of the most useful to mankind.

Leguminous plants are immediately recognised by their papilionaceous flowers in a large number, pods and pinnate leaves constituting the remainder. As objects of ornament, many are possessed of unrivalled beauty: for example—among hardy flowering trees, the Robinia and Laburnum; for the flower-garden borders, the various species of the Cytisus, Caragana, &c.; among hardy climbers, the far-famed Glycinias of China and North America, with the herbaceous Vicia and Lathyrus; and lastly, among hardy herbaceous plants, the genera of Lupinus and Astragalus.

Great, however, as is the beauty that can brave the inclemencies of Northern Europe, they must give way to the beauty and elegance of their brethren of the Tropics. The flowers of the *Erythrina* are of the deepest crimson, and borne on some of the loftiest trees of the forest. The *Bauhinias*, with their snake-like stems and twin leaves, hang in festoons of flowers from branch to branch of other trees, and are only rivalled by the less vigorous and elegant, but more richly coloured, blossoms of the *Carpopogons*. But all these, with their broad heavy foliage and gaudy colours, are far surpassed by the rugged trunks, trembling airy foliage, and golden flowers of the *Acacias*. While the forests of hot countries are thus indebted to *Leguminosæ* for their timber, the meadows and pastures of the same latitudes are enamelled with myriads of *Hedysarums* and others too numerous to recite: even the gayest part of the scenery of Britain is indebted, in many respects, to the yellow flowers of *Spartium* and *Ulex*.

The arrangement of this tribe of plants is attended with much difficulty. By LINNÆUS and others, the number of genera was much smaller than those admitted by botanists of the present age: many additions have been made since the discovery of New Holland, and a large number of sub-divisions in old genera have been from time to time introduced by different authors. To combine these scattered improvements under one head, has been attempted by M. DECANDOLLE, whose system is here adopted. He divides *Leguminosæ* into two grand divisions—the first, named *Curvembriæ*, consisting of plants the radicle of whose seed is carried back upon the edge of the cotyledons; and the second called *Rectembriæ*, whose radicle and cotyledons are straight. In the former, certain diversities in the structure of the calyx and corolla again divide into two principal forms—*Papilionaceæ*, comprehending all the genera with butterfly-shaped flowers; and *Swartziæ*, consisting of an obscurely lobed calyx, and corollas with one, two, or more petals. This last is not again divided, but the former resolve themselves into two great tribes—those with fleshy cotyledons and eatable pulse, *Sarcolobæ*; and those with foliaceous cotyledons and seeds which are not eatable, *Thyllobæ*. Each of these is divisible by three. In *Rectembriæ* two suborders are formed, *Mimosæ* and *Cæsalpinææ*, upon variations in the æstivation of the calyx and corolla. In the former it is valvate; in the latter imbric-

cate. The first constitute a single tribe; the last divide into three, distinguished by less momentous peculiarities of structure. Having premised so far, the following table will be intelligible :

ORD. LEGUMINOSÆ, GEN. 246, SP. 2517.

1. CURVEMBRIÆ, gen. 191, sp. 1930.
a Papilionaceæ.
- | | | |
|--|---|---|
| A. Phyllolobæ. Gen. 149, sp. 1483. | { | Tribe 1. Sophoræ. Pod continuous. Stamens distinct. Gen. 31, sp. 190. |
| | | Tribe 2. Lotææ. Pod continuous; stamens united by filaments. Gen. 85, sp. 1058. |
| | | Tribe 3. Hedysarææ. Pods with transverse articulations; stamens mostly united by the filaments. Gen. 32, sp. 234. |
| B. Sarcobolæ. Gen. 45, sp. 447. | { | Tribe 4. Vicicææ. Pod polyspermous, detriscent; leaves cirrhou, the first alternate. Gen. 9, sp. 181. |
| | | Tribe 5. Phaseoleæ. Pod polyspermous, detriscent; leaves not cirrhou, the first opposite. Gen. 29, sp. 227. |
| | | Tribe 6. Dalbergicææ. Pod one or two seeded, indetriscent; leaves not cirrhou. Gen. 7, sp. 39. |
- b* Swartzicææ. Tribe 7. Swartzicææ. Gen. 2, sp. 4.
2. RECTEMBRIÆ, gen. 50, sp. 583.
a Mimosa. . . . Tribe 8. Mimosææ. Gen. 12, sp. 236.
- | | | |
|--|---|--|
| <i>b</i> Cæsalphiniæ. Gen. 11, sp. | { | Tribe 9. Geoffrææ. Sepals and petals intricated in æstivation; stamens variously connected by filaments. Gen. 6, sp. 11. |
| | | Tribe 10. Cassiææ. Sepals and petals intricated in æstivation; stamens distinct. Gen. 31, sp. 235. |
| | | Tribe 11. Detariææ. Sepals before expansion indistinct; calyx bladder-like. Gen. 1, sp. 1. |

Having thus given, at one view, a tabular explanation of the sub-orders and their divisions and sub-divisions of this immense order, I think it will be loss of time and waste of paper to add a list of the generic names, which will appear at the description of each genus.

Div. 1, Curvembriæ. Sub-order 1, Papilionaceæ. Sub-div. 1, Phyllolobæ. Tribe 1, Sophoræ. Genera 1, Anagyris, or Bean Trefoil. Class 10, order 1, species 3. Le bois puant, Fr.; Der stinkbaun, Ger. Small shrubs of not very hardy growth, and very often killed back in severe winters. It is therefore best to protect them by means of hoops and mats, or in cold frames, where they will survive. Increased by layers, seeds, or cuttings of young wood. Anagyris, so named by TOURNEFORT, from Ana, backward—gyros, a circle; alluding to the pods being curved inwards.

Genera 2. Aotus. Class 10, order 1, species 3. Small evergreen shrubs with yellow flowers, from New Holland, and thrives best in an equal mixture of loam and peat. Increased by young cuttings planted in sand under a bell glass, and seeds when pro-

duced. Aotus, named by Sir J. E. SMITH, from a, privative or wanting—ous, an ear; in allusion to the want of appendages to the calyx.

Genera 3. Baptisia. C. 10, or. 1, sp. 9. Herbaceous plants of easy cultivation, and as ornamental border flowers, which will succeed well in any tolerably good soil. They sometimes ripen seeds, by which they are easily raised, and also increased by dividing the roots. *B. perfoliata* being a native of Carolina, should be kept in the greenhouse. Baptisia, from bapto, to dye, alluding to the blue tincture that is extracted from the leaves of some species; named by VENTENAT.

Genera 4. Brachysema. C. 10, or. 1, sp. 2. Handsome climbers for a conservatory, thriving well in an equal mixture of sandy loam and peat, and readily increased by layers, seeds, or by cuttings planted under a hand-glass in sand, which will root freely. Brachysema, named by BROWN, from brachys, short—sema, a standard; from the standard or vexillum of the flower being very short.

Genera 5. Burtonia. C. 10, or. 1, sp. 3. A genus from New Holland, which, as SWEET observes in the *Botanical Cabinet*, 251, requires more than ordinary treatment to keep it in good health. An equal mixture of very sandy loam and peat is the most suitable soil, the pots well drained with potsherds, that the water may pass off freely, as nothing is more injurious than to be sodden with too much water. Young cuttings are not difficult to root, planted in sand under a bell-glass; it may also be raised from seeds, which are sometimes produced.

Nov. 20th, 1833.

F. F. ASHFORD.

ARTICLE V.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONTINUED FROM PAGE 10.)

| NAMES. | DESCRIPTION. |
|----------------------------|----------------------------|
| 127 Bonito..... | Light purple and pink. |
| 128 Bonne Generaire | Lilac blush. |
| 129 Boquet charmante | Small pretty light purple. |
| 130 ——— royale..... | Bright purple. |
| 131 Boule pourpre | Dark purple globe. |
| 132 ——— rouge | Fine globe scarlet. |

| NAMES. | DESCRIPTION. |
|-----------------------------------|--|
| 133 Bracelet d'Amour | Small pale blush. |
| 134 Brown Superb | Light blush crimson, very splendid |
| 135 Bruis Kleau | Crimson. |
| 136 Buonaparte | Very brilliant red. |
| 137 Burning | Light red, very bright. |
| 138 Burning coal | Bright red, very double. |
| 139 Cæsar | Fine crimson blush. |
| 140 Camille Bohlin | Bright scarlet, curled. |
| 141 Candide | Fine large crimson. |
| 142 Candidus | Small rich purple. |
| 143 Capricorne | Fine curled double deep red. |
| 144 Cardon bleu | Large double blue purple. |
| 145 Carlo dolci | Good purple and scarlet. |
| 146 Carnation | Fine striped. |
| 147 Carnea | Beautiful flesh colour. |
| 148 Cassivclanus | Bright red, very large. |
| 149 Catelle | Semi double red. |
| 150 Celeste | Pale blush. |
| 151 Celestial | Semi-double light blush. |
| 152 Celestine | Bright deep blush. |
| 153 Cent Feuille d'Orticule | Deep red. |
| 154 ——— Platte | Large bright pink. |
| 155 Ceries curla | Deep pink, pretty. |
| 156 Cerotris | Double purple. |
| 157 Champion | Curled scarlet and pink. |
| 158 Champion, Fiery | Large red. |
| 159 Chapron | Bright deep crimson velvet. |
| 160 ——— rouge | Fine rich crimson. |
| 161 Charles Auguste | Very splendid large double pink. |
| 162 Charles the First | Large double red. |
| 163 Charles the Second | Fine bright pink, in clusters. |
| 164 Charlotte de la Charme | Large pale blush. |
| 165 ——— Rousseau | Semi-dble. bright scarlet in clusters. |
| 166 Charmante de Montrieul | Variigated light pink. |
| 167 ——— Ecossaise | Beautiful deep blush. |
| 168 ——— Irlandaise | Bright crimson. |
| 169 ——— Pivoine | Bright blush scarlet. |
| 170 Chrysolora | Large deep purple. |
| 171 Cicero | Light and dark purple, very curious. |
| 172 Claudius Cassius | Light crimson and blush. |
| 173 Claire | Small transparent pink. |
| 174 Clara | Close pale blush. |
| 175 Clarisse | Fine scarlet and purple. |
| 176 Clemantine | Large blush. |
| 177 Clementia | New, reddish blue. |
| 178 Cleonise | Beautiful blush. |
| 179 Concarde | Fine deep blush. |
| 180 Copenhagen | Fine deep scarlet. |
| 181 Cordon Pourpre | Fine purple. |
| 182 ——— rouge | Deep red. |
| 183 Coronation Nouveau | Immense large purple. |
| 184 Corvisar | Deep scarlet, tinged with purple. |
| 185 Couleur dufen alumnant | Fine red and purple striped. |
| 186 Countess d'Albemarle | Semi-double red and purple. |
| 187 Countess of Munster | Fine large scarlet and light blush. |
| 188 Craculatum | Beautiful pink blush. |
| 189 Cramoisi | Beautiful shaded scarlet. |
| 190 Cramoisi royale | Fine crimson, tinged with light blush, very splendid. |
| 191 Cristata | Light purple, tinged with crimson. |

| | NAMES. | DESCRIPTION. |
|-----|----------------------------|--|
| 192 | Crown..... | Double red. |
| 193 | Cumberland | Fine pale pink and purple. |
| 194 | Cupid..... | Small blush. |
| 195 | Dageraad nouveau | Large fine crimson. |
| 196 | Damas boquet | Light blush, in clusters. |
| 197 | — unique | Deep velvet purple. |
| 198 | Daragon | Light red. |
| 199 | Dauphmoise | New. The best dark purple. |
| 200 | Decomets | Bright blush. |
| 201 | Decora | Fine mottled purple. |
| 202 | De France | Very fine white. |
| 203 | Dejanice..... | Large deep lilac blush. |
| 204 | De la porte | Light purple. |
| 205 | Delice..... | Fine deep scarlet tinged with purple. |
| 206 | Deliceosa | Pale red. |
| 207 | Delphine | Fine double dark purple. |
| 208 | Diana..... | Cream colour. |
| 209 | D'Italie | Large bright deep pink. |
| 210 | Domminante | Light crimson. |
| 211 | Don Baltazer..... | Small blood red. |
| 212 | — Pedro..... | Pink, mottled with crimson. |
| 213 | — Quichotte | Bright dazzling scarlet velvet, semi double. |
| 214 | — Var..... | Lilac turning pale. |
| 215 | D'Otieul..... | Small blush. |
| 216 | Double Musk | White. |
| 217 | — Sweet Briar | Light pink. |
| 218 | Duc d'Angouleme | Fine cream colour. |
| 219 | — de Biabant..... | Very double bright red. |
| 220 | — Bordeaux | Fine mottled pink. |
| 221 | — ———, New | Blush. |
| 222 | — Grouchie | Semi-double, large blush. |
| 223 | — Guiche | Large bright red. |
| 224 | — Lerme | Purplish crimson. |
| 225 | — Malmaison | Fine bright red. |
| 226 | — Penthiere | Fine red. |
| 227 | — Wellington | Fine large deep scarlet. |
| 228 | Duchesse d'Angouleme | Beautiful brilliant red. |
| 229 | — de Bordeaux | Large fine bright scarlet. |
| 230 | — Normandie | Light lilac. |
| 231 | Duchess of Kent | Large cherry red. |
| 232 | — Oldenbourg | Light red. |
| 233 | — Parma..... | Crimson purple. |
| 234 | — Rutland | Blazing pink blush. |
| 235 | Dufay..... | Light bright red. |
| 236 | Duke of Devonshire | Small scarlet, mottled with purple. |
| 237 | Du Luxembourg | Deep red. |
| 238 | — Pape | Small bright red. |
| 239 | Earl Grey | Light pale red. |
| 240 | Elentheria | Scarlet and pink. |
| 241 | Elize d'Otieul | Crimson. |
| 242 | Emilius | Small pink blush. |
| 243 | Emmicus | Fine mottled purple. |
| 244 | Empress of Russia..... | Light purple. |
| 245 | Enfans de Crave | Fine large double deep pink. |
| 246 | Enfant de France | Bright scarlet, very double. |
| 247 | Enforbia..... | Curled red. |
| 248 | Entreprise | Good pink. |
| 249 | Erasmus d'Oviedo | Small pink, semi-double. |

| NAMES. | DESCRIPTION. |
|---------------------------------------|--|
| 250 Escarlate admirable | Beautiful curled scarlet. |
| 251 Etna | Fine crimson blush. |
| 252 Eucharis..... | Fine purple tinged with blue. |
| 253 Eugres nouvelle..... | Pretty lilac. |
| 254 Eugene d'Orleans | Small white, evergreen. |
| 255 Eveque | Changeable purple and scarlet. |
| 256 Exornatum..... | Dark and light purple. |
| 257 Fabrice | Pink with white spots. |
| 258 Fairly Cunningham | Fine scarlet, tinged with purplish blue. |
| 259 Falcata | Purple. |
| 260 Fanny..... | Dark purple. |
| 261 — Bease | Fine large pink. |
| 262 Fatine..... | Curled red. |
| 263 Favourite des Dames..... | Large blush. |
| 264 Felicite perpetuelle | Pale pink, in clusters. |
| 265 Ferocite | Fine purple. |
| 266 Feux nouveau de Beauman | Fine light purple and red. |
| 267 Flambeau ante | Small scarlet. |
| 268 Flava charmante | Large scarlet. |
| 269 — pourpres | Very large purple. |
| 270 Flemish Mottled | Fine large semi double red. |
| 271 Fleur de Parade..... | Light pink. |
| 272 Flora fantasio | Fine curled pink. |
| 273 — perfecta..... | Dark and light blue purple. |
| 274 Florida | Semi-double scarlet. |
| 275 — nouve..... | Semi-double deep purple and red. |
| 276 Friolette..... | Semi double light purple. |
| 277 French Glory of the Gardens | Fine blue purple. |
| 278 — rose de quatre saisons | Semi-double light red. |
| 279 Galinnira | Mottled white. |
| 280 Galliga | Fine large scarlet. |
| 281 — nouva | Fine bright blush. |
| 282 Gaufree | Fine deep mottled purple. |
| 283 Gay..... | Fine bright pink. |
| 284 General Blucher..... | Small purple, in clusters. |
| 285 — du Roc | Very large deep red. |
| 286 — Gourgoux | Large pale red. |
| 287 — Thiare | Fine small dark purple, in clusters. |
| 288 — Valmore..... | Purplish blood red. |
| 289 George the Fourth..... | Rich large purplish crimson. |
| 290 Geunier | Fine red. |
| 291 Gil Blas | Large pink. |
| 292 — Peres..... | Dark crimson, tinged with purple. |
| 293 Glacee..... | Fine scarlet and pink. |
| 294 Gladiator | Beautiful crimson and purple. |
| 295 Globe, white hip | Beautiful white globe. |
| 296 Gloire de Pourpre | Changeable purple. |
| 297 — des jardins | Purple and dark scarlet. |
| 298 — du Peuple | Semi double scarlet purple. |
| 299 Gloria Mundi..... | Pale reddish pink. |
| 300 Gocona | Pink. |

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

REVIEWS.

A Catalogue of Flower Roots, Plants, &c. for 1834: comprising Ranunculuses, Tulips, Geraniums, Carnations, Picotees, Pinks, Dahlias, and Pansies. Grown by the Rev. JOS. TYSO & SON, Wallingford, Berks.

THE Catalogue is greatly enlarged, having received a considerable addition of new varieties of Ranunculuses, Tulips, Carnations, &c. &c. (See v. I. p. 17.)

EXTRACTS.

Plants figured in the following Periodicals for January:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Rhododendron arboreum, var album.* Tree Rhododendron; white-flowered variety. Synonym, *R. album*. Decandria, Monogynia. Ericææ. This beautiful variety of the Tree Rhododendron, flowered in great perfection in the Conservatory of ROBERT BAXTER, Esq. Dee Hills, near Chester, in February, 1831. It was raised from seeds sent by Dr. WALLICH to Mr. SHEPHERD, of Liverpool, about twenty years ago. In the List of Plants of the Hon. the East India Company's Museum, Dr. WALLICH gives this plant as a native of the high mountains of Nepal, where he gathered it in 1821. Dr. HAMILTON appears to have first discovered the plant on a mountain at Narainhatty, in 1803. It flowered for the first time in Europe, in Mr. BAXTER's collection. Rhododendron, from Rhodo, a rose; and dendron, a tree.

2. *Tradescantia pilosa*, Hairy Spiderwort. Hexandria, Monogynia. Commelineæ. Roots of this plant were sent by Dr. DRUMMOND, from Louisiana, to the Glasgow Botanic Garden, where it flowered during the autumn of 1833. Stem grows two to three feet high. Flowers numerous in terminal umbels, of a bright purplish blue, with yellow showy anthers. Culture—it requires the same treatment as the common border *T. virginica*, from which plant it differs by having extremely hairy leaves. *Tradescantia*, from Mr. JOHN TRADESCANT, Gardener to CHARLES I.

3. *Lobelia puberula*; Blue downy Lobelia variety. Syn. *Lobelia puberula, var. glabella*. Pentandria, Monogynia. Lobeliacææ. This is a highly interesting addition to our Garden Lobelias, and was introduced last year by Mr. DRUMMOND, who sent the seeds from Jacksonville, in Louisiana. The species appears, indeed, to be little known even to the American Botanists, and is probably confined to the Southern States. Its nearest affinity is perhaps with *L. siphilitica*, but its spike is less dense, and vastly more elongated, its flowers smaller, of a brighter purplish yellow, with two white spots on the lower divisions of the corolla. The spike rises about a foot high. Culture—The plant is perennial, and increased by division. *Lobelia*, from M. LOBEL, a celebrated botanist.

4. *Opuntia Brasiliensis*; Brazilian Prickley Pear. Icosandria, Monogynia, Cactææ. The peculiar habit and mode of growth at once distinguish this species. It rises with a perfectly straight, erect, slender, but firm and stiff round stem, to a height of from ten to twenty, or even thirty feet, very gradually tapering to a point, furnished all the way up with short, mostly horizontal or declining branches. The whole plant resembles a straight taper pole, artificially dressed up with branches. The main stem is perfectly round. The flowers open in long succession, being abundantly produced all over the plant from the prominent parts of the edges of the terminal joints. They are of a bright lemon yellow, middle-sized. The fruit is rather agreeable, juicy, with a fine acid, somewhat resembling an indifferent, hard fleshed, or unripe Plum, with a smell and slight flavour like the leaf stalks of Garden Rhubarb. *Opuntia*, from *Opus*, a city of Locris.

5. *Libertia formosa*; beautiful *Libertia*. Triandria, Monogynia. Irideæ. This species flowered beautifully in Mr. CUNNINGHAM'S Nursery, at Comely Bank, Edinburgh, in May, having been received from Mr. Low, of Clapton Nursery, who raised it from seeds imported from near the Southern extremity of the continent of America by Mr. ANDERSON. Its root forms a number of crowns, by which it no doubt may be propagated, and it probably will ripen seeds in the greenhouse. Stem, one foot four inches high. Flowers, numerous, in a capitate head, they expand in succession, white.

6. *Helianthus speciosus*. Showy Mexican Sun Flower. Syngenesia, Frustanea. Compositæ. Division, Heliantheæ. THOMAS GLOVER, Esq. of Manchester, states, Mr. EDWARD LEEDS, of this place, who has lately commenced business as a Nurseryman and Florist, from among a packet of seeds from the Botanic Garden, Mexico, sent by W. HIGSON, Esq. of Manchester, has raised several plants that are not known in this neighbourhood. Only one, (the above named plant) has flowered. Only one seed vegetated, and the title upon the paper was *Composita speciosa*, and it is said to come from Jorulla. The plant with Mr. LEEDS, rose to the height of about five feet, beset with branches very thickly all the way from the bottom to the top, the lower ones projecting nearly horizontally from the plant about 18 inches long, the rest gradually decreasing in length up to the top, and forming a complete cone, each lateral shoot producing a flower at its termination, and inclining upwards. Flowers of a deep orange, about three inches in diameter. (We suppose the plant is annual.—Cond.) *Helianthus*, from *Helios*, sun; *anthos*, flower—resemblance of flowers.

7. *Cleome dendroides*. Tree-like *Cleome*. Syn. C. arborea. C. atro-purpurea. Hexandria, Monogynia. Capparidea. Though the colour of the flowers is rather singular than brilliant, this is a very striking plant, with its curious candelabrum like, flower spike, and handsome foliage. It was raised from seeds imported in 1828, from the Brazils, by Mrs. PENFOLD, of the Achada. For the first two years, this *Cleome* has quite the appearance of an annual or biennial herbaceous plant; rising with a single erect stem, to the height of from one to two or three feet, and producing, in the summer of the second year, a single, terminal spike of flowers. But after this, it puts forth one or two branches below the first spike, and the stem becomes more woody, brown and decidedly shrubby, attaining in this state five feet high, and lasts from four to five years. Flowers, large and singular in form, of a dark, dull, atro-purpureous colour, fetid, with the very unpleasant smell of cabbage-water. *Cleome*, from *Kleio*, to shut.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Esq.,
Professor of Botany in the London University. Coloured,
4s.; plain, 3s.

1. *Amaryllis Kermesina*; Carmine *Amaryllis*. Mr. W. B. BOOTH, gardener to Sir CHARLES LEMON, of Carclew, in Cornwall, states, "Roots of this pretty

species of *Amaryllis* were brought from Brazil, in the early part of 1833, by Lieutenant HOLLAND, of the Royal Marines, who presented them to Miss STREET, of Penryn. It appears next to *A. advena*, and *intermedia*, but is perfectly distinct from either flowers. Scape grows a foot high, flowers pedicelled, three or four in number; pedicels round and slender, from two to three inches in length. Perianthium about $2\frac{1}{4}$ inches long, funnel shaped, slightly campanulate, of a deep carmine colour, marked with darker veins. Culture—Thrives well in a mixture of loam, peat, and sand. It has hitherto been kept in a warm Vinery. *Amaryllis*, from a nymph of VIRGIL'S.

2. *Hesperoscórdum lacteum*. Milk-white *Hesperoscordum*. Hexandria Monogynia, Asphodeleæ. This plant was found by Mr. DOUGLAS in California, whence its roots were sent to the Horticultural Society in 1833; the plant bloomed in July. It proves a hardy perennial plant, of but little beauty. Flowers, numerous in each umbel, white. They appear very much like some white flowered *Allium*. It seems to grow freely in any sort of soil. *Hesperoscordum*, literally "onion of the west;" so named from its resemblance to an *Allium*, and its origin in the western world.

3. *Limnócharis Humboldtii*. Humboldt's *Limnocharis*. Syn. *Stratiotes nymphæoides*. Polyandria Polygynia. Butumeæ. An Aquatic Stove Plant, originally found by HUMBOLDT in Marsheso, the West of Caraccas; but it seems common over all the east side of South America. The seeds from which the plants in the Gardens were raised, were sent to the Botanic Garden, Liverpool, from Buenos Ayres. The flowers are very fugitive, opening in the morning, and withering up in the course of the day. They are of a bright yellow colour, much resembling the well known *Escholtzia californica*. The petals are extremely transparent and delicate; but the chief beauty of the species resides in the rich purple fringe of barren stamens which surrounds the fertile ones. It flowers all the year round in a tank in the stove. It is cultivated in Mr. LOWE'S Nursery, Clapton. *Limnocharis*, literally, Lake-lover.

4. *Pancretium pedale*, Long-flowered *Pancretium*. Syn. *Hymenocallis pedalis*. One of the most beautiful of the *Amaryllis* tribe, excelling them all in the extraordinary length of the flowers, which measure a foot from the base of the tube to the top of the segments. The latter are very narrow and wavy; the flowers are white. The bulb was sent by Mr. BARNARD from near Truxillo. Grown by RICHARD HARRISON, Esq. at Aighburgh. *Pancretium*, signifying "all powerful." It seems to have been originally applied to the squill, on account of its medicinal effects.

5. *Lupinus albifrons*. A new shrubby Californian Lupine. Flowers of a pale purple colour. Cultivated in the Garden of the London Horticultural Society. *Lupinus* (see page 16.)

6. *Hellebórus odoros*, Sweet Hellebore. Polyandria Polygynia. Ranunculaceæ. A very desirable addition to the scanty store of winter-blowing flowers, lately introduced from Hungary by the London Horticultural Society. The flowers are of a lively green colour, slightly fragrant. It thrives in a peat border among bushes, where it is probably quite hardy. Helleborus, the black Hellebore of the ancient Greeks, with which it is said that wells were sometimes poisoned, and which had so great a reputation as a dangerous medication, was undoubtedly a species of the present genus.

7. *Corydalis bracteata*, Large bracted *Corydalis*. Syn. *Fumaria bracteata*. Diadelphia Hexandria. Fumariaceæ. A very pretty little hardy herbaceous plant, found abundantly in damp shady places among the Altai mountains, where it appears with the earliest flowers of spring. Flowers, of a clear yellow colour. In this country the plant succeeds well in a peaty soil, if it is sheltered from winds, and protected from the sun's direct rays. It is, however, as yet extremely rare, for it yields no seed, and increases very slowly by its roots. It is grown in the London Horticultural Society's Garden. *Corydalis*, from the Greek word *corudallis*, a lark; in allusion to the lengthened base of one of the petals, which has been compared to the spur of the lark.

8. *Francoa appendiculata*, Sowthistle-leaved *Francoa*. Syn. *F. sonchifolia*, Octandria Monogynia. Francoaceæ. A pretty herbaceous plant, found

abundantly in various parts of Chili, by the sides of hills and in rather moist situations. In this country it grows freely in the open air in the summer, but requires protection in the winter, it, however, thrives better if constantly kept in a greenhouse, especially if it be planted in the open soil, where it can be freely exposed to light and air, without which the beautiful spots of its petals are scarcely developed. It is propagated by seeds and offsets. Francoa. So called by Cavanilles after a Spanish botanist of the sixteenth century, named Francisco Francoa.

9. *Aster puniceus*; var demissus. Dwarf blue Aster. Syn. *A. amœnus*, *A. hispidus*. This variety has long been known in the English Gardens, and is one of the commonest and most generally known of all the North American species. Its tall hispid racinose stem will at once distinguish it from others that are generally met with. Flowers of a violet blue colour. It is a very compact herbaceous plant, not exceeding a foot and a half, or two feet in height. The flowers appear in August, long before those of the true. *A. puniceus*. It is among the handsomest of the genus. Aster, from a Star, resemblance of flowers.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
 Librarian to the Linnæan Society. Coloured, 3s.; plain, 2s. 3d.

1. *Verbena sulphurea*. Sulphur coloured Vervain. *Didynamia Angiosperma*, *Verbenaceæ*. This pretty little Vervain was raised from Chilian seeds received from Mr. HUGH CUMING, by Mr. WILLIAM CHRISTY, JUN., in whose collection of plants at Clapham, it bloomed in August, 1833. The plant is apparently perennial, and forms a close spreading patch. It appears to prefer a loamy soil, and grows luxuriantly in the open border during Summer, but requires the protection of a pit in Winter. Cuttings of it root readily. In appearance, the growth and form of the plant is like *V. pulchella*. Flowers of a good sulphur colour. *Verbena*, from Ferfaen, its Celtic name.

2. *Adesmia uspalatensis*. Thorny. *Decandria Monogynia Leguminosæ*. An upright, branched, thorny, shrub, seldom exceeding a foot in height. The plant is grown in the Chelsea Botanic Garden, seeds of it had been received from Mr. HUGH CUMING, having been collected in Chili. It is a very pretty little shrub, its small, abruptly pinnate leaflets, mostly in five pairs, with its rich yellow papilionaceous flowers, render it a desirable plant. The pods, when full grown, are particularly pretty, from the long feathery hairs with which they are adorned. The plant is fond of a light loamy soil, it requires protection in Winter, and may be increased by cuttings. *Adesmia*, the name has reference to the separation of the stamens, and is compounded of a privative, and *desmos*, union.

3. *Francoa ramosa*; white-flowered. *Octandria, Monogynia, Francoacææ*. This species grows abundantly on the hills near Valparaiso, in Chili. It has been collected by Mr. CUMING and Mr. BRIDGES. It blossomed in July, 1833, in the Nursery of Mr. KNIGHT, King's-road, Chelsea. The scape of flowers rises from 2 to 3 feet high, erect, and branched, flowers white, occasionally a very slight tinge of rose colour. The plant appears to thrive best in a mixture of sandy peat and loam, and is readily increased by seeds, which it perfects freely. *Francoa*, (see page 41.)

4. *Petromarula pinnata*, wing-leaved, Candiôt Rampion. Syn. *Phyteuma pinnata*, *Rapunculus creticus*, *Petromarula*, *Rapunculo*, *Candiota*. *Pentandria, Monogynia, Campanulacææ*. This remarkable plant is frequent on the rocky shores and mountainous parts of Candia, and also on Mount Baldo, in Italy. It is now cultivated in the very rich collection of Messrs. YOUNG, of Epsom, where it blossomed in September, 1833; it was there planted in the open ground in May, in a rich loamy soil, where it grew vigorously, throwing up 40 to 50 stems, which began to blossom towards the end of August. Stems, erect, branched from 3 to 4 feet high, or more; branches on erect; Flowers fasciculate, disposed in very long, terminal, loose, spiked

racemes, of a pale azure blue. The plant requires the protection of a frame or greenhouse in winter. Increased slowly by division. *Petromarula*, from *petra*, a rock, and *maron*, an herb, from the plant growing on rocks.

The Botanical Cabinet. Edited by Messrs. LODDIGES'S. Coloured, 6s.; partly coloured, 2s. 6d.

This work is now completed. The Proprietors state that it was originally their intention to give figures of two thousand plants, which now being done, their work is completed.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small, coloured.

1. *Oxalis crenata*, notched-petalled Wood-Sorrell. Decandria, Pentagynia. Oxalideæ. This variety is a far more robust plant than any other of the genus; it is not on account of its flowers or herbage that it becomes an object of peculiar interest, but from its tuberous roots, which bear a great resemblance to those of the Potatoe, their form and colour being precisely similar to it. A native of Lima; introduced in 1829; grows to the height of three feet; perennial; flowers in July and September; colour yellow. In regard to the culture of this newly-introduced vegetable, very little knowledge has yet been acquired; but it will grow well in the open border, providing the soil is rich. *Oxalis*, from the Greek *Oxys*, signifying sour, taste of the leaves; *Crenata*, from the Latin, notched, in allusion to its flowers.—(See *Flo. Cab. Vol. I. plate 4, and page 45*)

2. *Erica cnearea*, grey Heath. Octandria, Monogynia. Ericææ. This hardy British Heath is highly ornamental in the garden, and deserves general cultivation. There are several varieties, as deep crimson, pure white, and intermediate tints. It grows one foot high; flowers in July and September; native of Britain. *Erica*, from *Ereico*, to break, referring to the fragility of the branches; and *cinearea*, signifying ash coloured.

3. *Alstræmeria pelegrina*, spotted flowered. Hexandria, Monogynia. Amarylloideæ. This plant has usually been treated as a greenhouse plant; it is, however, half hardy, requiring only the cold frame. If it be treated as a border plant, the situation should be warm and dry, and the soil made very light with leaf mould, sand, and the sifted mortar rubbish of an old building. Flowers rosy white, spotted with black; the stems grow one foot high; blooms from June to September, and is a perennial plant. *Alstræmeria*, named by Linnaeus, in honour of Baron Alstræmaer, who sent him seeds from Spain. *Pelegrina* is its common name in Peru, which signifies a superb flower.

4. *Aconitum versicolor*, Shaded Monk's Hood. Polyandria, Trigynia. Ranunculaceæ. This species is of upright growth, and its flowers are ornamental, it grows three feet high, flowers in July and August; is a perennial border plant. The flowers are blue and white. All the species of *Aconitum*'s are poisonous. *Aconitum*, from the Greek *acon*, signifying a dart, because its poison was used upon darts, to render them the more deadly.

Soot destroys or drives off from pink beds those common and voracious grubs of gardens, the larvæ of the moths of the family Noctuidæ.—Last summer I was troubled with the grub in a bed of pinks: I then made some soot water, and with it watered the bed well, and the bed was soon freed from the grubs. The precise mode of the soot's action on the grubs I cannot state; but I believe that the ammoniacal matter which it contains destroys some, and disperses the remainder. I shall gladly receive any information on this head. I have not found the soot injure the soil at all; and I name this because I had been told it would.—W. DENYER, *Gard. Mag.*

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

QUERY TO THE REV. JOSEPH TYSO, ON RAISING RANUNCULUSES.—Allow me through the medium of your excellent work, to ask my good friend the Rev. J. Tyso, who has been and still is one of the most successful growers of that beautiful Florist's flower the Ranunculus, to inform the lovers of that flower of his method of raising seedlings. He is well aware that the day is gone by for keeping anything secret that is for the pleasure or happiness of our fellow-creatures. Will he be so kind as to answer the following queries, in as plain and familiar a manner as possible.

1. To name a few of the best flowers in each class to be impregnated ?

2. The kind of flowers proper for the work of impregnation, whether single or semi-double ?

3. The time most proper to perform the work of impregnation, with the manner of performing it ?

4. The future management of the flower impregnated ?

5. The best time for gathering and sowing the seed, with the compost in which it is to be sown, and whether it is best to sow it in *pans* or *boxes* ?

6. The best plan of preserving the roots till the planting season ?

I should not have taken the liberty I have, if I had not known something of the kind disposition of my good friend; and shall wait with no small degree of impatience for his reply to my queries,

Now that I feel an inclination for scribbling, I wish to ask you the best situation and soil for the *Weeping Willow*, as I have succeeded in striking a cutting given me by a friend who took it from the tree that grows and spreads its sweeping branches o'er the tomb of

" Him who rode war's fiery billows
Once, and ruled their surges wild,
Now beneath Helena's willows
Sleepeth—like a child'
All his soaring spirit flows,
Napoleon! Napoleon!

In his grave the warrior sleepeth,
Humbly laid, and half forgot,
And nought, besides the willow, weepeth
O'er that silent spot!

Calm it is, and all his own,
Napoleon! Napoleon!"

My plant is about fourteen or fifteen inches high, with about five or six slender branches bending weepingly from the stem. I intend, as speedily as possible, to increase my stock, when (if you have no objection) I shall feel pleasure in presenting you with a plant.—[We shall esteem it a favour.—**CONDUCTOR.**]

Like our good friend REVELL, I certainly feel a considerable portion of incredulity relative to the size of "INNOVATOR'S" Pinks. I have for years grown that beautiful flower, but never to the perfection spoken of by your Correspondent. My blooms were universally admired, and took the first pan; but I should think the largest did not exceed six inches, which was taken from "*William of Walworth*." I hope that, in order all scepticism may be banished from the mind, INNOVATOR will at an early period give us an account of his plan, with the names of the sorts he grows.

Leicester, Dec. 12th, 1833.

SAML. WIGG.

ON PINKS, CARNATIONS, &c.—Will INNOVATOR inform me whether any of the Pinks “one foot in circumference” can be seen next year within ten miles of London, and their names. I must confess a Pink four inches across (which of course it must be to be a foot round) is new to me. Last July, at Hogg’s, a friend of mine measured a Carnation, which was so much larger than the others on his stage as to be on that account peculiarly conspicuous, and found it to be four inches and three quarters across, and I think no other there could have been more than four inches. But when we hear of Pinks of that size, Carnations may be grown by INNOVATOR probably eight inches in diameter. At all events he will, perhaps, favour us with his standard size for Carnations. With regard to piping, I tried Mr. REVELL’S plan this year late, (for my first pipings failed), and I struck every piping under a large hand-glass, except one. I am much indebted to him for communicating it. What does INNOVATOR mean by saying, that by the mode he recommends Mr. REVELL may strike *one hundred and fifty* out of every *one hundred*? Surely that can only be done in Ireland. B. M.

London, Dec. 2d, 1833.

ON DESTROYING THE WIRE-WORM, &c.—Can you or any of your respected Correspondents inform me of the best method of destroying the small black snail, and wire-worm, which do so much injury in our gardens? I have tried lime, which kills them, but have always thought it to do more harm to the plants than the destroying of the vermin did good.

Jan. 3d, 1834.

E. R. W.

ON RHODODENDRONS, &c.—I should feel much obliged by being informed, through the medium of the *Cabinet*, which are the best and handsomest sorts of Rhododendrons and Azaleas for green house culture.

Dec. 9th, 1833.

S. C. A.

ON THE CULTURE OF BRUGMANSIA.—I should be much obliged if some of the readers of the *Cabinet* would give a paper on the treatment suitable to the Brugmansia Arborea, both as a dwarf, or a tall cultivated plant, so as to bloom it well, whether in the house or open air.

Jan. 4th, 1834.

MARTIN.

ON PINKS, POMEGRANATES, &c.—I should be particularly obliged if you or any of your numerous Correspondents would give me some information on the culture of a Pink named “Davey’s Eclipse;” with me the edges of the petals become uneven instead of the contrary! Also the best method of producing in the *open air*, flowers of the Double Pomegranate, in the *shortest* possible period.

W. D.

Beverley, Dec. 13th, 1833.

ANSWERS.

ON THE SIZES OF PCTS, &c.—In reply to the query of a Subscriber, inserted at page 21, we beg to observe that there are eleven sizes usually sold. The price is the same for all the sorts, viz. two of the largest cost the same price as eighty of the smallest. The following scale gives the distinguishing sizes in inches, as requested by our Correspondent:—

| | | In. dr. | In. dp. |
|-----------------|-----------------------------------|---------|----------|
| 1st size, has 2 | to the cast, called Twos, and are | 18 | and 18 |
| 2d..... | ..... | 12 | 12 |
| 3d..... | Sixes..... | 9 | 8 |
| 4th..... | Eights..... | 8 | 7 |
| 5th..... | Twelves..... | 7 | 6 |
| 6th..... | Sixteens..... | 6 | 7 |
| 7th..... | Twenty-fours..... | 5 | 6 |
| 8th..... | Thirty-twos..... | 4 | 5 |
| 9th..... | Forty-eights..... | 3 | 4 |
| 10th..... | Sixties..... | 2 | 2½ |
| 11th..... | Eighties, or thumbs..... | 1½ | 2 |

ANSWER TO S. A. H., RESPECTING TULIPS.—The reason why bulbs are taken up every year, appears to be in order to accommodate them as nearly as possible to their natural state. In most hot countries the variation of seasons gives them a period of rest, during which the bulb is in a dry inactive state. Tulips, if left all the year in the ground, degenerate and become foul, the beautiful stripes and feathered markings become suffused, and the bulbs “break into small increase;” or, as my friend Mr. T. K. SHORT (to whom I am under peculiar obligations,) says of Hyacinths, “produce nothing but off-sets.” If the Tulips S. A. H. mentions, were originally good, *i. e.* fine roses, *byblomens*, and *bizards*, they may probably be brought back to their original state, by taking up the bulbs at the usual time and well harvesting them. I should then recommend that a different bed be prepared for them, at the greatest distance possible from the one they now occupy. The new bed should be made of good fresh loam, or at least good garden mould without dung, and this should be at least two feet deep. If, however, the Tulips be really bad, or only common border flowers, any trouble bestowed on them will be labour lost.

SNOWDROP.

November, 1833.

ON A DWARF YELLOW FLOWERING PLANT.—In reply to the query of AMICUS, in the November number of Vol. I. of your truly interesting, useful, and cheap publication, I beg to say, that I think the Winter Helebores would suit his purpose for a yellow, and the *Helleborus niger*, or Christmas Rose, for a rose-coloured flower; they both grow from three to six inches high. I have grown them with success in a stiffish soil, that has been broken with decayed leaves and decayed wood.

Jan. 3d, 1834.

E. R. W.

[We suppose our Correspondent means by Winter Helebores the *Eranthis hyemalis*, common Winter Aconite; this plant flowers from January to April—the Christmas Rose, *Helleborus niger*, from January to March. Of course either would have to be replaced after that period, by some other plant which would continue to the end of the year.—CONDUCTOR.]

REMARKS.

TULIPS.—Wishing to purchase a few tulips, I procured the catalogues of the present year, from two of the most eminent florists, BROWN, of Slough, and GROOM, of Walworth. On comparing them, I was much surprised at the great disparity of prices of many of the bulbs, and as this is a matter of importance to all purchasers, it may be generally useful to know the reason of this very great difference in the price of the same bulbs. I have selected a few with the prices, and find there is a difference in the two columns of upwards of £40.

| | Brown. | | | Groom. | | |
|------------------------------|--------|----|----|--------|----|----|
| | L. | S. | D. | L. | S. | D. |
| Agamemnon, bz. | 3 | 3 | 0 | 0 | 2 | 6 |
| Bolivar, bz. | 3 | 3 | 0 | 4 | 4 | 0 |
| Catafalque, Dutch, bz. | 2 | 2 | 0 | 1 | 10 | 0 |
| Duke of Clarence, bz. | 1 | 1 | 0 | 0 | 15 | 0 |
| Fabuis, bz. | 5 | 5 | 0 | 8 | 8 | 0 |
| Gresdelin, Jewl. by. b. | 1 | 1 | 0 | 0 | 5 | 0 |
| Leonardo da Vinci, bz. | 10 | 10 | 0 | 5 | 5 | 0 |
| Othello, by. b. | 3 | 3 | 0 | 9 | 15 | 0 |
| Parmegians, byb. | 21 | 0 | 0 | 50 | 0 | 0 |
| Prince Wm. IV. ro. | 0 | 10 | 6 | 0 | 5 | 0 |
| Rose Camusa de Craix, | 5 | 5 | 0 | 6 | 6 | 0 |
| Shakspeare, bz. | 15 | 15 | 0 | 21 | 0 | 0 |
| Sulphurea, bz. | 3 | 3 | 0 | 2 | 2 | 0 |
| Ulypes, bz. | 5 | 5 | 0 | 4 | 4 | 0 |
| Walworth, ro. | 0 | 10 | 6 | 0 | 15 | 0 |
| Warsaw, bz. | 10 | 10 | 0 | 15 | 15 | 0 |

In Brown's Catalogue, “La Pulcelli de Dort,” a *byblomen*, is marked One Guinea, and in the same Catalogue “Pucelle de Dort,” a *byblomen* is marked Half a Guinea. Are not these the same flowers?

SNOWDROP.

November, 1833.

3. *Lady Haggerston Pink*. A very good Florist Pink. Grown extensively by the late Mr. DAVEY, Florist, King's Road, Chelsea.

4. *Calceolaria formosum*. Handsome Calceolaria. There are two varieties which are known by this name; the one here figured is the original kind, and much handsomer than its rival. The present variety is something narrower in the shape of its flower than the other, but its colours are much deeper, and far more clear and distinct. To avoid future confusion, we suggest the propriety of calling the kind here figured, *formosissimus*.

FLORICULTURAL CALENDAR FOR FEBRUARY.

PLANT STOVE.—If there be severe weather, fires will be required every night, and probably in the day. The plants should be kept perfectly free from dust, &c. which otherwise would lodge upon the stems, branches, and foliage, let it be immediately washed off by syringing or sponging; this will very much conduce to the health of the plants. They must also be kept free from decayed leaves. Water of the same temperature as the house should always be used. Let all plants become dry before a fresh supply is given; and when applied, as much given as is likely just to moisten all the soil. Succulents will require care so as not to rot them off; better be too dry than otherwise. It is essential that the surface of the soil be frequently stirred, never allowing it to bind or become mossy. Fresh air must be admitted in all sunny weather.

GREENHOUSE.—This department should have good attendance during this month, similar in its operations to those directed in January, which see.—Oranges, Lemons, and Myrtles will require water frequently, they usually absorb much. The herbaceous kind of plants will require occasional waterings, but less frequent and in less quantities than the woody kinds. Succulents, as Aloes, Sedums, &c. should be watered very sparingly, and only when the soil is very dry. Air should be admitted at all times when the weather is favourable, or the plants cannot be kept in a healthy state. If any of the Orange, Lemon, or Myrtle Trees, &c. have naked, or irregular heads, towards the end of the month, if fine mild weather occur, begin to reclaim them to some uniformity, by shortening the branches and head shoots, by this attention they will break out new shoots upon the old wood and form a regular head; they should also be repotted in rich compost, reducing the old ball of earth carefully, and replacing with new soil. After sifting it would be of great use to the plants, if the convenience of a glass case could be had, in which to make a dung bed, that the pots might be plunged in, this would cause the plants to shoot vigorously, both at the roots and tops; cleanliness (as directed for the Stove.)

PLEASURE GROUND, FLOWER GARDEN, &c.—Towards the end of the month it will be time to sow most of the tender and curious kind of Annuals, which require the aid of a hot bed to bring them forward for early blooming. Sow also the Week Stocks and Mignonette, both for flower borders, and to bloom in pots for rooms. Plant and regulate where required all kinds of perennial roots and herbaceous plants, disposing them so as to be regularly intermixed. Fork and dress over the beds, and add fresh soil. Dress and add fresh compost to the Auricula plants; defend the plants from frost and heavy rain, as the flower stems will begin to appear, but admit all possible air on mild days, or the stems will be weakened. Auricula and Polyanthus seed must now be sown in boxes, using light rich soil. Transplant Carnation layers into large pots or borders, towards the end of the month. Defend Hyacinth, Ranunculus, and Tulip beds from severe frost (if such occur) by means of hoops and canvass or mats. Finish pruning flowering shrubs, evergreens, &c. Transplant also. Turf may be laid. Plant Box Edging, &c. Dahlia roots should now be potted, and seeds sown. Lobelia roots should be divided and potted singly in rich soil. Tigridia pavonia roots should be potted in rich soil.

F. F. A.



Althaea rosea



Calceolaria Phil



Calandrinia crandallii



Calceolaria 1

THE
FLORICULTURAL CABINET,

MARCH 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Carnation and Picotee.* By INNOVATOR.

I herewith send for insertion in your *Cabinet*, what I have found (after numerous experiments) to be the best method of growing those beautiful flowers, the Carnation and Picotee.

I shall begin with the first purchase. This ought to be made the first week in October; and in doing this, be cautious where you lay out your money, as I am certain there are no other articles in which so much roguery and deception are practiced as in Carnations and Picotees; you had better pay a little more to a florist of standing character than risk being cheated by the allurements of cheapness. I would also recommend your attending the removal of the layers from the parent plant where possible, and go home with them directly, and pot them in 48-sized pots, in the following compost:—One barrowful each of rather sandy maiden loam and thoroughly decayed hot-bed dung, with a peck each of coarse sand and leaf mould, all well mixed together and passed through a fine sieve; put in the bottom of each pot a quantity of potsherds, then fill to within two inches or so with the compost, and upon this place the plants, and place the compost lightly round them up to the first pair of leaves; strike the pot once upon the potting board, and give them water. When they are become dry, place a hand-light firmly over them for a week or ten days, by which time they

will have pushed fresh root, and be able to stand the open air. My reason for advising the removal to be made by yourself is, that they may not be exposed to the air for three or four days after they are taken from the old plant, and before they are sent to you. This is a common practice with knavish florists, that they may engender the disease complained of by your Correspondent IRIS, viz. their dying when near blooming. This exposure to the air causes every piece of grass then upon the plant to wither and die, and to stick so firm to the main stem that it is impossible to remove it without injury to the bark of the stem, where the water gets in after every watering, and produces decay just above the earth, and ultimately death. The next is the wintering your plants; this is generally done in common glazed frames. Having chosen a warm south aspect, place your frame upon four bricks, one at each corner, along the ends and middle; in the inside lay a row of bricks, and upon these splines of inch deal, three inches broad, and the length of the frame; set your pots upon these, and give them all the dry fresh air possible, by keeping the lights off during the day; when wet, raise the frame upon extra bricks; do this also after you have given them six or eight hours' gentle rain; if it should not clear up so soon as you expected, the air passing in under the frame will soon dry them, or possibly they might remain wet for three or four days, which would certainly produce mildew and unsoundness. In severe frosty weather shut down the frame close, and cover with mats at night. Give no water whilst it continues. Keep them in this situation till the last week in March. A week before you pot them into their flowering pots, expose them night and day to the open air; this will harden them to meet the transplanting, which should now be done. The compost I have found the most suitable is as follows:—10 barrowfuls of well rotted flag, dug from an old pasture, two years before use, where the soil is what farmers call heavy; five barrowfuls of well decayed old cucumber bed; one barrowful of coarse sand, and one barrowful of finely ground unburnt sulphate of lime (Gypsum); this last tends greatly to invigorate their growth, and causes the white to be beautifully clear. These should be put together in October, and turned frequently during frost in winter. About the last week in February put it under cover, that it may get moderately dry before use. The flowering pots should be 16 to the caste (sixteens). Over

the hole in the bottom of each lay an oyster-shell, and upon this an inch thick of fresh horse-droppings; then fill with the compost till the ball of earth, with the plants placed in centre of the pot, are about an inch below the rim; fill up with compost; strike the pot smartly once or twice upon the board, and water them; place the pots upon the stage, or along the walks, upon boards laid upon bricks to keep out worms. About the beginning of June they will require sticking with round sticks four feet long thrust into the middle of the pot; to these tie the flower-stem with loose collars of wet bass. Cut off all the flower-buds but one or two as soon as they appear. About this time some plants will wither and droop as if dying. I see Mr. REVELL attributes this to growing them too strong in their winter station; such I can from minute observation assure him is not the cause; it proceeds from there being worms in the pots; these destroy its fertility, and render the soil acid. The cure is easy: water them three times a week with lime-water for a fortnight or so, and they will quickly recover. I had this season a plant of Walmsley's William the Fourth in this state; I gave it the lime-water, and I afterwards won the first prize with its bloom. About the latter end of July, the buds will require girding. This is best done by narrow slips of bladder put two or three times round the pod; when wet with gum-water they dry and become firmly attached. When they are in full bloom, they require cording and shading by means of an awning. As soon as the flowers begin to fade, commence layering. I need not enter into this, it is too well understood; but when well rooted, proceed as recommended at the beginning of this article. I should advise young Florists not to seek variety, but to confine themselves to five or six pair of each of the best sorts, particularly if they compete for prizes. I am, perhaps, one of the largest Amateur growers in the kingdom, having about 325 sorts, and near 1500 plants; I can say what no others can, that I have shewn for several seasons, and have (with one exception) taken the first prizes. I must apologize for the length of this, but I have found it impossible to compress it into a smaller compass.

INNOVATOR.

You shall hear from me again. [We shall esteem it a favour.—
CONDUCTOR.]

ARTICLE II.—*On the Culture of Salpiglossises.* By
Mr. THOMAS APPLEBY, Gardener to the Rev. J. A.
RHODES, Horsforth-Hall, near Leeds.

For the information of such of your readers as may be desirous of cultivating this singularly beautiful family of plants, I now, agreeably to a former promise, send you an account of a method practised here, which is perfectly satisfactory to me.

Some time in March I sow the seed, covering it about one-eighth of an inch, in wide-mouthed and hollow pots, well drained, in a compost of light yellow loam and heath mould in equal parts, adding about one-sixth of fine white sand, and place them on a shelf close to the glass in the stove, (a cucumber bed might do, but on account of the damp there, I prefer the stove,) watering with a fine syringe, so as to keep the soil just moist. As soon as they have four leaves each, I pot them into sixties, one in each, in the same compost, only adding a little fine vegetable mould, taking care to drain well with broken pots about the size of peas. I place them again on the shelf before mentioned, shading them until they can bear the light without flagging.

As the plants advance in growth they are potted into larger pots four times. I flower them in pots about six inches wide and eight deep. To cause them to flower strong, I remove them after the third potting into a cold frame, facing the south, and on all fine days expose them, by drawing off the lights, to the full air and sun. This makes them grow stiff and bushy. When the greenhouse plants are removed into their summer situation, I give the Salpiglossises their last potting, and take them into the greenhouse, giving every day plenty of air, and I find they flower much finer for the previous exposure.

Salpiglossises will grow and flower in the garden in a satisfactory manner, provided they are planted out from the pots about the 1st of June, in rich dry soil, and a sheltered situation; but in my opinion, and my success bears me out, the situation to shew them to the greatest advantage, is in the greenhouse amongst Cockscombs, Balsams, *Triverania coccinea*, and some species of *Gloxinia*. There they will flower admirably, and with proper management produce seed in abundance.

I usually sow a little seed in September, for the purpose of

having a few early flowering plants. They require to be kept through the winter in the stove, close to the glass, in small pots, and then managed as to soil, potting, &c. as the spring-sown plants, and they flower finely in April, May, and June.

I think too rich soil very injurious : the plants often take the pet, and die off by the roots, in it. I have frequently seen plants with fine healthy leaves and flowers, dying gradually upwards. I cannot account for this disease, excepting by the soil being too rich.

To be certain to procure seed from *Salpiglossis atropurpurea* and *Barclayana*, it is necessary to impregnate them artificially ; whilst *picta*, *straminea*, and their varieties, seed freely without any care. Upon examination, however, this apparently strange circumstance may be easily accounted for : the pistil in those species is considerably elongated, and the stigma on its summit is of a curious boat-like shape ; and as the flowers stand quite erect, the pollen falls to the ground without effecting its office, unless by chance some friendly insect assist in the business, which whatever it may do in their native situation, is not to be expected in our greenhouses.

Out of doors seed is not to be had, at least I never could obtain any ; but perhaps in the south of Britain, seed may be procured in the open air.

By impregnating with different sorts, I find they sport into various and beautiful shades of colour and size ; and I have no doubt many sorts will run one into another, which satisfies me that most of the kinds now ranking as species, will have to be reduced to mere varieties.

THOS. ALLIBY.

Jan. 2, 1834.

ARTICLE III.—*On the Cultivation of British Ferns.*

No. II. By M.

Having now more than thirty species of British Ferns growing healthfully in the open ground, I would suggest the following method, which I have practised, to those who wish to form a collection of this interesting tribe.

Without remarking on the ornamental disposition of the ground, the first thing to be considered is, having the bed in which it is

purposed to grow the Ferns elevated above the level of the surface of the ground, and giving a perfect drainage to the water from it. If the soil be sandy and light, a few stones at the bottom of the mound or bed will be sufficient ; but if on a strong, loamy, or retentive soil, I would place a layer of loose stones to the height of eighteen inches, taking care that all superfluous moisture should have a free drainage from the bottom. Upon the stones I would place pieces of bog earth, not chopped small, to the depth of eight or ten inches : then an equal thickness of heath mould, or sand and light soil mixed ; and then a layer of bog earth mixed with sand. When heath mould and bog earth cannot be procured, sand and good mould may be substituted, mixing with the upper layer some leaf mould, instead of the bog earth ; this I have found to answer remarkably well. No clay or strong loam must be used for the generality of the larger Ferns, such as *Aspidium dilatatum*, *Asp. aculeatum*, *Filix fœmina*, &c. ; but for the smaller species, such as *Asplenium Ruta-muraria*, *Scolopendrium Ceterach*, or *Aspl. Trichomanes*, pieces of some light porous stone, (the Derbyshire Tufa is the best,) should be placed for the roots to shoot amongst, and but little soil is needed amongst the stones. After all the care in preparing the soil and planting the Ferns, but little success will be attained without *shade*, and the *cooler* the situation the better ; for though *stagnant* water is very prejudicial to them, they will bear and enjoy a great deal of moisture, provided the soil is such as to admit of its draining away.

The *Ophioglossum vulgatum*, or Adder's Tongue, is somewhat impatient of removal, and thrives better in its natural situation in grassy meadows, than in any to which I have transplanted it.

I shall be glad if these observations occasion others from your Correspondents, upon the Cryptogamia, and the habitats of British Ferns ; they will be desirable information to all who are anxious to collect or cultivate so interesting a class.

In my next paper, I will add a list of the localities of those I have gathered.

Feb. 4.

M.

ARTICLE IV.—*On the Culture of Dutch Bulbs in Pots.*

By Mr. F. F. ASHFORD.

Observing in Vol. I. page 242, of your valuable Monthly Periodical, that a Querist, Mr. J. B. DENTON, asks for a little information respecting the cultivation of Dutch Bulbs, in pots, requisite for their flowering freely, I sit down to the consideration of his request, and pen a few remarks, which upon receiving, if you deem worthy of admission into the pages of the *Cabinet*, they are entirely at your disposal. In my opinion, there are no plants that produce and expand their blossoms at the time when forced Dutch bulbs generally do, deserving of general cultivation, and a little extra trouble, more than this tribe of plants—Hyacinths, Tulips, Narcissuses, Crocuses, &c. of every hue and colour, of different heights (from three inches to two feet and two feet six inches high), and their blossoms so very odoriferous that they fully compensate for the care bestowed upon them by their cultivators. The method I propose to elucidate is not primarily my own (though one I shall follow), but Mr. F. GODALL'S, Gardener at Rode Hall, Cheshire, which after a fair trial will be found efficient, and answer the expectation of every one.

After a sufficient quantity of bulbs have been procured from the nursery early in October, prepare them for potting by removing all the loose rind and offsets or side bulbs; at the same time care must be taken not to injure the bulbs in the least by so doing.

Compost.—This should be prepared the preceding winter, and consist of the following:—One barrowful of well decomposed hot-bed dung; one barrowful of vegetable leaf mould; two barrowfuls of fresh maiden loam; and a quarter of a barrowful of drift sand. These materials must be well chopped and mixed together and thrown into a heap, that the frost and atmosphere may decompose and pulverise the various substances that this mixture may contain; and about the middle of September convey it to a dry open shed, that it may become dry before using.

Potting.—The bulbs, after having been prepared as above, must be potted in the soil in pots proportioned to the size and sort of bulb. Fill the pots and shake the soil down well, but do not press it with the hand before commencing to plant the roots; then lay some sand on the top of the soil in the middle of the pot,

and placing the bulb on the top, gently, though firmly, press it down till within a quarter of an inch of the top. Care must be taken not to press with sufficient violence to injure the bulbs, yet it must be left firm in the pot, for on these two things much depends as to their future success. After they are potted, and named or numbered, place them in an old cucumber or melon frame, prepared after the following manner. Take out the soil, and lay upon the dung about two inches thick of ashes; level and make them very solid; on the top lay a quantity of sifted ashes, in which plunge the pots, making the ashes as firm round them as possible. When this is finished, cover the whole to the depth of eight or ten inches with light dry soil. Always choose a dry day for the purpose, and let every thing be dry that is used about plunging. Give air at all times, excepting in heavy rains, snows, or frosts, when the lights must be put on, and, if very severe, mats must be added.

In January take them out of the frame, wash the pots, convey them to the stove for flowering, supplying them with water at all times when required, and air when necessary, which will assist them in flowering strong. As the scapus, or flower stalks, advance in growth, tie them carefully, and not too tight up, to neat green or white sticks, with bass mat finely twisted. When the flowers begin to open, remove them to the conservatory or greenhouse, where they will almost turn dreary winter into gaudy summer by their delightful fragrance and varied appearance. Crocuses planted four or five in a pot, and treated as above, look exceedingly well when in flower.

If it is not convenient to make a compost purposely for them, as is sometimes the case, old cucumber soil may be used when made lighter or richer with dung or sand, according as it may require, and will answer very well. If Mr. DENTON will next season adopt the above method, no doubt but he will prove successful; and if Mr. D. wishes any further information respecting the culture of Dutch Bulbs in pots, I will with pleasure answer his queries through the medium of the *Cabinet*.

I subjoin a list of a few kinds which answer very well when treated as above.

HYACINTHS.—1. Henri de Prussie, double blue. 2. Alamode, double white. 3. Waterloo, double red. 4. Madame Zoutman, double red. 5. Groot Vorst, double red. 6. Ophir, double yellow.

7. Heroine, double yellow. 8. Boquet d'Orange, double yellow. 9. Passetout, double yellow. 10. Sultan Achmet, double white. 11. Grand Sultan, double blue. 12. Anna Maria, double white. 13. Dido, double red.

NARCISSUSES.—1. Grand Primo, white. 2. Grand Monarque, white. 3. Double Roman, white. 4. Soliel d'Or, yellow. 5. Bazelman Major, white. 6. Bazelman Minor, white. 7. States General, white. 8. Juno, yellow.

TULIPS.—1. Duc van Thol. 2. Florentine. 3. Marriage de ma Fille. 4. Perfecta Parrot. Persian Irises, Jonquils and Crocuses of every colour, single and double.

Mr. DENTON's other requests shall be answered next month, and any other he chooses to propose.

F. F. ASHFORD

Somerford Booths, January 7th, 1834.

ARTICLE V.—*On the Cultivation of Gloxinia speciosa, G. caulescens, and G. maculata.* By Mr. W. MOUNTFORD.

The Gloxinias are plants that possess considerable beauty, and are particularly deserving of cultivation. The following is my practice. Some time during the summer, I take a quantity of leaves from each sort I wish to propagate, cutting them close off at the surface from the parent plant. I then prepare a quantity of pots, sixties, with a compost of loam, leaf mould, and peat soil, in equal parts, adding as much fine sand as will keep it perfectly open. I then insert a cutting (a leaf) in each pot, half an inch deep, pressing the soil pretty firm. After the whole is finished, I give a gentle watering from a fine syringe, and place them in a hot-bed frame, if I have one at work, or a stove, which is nearly as well. Water must now be given with great caution, for too much moisture would cause them to rot. I let them remain in the same pots, after the bulb is formed, until the period arrives for rest, which is easily known by the leaf gradually dying away. I then remove them to a dry cool place, taking care that they do not get much moisture during the winter. In the latter end of February, or beginning of March, I take all the pots of roots, and carefully shake all the mould from them, and then

pot the largest in forty-eights, and the small ones into sixty sized pots, taking care that they are well drained with broken potsherds. After the whole are potted, I give only sufficient water to settle the earth to the roots, and then place them in a warm part of the stove. As the plants advance in growth, and fill the pots with roots, I again remove them out of sixties into forty-eights, and those out of forty-eights into thirty-twos. Two or three times during the summer months, I find it very beneficial to water them with liquid manure. As soon as they begin to flower, I place them in the greenhouse amongst the plants, where they bloom profusely, and look very splendid. Nothing more is required but occasionally supplying with water. When they are become dormant, they are put by as before.

W. MOUNTFORD.

Warleigh Gardens, near Bath, Dec. 8, 1833.

ARTICLE VI.—*On the Deterioration of the Dahlia.*
By VERTUMNUS.

Many important engagements have prevented me sending you the few remarks I promised you, relative to the deterioration of the Dahlia, by the extensive system of propagation usually pursued.

My idea is, that in order to have a good bloom, it is necessary that plants raised from some of those shoots which first present themselves should be selected for planting. So far as I have had any opportunity of proving this idea, I am fully borne out in it. Two years ago I observed a plant of the Countess of Liverpool, in a first rate collection near London, of which nearly all the blooms were single; and, on inquiry, I found that the parties having numerous orders, had sold all their early plants, and had reserved the latter propagation for their own growth.

This season I saw three plants of the Queen of Yellows without a flower in the slightest degree multiple; and I discovered that the very same occurrence had taken place.

Further, a flower called Wood's Triumphant, which had been much admired two or three years ago, was rejected by many growers; and in a conversation I had with Mr. WOOD, the original raiser of it, he told me he had himself rejected it, as it could not be relied on.

Now, this very flower went from me to several persons this last season, and has in every instance given great satisfaction, which I can only suppose has occurred from the fact, that having from the first had a large stock of it, I have never had occasion to work it so extensively as others have done.

As this is in a measure at least, after all, only conjecture, I must protest against such attacks as are made on several writers in your miscellany, as I conceive it is out of such conjectures, fairly argued, the truth will be elicited; and I believe it is an axiom generally acknowledged, that invective is a never-failing sign of a bad argument.

I will just observe to some inquirers about Levick's Incomparable, that I have seen several instances of success in developing the spots, by pulling off the self-coloured flowers immediately they show themselves to be such, when a course of tipped flowers generally succeeds them. At the same time, Mr. LEVICK is perfectly correct in his statement, that luxuriant plants are generally self-coloured: and, therefore, all manure should be avoided, at least until the plant shows itself to be in colour, when it may be applied at the top.

The luxuriant growth may be much retarded, by treading the ground round the plant very firm, if it begins to grow too freely.

So much for Dahlias: and now I beg to state to Mr. REVELL and INNOVATOR, that I have tried with success Mr. R.'s plan of puddling the soil in which I inserted my pipings of Pinks; I conceive the great loss frequently occurring is occasioned by the minute drops of moisture, which will, in spite of all efforts, remain in the hearts of the piping; by his plan the soil settles as closely as possible about them in a few hours, and the necessity of watering is avoided, which I consider a great advantage.

Mr. REVELL, however, may speedily convince himself that the Pink is to be grown exceeding *thirteen inches* in circumference, if he will try Tate's William the Fourth, a flower raised by Mr. TATE, near Islington Church, from the seed of Ford's Victory, I believe; which has, however, in my opinion at least, hardly any other property than its monstrous size to recommend it.

I conclude by congratulating you on the improvement in your work, which I much admire, and which I am happy to hear succeeds so well.

VERTUMNUS.

London, Dec. 11th, 1833.

ARTICLE VII.—Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.

By ST. PATRICK.

(CONTINUED FROM PAGE 37.)

| NAMES. | DESCRIPTION. |
|---------------------------------------|------------------------------------|
| 301 Gracilis | Small compact globe blush. |
| 302 Grand dorc | Dark crimson in clusters. |
| 303 Grande Duchesse de Bruxelles..... | Fine bright red. |
| 304 ——— Image | Semi-double pale red. |
| 305 ——— Junon | Dark scarlet. |
| 306 ——— Sophie | Maroon. |
| 307 Grand George | Large deep red. |
| 308 Grandidier..... | Purple. |
| 309 Grand Monarque | Fine light purple. |
| 310 ——— Pivaine | Pale red. |
| 311 ——— pourpre dour..... | Fine mottled purple. |
| 312 ——— Sowanof..... | Light purple. |
| 313 ——— Sultan | Small deep blush. |
| 314 ——— Triomphe de la ville..... | Light crimson, changing to pink. |
| 315 ——— Turc | Large pale red. |
| 316 Gros major | Bright pink. |
| 317 Grosse Junon..... | Very pretty red. |
| 318 Gurin..... | Semi double light reddish purple. |
| 319 Harphise | Light blush. |
| 320 Helene | Close double purple, scarlet eye. |
| 321 Henrico | Fine deep blush. |
| 322 Henriette | Fine light purple. |
| 323 Henry I..... | Light purplish crimson. |
| 324 ——— III..... | Fine red. |
| 325 ——— IV..... | Large beautiful double red. |
| 326 ——— VIII..... | Beautiful scarlet. |
| 327 Heri à fleur pleine..... | Rosy crimson. |
| 328 Heroine noir | Dark purple, nearly black. |
| 329 Hersilia | New, small semi-double blush. |
| 330 Hessiose | Beautiful blush. |
| 331 Hibride du Bellage | Beautiful gay deep crims. scarlet. |
| 332 ——— brunne | Pinkish purple. |
| 333 ——— large | Light blush. |
| 334 ——— Luxembourg | Very bright red. |
| 335 ——— nouveau..... | Fine deep purple red. |
| 336 ——— perfecta | Deep scarlet. |
| 337 Hibrid perfecta | Very large velvet purple. |
| 338 Hollandaise nouvelle | Beautiful kind of buff. |
| 339 Holocirieca nova | Bright scarlet and pink. |
| 340 Honine | Bright red pink. |
| 341 Hymenée | New, large fine blush. |
| 342 ——— | Striped light purple. |

(TO BE CONTINUED.)

PART II.

EXTRACTS.

New and Rare Plants figured in the Periodicals for February.

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Ipomea rubro-carulea*, Reddish-blue Ipomea. Pentandria, Monogynia. Convolvulaceæ. Of the genus *Ipomea*, as distinguished from *Convolvulus*, no less than 165 species are described by ROEMER and SCHULTES. The species which compose it are chiefly inhabitants of the tropics, and remarkable for the beauty of their flowers, which, though they be individually short-lived, are succeeded so rapidly by others, that there are few more showy ornaments of the forests in warm countries, or of the stoves in our own. One species, *I. Jalapa*, yields the jalap of the shops; whilst another, the *I. Batatas*, or Sweet Potatoe, is an important article of food in the tropical countries, as the Potatoe is in Europe. The present species, *I. rubro-carulea*, is grown in the stoves of JOHN ALLCARD, Esq. and MISS LOXLEY, of Stratford Green, Essex. Seeds of it were collected in Mexico, and received in this country by J. D. POWLES, Esq. of Stamford-Hill, who liberally distributed them. Flower, in bud, white, with the limb of a rich lake red, which, when fully expanded, becomes of a fine purplish blue; the diameter of the corolla is about four inches, and altogether the flower is exceedingly handsome, meriting a place in every collection of stove plants. Culture: increased by cuttings or seeds. Soil: rich sandy loam. *Ipomea*, from *Ips*, bindweed; and *homois*, similar.

2. *Epidendrum nocturnum*, Night-smelling Epidendrum. Gynandria, Monandria. Orchideæ. This plant is a native of the West Indies, growing in this country in the Liverpool and Glasgow Botanic Gardens. The flowers are of a pale greenish yellow, uninteresting in appearance; they are scentless during the day, but at night yield a very powerful odour, resembling that of the White Lily. *Epidendrum*, from *Epi*, upon; and *dendron*, a tree—growing upon trees.

3. *Onopordium Arabicum*, Arabian Cotton Thistle. Syngenesia, Aequalis. Compositæ. A native of Arabia, also of the warmer parts of Europe. A plant was grown by Mr. MACKAY, at the Dublin College Botanic Garden, ten feet high, raised from seeds sent in 1832 from Buenos Ayres. It is a hardy biennial. Flowers: terminal, solitary, purple. Culture: increased by seeds, common, rich garden soil. *Onopordium*, from *Ono.* a s; and *perdo*, effects.

4. *Ceropegia Lushii*, Mr. LUSH's Ceropegia. Pentandria, Digynia. Asclepiadæ. This plant was sent from Bombay to the Edinburgh Botanic Garden, where it flowered in October 1833. Flowers: yellow green, tinged with purple, uninteresting. *Ceropegia*, from *Keropegion*, a candelabrum, or lamp-stand, referring to the peculiar shape of the flowers.

5. *Opuntia cylindrica*, Round-stemmed Prickly Pear. Synonyms, *Cereus cylindricus*, *Cactus cylindricus*. Originally introduced into England in 1799, but has never flowered in this country. Flowers of an orange red, smallish. *Opuntia*, from *Opus*, a city of Liberia.

6. *Kentrophyllum arborescens*, Arborescent. Syn. *Carthamus arborescens*, *Carthamus rigidus*, *Onobroma arborescens*. Syngenesia, Aequalis. Compositæ. Raised by Mr. MACKAY, of the Dublin Botanic Garden, from seeds

sent from the South of Spain. It is a singular and very ornamental plant of its tribe; it has stood out of doors two winters, flowering freely in autumn. Both flowers and leaves have a musky smell. Flowers, yellow. Kentrophyllum, from *Kentros*, a spine; and *phyllon*, a leaf—in allusion to the spiny leaves.

7. *Chrysophyllum monopyrenum*, Date-shaped, or Damascene Plum, Star Apple. This species of Star Apple, which was introduced to the conservatories of Britain in 1812, forms in Madeira a rather elegant evergreen tree, growing about thirty feet high, with a trunk one foot in diameter. Leaves alternate, oval, approaching to oblong, four or five inches long, and two broad. Before they fall, the leaves turn to a beautiful deep rich red, variously marbled or mottled with yellow or white. The fruit is of a dark brown colour, insipid, yet not absolutely disagreeable, being tolerably juicy and sweet, with a fig-like flavour. Flowers, yellowish white, small. *Chrysophyllum*, from *Chrysos*, gold; and *phyllon*, leaf.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. 4s. coloured, 3s. plain.

1. *Calanthe densiflora*, Clustered Calanthe. Gynandria, Monandria. Orchidæ. A native of the mountains of Sylhet, whence it was obtained by Dr. WALLICH. It is cultivated by Messrs. LODDIGES'S. The plant is a terrestrial species, growing very freely in loam and decayed vegetable matter in a damp stove. It is propagated by division of the crown of the roots. Flowers, in a dense, many-flowered corymb, pale yellow. *Calanthe*, from *Kalos*, beautiful; and *anthos*, flower.

2. *Gastrolobum retusum*, Blunt-leaved Gastrolobium. Decandria, Monogynia. Leguminosæ. A native of the south coast of New Holland, whence it was received by Mr. KNIGHT, of the King's Road, Chelsea, in whose nursery it is now cultivated. It is a smaller plant than the old but rare species, *G. bilobum*. Its flowers are of the same rich orange yellow, but in smaller heads; and their keel is not purple. It is a pretty greenhouse plant, easily propagated by cuttings. *Gastrolobium*, from *Gaster*, the abdomen; and *lobus*, a pod. It might be Englished Bladder pod, the pods having an inflated appearance.

3. *Heliconia pulverulenta*, Powdered Heliconia. Pentandria, Monogynia. Musacæ. A beautiful stove plant, cultivated in the hothouse of Sir ARTHUR HUME, Bart., at Wormleybury, in Herts, where it flowered in July 1833. It is impossible to imagine any thing more delicate than the blue bloom which thickly covers the under side of the leaves, or more brilliant than the vivid scarlet of the flower leaves or spathes. It is probable this species is a native of some of the South American forests. Culture. soil, peat and loam; increased by division. *Heliconia*, from *Helicon*, mountain of the Muses—affinity to *Musa*.

4. *Nierembergia filicaulis*, Slender stemmed. Pentandria, Monogynia. Solanæ. This new species is cultivated by Mr. TATE, of Sloane street Nursery, Chelsea. It is probably a native of Mexico. It is a very pretty greenhouse plant, perennial. Flowers numerous, lilac with a yellow centre, one inch and a half diameter. It differs from *N. graealis*, not only in the colour of its flowers, but also in being entirely destitute of the down found on all parts of that species. Culture: easily increased by cuttings, and requiring but a moderate degree of protection in winter, provided it is kept in an airy place; soil, rich sandy loam. *Nierembergia*, in honour of J. E. NIEREMBERG, a Spanish Jesuit, who is said to have written a Natural History, in sixteen books, of which nothing is now remembered.

5. *Viburnum cotinifolium*, Quince-leaved Wayfaring Tree. Syn. *V. polycarpon*. Pentandria, Monogynia. Caprifoliacæ. This rare plant is a shrub

with so much the appearance of *Viburnum Lantana*, our English Wayfaring Tree, that unless the flowers were seen, it would be judged a variety. The flowers are, however, much larger, more coloured with pink. It is a native of the mountains of Kamaon, one of the northern provinces of British India. The fruit it produces is eaten in its native country. *Viburnum*—the Latin word *vinc* signifies to bind with twigs; and hence, they say, comes *Viburnum*, the shoots of which are used as withies.

6. *Oncidium altissimum*, Lofty *Oncidium*. Syn. *Epidendrum altissimum*, *Epidendrum gigas*. Gynandria, Monandria. Orchideæ. One of the most gigantic of epiphytes. It is described by RICHARD as frequently attaining the height of nine feet, with leaves as long, in its native woods in Guiana. Mr. HARRISON, near Liverpool, has grown a flower stem upwards of ten feet long. The blossoms are beautifully marked with green, yellow, and scarlet, but are rather small, little more than one inch across; they are produced numerously. The plant is a native of most of the tropical parts of America. Many of the Orchideous epiphytes are found to succeed best if tied to short pieces of the branches of trees with rugged bark; none succeed better upon that plan than the different species of *Oncidium*; and provided so large a plant as the present species, with its long heavy leaves, can be made fast to a branch, we have no doubt it will also be found to like that kind of treatment. *Oncidium*, from *Oghidion*, a tubercle—two prominences on the lip.

7. *Scottia levis*, Smooth branched. Decandria, Monogynia. Leguminosæ. A third species of the rare genus *Scottia*. It has been raised by Mr. KNIGHT, King's Road, Chelsea, from seeds gathered on the south coast of New Holland, by Mr. BAXTER. It is a delicate greenhouse plant, requiring a cool shelf in the winter, and abundant ventilation. The foliage is handsome, like some of the prettiest *Cassias*. Flowers, yellow. *Scottia*, in honour of Dr. SCOTT, Professor of Botany, Dublin.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnean Society. Coloured, 3s.; plain,
2s. 3d.

1. *Zappania nodiflora*: var. *rosea*. Pink-flowered Knotted *Zappania*. Didynamia, Angiosperma. Verbenacæ. Synonyms, *Verbena nodiflora*, *Sherardia repens nodiflora*. This plant was introduced from Chile by Mr. CUMING, and is grown by Mr. KNIGHT, King's Road, Chelsea. It is perennial, creeping, forming a close patch, resembling a good deal in habit *Veronica officinalis*. When in flower it has a very pretty effect, being then adorned with innumerable heads of pink blossoms, marked with a yellow spot. It is tolerably hardy and highly ornamental, whether kept in a pot or planted in a rock work. Culture: a mixture of sandy peat and loam will be found to suit it well; it is easily increased by slips, for almost every branch is supplied with roots. *Zappania*, so named by SCOPOLIA, after PAUL ANTHONY ZAPPA, an Italian botanist.

2. *Fabajo major*, Greater Bean Caper. Decandria, Monogynia. Zygophyllæ. Syn. *Zygophyllum Fabago*, *Fabago Belgarum*, *Capparis Fabagina*, *C. portulacæ folia*, *C. leguminosæ*, *Telephium Dioscoridis*. This is an old inhabitant of our gardens, viz. from 1596, but still uncommon. It is a perennial plant, quite hardy, growing four feet high. Flowers: drooping, numerous, whitish and saffron; they are curious and pretty. Culture: it delights in a gravelly loam; increased by division and seeds. *Fabago*, from *Faba*, a bean—meaning a plant resembling a bean, which this does in its leaves.

3. *Calceolaria arachnoidea*; var. *refulgens*. Refulgent Slipperwort. Dianthia, Monogynia. Scrophularinæ. Tribe *Calceolarieæ*. This very showy plant was raised by Mr. GILLEN, gardener to Mr. M'INTOSH, at the East India Docks, by cross impregnation with two of the numerous varieties originated

between *C. arachnoidea* and *corymbosa*. Mr. GILLEN has raised several others equally beautiful. The present variety grows about one foot high. Flowers: cymose, numerous, of a bright rufous red colour; the inner side of the corolla is whitish. It is a valuable addition to this deservedly esteemed genus. A light rich soil suits it best; increased by slips. *Calceolaria*, from *Calceolus*, a slipper—the form of corolla.

4. *Pericallis Tussilaginis*, Coltsfoot leaved *Pericallis*. Syn. *Cineraria Tussilaginis*, *Senecio Tussilaginis*. Syngenesia, Polygamia, Superflua. Compositæ. An ornamental plant, native of Teneriffe, whence it was introduced, some years ago, by Mr. WEBB. It is usually regarded as an annual, but, if kept in the greenhouse during winter, it will survive several years. The stems rise about one foot high. The flowers are of a rich lilac on the upper side, and whitish beneath, in a numerous corymbose panicle. It is readily increased by seeds, and grows freely in any soil. *Pericallis*, from *Perikalles*, pretty—which alludes to the beautiful ray blossoms.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small, coloured.

1. *Lavatera triloba*, Three-lobed Lavatera. Monadelphica, Polyandria. Malvacea. A native of Spain, introduced in 1759. It is a hardy perennial, growing four feet high, and flowers in July and August. Flowers: rose-coloured. This plant will grow well in smoky districts. TOURNEFORT, the celebrated French botanist, adopted the name of this genus in honour of Dr. LAVATER, of Zurich.

2. *Lupinus ornatus*, Adorned Lupine. Monadelphica, Decandria. Leguminosæ. This species is a native of Columbia, and was sent by Mr. DOUGLAS to the London Horticultural Society. He found it growing abundantly in the vicinity of the river Columbia, in gravelly or light dry soils. He considered it one of the finest species. Flowers, sky-blue; leaves, silvery. [It is not equal to the polyphyllus, and many others.—CONDUCTOR.] The *Lupinus ornatus* does not increase much at the root, but it is readily increased by seeds. *Lupinus*, from *Lupus*, a wolf.

3. *Pyrethrum uliginosum*, Marsh Feverfew. Syngenesia, Superflua. Compositæ. A native of Hungary, growing three feet high, blooming from July to September. Flowers, white. The plant is perennial, and was introduced into this country in 1816. It spreads freely by underground shoots, and is readily increased. *Pyrethrum*, from *Pyr*, fire—in allusion to the hot tasted root.

4. *Linaria triornithophora*, Three Birds Bearing Toad-Flax. Didynamia, Angiospermia. Scrophularinæ. This plant has been long grown in this country, but is still rare. It is a native of Portugal, introduced here in 1710. It is a perennial plant, growing from two to three feet high, blooming from July to September. Flowers, of a crimson red, with a yellow mouth. Culture: in the latter part of summer, from its fibrous roots, a foot or more from the parent, spring up small young plants; these should be transplanted, or potted, to have protection in very severe weather, and in April be turned out into the borders. The term *Linaria* is deduced from *Linum*, just as Toad-flax is from Flax; *triornithophora*, from *treis*, three—*ornithos*, of a bird—and *phora*, carrying or bearing.

On the Culture of Cape Heaths.

(CONCLUDED FROM PAGE 15.)

“The soil most suitable for the cultivation of Cape Heaths, consists of a black sandy peat, that is naturally intermixed with about one-fourth of white sandy particles, which is frequently found on commons, where the common

Heath or Ling is growing; the top spit of which should not be taken off deeper than the soil appears of a free silicious texture. The turfy or sandy surface should be all carted along with it to the compost yard, and thrown up in a heap, to decompose and pulverize for two or three months—when the soil will be fit for use. The plants that have overgrown their pots, may be shifted into larger ones, any time from February to August, or otherwise, after they have done flowering, or previous to their coming into flower. If the operation be carefully performed, it is immaterial at what particular season. The balls of mould should not be reduced, and as few of the roots injured by it as possible, observing only to loosen the small fibres at the bottom and sides of the pots, which will induce them to strike freer into the fresh soil. There should, also, be plenty of drainage placed in the bottom of the pots, in order to carry off any superfluous moisture; and over the drainage a layer of the fibrous particles, sifted out of the soil, should be placed, which will also facilitate the carrying off the superabundant water.

“Mr. M'NAB, in his valuable treatise on the General Treatment of the Cape Heaths, recommends to be mixed along with the soil, ‘a quantity of coarse free-stone, broken into pieces, from an inch to four or five inches in diameter; of those I always introduce a quantity among the fresh earth, as it is put in. This I consider of great advantage to all sorts of Heaths; but more particularly so to those that may have been shifted into a much larger pot or tub at once, than it had been grown in before, or in what I would call biennial, or triennial shifting.’

“The Heathery should have large portions of air admitted daily, to be only excluded in severe frosty weather, when the plants will require to be kept rather in a dry state, and but small portions of water given at once; they should be looked over daily, in case any of them are getting too dry, when a little water will be necessary. In mild weather, they will require to be more liberally supplied, and should have occasional syringings over their foliage; and as the season advances, this element must be more bountifully supplied, particularly in dry hot weather, when they should be syringed over head in the mornings and evenings, as well as large portions given at the roots.

“About the latter end of May, or beginning of June, the plants may be turned out of doors, and placed in a situation where they can have the benefit of the morning and evening sun, but sheltered from the westerly winds, and scorching effects of the sun's rays, in the middle of the day; and arranged so as that a free circulation of air can readily pass amongst the whole collection, which will prevent their being drawn up in a weak or languid state, as is the case when crowded. The scarcer, and more delicate growing sorts, should be placed in a pit or frame, where they can also be shaded from the mid-day sun (by throwing a thin mat over the frame), and protected from heavy rains. If the autumn months are at all favourable, the plants may be left out of doors, until the middle or latter end of October, when they should be all cleaned and replaced in the Heath-house; but if the season is wet, they will require to be taken into the house earlier, in order that they may be protected from the heavy rains, which would saturate the soil about their roots, and be injurious to the plants. When the Heaths are taken into the Heathery or greenhouse, they should have as large a portion of air given to them as the house will admit of, both night and day, which should never be excluded, except in frosty or cold weather, when the Heathery should be shut up at night, but re-opened, if only for a couple of hours in the middle of the day”
—*Hortus Woburnensis*.

On the Chemical Changes of the Sap of Trees.

The most important information which you will, I think, be able to give to the modern gardener, respects the chemical changes which take place in the sap of trees, and the motions of the sap at different periods of the year. That it descends in our trees through the bark (I exclude the Palm tribe generally) from the leaves, cannot be questioned, or that it ascends through

the alburnam into the leaf; but that a portion of the fluid, which has become true sap in the leaves, passes from the bark into the alburnam, and there joins the ascending current, and feeds the young shoots and leaves, is not generally understood by gardeners; nor that the fruit is fed by similar means; nor that the sap is deposited in the alburnam, to afford materials for leaves, or to feed the blossoms and young fruit of the succeeding spring. The coagulum which gives the matter of the new layer of bark in the spring is derived from the same source, though the arrangement of the vessels and fibrous texture of the bark is given by the fluid which descends by the bark.—T. A. KNIGHT, Esq.—*Gardener's Magazine*.

Evil Effects of Exposing Greenhouse Plants to the Open Air of Great Britain, &c.

The practice of turning greenhouse plants out of doors in summer may be necessary under particular circumstances, and with regard to certain species of plants; but, in cases where greenhouses are properly constructed, and solely devoted to the cultivation of plants, these will generally be found to be injured, rather than benefitted, by this treatment, particularly when turned out early in the season. Were it possible to manage greenhouse plants during the winter as it could be wished, and as they require, exposing them to the open air in summer would no doubt be highly beneficial to them; but in winter, fire heat being applied, a considerable degree of excitement is induced, and, before the season has arrived at which they can be safely exposed to the open air, they are all, or nearly all, in a state of vigorous growth. When at once removed to their summer quarters, the temperature at night is often so low that a complete check is given to the growth of the plants, from which they seldom recover till towards the approach of autumn; but, becoming injured to the open air climate, they again make an effort to grow. From the gross habit which they have, however, now acquired, together with the lateness of the season, the shoots are seldom well matured, and the plants are unable to resist the effects of frost, mildew, damp, &c., by which greenhouse plants are liable to be injured. But when plants are retained under glass during summer, both first and second growths are ripened sufficiently early in the autumn; and unless very improper excitement be applied, they will remain in a state of comparative rest till the following spring, when their flowers will be both more perfect, and much more abundant, than such plants will produce as may have stood out the preceding summer.

In keeping them in the greenhouse, I do not recommend the plants to be kept crowded together the whole of summer. Duplicates, and the hardier kinds, may very properly be removed out of doors. During summer all possible air should be given day and night, except during long-continued rain, and the plants occasionally be syringed overhead with water, which may be done beneficially any hour of the day. I mention this, from having been myself sometimes cautioned never to wet the leaves of plants when the sun was shining upon them. When the roots of plants thus exposed to the sun can be preserved in a tolerably cool and moist state, their tops will not only bear the sun, but his full influence is indispensable to their health and vigour, and the full development of their flowers.

Orange trees, Camellias, &c., are liable to have their foliage injured by the sun, but this injury would seldom accrue to them were they retained in the house both summer and winter, and kept cool during the latter season, not applying fire heat till the temperature indicated three or four degrees of frost.—R. MARNOCK,—*Ibid*.

Method of Transplanting.

Small plants may be very neatly and safely transplanted from the borders,

by making narrow trenches round them, and filling such trenches with plaster of Paris, mixed with water to the consistence of a thick cream. This quickly becomes hard, and forms a pot, by which the plant may be taken up without disturbing its roots. With a little ingenuity, the soil and roots may be so encompassed, with the same material, as to greatly facilitate the safe removal of a choice plant to any reasonable distance.—*Maund's Botanic Garden.*

To destroy Ants.

The most effectual method of destroying ants that we have ever tried, is the use of the following mixture:—Take equal quantities of loaf sugar, arsenic, and finely powdered dried bread; rub them together in a mortar, till they are very well mixed. This should be kept in a bottle, in readiness for laying small quantities near their haunts. Great care is requisite in the use of this mixture, for it is injurious to vegetable as well as animal life.—*Ibid.*

Conditions favourable to the Growth and Flowering of the Rhododendron.

I am led to infer (observes the author) that, in all sheltered situations, where a moderate degree of shade is afforded, and where the soil is of a light sandy nature, the Rhododendron will grow and flower well, without any peat earth whatever; provided the ground is properly prepared, by trenching and breaking the surface, so that all the grass and vegetable matter be properly mixed. I deprecate the too general practise of pitting and planting without the ground being previously well trenched. It may be proper to state, that the Rhododendron is to be seen growing here very luxuriantly, in banks of very strong clay; in this case, after the ground had been well trenched and broken, I had pits made according to the size of the plants, and a portion of peat earth placed under and around each plant (say one or two barrowfuls, according to the size of the plants). Notwithstanding my having filled the pits with peat earth, I am satisfied that Rhododendrons, and other American plants of the same tribe, usually grown in peat, will grow and thrive even in clay, and perfectly well in loam, if it be trenched, and a portion of leaf-mould and of the scrapings of roads be mixed with it; the plant being planted in the neighbourhood of large trees, so as to be benefitted by their shade. I have planted American shrubs with success at all seasons, but prefer from the second week in August to the end of December; always taking advantage of a mild day, and always giving, after the planting, a good supply of water. I would add, that the same treatment that I have recommended for Rhododendrons is here applied to Kalmias, Azaleas, Andromedas, Vacciniums, and Cistus—and to all with an equally satisfactory result.

I would recommend all who may wish to cultivate the Rhododendron ponticum extensively, to provide their stock of plants by raising them from seeds. The mode is a cheap one: and, besides the number of the plants which may be obtained by it, a considerable variety of kinds is acquired. In those which I have reared, the variety is almost endless, as to the shape, size, and colour. The seeds should be sown in February, upon a gentle hot-bed.—*JOHN GOW Gardener's Magazine.*

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON DRYING FLOWERS.—I am very desirous of knowing how to dry flowers, as I am making a collection of Pansies, and wish, instead of drawing them, to have a dried specimen of each, that I may not get the same plant twice over. I find it difficult to get them to retain their colour—that is to say, the blues and purples. If in an early Number you can give me any information on this subject, I shall feel obliged.

PANSY (2nd.)

ON POISONOUS PLANTS.—I should, and doubt not many other cultivators of flowers, who like me have young families, would also, be much obliged to any of your Botanical correspondents who would give a few remarks by which they might be guided in distinguishing plants possessing poisonous qualities. Is it found that the generality of the plants, in any division of the Linnæan or natural systems, are poisonous or otherwise? Which of the florists' flowers or common greenhouse plants are poisonous? And above all, what is the best antidote for vegetable poisons, and how and in what quantities should it be used?—I find much difficulty in preventing my little ones from picking and tasting leaves of any plants within reach, and I hope some medical amateur of the science will relieve me from my consequent dilemma.

Jan. 9th, 1834.

X. Z.

ON CULTIVATING EPACRIS GRANDIFLORA, &c.—I should be happy if any of your numerous readers would furnish me with an account of the means of cultivating the *Epacris grandiflora* and *Coriœa speciosa*; also the various species of *Gnœthra*.

ALBERT PHILLIPS.

Jan. 15th, 1834.

ON FUCHSIAS AS BORDER PLANTS, &c.—Will all kinds of Fuchsias flourish under the same mode of treatment as that adopted by Mr. SHARMAN in respect to the *F. gracilis*, viz. cutting them down every autumn and leaving the roots in the common ground, with only a covering of leaf-mould through the winter? The sorts I cultivate, besides the *Gracilis*, are the *virgata*, *microphylla*, *elegans*, *globosa*, and *bacillaris*. Also, will the Double Yellow Rose Tree flower and flourish in the neighbourhood of Sheffield, in the open ground? My garden receives all the sun till about one o'clock in the afternoon, and the soil is chiefly composed of leaf-mould, decayed wood, &c. An answer to the foregoing questions, in an early Number of your very cheap, useful, and interesting publication, will greatly oblige

A CONSTANT SUBSCRIBER.

ON THE SITUATION OF A GREENHOUSE, &c.—The *Floricultural Cabinet* has been a favorite with me from its commencement: it is exactly the sort of book for a *practical* gardener, and also for the many who like myself are fond of flowers, and employ their leisure hours in cultivating the little spot of ground at the back of their houses in "the pent-up city," which they dignify by the name of a garden! I have LOUDON, and MAUND, and CURTIS, and SOWERBY, and WITHERING; and when one of my favorites looks sickly, I turn over their pages to ascertain the nature of the disease, whether it is owing to soil or situation—to too much or too little rain or sunshine; and after all,

I can gather from their voluminous pages but small satisfactory information upon the *simple, every-day points* on which I seek it. I find readily enough its class, and order, and genera, and species; that it is a native of such a climate, and was introduced into this country by so and so. I attend minutely to the instructions under the head of "Cultivation"; nevertheless my fragrant favorite gets worse and worse, and ultimately dies. In what particular have I erred? If CURTIS, or LOUDON, or MAUND were at my elbow indeed, all would be right; but as it is, my care and attention are thrown away. Now in your little book I find perhaps the mode of treatment which this very flower requires, minutely detailed by *practical* men; or if not, I have nothing more to do than sit down and state my Botanical case, and some one or other of your well-informed correspondents solves my difficulty of years' standing, in the next or some subsequent Number of the *Floricultural Cabinet*.

I have it in contemplation to erect a greenhouse; but if I do, from the nature of my confined situation, I must place it where the plants will have *but little sun*. I propose to carry a flue round it, and I shall feel *particularly* obliged to some of your numerous correspondents if they will inform me whether, in such a situation, *artificial heat* will so far answer my purpose as to ensure me a reasonable prospect of success in rearing and preserving Geraniums, Myrtles, &c. &c.

A LOVER OF FLOWERS.

P.S. The plan of your correspondent (announced in your July Number) for rearing bog plants upon roofs and balconies, was to me worth the price of the volume: so precious is space to me in my miniature garden. I shall certainly try it.

ON FLOWERING PELARGONIUMS IN WINTER.—I shall feel greatly obliged if you, or any of your correspondents, would take the trouble to inform me, through the medium of your Magazine, how to flower Pelargoniums (Geraniums) in winter.

J. T.

January 25th, 1834.

ON CLIMBING ROSES.—Would you oblige me, as doubtless it would oblige many others also, by giving in the next Number of your excellent little *Cabinet* a list of a few of such *running* Roses as are best adapted for covering trellis-work, &c., and will succeed each other in their time of blossoming? Several of the cottages of my poor have been recently repaired, and ornamented with rustic porches; and I am anxious to supply them with Roses which are of a hardy nature, and will grow and flower freely.

Jan. 20th, 1834.

A COUNTRY CLERGYMAN.

[The following kinds of Climbing Roses are of quick growth, hardy, and handsome flowering; and may be had at most of the public nurseries — Double White Ayrshire, Yellow Ayrshire, Bengal florida plena, Boursoulti rubra, Boursoulti alba, Hermite de grand Val, Incarnata scandens, Knighti scandens pallida, Moschata scandens, Scandens Carolinensis, Sempervirens Double, Seven Sisters Rose, Roxburghii alba, Hyacinthina rubra, Grevillii rubra, Russelliana rubra pallida, Banksia lutea, Banksia alba, Multiflora alba, Multiflora rubra.—CONDUCTOR.]

ON DOUBLE WHITE ANEMONE, &c.—Can any of your numerous correspondents inform me where I can purchase the Double White Anemone, and the Trillium sessile?

J. MILES.

ON THE CULTURE OF SEDUMS.—I should be obliged by information on the culture and mode of flowering the genus Sedum in pots. I have fifteen species, not one of which has yet flowered with me.

SNOWDROP.

ON SOILS, &c.—The greatest praise is due to you for being the originator and conductor of *The Floricultural Cabinet* and *The Gardener and Forster's Record*, especially for being careful, when describing new plants, to give the synonymous names, where such exist; this is of great service to Gardeners as far as I am able to judge; and it is the opinion of other Gardeners, it

would be better to incorporate the two works into one, and would answer the purpose better, as the separation impedes the sale of the works. You have promised us a list and description of the varieties of *Camellia Japonica*; it has not yet appeared.—[We had it promised us, but it has not yet come to hand.—COND.]—In respect to *INNOVATOR* on the Pin^h, as far as any one is concerned by being troubled with earth worms, I perfectly agree with his mode of preventing their injurious effects, having successfully adopted the plan.—I wish to know from you the method of placing a piece of window glass over a pot of heath cuttings, &c. as given in the 1st Vol., page 19; does it consist of one piece placed on the top of the pot,—[it does—COND.]—or of five pieces formed so as to bring them similar in shape to a hand glass in miniature? An early answer will oblige.

I wish to know of Mr. Hogg, what he means by *maiden earth*; does he in every instance, where he has occasion to mention it in his Treatise on Florist Flowers, mean maiden loam, or the top spit of a loamy pasture field? I consider *maiden earth* an *indefinite* term, as there is maiden loam, maiden peat, maiden wood-earth, and a variety of other maiden soils of tints, textures, complexions, &c.

A WELL WISHER TO YOUR MAGAZINES.

Dec. 6th, 1833.

ANSWERS.

CULTURE OF THE ANEMONE.—In reply to B. C. L.'s inquiry concerning the culture of the Anemone, I beg leave to inform him, through your *Cabinet*, the method I have adopted for the last twenty years. Take two parts of rich meadow trenching earth, sward and all, and one of rotten dung from an old cucumber bed; let it be turned four or five times, to sweeten and pulverise it; then take as much as will be sufficient to make the bed from two and a half to three feet deep; after letting it stay two or three weeks to settle, rake the surface of the bed even, and the last week in November, or the first in December, plant your roots: take a planting-board, as described in Vol. I. p. 82 of the *Cabinet*; make your holes, and put in your roots with the crowns upward, and cover them with the same compost. I prefer planting with the board and dibble, because the roots are then all one depth in the ground, and they come up all at the same time. As to planting Anemones in the month of March, as is the practice of some, I am confident they never can get a general good bloom, neither will they have an increase of roots.

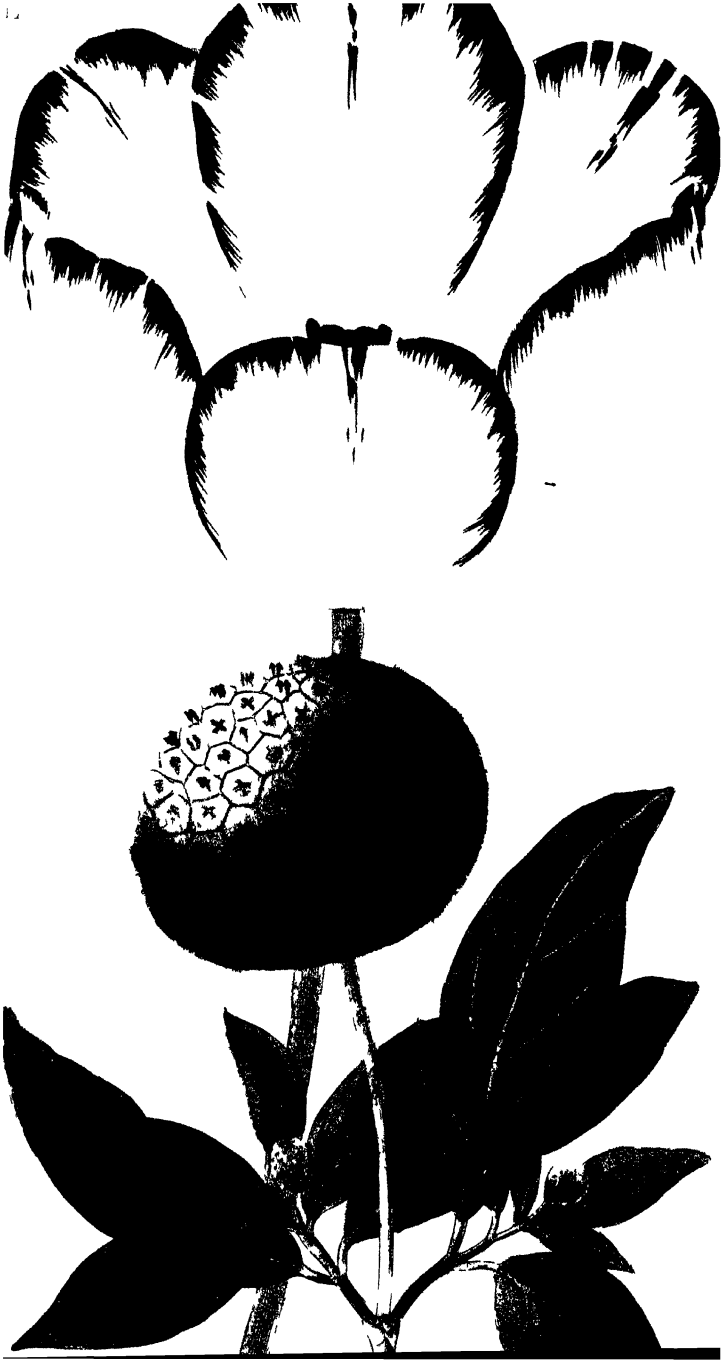
JAMES MILES.

Hilpertou, near Trowbridge, Jan. 15th, 1834.

ON THE BIGNONIA, &c.—A correspondent, at page 21, requests information how to propagate the Bignonia. I have a large plant thirty feet high, which sends out a sufficient quantity of suckers to supply all the increase that I need; but I have propagated from *ripened* cuttings, and from pieces of the *roots*. A neighbour of mine propagates it from layers, each shoot flowering in about two years. I have raised it from seed that was sent me from America.

AN ARDENT AMATEUR.

ON PINKS, &c.—I expected nothing more would have been said respecting my mode of growing Pinks, after the authority I adduced in proof of others producing them as large, or larger, than myself; but I find myself beset by two more two-inch growers—one, Mr. Wigg, who declares his maximum standard to be two inches, and that he won the first prize with these THINGS; this is really a disgrace upon the Florists of the neighbourhood if there were any competitors. It is well known that twenty years ago, 2½ inches was the minimum standard. Is this not retrograding with a vengeance, when every branch of Floriculture is making such rapid strides in advance! Mr. Wigg asks for my plan: I refer him to your First Volume, September Number, page 146, which, if fully acted upon, will amply repay him, particularly if he attends to the manner of preparing the pipings. I am the more anxious to impress this upon his mind as he will in the course of three or four years find every laced flower come perfect, instead of half the petals plain, which is the



case with half the beds I see. This defect arises entirely from neglect in this matter. I received a plant of Lady Wharncliffe Pink a day or two back; it had a shank under ground of near four inches in length. It is impossible for Pinks to thrive and grow *luxuriantly* when propagated in this careless way. This piping must have been cut at least at the sixth joint. It is well known, that fruit trees plunged in the ground in this way, never thrive; and why should Pinks? Carnations will not submit to it. If I were to reply to B. M., I am fearful my observations would be beyond his comprehension; I shall, therefore, defer it till his *assures* that he has, with the assistance of one of his brothers in intellect (one of which adorns most parishes,) solved the enigma quoted at the latter part of his Query.

February 13th, 1834.

INNOVATOR.

REFERENCE TO PLATE,

1. *Emily Tulip*.—This very fine Bybloemen Tulip was raised from seed, by the late Mr. CLARK, of Croydon, in Surrey: it broke and became variegated in the garden of Mr. HOGG, Florist, Paddington, near London. It is finely feathered, and slightly lined with a violet colour. Mr. CLARK's breeders, which are held in the highest estimation by the London Florists, have produced some of the finest varieties of Bybloemen, Bizard, and Rose-coloured Tulips that are in cultivation.

2. *Cornus capitata*.—Tetrandria, Monogynia. Corneæ. Synonym. Benthania fragifera.—We are at a loss for words calculated to give expression to our admiration of this most truly splendid evergreen shrub. Seeds of it were sent by Sir ANTHONY BULLER, during his residing in the East Indies, to his relative, J. H. TREMAYNE, Esq., Heligan, in Cornwall, in whose garden the plant was raised by the very worthy gardener, Mr. ROBERTS, who has had the honour and pleasure of raising, flowering, and fruiting, for the first time in Europe, this unrivalled hardy shrub. The fruit in the figure is from the finest on the branch sent us. The flowers are terminal, and surrounded by an involucre two inches across, of four yellowish parts resembling petals. The real flowers are of a whitish green, small. The profusion of both parts, in the heads of flowers, render them very showy. The flowers are succeeded by a profusion of splendid fruit, which from their weight, are somewhat pendulous: the appearance during autumn and winter must form a most delightful object. The flesh is rather insipid and slightly bitter to the taste, but somewhat agreeable. It is of a yellow colour inside. The plant was raised in 1825, and has been planted out in the open air; it has not required even the slightest protection during winter. It is growing in a strong soil. The bush is now seventeen feet high, and spreads proportionably. It is readily increased by seeds, layers, or cuttings struck under a hand-glass, using a loamy soil. Dr. WALLICH has twice published this plant by the name *Cornus capitata*, as this was its first title sent to this country; we have retained it for the present, not having yet seen any just reasons for changing. Dr. LINDLEY remarks, that it differs essentially from *Cornus*, both in flower and fruit. During the coming season perhaps the matter may be set at rest.

FLORICULTURAL CALENDAR FOR MARCH.

PLANT STOVE.—Many kinds of stove plants will now approach their flowering season; they will therefore require an increase of heat, keeping the house at 85 degrees by day, and 75 by night. For watering and cleanliness, see directions in February Calendar. Cuttings of many kinds of stove plants may now be taken off and struck in moist heat, using sand, or very sandy loam, to strike in. [*An Article on propagating Exotics is now in preparation, and will appear soon.*]

GREENHOUSE.—Admit air as much as possible every mild day, this being most essential to the health of the plants, and to their flowering satisfactorily. If this is not attended to, the plants will not only be drawn up, but be infested with insects. As the new shoots are now beginning to push, if air is not given as directed, they will become weakly, unsightly, and leafless, and the flower-buds will eventually drop off; to prevent which, also, protect in inclement weather. Look over the tubs and pots every day, and attend most strictly to watering; never allow a plant to flag, nor give it water till the soil appears dry. For cleanliness, &c., see February Calendar. The plants, in general, should now, if not done last month, have some fresh soil given to the tops of the pots, tubs, &c. This will add to the vigour of the plants, as well as give a neat appearance. Use the proper soil or compost to each respective plant. Do not raise the soil so high, as that the pot will not hold a proper quantity of water, or be liable to be washed over. Sow seeds of greenhouse plants, annuals, biennials, perennials, &c., in pots, using suitable compost for each kind. Let the soil be fine to sow the seeds upon, and also for covering with. Press it gently close at the surface. Raise the plants in moist heat, and when up admit plenty of air, or remove the pots to the stove, and finally to the greenhouse. Propagate plants by cuttings, layers, inarching, &c.

FLOWER GARDEN.—Sow tender and half hardy annual seeds—(see lists, Vol. I., page 21); the tender kinds in pots, using light rich soil, very fine at top, and placing the pots in a hotbed frame; the half-hardy ones may be sown on a slight hotbed, in drills, or thinly broadcast. Those tender kinds sown last month may be potted off into small thumb pots, or be pricked out on a well-prepared slight hotbed. Sow hardy annual seeds on patches or beds as required (see Vol. I., page 43); any desirable kind may be sown in pots. Remove all dead leaves, &c. from tender perennials potted last autumn, and renew with a little fresh soil. Indian Chrysanthemums struck in boxes or pots last autumn should now be potted off. Suckers should be taken off the old roots, and potted into small pots. Old roots may be divided. If Auricula plants were not dressed in February, it should now be done; and protect from excessive wet, cold winds, or frost. Let them have all the mild air that can be given, and a gentle shower of rain would benefit them, provided no petals have expanded. Never suffer them to flag. Carnation layers may be planted in borders or pots. Sow Carnation seed. Protect Tulip, Hyacinth, Ranunculus, and Anemone beds from cold driving winds, rain, &c. Finish planting any of these kinds of roots designed for late flowering. Tuberoses should be planted in pots, or in beds in a warm situation, using a rich soil; those in pots should be forced in a frame or hothouse for a few weeks. Sow seeds, plant roots, &c. of Dahlias (see Vol. I., pages 3, 23, 32.) Divide perennial roots, &c. Lobelias, Tigredias, &c. (see page 46.)

SHRUBBERY.—Flowering shrubs may be divided and replanted. Evergreens may be successfully planted. Rose trees should be immediately planted, or they will not bloom well this year. Box edging should be planted, also Thrift, Double Daisy, and London Pride edgings.

THE
FLORICULTURAL CABINET,

APRIL 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Tulip.* By W.
J. P.

I hailed the appearance of the first Number of the *Floricultural Cabinet, and Florist's Magazine*, with an unusual degree of satisfaction, impressed as I was with the idea of the necessity of a publication exclusively treating upon the subject of Floriculture, embracing at once a fair and free discussion, and combining the very important advantage of a price placing it within the convenience of a numerous class of individuals to obtain it regularly. I have anxiously and attentively perused, and watched the rise and progress of the *Cabinet*, and my impartial conclusion is, (leaving altogether out of the question its present extensive circulation,) that its merits will entitle it to the highest public estimation, and be really calculated to produce the most beneficial results to the general interests of Floriculture, add a zest to the exertions of the amateur florist, and crown with éclat the pursuit of that most enchanting recreation.

As I emerged from the dawn of my admiration for flowers, the Tulip formed a prominent feature, and each successive bloom strengthened and confirmed my devotion to the cultivation of that lovely flower, not forgetting or neglecting the Carnation, Pink, Ranunculus, Auricula, &c., which may justly rank among the "beauties of the creation."

I have hitherto been tenacious to intrude myself upon public notice, but as the *Cabinet* is now in the twelfth month of its existence, and numerous Queries have been made upon the subject of the Tulip, and but one Article (Vol. I. page 149) has appeared, and the season approaching which will so sensibly invite the attention of the bloomers of this delightful and graceful flower, I am induced to make the following detailed observations on its culture, conceiving that it may be instructive and acceptable to a portion of your readers, some of whom, who ardently admire the flower, are doubtlessly wholly or nearly unacquainted with the general treatment and nature of the plant, and desirous of obtaining information on the subject. To such I address my remarks, trusting that the service it may render to some will be a sufficient apology for the space I occupy in your pages; the more so, as I observe that a few other subjects have been treated on as fully in the *Cabinet*, and feeling, as I do, a lively interest in the success and gratification of my brother florist.

Soil.—The standard of soil for the Tulip should indisputably be a strong, rich yellow loam, laid open and exposed, previous to using, to the action of sun and air, for at least one winter and one summer, turned over every few weeks, by which means it becomes thoroughly decomposed and divested of all acrid and rank qualities, and in a state congenial to the natural order of the vegetation of the plant.

Manure.—There is upon this point some little difference of opinion, even amongst the oldest and most scientific growers of the present day; but it is, I believe, admitted by a very considerable majority of the most inveterate fanciers, that the intermixture of manure upon the undermentioned principle is decidedly beneficial, and is acted upon with the utmost success. It should be equal proportions of horse and cow dung, laid up in a heap for at least eighteen months, turned about once a month, but in frosty weather more frequently, in order to allow the frost well to penetrate it, as it must not on any account be applied to the Tulip bed until it has become completely pulverised, and formed positively into a substance as fine as mould, when it is entirely freed from every pernicious or injurious property, and the existence of insects is nearly or wholly annihilated. Then the application of one-third part of such manure to two-third parts of loam as above

described, will—I speak from the most certain results of experience and adoption—be found highly beneficial in producing a fine full green foliage, a strong upright stem, and a vigorous and perfect bloom.

The Bed—Should be about 4 feet wide, of a length proportionate to the quantity required to be planted, varying from 12 to 50 feet in length, planting seven in a row, the outer root to be about 3 inches from the edge. The box, as it is termed, to be composed of strong wood, not less than one inch and a quarter thick, and raised 10 or 12 inches from the surface of the ground, below which the soil should be completely removed for at least one foot, filling up about one-half of the space so dug out with some rather large cinder ashes, or clinkers, or brick rubbish, or any substance which will not adhere closely, in order to admit of a good drainage under the bed; then over that fill up the remaining space upon a level with the regular surface, or bottom edge of the boarding or box of the bed, with a good dry, mellow loam which has been exposed some months to the air; and then proceed to fill the box with the composition above described, it being first well mixed and united together, to within about an inch of the edge on each side, and raised gradually from each side towards the centre, so that the middle row will be some inches higher in the ground than the outside rows, although planted the same depth, being careful to plant the largest and tallest growing roots in the centre, and the next size in proportion in each of the other three rows, the smallest, or shortest, being outside. Round my bed, when thus arranged, I put a neat, lightly constructed, open green fence, made of one-foot single laths not too close together, and painted green, so that it stands just one foot high above the upper edge of the box of the bed, gives a neat, finished, and ornamental appearance to the bed, and forms a material protection to the growth and bloom of the plants. Where the Tulip stage is then erected over, and properly covered in the blooming season, the bed assumes a regular and handsome appearance, and forms no inconsiderable scene of attraction.

Planting.—The time to be selected for this purpose is from the latter end of October to about the 12th of November, choosing during that period the most open, dry weather, as that description of soil which is used for the growth of the Tulip cannot be dis-

turbed with facility except when at least moderately, if not nearly, dry; independent of which, it must be found most inconvenient to plant (as very many persons do) a bed of several hundred roots in wet, heavy weather. I judge it, therefore, of much advantage to avail myself of the earliest time above stated, if the weather be fine.

Dibble, or Dibber, as it is termed.—The best that I have ever seen or heard of is one which I and several friends make use of, which is made of block tin, about 6 inches in depth, 3 inches in diameter across the top, narrowing to the bottom to about 2 inches, with a mark or piece of solder outside 4 inches upwards from the bottom. This has a strong handle projecting over the top, sufficiently circular and large to be convenient to the hand, and each extremity soldered well on the outside, near the top or upper rim of the dibble. The material advantage derivable from this dibble is at once explained, and easily and quickly comprehended, inasmuch as by this method the bed (being well settled and prepared for planting, and marked out for the number of rows intended) is not at all compressed and disturbed, because by gently pressing and turning this dibble round until the mark above described reaches the surface of the bed, every hole is made the precise and equal depth (4 inches) throughout the bed, sufficiently large at top to admit of the hand to place the root regularly at the bottom; the dibble, as described, being smaller at bottom than top, retains the earth, which is quickly turned out into large garden-pots, or on a bed or border close at hand, and then afterwards the roots, when in, can be covered, and the holes filled with the same soil as was taken out, raking the bed over lightly and regularly with a fine rake or spade, to settle the earth firmly and properly. This is, by all who have seen and used it, admitted to be the most perfect and convenient system. It is also an additional advantage to dib the holes a week previous to planting, by which means the soil is well exposed and sweetened, and the bulbs are afterwards less liable to the attack of insects. Previous to putting in the roots, it is a great advantage, and universally adopted by those initiated in the treatment of Tulips, to put a table-spoonful of “sharp sand” in the hole. This is the surest preventive of the attack of the earthworm, or any insect whatever, and preserves many a sickly or damaged bulb from rotting.

From the time the Tulip is planted until the latter end of March, or beginning of April, little or no attention is required, where the bed is constructed on the principle above described; but at that time, as the buds advance in growth, they are more or less susceptible of injury from frost, and particularly a superabundance of wet. With a bed of choice Tulips, then, it is highly advisable, if not indispensable, that a temporary awning or covering, by means of large hoops and canvas, should be thrown occasionally over the bed, to protect it, as much as practicable, from heavy rains, hail-storms, sharp cutting north-easterly, &c. winds, and the chance of sharp frosty nights, which not unfrequently occur at this season. There are many beds, however, in which the choicest varieties are cultivated, that have no such temporary protection afforded them; but by being properly raised and drained as above described, the root is kept in a vigorous, healthy state, and the buds sustain in general but little injury from such mischances.

Bloom.—In the beginning of May, when the buds become sufficiently matured, and begin to display their various stripes and tints, it is time to prepare to place the upper or main awning over the bed, which on a regular stage is so constructed as to admit of being drawn up at pleasure by means of a roller with pulleys on each slope, so that sun and air can be admitted or excluded as occasion requires, without which convenience the bloom can never be retained so long or in so much perfection, observing always to give the advantage, if possible, of very early morning sun, until the flowers are all in full bloom, and by all means the refreshing air after sunset, if not too cold; but the flowers to be wholly protected from the weather, and particularly the operation of the sun and wind, with these exceptions. If the season has been dry, and the weather be hot, the plants when in full bloom will probably exhibit symptoms of drooping; it will then be necessary to apply water moderately and cautiously between the rows, by means of a fine rose watering pot.

When the bloom is completely over, let the covering be wholly removed, be the weather what it may, and the plants fully exposed. When the foliage and stem have become sufficiently brown and withered, which will be about the 25th of June, by which time the root matures and becomes in a state of rest, take up the roots cautiously with a rounded trowel, strong, being careful not to touch

or cut the bulbs; separate the largest offsets, and place them in a dry room or shed, where the air has free access constantly, but totally away from the effects of sun or fire. When the bulbs are dry and hardened, say in about a week or ten days, place them carefully away until the time of replanting.

The method adopted by many famous Tulip bloomers, who have many hundred named roots to take care of, is to have shallow boxes or drawers, with divisions or partitions in each, only large enough to hold one root in each; they contain seven holes or divisions from front to back, and may be made any width that is fancied. These rows are numbered from 1 progressively, by which means the roots are placed in them in that order as they are taken from the Tulip bed. The Tulips are of course planted in the precise order in which they are arranged and written down by name in the Tulip book, and if any mistake or error is discovered in the course of the bloom, the book is then corrected. So the roots are taken up and disposed in these boxes, by which means the book and the boxes agree as to order, and any alteration or variation of roots for the subsequent planting can be made at pleasure.

But as this, though a most superior and convenient plan, may be found objectionable on the ground of expense and trouble at first, (as these boxes or drawers should, to be complete, be fitted into a case or frame, after the manner of a chest of drawers, with open ribbed sides and back, and kept in an airy, dry room, away from sun, and where little or no fire is kept,) the best method that I am aware of, in the absence of some such convenience, is to put the roots singly in what is termed technically "small hand" paper, one root only in a piece of paper, with the name of the Tulip written on it. This is the best paper that can be procured for the purpose, being soft and pliable, and not liable to injure the shoots of the bulbs previous to planting.

Offsets—Should be planted about three weeks earlier than the parent bulbs, and tolerably close in proportion to their size, with a layer of sharp sand under them, and covered about two inches with fine sifted soil.

The whole body of soil for the main bed should be first passed through a screen, or coarse sieve.

I have never known or heard of Tulips treated somewhat upon

the above principle, with reasonable attention, that ever suffered to any material extent from insects or weather.

W. J. P.

New North Road, Jan. 7th, 1834.

P.S. If acceptable, I shall be happy to forward for insertion in a future Number of the *Cabinet*, some hints and general remarks (the result of ardent and unflinching application) upon the propagation, wintering, potting, and blooming of the Carnation, Auricula, &c.; and some observations calculated to instruct the young florist on the management of perennial and biennial plants and tender annuals.—[They will be highly acceptable.—COND.]

ARTICLE II.—*On the Propagation of Annuals, &c. by Cuttings.* By the Author of the “*Domestic Gardener’s Manual*,” C.M.H.S.

An annual plant is supposed by most persons to produce its flowers and fruit (the seeds), and then to perish; and it is treated accordingly. The seeds are usually sown in the borders during the months of March or April, and nine-tenths of the young plants perish by grubs and worms, or by the acerbity of the ever-varying season. They who have the good fortune to possess some crection where a little extra heat can be furnished, frequently produce early plants; and these are placed in their allotted situations by transplanting, and thus fulfil the original intentions of the gardener. Things must remain pretty nearly as they have always existed; and as long as underground enemies continue to live and propagate, we must be content to submit to losses and vexations. There is a way, however, of counterplotting the attacks of every common enemy, by striking, during the months of September and October, such choice annual plants as it is desirable to preserve throughout the winter, and to retain for the production of seed or of cuttings very early in the ensuing summer. I have proved that Balsams can be struck in the autumn, and be made to flower in a short time; the cuttings may be taken off any joint just below the leaves, and of any length; they strike almost immediately in common soil. Balsams, however, can scarcely be retained during the winter, owing to the absence of light. Schi-

Zanthus will strike by cuttings six inches long, and flower. I have one by me now, that I caused to take root in August, in loam and sandy peat, without the aid of a glass; it produced bloom in October and November, but *failing to bear seeds*, it remains a stout and healthy plant, with two branches. *Clarkia* can be struck and preserved, so can *Calliopsis* (late *Corcopsis*) of several species. I mention a few only of the many beautiful annuals that can thus be preserved, even in a well protected cold frame of turf, with a good glazed light. The object is not one perhaps of much interest; and the subjects themselves do not appear very ornamental during the dead months, but they *may* prove very useful even to the gardener; and to ladies, and to young people of taste, the practice of raising, or of trying to raise, plants by this process, a fund of rational entertainment, and some instruction, may be procured. Of biennial and herbaceous subjects, such as *Calceolaria integrifolia*, *angustifolia*, *rugosa*,—*Salvia* of many kinds, Wall-flowers, some Stocks, &c. &c., numbers may be struck, and kept in health for early transplantation. A cold frame, a green-house, or even a sitting-room window, will afford to many plants ample protection, which would all be lost unless they were annually renewed by seeds.

The soil for such cuttings may, in general, be good border earth, or maiden loam and decayed vegetable matter, blended in nearly equal proportions. If single plants be raised, a small pot should be filled thus, above a good stratum of drainage, and then a hole being made two inches deep in the centre of the mould, with a round stick, silver sand, to the depth of half an inch, is to be poured into the hole; upon this, place the base of the cutting, keep it in the middle of the hole, and fill that up with the same sand; shade the plants till they appear to have adapted themselves to their situation, and stand firm and erect; or cover them with small glasses. In raising a stock of plants, Mr. MEARN'S method may be tried. Put the soil into a broad and rather deep pot, so deep only that the cuttings, when planted, shall not quite reach its rim; then make as many holes as there are cuttings—apply sand as above directed, and finally, cover the top of the pot with a suitable piece of flat glass. A gentle sprinkling may at first be given over the surface of the soil, and this should be kept rather moist, but not wet; air ought to be freely given when the plants

appear firm. As the roots emerge, they readily reach *the soil*, which circumstance I think is more conducive to their safety, than the removal would be from a bed of pure sand into separate pots of soil. If these few loose hints—for such only they are,—lead to any enquiry, I shall be happy to furnish every kind of information within my power.

G. I. T.

January 13, 1834.

ARTICLE III.—*Remarks on Sir J. E. Smith's Arrangement of the British Ferns—No. III.* By M.

The genera of Dorsal Ferns, or those which have their fructification on the under side of the leaf or frond, have been founded upon different characteristics by different writers.

RAY, and some other systematic botanists, resorted in the first instance to the shape of the frond; but this is so similar in many of the species, that it is useless, *alone*, as a genuine distinction.

LINNÆUS depended upon the shape of the *sori*, or masses of capsules; whether round, oblong, linear, &c. This forms a much better distinction, but still is insufficient.

SIR J. E. SMITH, who purchased the *Herbarium* of LINNÆUS, and was thus furnished with a vast collection of specimens of Ferns, first suggested an additional principle of arrangement, arising from the form and insertion of the membrane which in most of the Ferns protects the masses of capsules, and especially from the manner in which this cover bursts when the capsules become ripe. This is found to afford very certain distinctions; to establish the most natural genera; and greatly to facilitate their investigation.

The numerous species formerly included in the genus *Polypodium*, are by this means divided into three genera—*Polypodium*, *Aspidium*, and *Cystea*.

Polypodium contains four species, which have no cover to the masses of capsules.

Aspidium—Shield Fern, thirteen species; which have a cover nearly orbicular, fixed by the centre, and when ripe separating all round.

Cystea—Bladder Fern. This is a name given by SMITH to a delicate little tribe, distinguished from either of the others by the

in December. Several eminent floriculturists came from town to see the plants when in bloom, and they declared that they had not seen such a sight before, nor was there any thing likely to compete against the display of bloom and plants, in the neighbourhood of London. Early in May, a quantity of plants are plunged out in the open border, where they are fully exposed to the sun, and plentifully supplied with liquid manure, so as to get the shoots strong by the middle of September; the greater part of the shoots will have by that time shown flower-buds; these shoots are bent down, and laid into pots called "small forty-eights"; they very soon begin to emit a number of roots at the part laid in the pot. As soon as the roots have got a little established, the plants are disengaged from the parent; afterwards they are tied up and watered, and removed into frames or pits, where they are plentifully supplied with air and water, so as to enable the plants to perfect their flowering. The plants will soon establish themselves, and begin to expand their bloom, when they are removed into the greenhouse.

Plants raised in this manner are from a foot to eighteen inches high, and clothed with foliage from the pot up to the flowers. Should more than six buds be formed on each plant, they are taken off; consequently, those remaining attain to a larger size, and a superior shape and colour, than plants flowered in the ordinary manner.

The compost I use is a rich yellow loam, with a little peat and sand added.

GEORGE HARRISON.

Downham Nursery, Feb. 14th, 1834.

ARTICLE V.—*On the Culture of Calceolarias as Greenhouse Plants.* By Mr. JOHN MENZIES, Gardener to CHRIST. RAWSON, Esq., Hope House, Halifax.

The numerous species and varieties of the above beautiful tribe of plants, with their singularly shaped corollas, almost of every colour, render them superior to any other for the decoration of the greenhouse during the summer months. In winter, the Calceolarias are of course in pots, according to the size of the plants,

generally about four inches diameter at top. Early in February I pot them in a size larger, in a compost of equal parts of sandy loam and tree-leaf soil, with a small portion of heath mould : care must be taken to have the pots properly drained at this and all future shiftings. When the roots fill the pots, they should be again shifted to a size larger, in the same sort of compost as above, and placed in the greenhouse, where they should have a plentiful supply of water, when they will grow freely. By the first or second week in April they will again require a larger pot, adding rotten dung to the compost for this and the last shifting ; at this time I have it broken finely with the spade, but never use a sieve. I then remove them to a pit by themselves, having in it stone shelves about eighteen inches from the glass. At this stage of their growth they should be liberally supplied with water, and fumigated if necessary. In the evening, before the frame is closed, some water should be thrown on the shelves, and occasionally over their leaves, which greatly accelerates their growth and luxuriance. When their flower-stems appear above the leaves, those that require it I remove into pots from twelve to fourteen inches diameter ; some shrubby ones, with *C. purpurea* and others of similar habit, are not placed in so large a pot. They are then removed to the greenhouse to flower ; after flowering, they are cut down and turned out of the pots, and are then divided and potted in suitable sized pots.

Many of them may be increased at all times of the year. *C. purpurea* *Harrisoniana*, &c., with the shrubby kinds, are increased by cuttings from March till August. The only sorts that I am acquainted with that will seed freely, are *C. penduliflora* and *corymbosa* ; all the other kinds will produce seed by impregnation. Many have the anthers hidden under the upper lip of the corolla, in which case it will be necessary to cut a small piece out of it, which will give a better opportunity to the gardener who wishes to procure new varieties. Seeds sown later than August : the young plants will have to be kept in a little heat during winter, and treated like the others in the following spring. Those that are kept in cold frames scarcely require any water ; but those that are kept in the greenhouse during winter, should be treated as other greenhouse plants.

JOHN MENZIES.

30th January, 1834.

ARTICLE VI.—*On a simple and successful Method of Cultivating the Lobelia cardinalis, &c.* By Mr. JOHN WINFIELD.

I take the liberty to suggest, that the general usefulness of the *Floricultural Cabinet* would be greatly increased, if some of your readers who do not possess any great convenience for the cultivation of plants, would communicate, for insertion in it, the success which attends their simple experiments for that purpose. No doubt the generality of your readers have neither stove, nor hothouse, nor greenhouse, but only a hand-light or hot-bed, for raising their plants; and, therefore, their observations would be particularly valuable to those in a like situation with themselves. To prove my willingness to act upon the plan which I now propose that others should follow, I beg leave to mention my method of cultivating the *Lobelia cardinalis*, as it appears to me to be more simple than that mentioned by "An Ardent Amateur," at page 225 of Vol. I. I would, then, recommend to those who have no great convenience for plants, to take their *Lobelia* roots out of the ground in the beginning of November, clean them, and keep them dry and protected from the frost (for instance, on a board in a dry cellar) till the end of March. Then separate the roots, and plant each of them in a small pot; and if the plants cannot be put in a hot-bed to start them, keep them in a room with a fire till they have fairly taken root. After that strengthen them by degrees in a cooler place, and plant them out in a light rich soil, in the beginning of June; and as they grow, trim them up to one stem, and water them every night in warm weather. Such is my treatment of the *Lobelia cardinalis*, which has been as successful as it is simple; and I may add, I have scarcely seen a more beautiful bed than I have had this year, having mixed the *Verbena melindres*, which so soon covers the ground, with the *Lobelia cardinalis*. As I profess to write only for the information of those who have little or no convenience for their plants, perhaps it may not be uninteresting to such persons to hear, that I preserved during last winter most of the plants which I had of the *Verbena melindres* in the open border, by putting some coal-ashes over them; my situation is a dry one.

12th December, 1833.

JOHN WINFIELD.

ARTICLE VII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONTINUED FROM PAGE 60.)

| NAMES. | DESCRIPTION. |
|-------------------------------------|--|
| 343 Imperial Crimson | Good crimson. |
| 344 ——— Purple | Fine purple. |
| 345 Isabella | Very fine curled large lilac. |
| 346 Jean d'Arc | Deep scarlet. |
| 347 Jenner | Singular light lilac blush. |
| 348 Jnunne Albert | Small bright red. |
| 349 ——— Eliza | Semi double light purple. |
| 350 ——— Henri..... | Fine scarlet. |
| 351 Jolie rouge changeable | Fine blush. |
| 352 Josephine | Deep blush. |
| 353 Juliet | Fine curled pink. |
| 354 Julius Charles | Fine lilac pink. |
| 355 Junon | Salmon colour. |
| 356 ——— sans epine | Deep purple, variegated. |
| 357 Jupiter | Large fine bright blush. |
| 358 Kariaskaki | Fine purple. |
| 359 Kenlock Cunningham | Purple tinged with blue. |
| 360 Koratry | Pink, crown scarlet. |
| 361 King's Mantle | Light purple. |
| 362 La Beaute de Strasbourg | Fine large pink. |
| 363 ——— eblonissante | Striped red and purple, very splendid. |
| 364 ——— etheral..... | Beautiful light blue, pink edge. |
| 365 — Belle Africaine | Fine globe scarlet purple. |
| 366 ——— Enchantresse | Bright scarlet purple. |
| 367 ——— Hollandaise..... | Large semi-double crimson. |
| 368 ——— Pourpre | Red and purple. |
| 369 — Charmante Adele..... | Beautiful large pink. |
| 370 ——— Amelia | Fine small blush. |
| 371 ——— Antrichienne | Pale red and pink. |
| 372 ——— Caroline..... | Fine light blush. |
| 373 ——— Dauphine | Very fine crimson. |
| 374 ——— Francaise | Beautiful striped blush. |
| 375 ——— Louise | Small pretty red. |
| 376 ——— Romaine | Fine large blush. |
| 377 ——— Venuse | Light scarlet. |
| 378 — cherie..... | Small pale blush. |
| 379 — coquette..... | Light purple and red. |
| 380 — curiosite | Beautiful rose colour. |
| 381 — Dame Jacinte | Blush in clusters. |
| 382 — delicatesse parfait..... | Delicate blush. |
| 383 — desiree | Large pale rose colour. |
| 384 L'Admirable | Fine semi-double deep crimson. |
| 385 La Duchesse de Montabello | Fine deep blush. |
| 386 ——— d'Orlean | Blazing crimson. |
| 387 Lady Broughton | Crimson purple. |
| 388 La Fidelle | Light purple. |
| 389 — Globe blanche | Fine large white. |
| 390 — Gracieuse | Large deep blush. |
| 391 — Grande Chaprone..... | Light crimson pink. |
| 392 ——— Therese | New—delicate blush, changing white. |
| 393 — Haute puissance | Close bright scarlet. |

| NAMES. | DESCRIPTION. |
|-----------------------------------|-----------------------------|
| 394 L'Aimable Etrangere..... | Fine pale red. |
| 395 La Jolie Felicia | Light pink, very double. |
| 396 L'Alliance | Brilliant red and purple. |
| 397 Lamentia | Beautiful purple. |
| 398 La merveilleuse | Large pale blush. |
| 399 L'amie de cour | Dark rich velvet purple. |
| 400 ——— Guillaume | Close deep purple. |
| 401 La Naine | Elegant scarlet globe. |
| 402 — Nouvelle Dauphine | Small dark purple scarlet. |
| 403 — Petite Elize | Pale blush. |
| 404 ——— Louise | Small anemone flag scarlet. |
| 405 — plus belle des jolies | Large globe deep blush. |
| 406 — Princesse Charlotte | New—beautiful large blush. |
| 407 L'Archeveche de Grenada..... | Light pinkish red. |
| 408 Last Tribute | Elegant scarlet globe. |
| 409 La superbe | Fine light scarlet. |
| 410 — surprise | Fine white. |
| 411 — tendresse | Bright pink. |
| 412 Latone..... | Bright red. |
| 413 L'Auteur parfait..... | Dark purple. |
| 414 La variable..... | Blush and pink. |
| 415 — vertu | Deep crimson. |

(TO BE CONTINUED.)

PART II.

EXTRACTS.

Adam the Gardener. By CHARLES COWDEN CLARKE. London, 1834, pp. 279.

This is a very interesting publication, and we recommend it to our juvenile readers. The contents consist of excellent remarks on flowers, fruits, &c suitable for each month in the year. As a fair specimen of the work, we have selected a portion of the observations for the month of August.

“ ‘Come to the yellow fields, golden with corn!
 The brawny AUGUST, with fast-reaping hand,
 Lays low the earth's tall plumes of pride; and blithe
 Young gleaners, in bee-swarms, trample the shorn
 Stout stubble down, with naked feet and torn,
 In little laps garnering allowed tithes;
 And wheaten sheaves are bound with strawy band,
 And to the hungry barn brown Ceres' wain is borne.
 With no more music than the woods afford,
 No dancier food than is the wild strawberry,
 With water from clear brooks which clean deer ford,
 We may be fed, and pleased, and careless merry;
 And fear not but the day's sweet exercise
 Will bring night's balmy slumber to our eyes.’

“ LYRIC LEAVES.

“ ‘Adam,’ said Mr. Stock, ‘do you remember who Octavius Cæsar was called—the first of the Roman Emperors!’ ‘Yes, papa; he afterwards took the name of Augustus.’ ‘Well, then, the title of the present month was changed in honour of him. Before his advancement to the dominion of the Roman Empire, July and August used to be called Quintilis, and Sextilis, or fifth and sixth months, being the fifth and sixth in succession from March, which was, originally, the first of the year: and, in consequence, September, October, November, and December were considered, as their names signify in Latin, the seventh, eighth, ninth, and tenth months.

“ ‘Come, my boy. we must set to work, and prepare yonder bed for the purpose of sowing some winter Spinach for our early spring crop. That bed, I mean, under the south wall; it is a good piece of soil, and lies dry and well for the winter sun. Now, you shall do all this yourself; so dig it up in your neatest manner, and next week you shall sow the seed. Scatter it thinly over the surface, then tread it in, and, lastly, rake it over lightly. If we have good fortune with the seed, we shall have a fine crop of Spinach for our dinners of early lamb, and many a good supper of it with poached eggs. I will now give you full directions for managing this Spinach-bed, in order that I may prove whether you bear in mind what I tell you. So, remember that you get the prickly seeded Spinach for the winter crop, because the plants are more hardy. Then, do not forget, when the plants have come up about an inch above the ground, to weed the bed at the same time thinning it, leaving a space of about four inches between each plant of Spinach. While you are performing this task, I will be preparing two beds for sowing cabbage seed for our next summer and autumn supply, and then I will prepare and manure that piece of ground for transplanting some of the young brocoli plants, which will be coming into perfection next spring with the lamb and spinach. I shall plant them about two feet asunder, and you must remind me to water them now and then, if the weather continue dry. I must also hoe up the earth round the stems of those which we planted out last month. After this job, I shall transplant some of those savoys, at the same distance from each other, and I expect many a fine dish from them, all through November, December, and January.

“ ‘The next thing will be to prepare a bed or two for onions, to come in with our spring sallads, and some carrots. As you and your brothers and sisters are fond of radishes and small salad, you may prepare a small bed for each. They will be ready for cropping by the time you have consumed the last stock. And do not forget to remind me, towards the last of the month, that I sow some cauliflowers for our spring supply.’

“ In the course of the present month, both the father and son did not omit to clear the young asparagus plants from weeds, and to transplant more celery from the beds into trenches; also to keep carefully earthed up those which they had planted out a month or two previously, and which were growing. They were also careful in watering regularly, while the weather was dry, those young plants which they had last trenched. In the course of their employment, too, they examined every now and then the artichokes, and as the fruit began to fill, they cut off the small heads that grew upon the suckers, in order that the whole vigour of the plant might be reserved for the principal fruit. And as these reached their full size, and were fit for the table, they broke the stems down to the ground, after cutting the produce. Then they planted out lettuces from the seed beds, and endive upon well-dug ground, setting the roots about a foot apart, first trimming the lower ends and the roots. Those which had been put out last month, and had grown to a full size, they tied up closely with bass, in order that their inner leaves might become white and fit for salads.

“ ‘Papa,’ said Adam, why are the insides of the endive plants white after they have been tied up?’ ‘Because,’ said his father ‘they are deprived of the benefit of the light of the sun, which is absolutely necessary for giving to them the green tinge which they acquire when growing in a natural state. Have you not observed, that the stalks of potatoes, and of other vegetables immediately under the surface of the ground, are always white, and that the parts of the same stem above the ground are green, that is, when they are growing

in the open air? To show you that this effect must arise from the action of the sun's rays, you must remember to have noticed the long stalks from potatoes that we have growing in the cellar where no light could come to them. They were always perfectly white, and the leaves were paler than the lightest straw-colour. All plants become pale and feeble when shut up for a length of time in dark rooms. So earnestly, too, do they seem to desire the light, that potatoes and other vegetables with long stems, when laid in a dark corner of a cellar in which there is a small window at a distance, will uniformly stretch out and grow towards the light; and as soon as they reach it, the portion presented to the light will become green, while all the remainder of the stalk that is still in darkness will continue white. I cannot tell you why the light should make them green, any more than I can explain to you why one flower should always be red, another blue, and another yellow. A reason can of course be given for it, as a reason could be given for every thing that happens in nature; nothing takes place without a cause, and this cause was ordered by the same infinitely-wise Being that created the plant. Some chemical philosophers have, with great ingenuity accounted for the different colours in flowers and plants, and when you are a few years older, you will do well to make yourself acquainted with their clever reasonings; at your present age it would be impossible to make you comprehend them."

(TO BE CONTINUED.)

New and Rare Plants figured in the Periodicals for March.

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Billbergia purpureo-roseo*, Rose-purple Billbergia. Class, Hexandria; order, Monogynia; natural order, Bromeliaceæ. Among the remarkable features in a tropical forest, are the numerous and beautiful species of plants which attach themselves parasitically to the trunks of trees, investing the stems and branches, and adorning them with adventitious flowers and foliage. The chief of these are the Orchis and Bromelia, or Pine Apple families. The Billbergia belongs to the latter of these, a group of vegetables, which not only affords the most richly-coloured blossoms, accompanied by foliage armed with exceedingly annoying spines; but one of the choicest of productions for our desserts, and, according to the information of scientific travellers, a truly refreshing beverage in the water that collects in the hollows formed by the inflated leaves, and which is eagerly sought after by the natives of those hot countries. The present species is one of the most beautiful of its tribe. It is a native of Brazil, was introduced by that zealous cultivator, Mrs. ARNOLD HARRISON, and flowered for the first time in this country, I believe, in 1833, in the hot houses of the Liverpool Botanic Garden. Flowers: in a compound raceme, from eight to ten inches long, bearing numerous rose-coloured flowers, the petals alone being purple. Billbergia, from J. G. BILLBERG, a Swedish botanist.

2. *Ficus comosa*, Tufted Fig. Polygama, Diœcia. Urticæ. A most elegant tree, growing in Madeira forty feet high, with gracefully waving, sub-pendulous, tressy masses of dark rich evergreen, shining foliage. Introduced into England from Circars in 1808.

3. *Ornithidium album*. Gynandria, Monandria. Orchidæ. A native of Trinidad, whence it was sent to the Glasgow Botanic Garden, by Mr. DAVID LOCKHART. It flowered in November, 1833. Flowers: rather large, white, sessile, solitary. Ornithidium, from *Ornis*, bird; and *oidos*, like,—the upper lip of the stigma being beak-like.

4. *Westringia cuneata*, Ash-coloured. Diandria, Monogynia. Labiatæ. The present species is a very desirable one for cultivation, and was discovered

by Mr. BROWN on the south coast of Australia. Introduced into this country in 1822. Flowers: handsome, solitary, pale purple, with deep purple spots, the lower lip having also yellow spots. Culture: increased by cuttings; soil, peat; greenhouse protection. Westringia, from J. P. WESTRING, Physician to the King of Sweden.

5. *Westringia Dampieri*, DAMPIER'S. Diandria, Monogynia. Labiatae. This is even a more desirable species than the above for cultivation in the greenhouse, and very distinct from it. Flowers: solitary, white; upper lip without spots; lower lip with yellow and purple spots. Blooms from September to December.

6. *Francoa sonchifolia*, Sow Thistle leaved. Octandria, Monogynia. Galacinae. Synonymus, Llanpanke amplissimo sonchifolia, Panke sonchifolia. This species is at once distinguished from *Francoa appendiculata* by the presence of a stem; the flowers being very similar. The present species is a large branching plant. It was first raised by Mr. JOHN MENZIES, gardener to CHRISTOPHER RAWSON, Esq., Hope House, Halifax, from seeds sent from Chili. Flowers, sub erect; petals, lilac coloured, darker in the centre. Dr. HOOKER believes that *F. appendiculata* and *sonchifolia* are mere varieties of the same species. The plant is hardy, increased by seeds or divisions, hardy.

7. *Monarda fistulosa (flore maculato)*, Spotted flowered. Syn. *M. purpurea*, *M. allophylla*, *M. undulata*, *M. altissima*, *M. affinis*, *M. media*, *M. oblongata*, *M. mollis*, *M. menthaefolia*. This plant was sent from New Orleans, by Mr. DRUMMOND, to the Glasgow Botanical Garden, and flowered in the open air in the summer of 1833. The plant is hardy. Flowers, pale rose-coloured, with darker spots.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. 4s. coloured, 3s. plain.

1. *Bartholina pectinata*, Syn. *Orchis pectinatus*, *Orchis Burmannia*, *Arethusa ciliaris*. Gynandria, Monandria. Orchidea. This plant is a native of the Cape of Good Hope, and flowers from October to December. We presume that this, like all the Cape Orchideous plants, is incapable of being cultivated permanently by any means hitherto discovered; for the roots, although when first imported they flower, afterwards disappear. They should be planted in sandy loam, and kept in as light a greenhouse as possible; for it is probable that the reason of their disappearing is the want of light during their growing season in this country. Flowers: purplish lilac. *Bartholina*, in memory of the great Danish anatomist and physiologist, THOMAS BARTHOLIN.

2. *Liatrix scariosa*, Large flowered. Syngenesia, Polygamia, Cynals. Compositae. Syn. *Serratula scariosa*. It is a native of North America, inhabiting sandy woods, and growing three or four feet high. Flowers: rose, with a higher coloured centre; the blossom is about one inch and a half in diameter. Blooms freely, and is quite hardy. In bloom from July to October. It well deserves cultivation.

3. *Pyrus crenata*. Icosandria, Digynia. Pomaceae. Syn. *Pyrus vestra*. This plant is found naturally in the highest of the mountainous parts of Northern India, at from 9,000 to 12,000 feet of elevation, flowering in May. The fruit is eaten by the hill people. Growing in the garden of the London Horticultural Society. Flowers: greenish white. *Pyrus*, from *Peron*, its Celtic name.

4. *Aster eminens*; var. *virgineus*. Pure White Lofty Aster. Syngenesia, Polygamia, Superflua. Compositae. Syn. *A. junceus*, *A. longifolius*, *A. albus*. An extremely common North American herbaceous plant, found growing by the sides of canals, and in marshes from New York to Carolina, flowering from September to October. Flowers: white. Plant grows from

three to seven feet high. Aster, from *Aster*, a star,—in allusion to the form of the flower.

5. *Beloperone oblongata*. Diandria, Monogynia. Acanthaceae. Syn. *Justicia oblongata*. A pretty species of hothouse plant; native of the Brazils. Grown in this country by Mr. KNIGHT, of Chelsea Nursery. Flowers: of a fine rosy purple. Blooms freely, and deserves general cultivation. It is cultivated easily by cuttings. *Beloperone*, from *Belos*, an arrow; and *perone*, a strap or band,—in allusion to the arrow-shaped baud which holds together the two cells of the anther.

6. *Ribes punctatum*, Dotted Currant. Pentandria, Monogynia. Grossularaceae. Syn. *R. prostratum*. Rather a pretty evergreen shrub; native of Chile. It is remarkable for the shining yellowish green appearance of its leaves, and the short bunches of yellowish flowers. It is hardy enough to live in a dry border without protection. It flowers in April and May. *Ribes*, from an acid plant, mentioned by the Arabian physicians.

7. *Stigmaphyllon aristatum*. Decandria, Trigynia. Malpighiaceae. A handsome stove climber; native of South America. Flowers: yellow, an inch across. It blooms from June to August. Readily propagated by cuttings. Grown in Mrs. MARRYETT's collection at Wimbledon, under the name of *Banisteria auriculata*. *Stigmaphyllon*, so named in allusion to the singular circumstance of the stigmas of this genus being expanded into a sort of leaf.

8. *Oncidium ciliatum*. Gynandria, Monandria. Orchideae. This plant is probably not uncommon in some parts of Brazil. It is cultivated by Mr. KNIGHT, Chelsea Nursery; also in the garden of Sir CHARLES LEMON, where it has been cultivated for the last three years, flowering in November. It will grow in a hot damp stove, but requires to be tied to a piece of the branch of a tree. *Oncidium*, from *Ogkidion*, a tubercle,—two prominences on the lip of the flower.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnean Society. Coloured, 3s.; plain,
2s. 3d.

1. *Rosa indica*; var. *nivea*. White Noisette Rose. Icosandria, Polygynia. Rosaceae. Imported from France by Mr. DENNIS, under the name of *Amie Vibert*; in whose nursery, at Chelsea, it flowered in July last. It is doubtless a hybrid production; most probably originated between *Rosa indica* and *moschata*. It is an extremely free flowerer, often bearing from forty to fifty blossoms in a cluster, and on account of most of the young shoots running to flower, cuttings are obtained with difficulty. It requires a rich loamy soil, is increased by cuttings, and requires the same treatment as the common Noisette Rose. *Rosa*, from *Rhodd*, red, colour of the flowers.

2. *Adesmia viscosa*, Clammy Adesmia. Decandria, Monogynia. Leguminosae. It was raised from seeds, received from Chile in 1832, by Messrs. ALLAN and ROGERS, in whose nursery, at Battersea, it flowered in August last. The present is, perhaps, entitled to be regarded as the most showy of the whole genus, the flowers being double the size of those of most of the other species, and of a rich gamboge yellow. It forms a small shrub, which succeeds best in a light loamy soil, and may be increased by cuttings, or by seeds; it requires the protection of a pit, or frame, in winter. *Adesmia*, from *A*, without; and *desmos*, a bond,—alluding to the stamna, which are free.

3. *Dianthus Libanotis*, Lebanon Pink. Decandria, Digynia. Caryophyllea. This rare and very distinct species was discovered on the lofty mountains of Lebanon, by LABILLARDIERE, who has given a very faithful representation of it in his *Icones Plantarum Syriae Rariorum*. A plant, almost the only one yet in cultivation, was raised in 1831, from seeds received by Mr. LAMBERT, from Dr. FISCHER, of the Imperial Botanic Garden at St. Petersburg, and which blossomed at Boyton in August last. The plant is a hardy perennial,

growing well in a light loamy soil, and is sparingly increased by cuttings. To its late period of flowering is most probably to be attributed the circumstance of its never having yet perfected seeds in cultivation. The Greek name *Dianthus* bears the same meaning as the Latin *flos Jovis*, and is compounded of *dios*, God, and *avθos*, a flower, literally "divine flower," so termed on account of the extreme beauty of the flowers.

4. *Sollya heterophylla*, Various leaved Sollya. Pentandria, Monogynia. Pittosporææ. This handsome evergreen twining shrub is a native of Van Dieman's Land, where it was originally detected by LABILLARDIERE, who has given a figure of it in his work on the plants of New Holland. Although usually treated as a greenhouse plant, it proves to be nearly hardy; and when planted against a wall, with a favourable aspect, it will be found to thrive even more vigorously than if kept in the conservatory. The one in Mr. KNIGHT'S nursery is placed against the west wall of one of the houses, where it has attained the height of six feet, and is annually adorned during the summer and autumn months with a profusion of its brilliant azure blue blossoms. It requires a soil composed of peat and loam, and is readily increased by cuttings. Named by Dr. LINDLEY, after RICHARD HORSMAN SOLLY, Esq., F.R.S., and L.S., &c.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON THE CULTURE OF ALSTRÆMERIA LIGTU.—Your useful and widely circulated work seems a proper medium for an inquiry as to the best mode of treating *Alstræmeria Ligtu*, so as to ensure its flowering.

Feb. 14th, 1834.

A CAMBRIAN.

ON THE AURICULA, &c.—I should be extremely obliged if you, or any of your correspondents, will inform me how long the composts for the Auricula and Polyanthus should be made up before using, and the best time for making them up; also, how long the compost for Pink beds should be made up before inserting the plants, and how far the plants should be set apart. Should this meet the eye of your correspondent Mr J. REVELL, perhaps he will be kind enough to inform me respecting the Pink beds.

D. P.

Kennington, February 26th, 1834.

ON FLOWERING MYRTLE TREES, &c.—I shall be much obliged by you, or by any of your correspondents, informing me of the best manner in which to make Myrtles flower. I have several fine healthy plants in large pots, but they never flower. Also, how *Heliotropes* should be treated? An answer to these questions will very much gratify me. I am charmed with your *Floricultural Cabinet*.—I beg leave to add, that one of your correspondents advises *Lobelia Cardinalis* plants to be taken up and housed every winter. My plants are kept out every winter, and they increase rapidly, and flower very finely. The situation of my garden is in a very high part of England, and much exposed to high winds: it is, in fact, accounted a cold situation.

MYRTLELLA.

ON CULTIVATING THE ANEMONE.—Can you, or any of your readers, inform me of the best method of cultivating the Anemone, and also of raising it from seed?

A CONSTANT READER.

Feb. 20th, 1834.

ON RAISING THE ROSE FROM SEEDS.—Would you, or any of your correspondents, be kind enough to inform me of the best way to raise the seeds of a very beautiful Rose, which I have in my garden. I have not been able

to save one pod of seed; but if I succeed in raising them, and find the plants to be worth any thing, I shall have much pleasure in sending you a few.

Feb. 18th, 1834.

A CONSTANT READER AND SUBSCRIBER.

P.S. I am trying the plan of pouring milk (instead of water) on some *Auricularias*, and shall soon be able to tell you how I succeed.

ON DESTROYING SLUGS, &c.—I shall be much obliged by your opinion as to the best mode of destroying Slugs in Carnation frames, without injury to the plants. Owing to the mildness of the winter, Slugs have been more numerous than I ever recollect them to have been.

Near Bradford, Feb. 17th, 1834.

AN OLD CARNATION GROWER.

ON THE CULTURE OF AGAPANTHUS UMBELLATUS.—Being a constant reader of your most excellent Work, the *Floricultural Cabinet*, I shall feel much obliged, if you, or any of your correspondents, will inform me through the medium of its pages, the best method of keeping and treating that beautiful plant, the *Agapanthus umbellatus*. Having purchased a fine young plant, I was advised to re pot it into a larger pot, and to use two-thirds sand and one of loam; also to keep it well supplied with water, as it would live in water alone. This I attended to, and it bloomed the first year, but not since; which I apprehend is an improper method, as it has gone into three large roots, besides many small ones I have taken away. The water, I conclude, forces it into offsets and foliage. It being a plant I much admire, I should be glad to know a proper treatment for it, also the compost.

A SUBSCRIBER.

ANSWERS.

ON FLOWERING THE DOUBLE POMEGRANATE, &c.—A Correspondent in your February Number asks, Which is the best method of producing flowers of the Double Pomegranate? We have found, that so long as the tree is pruned it will not blow; but when permitted to grow wild, it yields the most profuse bloom. From the 1st of June last summer, till November, our tree was covered with blossoms, and we never had one while the knife was used.

In a former Number, a Correspondent, I remember, asks, How the *Gentiana* is made to blow well? I have found that profuse watering will have that effect.

And now, perhaps, some of your Correspondents will kindly tell me how to make the *Bignonia* blow?

B. E.

ON DESTROYING ANTS.—Being from home some time, I had not the opportunity of reading my December Number, in which I perceive a Query respecting Ants; and if you think my experiment likely to be of any utility, or worthy of insertion, I shall feel very glad in having it in my power to tender a trifle to so generous and valuable a Work. I have a large garden, two-thirds of which is a kitchen garden, the other a flower garden. I had some valuable apple trees in the larger one, from which, for three years, I could obtain no fruit; the bloom was abundant, but as soon as it set, and got a little size, it nearly all fell off; and on very strict observance one day, I perceived the trees were all infested with thousands of Ants; and on speaking of it to a clever old gentleman in gardening, he said that tar was the only preventative to those insects, and that I must tar the trees about three or four feet high from the ground. Accordingly, the next day, I had it attended to, by having a pot of tar brought into the garden, and an old paint brush; fearing this might injure the bark of the tree, I had a ring made of it quite round the trees next the earth; and when it was getting dry, had a ring pressed down hard on the earth, close to the tree, which answered as well. I soon perceived the Ants would not touch it, the smell seemed to annoy them, for scarce any was caught on it. The next thing was to destroy the insects; and as I knew lime would kill small insects, I had a large tub of lime (finely sifted with a hair sieve) brought and kept there; their haunts are easily traced, but will require for the first time dressing, a man and a boy. Where there is a great quantity of these marauders, they make their roads, and very frequently



across the paths, which is soon perceived, which will direct you to their haunts. Where they enter, by small apertures in the ground, having ready a sieve full of lime, and a water-pot full of strong lime water, take a spade and gently turn up the earth till you come to the Ants, which will be found in immense numbers; sift the lime over them immediately; this confuses them. Rake the earth on them quick, and water over well with the water pot; this first dressing is some trouble, but afterwards a boy can do it as well, if shewn how to leave the earth neat. The next summer we pursued the same plan, but did not find half the number of insects, and the next a very few; and afterwards had no further annoyance from them, but plenty of fruit. The white currant trees they attacked, when in full bloom, which nearly all fell off; the flowers did not suffer much from them, except the succulent kind. As to Balsams, I could not get one to bloom, in my observations of them, I perceived they attacked the stalk of the fruit or flower, next to the tree, and by sapping out the juice which should nourish the fruit or flower, caused it to decay and fall off. Upon taking up some of the fresh-fallen apples, and cutting through the stalks, I found them dry and spongy.

A SUBSCRIBER.

REFERENCE TO PLATE.

1. *Lupinus mutabilis*; var. *Cruckshanki*. This very beautiful and showy variety was discovered by Mr. CRUCKSHANKS, not far from Pasco, on the Peruvian Andes, near the limit of perpetual snow. The plant is only biennial, but assumes an arborescent habit; and, if kept in the conservatory, will continue to flourish for several years. It is increased by seeds.

2. *Thysanotus junceus*; Rush-like Thysanotus. Hexandria, Monogynia. Asphodeleæ. A native of New Holland, growing near Port Jackson. The flowers open only once, remaining for a few hours, but more are produced for a considerable time in succession. The plant must be kept in an airy greenhouse, potted in sandy peat earth.

3. *Tropæolum pentaphyllum*. This has been lately introduced from Buenos Ayres. It produces abundance of flowers during summer, climbing two or three feet high. It has a tuberous root, and requires the greenhouse protection. Increased readily by cuttings. Requires a rich loamy soil.

4. *Nerembergia ficulnis*; Slender-stemmed. This is a pretty and entirely new species; we presume it is a native of Mexico. Mr. TAIE flowered it in May 1833. It is a greenhouse perennial, easily multiplied by cuttings, and requires but a moderate degree of protection in winter, provided it is kept in an airy place.

5. *Chorizema spartoides*. A native of New Holland; raised by Messrs. LODDIGES from seed in 1832, and flowered most abundantly the following spring, the plants being two or three inches high, and the flowers large and splendid in colour. Requires to be kept in the greenhouse; increased by cuttings; potted in sandy peat soil.

FLORICULTURAL CALENDAR FOR APRIL.

PLANT STOVE.—Still support the requisite degree of heat by fires at night, as the plants will now begin to show their blossoms, which should be encouraged as much as possible at this season. Fresh air, when the weather is favourable, is very necessary, and should always be admitted when required; this will greatly assist their flowering, and cause the new shoots to be strong and healthy. This month is the most proper time to pot such plants as may require it, taking great care to use such compost as is congenial to them. Any that do not require shifting into larger pots may have the surface soil renewed with fresh compost, which will greatly invigorate them, and also add to their neatness. The same directions respecting watering and cleanliness may be observed, as given last month. Still propagate all kinds of exotics by means of seeds, cuttings, layers, or suckers, according to the nature of the dif

ferent kinds; insert them in pots, and plunge them in hot-beds, which will promote their vegetating and rooting quickly and certainly.

GREENHOUSE.—These plants will now require large admissions of air at all times when the weather is mild, for as most of them will now be shooting freely, they must not be kept too close. The plants must now be looked over, to see when water is wanted, and let all the plants be properly supplied therewith, as this is now a very necessary article, particularly when they are in the house; be careful of the succulent kinds. Let no decayed leaves or shoots be allowed to remain, but let such be taken off as soon as perceived; and all shoots that are of a weak straggling growth must be pruned more or less, as appears necessary. Let no weeds, moss, or litter, be seen on the tops of the pots or tubs; and if any foulness be contracted on the plants, let it be instantly removed. Inarch shrubby exotics of any particular kinds—sow seeds in pots, placing them in a hot-bed; sow seeds of orange, lemon, &c. for stock; also propagate by cuttings, layers, or otherwise, and if placed in a bark bed in the pine-stove or hot bed, they will be greatly facilitated in their rooting.

PLEASURE GROUND, FLOWER GARDEN, &c.—Plant out in a gentle hot-bed, all kinds of tender and half-hardy annuals, raised from seed the two last months; also sow more seeds to succeed them; a little air should regularly be given to prevent the plants from being weakly. Hardy annuals may still be sown in the borders or other parts of the garden, where they are to remain. Sow Ten-week Stocks and Mignonette in pots for rooms, and borders for nosegays. The more curious and valuable varieties of Hyacinths, Tulips, Ranunculuses, and Anemones, which are planted together in beds, require particular attention, or heavy rains, cutting winds, and sharp frosts, will do them much harm; and the sun, if permitted to shine on them fully, will bring on the decay of their blossoms in a short time. The best Carnations in pots should have a good share of attention, and their growth encouraged as much as possible; as their flower-stalks advance in growth they should be carefully tied up to neat sticks; keep the pots perfectly free from weeds, and the plants from decayed leaves; those not yet planted out in pots, beds, or borders, where they are to remain, should now be done. Sow seeds of both Carnations and Pinks. Polyanthes may still be planted, also increased by sowing the seeds and by rooted slips. Give fresh earth to such pots of perennial plants as may require it. Many kinds of perennial and biennial plants may still be planted, and also increased by seeds, offsets, &c. Auriculas will now begin to blow; care must therefore be taken to protect the more valuable sorts in pots from rain, wind, and too much sun. Evergreen trees, and flowering shrubs, may yet be planted, and the sooner the better. Grass walks, lawns, and other compartments of grass in the garden, should be rolled. Box, Thrift, and other edgings may still be planted; they will root readily if in dry weather they receive a supply of water occasionally. Where any edgings have become disordered through age, &c. let them be taken up, slipped, and replanted. All flowering plants should be attended to, and all straggling, broken and decayed shoots should be taken away at all times. Tigrisia Pavonia should now be planted in pots or borders; the soil should be a rich loam. Hepaticas should now be divided; Lobelias should be planted out in pots and borders; Pansies should now be propagated by young shoots or slips, which should be pricked out under hand glasses, and well watered; they will soon strike root, when they should be planted out into beds where they are intended to flower.—In watering tender annuals, care should be taken to give it in a tepid state, and if possible, to pots, to flood them over the surface of the soil, and not over the tops of the plants, or they will be liable to rot, particularly ten-week Stocks, &c. &c.—Some of the early-sown tender annuals will now require to be potted off, using rich soil.

HYDRANGEAS.—Plants that have plump end buds, may have the shoots cut off a few inches long, and one inserted in a small sixty pot struck in heat, and afterwards re-potted; such will bloom singularly fine and unique. One-twentieth of steel filings in the soil will cause them to flower blue.

F. F. A.

THE
FLORICULTURAL CABINET,

MAY 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On Raising Seedling Ranunculuses.* By
the Rev. JOSEPH TYSO, Wallingford, Berks.

Permit me, through the medium of your very interesting *Florist's Magazine*, to reply to the Queries of your respectable Correspondent, the Rev. S. WIGG, of Leicester, relative to my method of raising Seedling Ranunculuses.

1st. The flowers which are proper to be impregnated, are those which have good properties, and produce pericarps, especially the following :—

Dark.—Admiral Keppel, Hanno, Kempensfelt, Naxara, Niobe, Quixos, Roi de Mauritanie, Variat, and Viola la vrai Noir.

Edged.—Agricola, Artificial, Dr. Franklin, Heu de Fontenoy, Flavimorus, Galitzin, Grand Beyer, Grand Monarque, Horatio, Julius, Louisette, Nestor, Rose Incomparable, Tendress, and Venus.

Spotted.—Andrew, Arbrisseau, Benjamin, Cremona, Esther, Fabius, Flora, Isodorus, Lord Cochrane, Pourpre Panache, and Princess of Wales.

Striped.—These flowers seldom produce pericarps, yet I have seen Melange in a state to be impregnated, but no other good flowers in that class.

Mottled.—Cora, Earl of Coventry, and particularly Thompson's Queen.

Selfs.—Any crimson, scarlet, white, or yellow, that shows the eye or pericarp.

2nd. The kind of flowers proper for impregnation are semi-doubles of good properties as to colour and shape of their petals. The more double the flowers are from which the farina is taken, the greater is the probability of obtaining fine double varieties. The perfection of the art of raising seedlings consists in having some of the best show-flowers of each class, which produce a pericarp or seed-vessel—namely, dark, white, scarlet, crimson, yellow, striped, edged, spotted, mottled, olive, &c. &c., and a number of the best semi-doubles of each corresponding class, producing anthers as well as pericarps. If a new flower of any particular class is desired—for example, yellow-edged,—fertilise Julius or Grand Monarque with the pollen of a yellow-edged semi-double, or nearly double flower, of first-rate properties. A similar method must be pursued in order to obtain a superior flower of any other class.

3rd. The time and manner of performing the work of impregnation.—Commence the operation when the flowers are in perfection. The time of day—from ten o'clock in the morning until two or three in the afternoon, in fine sunny weather. The most approved method is to gather the semi-doubles, and bring them in contact, by lightly pouncing the pericarp of the flower from which you intend to save seed. If semi-doubles are scarce, it may be performed with a large camel's hair pencil. Repeat the operation once or twice a day, until the petals decay or fall off.

4th. The future management of the impregnated seed-vessels.—Tie them to small sticks, with two or three bandages of matting, to prevent the stalk from breaking: they seldom want any other care. When they turn brown, gather them and dry them in the shade.

5th. The compost I prefer is rich garden earth, mixed with one-fourth of loam, but no dung. I generally sow in boxes 18 inches by 11, and 5 deep. A butter-tub cut in two, and iron bound, does as well. I have sown in Carnation pots, but prefer *boxes*, which I fill with the above compost, press the surface level, then sow the seeds about an eighth of an inch apart, and water it to make it lie flat. I then sprinkle it with *dry mould*, just sufficient to cover the seeds, and water it with a fine rose or syringe,

discharged in the air, so that the water may fall lightly on the surface. I put the boxes under a north wall, and protect them from heavy rains. The best times of sowing are the middle of October, or early in January; the seed will come up in a month or five weeks. They should be put in a cold frame in frosty weather, but, at all other times, should have constant exposure to sun and air. Clean the boxes from green moss in February, and top-dress them with dry mould. About the second week in May, plunge the boxes up to the edge in the open ground, where they have only the morning sun; water them daily until the grass withers, then let the boxes become quite dry, and about the middle of July take them up, dry them gradually, and keep them in a box in dry sand. I plant them in February, and treat them as I do the old roots. They will flower in great profusion in the following June.

I am confident that, if florists would adopt this method, more than half the old flowers would soon be thrown into mixture. Much has been done in raising seedling Tulips, Carnations, Pinks, Auriculas, and Polyanthuses; yet comparatively little has been done in the culture of the Ranunculus, though it excels all other flowers in the symmetry of its shape, and in the brilliancy and variety of its colours. A bed of choice Ranunculuses presents one of the most attractive objects Nature can exhibit in her gayest mood. There you behold black, purple, and violet of every shade, mingled with others as white as snow. There you see crimson, red, and rose, of various tints; orange, yellow, and straw, of every dye. Many are striped as distinctly as the Carnation: some are red and white, and others scarlet and gold. Numbers are edged like the Picotee, having white, buff, or yellow grounds: others are shaded, spotted, or mottled, in endless variety. The sight of such a collection instantly fills the spectator with admiration and delight.

Wallingford, Feb. 14th, 1834.

JOSEPH TYSO.

ARTICLE II.—*On the Culture of Salvias as Border Plants.* By A JERSEY GARDENER.

As there has been but little said, in the *Florist's Magazine*, on the culture of the various kinds of Salvias as border plants, I

venture to offer a few remarks: as there is no class of plants more beautiful, nor of easier culture, if rightly managed; and if turned out in a clump, with the sorts well contrasted as to size and colour, nothing can exceed its beauty at this season of the year, when there are so few other flowers in bloom. I have had the following sorts in bloom, more or less, this four months past, and now (the middle of November) they are most of them in full bloom—viz. *Salvia splendens*, *formosa*, *pseudo coccinea*, *Grahamii*, *Chæmædroides*, *involucrata*, *cardinalis*, and *Doliestachya*; all of which, with the exception of the three first sorts, are hardy enough to bear a mild winter in the South of England, in a sheltered situation. But as it respects the general propagation of this beautiful genus of plants, I cannot do better than refer your readers to the advice given by Mr. SHORT, in Article V., page 9, Vol. I., “On the Culture of *Salvia Africanus*,” as the same treatment is applicable to nearly all the sorts, where there is the requisite conveniences, although Mr. SHORT considers it a treatment peculiar to itself. I have never found any difficulty in cultivating nearly all the sorts by this mode.

I presume there are but few gardeners at the present day, with those conveniences about them, who have not a knowledge of this old system; but I think it behoves every one, not only to rise far above the level of that system, but also to simplify the art of Gardening as much as possible (where their interest is not at stake); so as to bring it within the reach of every industrious cottager, that his little garden may be decorated with those more splendid flowers, as well as that of his richer neighbour: for all the above-mentioned sorts can be abundantly obtained, by adopting precisely the same plan as recommended by me for *Fuchsias*, in Article IV., page 197, Vol. I., excepting *involucrata*, which is herbaceous, and can be easily obtained by parting the roots in the month of May: so that, by the above treatment, every cottager, as well as every gardener, may, without the aid of a hot-bed, obtain a sufficient number of plants to put in pots, and keep in his frame or window, as a stock of reserve through the winter months; for, if in case the winter should prove severe, there will be always a young supply to fill up the vacancies in the month of May.

I should be much obliged to you, or any of your correspondents, for information as to whether the *Salvia* in the drawing here

subjoined is generally extant in England, and if so, under what name; for Mr. SAUNDERS, florist in this island, received the parent plant a few years ago from England, under the name of "Sal. coccinea of Linn." But DON MARIANO LA GASCA, late Professor and Director of the Royal Botanical Gardens of Madrid, on seeing it last year, told me it was evidently not coccinea, but *Doliestachya* of his *Elenchus*, H. R. M., which he described and denominated 29-30 years ago in the Royal Gardens of Madrid. And if it is not intruding too much on your pages, I will give a brief account of the history of this interesting species, as I believe it has never yet been published. Professor LA GASCA says, the first seeds were brought to him from Mexico, by the late authors of *Flora Mexicana*, the celebrated Doctors DON MARTIN DE SESSE and DON JOSEF MARIANO MOCINO, in the year 1802; and also from seeds sent about the same period, by the late DON VINCENTE CERVANTES, then Professor of Botany in the University of Mexico. From that time, he says, its seeds were sent to many botanical gardens in Europe, and probably to Mr. LAMBART, and to the Kew Gardens. He published only the name, at page 13 of his *Elenchus*, and only by oblivion, the description of this plant was omitted in his *Genera et Species quæ ant novæ Sant*, &c., which accompanies his *Elenchus*; and we are indebted to him for the preceding historical account, as well as for the subjoined Latin specific phrase, and short comparative description.

"*Sal. Doliestachya*; foliis cordatis ovato lanceolatis acutis crenatis, supra rugosissimis, glabrescentibus, subtus ad nervos precipue Pubesummis sessilibus, pseudo-verticillis subdiodecim. Floris in racemum elongatum terminalem Digestis: bracteis caducis, calycis labio superiore ovato acute apiculo brevissimo incurvos; corola subglabra."

Salvia Doliestachya.—LA GASCA'S *Elenchus*, H. R. M., page 13.—"Abasque descriptione—Folio colore, virida flavicante, nec intense viridia corolla coccinea, fulgentes, calyce subtriple longiones glabræ, galeatantum apice subhirsutum verticillis sæspesæpius, 12 flori."—*La Gas. MSS.*

This new and beautiful species of *Salvia* grows with us from five to seven feet high, and is a handsome bushy plant. It grows wild in the valley of Mexico. At first sight it has the appearance of *Sal. fulgens*, Cav.; but it differs from that in being

twice as high, while the scarlet flowers are only one-third *as* size, and smooth, except the galea, or upper lip, which is somewhat shaggy; the middle segment of the lower lip kidney-shaped, a great deal larger than the two lateral ones; emarginate leaves, very rugose on the upper surface, and broader; the sinus at the base deeper, and the two uppermost sessile; the flower-bunches longer, with from seven to twenty apparent whorls of pedicellated flowers, each of them with ten or twelve flowers, generally twelve; the upper lip of the calyx ovate, acute, with a very short incurved point.

I have no book or specimens to compare this plant with *Sal. pulchella* Decan. and *Sal. machrostachya* Humb et Bomp., to which it seems somewhat alike. According to M. LA GASCA, it was cultivated in the open air in the Royal Gardens at Madrid, from the year 1814; but the severe frost of December destroyed its tender annual shoots. Mine were not at all affected by the frosts of last winter.

A JERSEY GARDENER.

P.S. Plants of this beautiful *Salvia* are now selling by Mr. B. SAUNDERS, florist, Jersey.

[An Engraving of this species is in hand.—COND.]

ARTICLE III.—*On the Culture of the Garden Anemone (Anemone hortensis)*. By INNOVATOR.

At the request of your Querist "B. C. L.," I forward you my most approved plan of cultivating that beautiful, but much neglected flower, the Double Anemone. It is astonishing that it is not more generally grown, as its culture is easy, and it invariably repays us with a profusion of bloom. The practice that has answered my most sanguine expectation is as follows:—About the last fortnight in September, take out the natural soil of the bed to the depth of eighteen inches; in the bottom lay a layer of cow-dung three or four inches thick; then fill up the bed to within an inch and a half of the surface, with the following compost:—Take of thoroughly rotted cow or horse-dung, leaf mould, and heavy loam, of each six barrowfuls; white pit sand, two barrowfuls,—which mix well together. Let the bed lay to settle till the middle of October; when, having raked over the surface,

the tubers may be planted upon it, in six rows, six inches apart from root to root : this distance is absolutely necessary, to allow room for their fine flowers to expand and show themselves. Cover each tuber with a little white sand, and fill the bed level with the surface with light sandy loam ; compact the surface with the back of the spade. Protect them from heavy rains, or severe frost, by straw mats, supported from the surface of the bed by a wooden frame, made like the roof of a house ; but do not continue this covering only when absolutely necessary, as nothing is so hurtful to them as confined air. Shade them with an awning from sun and rain when in full bloom, and give them rain-water every other day, poured between the rows. As soon as the bloom is over, cease to give water, and admit all the sun possible, but not a drop of rain—as the quicker vegetation is destroyed, the better will be the bloom next season. Take up the roots as soon as the grass dies down. They will answer nearly as well grown in 32-sized pots, using the same compost, and plunging the pots in cinder-dust. They are a cheap flower. All the best sorts under name may be had of Mr. GROOM, florist, Walworth, at about 10s. 6d. per dozen.

INNOVATOR.

ARTICLE IV.—*On the History and Culture of the Tree Pæony.* By AN ARDENT AMATEUR.

Pæony belongs to Polyandria, Digynia—Linn. ; Ranunculacæ, nat. ord. *P. officinalis* has been in this country ever since 1562 : it is a native of Switzerland. *P. corallina* is a native of this country ; but the only place where, to my knowledge, it is found wild, is the Flat Holmes, a rocky island in the Bristol Channel, which, by-the-bye, is noted for its natural productions. PLINY mentions the Pæony as one of the first known plants, and that it was called after PÆON, a physician, who is mentioned by HOMER, in his *Iliad*, 5th book, 900th line, when MARS had been wounded :

“ Thus he who shakes Olympus with his nod,
 “ Then gave to Pæon’s care the bleeding god :
 “ With gentle hand the balm he pour’d around,
 “ And heal’d th’ immortal flesh, and clos’d the wound.”

PLINY also says, that it was called Pentoberan and Glycisides by

it is decidedly a stove plant, and requires great heat and moisture to flower it to perfection even there.

Jan. 7th, 1834.

THOS. APPLEBY.

ARTICLE VI.—*On Compost for Carnations.* By MR. J. BANTON, near Oakham, Rutland.

Being convinced of the utility of the following method, I offer it to your notice for the use of such of your readers as may be disposed to try it. The chief thing in which I differ from most others whose methods of preparing compost I have seen, is the substituting turf-ashes for sand. This I find to be much preferable; and I have no doubt it will be found the same by all those who, like me, are obliged to use cow-dung as the principal article in their compost: by cow-dung, I mean the manure formed by the dung and litter thrown from the cow-house, which should be at least one year old before it is used. The cold, heavy nature of this manure is corrected by the contrary properties of the ashes. My method is as follows:—In March or April, I take some turf from the best ground I can, considering that the fatter the soil the better will be the ashes. I do not take it more than four inches deep; and as soon as the turfs are in order, I burn them. When I consider that I have a sufficient quantity of ashes, I mix them as hot as possible with my cow-dung and loam. As to the precise quantity, I am not very particular: much depends on the nature of the loam; and a trial or two will easily determine the proportion. Of our red earth, I allow about one part to one part of ashes, and two parts of dung. This compost should be turned and mixed at least once a fortnight in summer, and once in three weeks or a month in winter: for, notwithstanding all that has been said about the winter preparation of soil, I believe one summer to be worth two winters for the purpose. I do not find it necessary to use quick lime in this compost, though, when I used sand, I thought lime indispensable. The wire-worm I have not seen in the compost, as I now use it; yet I am by no means prepared to say, that that formidable enemy of the florist will not attack plants growing in it. After twelve months' preparation, it will be fit for use. Turf-ashes are used by other florists in the

neighbourhood besides myself, though not in quite the same manner; yet all those that use them speak well of them.

J. BANTON.

Leigh, near Oakham, Rutland, Jan. 9th, 1834.

ARTICLE VII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONTINUED FROM PAGE 88.)

| NAMES. | DESCRIPTION. |
|------------------------------|------------------------------------|
| 416 L'Ebloassante vierge | Very large bright blush. |
| 417 Lebrée | Large bright red. |
| 418 Le Grand Duc | Light purple. |
| 419 Leicester | Small pale pink. |
| 420 ———— Crimson | Beautiful light crimson. |
| 421 Le Marquis | Fine scarlet and blush. |
| 422 L'Enchanteur | Fine pink. |
| 423 L'Enchantresse | Bright deep pink. |
| 424 Le Plus jolie coup d'œil | Fine bright red, changing pink. |
| 425 Les étoiles garnis | Crimson blush. |
| 426 — trois nages | Very fine white. |
| 427 L'Etoile rouge | Large red. |
| 428 L'Illustré | Large bright red pink. |
| 429 ———— Cavalier | Beautiful bright red. |
| 430 ———— Champion | Mottled purple and scarlet. |
| 431 L'Obscurité | Very deep red. |
| 432 ———— | New—Small dark purple. |
| 433 Lodoiski | Pretty light pink. |
| 434 L'Ombre parfait | Dark shaded purple. |
| 435 London Pride | Very fine fringed dark. |
| 436 Louis dix | Pink and purple. |
| 437 ———— nouveau | Immense large bright red. |
| 438 — huit | Fine red. |
| 439 Louis seizieme | Very large fine pale red. |
| 440 Lucrece | Small early blush. |
| 441 Macbeth | Small crimson purple. |
| 442 Macrithorum | Superb large blush. |
| 443 Maculata | Fine mottled light red. |
| 444 Madame Lavalette | Large deep scarlet. |
| 445 ———— Salvin | Beautiful bright red. |
| 446 Mademoiselle | Small pretty bright red. |
| 447 ———— Caroline | Very pale purple. |
| 448 ———— Charlotte | Fine bright red. |
| 449 ———— de Berri | Fine pale blush. |
| 450 ———— d'Eufraise | Very fine cream colour. |
| 451 ———— Esther | Large fine brilliant red. |
| 452 ———— Jencire | Very double red. |
| 453 ———— Julia | Beautiful deep blush. |
| 454 Madiska | Fine curled deep red. |
| 455 Magnifique | Large deep blush. |
| 456 Maiden's Blush | New—Beautiful blush. |
| 457 Malva brillante | Anemone flowered, fine deep-blush. |
| 458 Manteau rouge | Light crimson. |

| | NAMES. | DESCRIPTION. |
|-----|----------------------|---|
| 459 | Margin hip | Beautiful semi-double cream colour, scarlet margin. |
| 460 | Marquis | Pinkish red. |
| 461 | Marquis of Tavistock | Fine light tinged crimson. |
| 462 | Marshall | Pink and purplish crimson. |
| 463 | Martinez | Fine curled rich rosy crimson. |
| 464 | Masterpiece | Immense large red. |
| 465 | Maximo palira | Fine crimson purple. |
| 466 | ——— pourpres | Fine mottled purple. |
| 467 | May | Lilac blush. |

(TO BE CONTINUED.)

PART II.

EXTRACTS.

Adam the Gardener. By CHARLES COWDEN CLARKE. London, 1834, pp. 279.

(CONCLUDED FROM PAGE 90.)

“In the course of your other engagements, Adam, do not forget your weeding. Your hoe and your fingers must both be busily employed throughout this month. The young weeds must be cleared from the beds of young plants, and the old ones must be cut down before their seed ripens; since the wind would then scatter it all over the garden, and your labour next year be greatly increased.

“While you are so employed, too, look round, and observe what annuals have ripened into seed, then cut them off carefully, and lay them upon a sheet under the shed in the sun. As soon as they have become thoroughly dry and hard, we will employ some evening in rubbing them out, and packing them away in parcels. We will also sow some corn-sallad for our winter and spring dinners.

“Every evening, so long as the winter continues dry, you may give each of the cucumber plants some water, and our crop will in consequence be the more abundant.

“I am not sure that I shall sow any more turnips this year; but I must make up my mind before the middle of this month, or it will be too late. You, however, may hoe that bed by the medlar-tree, where those young ones are; and thin out the smallest plants for the cow, leaving the larger ones at about six inches’ distance from each other.’

“One day, while they were at work, they noticed how much they were troubled by wasps: at his father’s desire, therefore, Adam filled some phials about half full of treacle and water, and hung them in various quarters of the garden, upon branches of the wall trees. The quickness with which these little creatures discover any sweet provision (of which they are very fond) is truly surprising. It is worthy of remark, that at dinner, during the fruit season, wasps rarely intrude at table till the pies are opened; when, in the course of two or three minutes, they will be found to have made their way into the room, and become one of the guests—though uninvited and unwelcome. Their scent is as keen as that of a blood hound.

“See if there be any manure-water, Adam,’ said his father; ‘if we have none, get the two gallon watering pots, dip some of the soft pond-water, and

put a good handful of salt into each; and then give it to those vines against the house: in the mean time, I will be removing the young shoots upon them, above the fruit; and, after that, I will trim and dispose the peach and nectarine trees. Remember, also, with your hoe and rake, to clear and remove the weeds from the fruit-borders. A neat appearance is not the only benefit that will be derived from this step; but the fruit itself will be more quickly ripened, and its flavour improved, by the rays of the sun being reflected from the smooth surface of the ground.

“ They also, from time to time, attended to their flower garden; watering the annuals regularly, and putting sticks to support those which required them. Those perennials, too, in pots, that had done blowing, they cut down the stalks, and at the same time loosened the earth at the top of the roots, removing some of it, and replacing it with new mould. They likewise propagated many others by dividing the roots; such as the double rose chameleon, catch fly, double scarlet lychnis, and double rocket, gentianella, and polyanthus. Their choicest auriculas they shifted into fresh pots, and sowed fresh seed in pots, sprinkling the seed closely, and covering it about an inch deep. They also transplanted bulbous roots, such as lilies, &c., and sowed some of the seed of the same. Young seedlings of wall flowers, stocks, sweet williams, and columbines, they transplanted out into the borders. This work they contrived when the ground was moist after rain.

“ In the nursery ground they trimmed the evergreens, clearing the ground of weeds, and transplanting young seedlings; and those which had made strong shoots from the stems near to the ground, they cut away close off. Those trees which Mr. Stock had budded about three weeks or a month before, he loosened the bass that bound them, to prevent the bud from being too closely pressed, as the branches had swelled,” &c. &c. &c.

Plants figured in the following Periodicals for April:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Amaryllis aulica*, Courtly Amaryllis. Class, Hexandria; order, Monogynia. Natural order, Amaryllidæ. It seems liable to much variation: the present is a splendid variety, with green lines in the centre, running nearly the whole length of each petal, which are of a fine red, with a very obsolete glandular disk, and with long, narrow, glaucous leaves. Another variety is the *platypetala* of Professor LINDLEY, in the *Bot. Reg.* t. 1038; while our present plant seems intermediate between these and what is considered the type of the species. The bulb was presented to the Botanic Garden by — PEARSON, Esq., who brought it from the neighbourhood of Rio Janeiro, in Brazil, where it is a native. Amaryllis, a nymph of VIRGIL'S.

2. *Alyxia ruscifolia*, Butcher's broom leaved Alyxia. Pentandria, Monogynia. Apocynæ. The present species was detected in New South Wales, within the tropics; to which, however, its geographical range is not limited— for, upon a settlement being established, some nine years since, at Moreton Bay, on the same line of coast, but in 27° S. latitude, it was found in the dense woods that clothe the banks of the Brisbane River, growing luxuriantly among great shade and but little light; yet, under these circumstances, bearing its flowers at the termination of each branchlet throughout the cooler season of the year. It was originally raised at Kew, from seeds gathered on those intertropical shores, in 1820; and from the Royal Gardens, other collections were enriched by it. It is a hardy conservatory plant, ornamental from its habit and dark foliage, and putting forth its fragrant white flowers (smelling like Jasmine) freely, and generally during the greater part of autumn. Alyxia, from the Greek *Alyxis*, grief, anxiety of mind—in allusion to the deep sombre green of several of the genus.

3. *Alyxia Daphnoides*, Daphne-like Alyxia. Pentandria, Monogynia. Apocynæ. Plants of this very distinct Daphne-looking species were introduced to the Royal Gardens by Mr. CUNNINGHAM, in 1831, where they soon afterwards flowered, and produced green fruit. It is remarkably hardy, simply requiring protection from frost, and is readily propagated by cuttings. It is a shrub of strong growth, inhabiting dry shaded woods on Norfolk Island, where it is by no means of frequent occurrence.

4. *Caladium fragrantissimum*, Delicious-scented Caladium. Monœcia, Polyandria. Aroidæ. This new species was introduced into the Liverpool Botanic Garden, from Demerara, by C. S. PARKER, Esq. Among other plants which invest the stems of trees in the forests of the tropics, the different species of *Caladium* constitute a striking feature, both in regard to form and colour. Some are stemless; others have long climbing stems, sending forth thick wiry roots, if they may be so called; for they seem rather calculated to imbibe nourishment from the surrounding atmosphere, than to fix the plant producing them to their place of growth. We are familiar with the general form of their inflorescence, from that of the *Arum maculatum* (or Wake-Robin) of our banks and hedges in England. The floral covering is generally of a pale and unobtrusive colour, and scentless; but in our species, and some others, it is in part richly tinged with red; and the whole inflorescence yields a fragrance, which, in the present species, can only be compared with that of the well-known *Olea fragrans*, but far more powerful.

5. *Ipomœa Horsfallia*, Mr. HORSFALL'S Ipomœa. Pentandria, Monogynia. Convolvulacæ. Seeds of the present species were received by CHARLES HORSFALL, Esq., either from Africa or from the East Indies, and raised by his very skilful gardener, Mr. HENRY EVANS, at Everton, where the plants produced their lovely rosy crimson coloured blossoms in great profusion during the months of December and January (1833-4), a season when so gay a visitor is particularly welcome to the stove. Ipomœa, see page 61.

6. *Lonicera Chinensis*, Chinese Honeysuckle. Pentandria, Monogynia. Caprifoliacæ. A native of China; and though treated at first as an inmate of the greenhouse, it proves to be perfectly hardy. It produces its beautiful fragrant flowers through a great part of summer and autumn. *Lonicera*, so named in honour of A. LONICER, a great German botanist, who died in 1586.

7. *Streptanthus obtusifolius*, Blunt-leaved Streptanthus. Tetradyamia, Siliquosa. Crucifera. This species is a very showy annual plant, and was received, under the name of "Arkansa Cabbage," from the hot springs of the Arkansa territory. It is cultivated in the Glasgow Botanic Garden. It will no doubt bear the open air, though Mr. MURRAY has hitherto kept it in the greenhouse. Flowers: fine rose colour, with a very deep lake coloured spot at the base of each limb. Streptanthus, from *Strepho*, to turn or twist; and *anthos*, a flower,—in allusion to the twisted petals.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured, 3s. plain.

1. *Cyclobothra alba*, White Cyclobothra. Hexandria, Trigynia. Liliacæ. A Californian bulbous plant, introduced by the Horticultural Society. It forms quite a new class of horticultural objects, of great interest; representing, at midsummer, which is their time of flowering, the Fritillaries and Tulips of the spring. They are probably quite as hardy as Tulips, like which they should be treated; unless it should prove that their bulbs are capable of living all the year round in the open ground, a property we can hardly anticipate, considering how dry and mild a climate is that of California, compared with England. In the Garden of the Horticultural Society, they have been planted in the open border, in a light loamy soil, in a cold frame, where they grew with considerable vigour, flowered beautifully, and produced abundance of seed. *Cyclobothra*, from *Kuklos*, a circle; and *Bothros*, a pit,—in allusion to the circular depression from which the petals distil honey.

2. *Cyclobothra pulchella*, Deep yellow flowered. Syn. *Calochortus pulchella*. Hexandria, Trigynia. Liliaceæ. We doubt whether this plant likes the climate of England so well as the last, for although it grew with apparently perfect health, flowered freely, and ripened its seeds under the same circumstances as *C. alba*; yet the specimens which were produced could not be compared for beauty with the wild ones sent home by Mr. DOUGLAS. The latter consisted of many-flowered and rather dense corymbs of flowers; but the cultivated plant hardly exceeded *C. alba* in the number of its blossoms. The flowers of this genus much resemble *Fritillarias* in form and habit.

3. *Cyclobothra lutea*, Pale yellow flowered. Hexandria, Trigynia. Liliaceæ. Syn. *C. barbata*. When this plant was first introduced, it was supposed to be the same as the *Fritillaria barbata*. This pretty species of *Cyclobothra* was obtained some years since from Mexico, by Mr. TATE, and has now become dispersed through many collections. It appears to grow freely in a light mixture of peat and loam, and to require no other protection than a good pit.

4. *Echites stellaris*, Star-flowered. Pentandria, Monogynia. Apocynææ. A tender stove climber, introduced from Rio Janeiro to the Horticultural Society, by the Hon. ROBERT GORDON. In the month of August, its flowers perfume the part of the hothouse in which it is placed, with a delightful smell of Primroses. It grows readily in peat and loam, but is scarcely to be propagated except by cuttings of the root. Dr. LINDLEY has named it with reference to the coloured eye of the corolla, which, being deep rosy red in the centre, with five starry lobes, bordered with a sort of orange yellow, gives a striking appearance to the flowers. *Echites* is the Latin name of the Birthwort, one of the twining species of *Aristolochia*. Its meaning being "serpentine," from $\epsilon\chi\iota\varsigma$, a snake, LINNÆUS applied it to the present twining genus.

5. *Ismene Amancaes*, var. *sulphurea*, Sulphur-coloured *Ismene*. Hexandria, Monogynia. Amaryllidææ. This very ornamental bulb was raised four years ago from a seed of *I. Amancaes*, which had been fertilized by the pollen of *I. Calathina*. The colour of the flower is intermediate, and the scent, though very powerful, is not delightfully fragrant, as in *Calathina*, nor so disagreeable as that of *Amancaes*. *I. Calathina* thrives vigorously out of doors in a border of sand and peat mixed, and flowers in July and August, if the bulbs are planted out in April, and taken up when the leaves decay in November or October. The soil being loose and light, it is easy to avoid breaking their strong fleshy fibres, which should not be injured. The bulbs so taken up should be put all together in a large pot, or a small tub, according to their number and size; and, some light soil being poured over them, they should be placed at the back of a greenhouse, or in any shed where they will be preserved from frost, and must have no water. *I. Amancaes* requires a much more sandy soil, and less moisture: if planted out of doors, a large potful of soil should be taken out of the border where it is set, and the hole filled with pure white sand, and, unless the summer is very wet, it will succeed well. If kept in the greenhouse, it should be potted in very sandy compost, and be watered sparingly; and should be left quite dry from the time the leaves decay till May. Peat and too much water have caused many cultivators to lose this plant, which is not difficult to preserve. *Ismene* is a classical name applied to this genus by Mr. HERBERT. ISMENE was a daughter of ŒDIPUS.

6. *Cypripedium spectabile*, Large white Lady's Slipper. Gynandria, Dianthia. Cypripediææ. A native of the low meadows and bogs in North America, particularly in the mountainous tracts from Canada to Carolina, flowering in May and June. This remarkable plant is the finest of the North American *Cypripediums*, and is not by any means uncommon in the gardens of this country, its roots being periodically imported. It has, however, resisted all attempts at propagating it, and seldom lives above a year or two after its arrival. Those who manage it the best treat it as a greenhouse plant, keeping it very near the light until its leaves have withered, when it is removed to a dry shelf till its growing season returns. *Cypripedium*, from *Kypris*, Venus; and *podion*, slipper,—in allusion to the form of the flower.

7. *Catasetum luridum*, Lurid *Catasetum*. Gynandria, Monandria. Orchidææ. Syn. *Anguloa lurida*. This plant is a native of the woods, not only of

Brazil, but probably of the greater part of Brazil. Like all the species with similar habits, it grows freely in decayed vegetable matter, mixed with a little pure loam, among quantities of potsherds, and it probably will soon become common. Although it cannot be compared for beauty with *C. tridentatum*, it is nevertheless a very interesting species; the spots on the margin of the tip are of the deepest and richest ruddy brown; while the horns of the column may be compared to the fore legs of some spider, lurking in the bosom of the flower, to seize upon the victims that may enter it. *Calasetam* is a name the meaning of which is unexplained.

8. *Begonia heracleifolia*, Parsnip leaved Begonia. Syn. *Begonia radiata*. Monœcia, Polyandria. Begoniaceæ. A native of Mexico, where it was met with by the German travellers, SCHIEDE and DEPPE, in several localities. It is a very free growing hothouse plant, producing its rosy flowers in every month of the year. All that it demands at the hand of the cultivator is heat, moisture, and a full exposure to the light. If kept too much in the shade, the flowers lose the bright rosy tint which is natural to them, and with it their beauty. Begonia, named in honour of MICHAEL BEGON, a French promoter of Botany.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnean Society. Coloured, 3s.; plain,
2s. 3d.

1. *Manettia glabra*, Smooth Manettia. Syn. *Manettia cordifolia*. Tetrandria, Monogynia. Rubiaceæ. This is an exceedingly elegant plant. Its delicate and graceful form, and its long scarlet blossoms, contrasted with its broad deep green foliage, render it one of the most beautiful objects that can well be conceived. The plant appears to thrive best in a mixture of sandy peat and loam, is of easy culture, and is readily increased by cuttings, planted in sand, and placed in artificial heat. Like most of the plants of the same country, it will doubtless succeed well in the open border during summer. The genus was named by LINNÆUS, at the request of his correspondent MUTIS, after XAVIER MANETTI, Professor of Botany at Florence.

2. *Artanena fimbriatum*, Fringed flowered. Didynamia, Angiospermia. Scrophularinæ. Syn. *Torrenia fimbriatum*, *Torrenia scabra*. A native of the banks of the River Brisbane, at Moreton Bay, New Holland; whence seeds were transmitted, by the late Mr. C. FRAZER, to the Edinburgh Botanic Garden, where the plant blossomed in 1831. Although usually treated as a greenhouse plant, it will be found to succeed very well in the open border during the summer months, producing its blossoms and ripening its seeds freely. Flowers: blue, with violet streaks, about an inch long, very showy, and an interesting addition to our gardens. It should be planted in a mixture of peat and loam; is increased by seeds, or by cuttings.

3. *Linaria circinata*, Curve-leaved Toad-flax. Didynamia, Angiospermia. Scrophularinæ. This curious species was raised by Mr. ANDERSON, in the Chelsea Botanic Garden, from seeds received from Buenos Ayres; but it seems more probable that it is a native of Northern Africa, as most of the species of the section of the genus to which it clearly belongs, are natives of that country. The plant is apparently somewhat shrubby. Flowers: axillary, solitary, sulphur coloured, dotted with dark red, very pretty. The plant requires a light loamy soil, and may readily be increased by cuttings. It also requires to be protected during winter, in a pit. *Linaria*, from *Linum*, flax,—having similar leaves.

4. *Lablab vulgaris*, Egyptian Haricot. Diadelphia, Decandria. Leguminosæ. Syn. *Lablab vulgaris*, *Lablab niger*, *Dolichos Lablab*, *Phaseolus niger*, *Dolichos purpurea*, *D. Bengalensis*, *D. albus*, *D. Lablab*, *Lablab nankinicus*, *L. leuocarpus*. This plant is cultivated in India, China, Egypt, and many other countries of the East, and also in the West Indies, on account of its pods, which are prepared and eaten in the same manner as Kidney

Beana. It is an extremely showy plant, and is admirably suited for being trained to trellis work, or over a verandah. Mr. LITTLE, nurseryman, King's Road, Chelsea, has cultivated it for some years as an ornamental plant; and he finds it quite as hardy, and to require the same treatment, as the Kidney Bean. Flowers, in long interrupted clusters, of a pale purple, varying often to dark purple, or white; blooms from July to October. The name *Lablab* means simply, in Arabic, a twining plant, and is applied indiscriminately to the *Convolvulus* and many others of similar habit.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small, coloured.

1. *Rosa indica*, Rose Clare. This Rose partakes of the habit and character of the China Rose, and there is little doubt but it has been raised from this species; where, or by whom, we cannot with confidence state. Report, however, states, that it originated with a gentleman of the name of CLARE; and that it was raised from seeds brought from Italy. It grows very freely wherever other Roses flourish, and produces an abundance of flowers, from the commencement of the season to the end of autumn. Flowers: fine deep rose, single, blooming in clusters; deserves general cultivation; grows to the height of ten feet. The Celtic word *Rhos*, a Rose, from the word *Rhodd* of the same language, signifying red, has, with a little variation, been transferred into numerous other languages, to convey a meaning similar to the original. *Indica* is applied as a specific name, to connect the plant with its native country.

2. *Coronilla Iberica*, Iberian Coronilla. Diadelphia, Decandria. Leguminosæ. It is a delightful plant for the foreground of the parterre. It spreads freely, completely covering the surface of the soil with its neat foliage; from amongst which, rise its brilliant little coronets of yellow blossoms. Luxuriant foliage and flowers will be yielded by a rich fresh loamy soil, which it requires. It should be planted in an open situation, uninfluenced by the shade of trees. *Coronilla*, from *Corona*, a crown; *Iberica*, a district bordering on Mount Caucasus.

3. *Digitalis laciniata*, Cut-leaved Fox Glove. Didynamia, Angiospermia. Scrophulariæ. This plant is a native of Spain, and but little known to English botanists; and although it has borne the two or three last winters without injury, we do not anticipate that it will become a plant of so hardy a character as to stand unprotected, in severe seasons. Flowers: stalk rises eighteen inches high; blooms from July to September; colour, a rosy red and buff. In dry summers, seeds are produced abundantly. It may also be propagated by cuttings. Loamy soil should be preferred to that which is peaty, and a warm situation. *Digitalis*, from *Digitalis*, the finger of a glove.

4. *Verbena urticifolia*, Nettle-leaved. Didynamia, Angiospermia. Verbenacæ. It is an upright plant, of strong growth, rising three feet high; and although its flowers, taken separately, are small, they become showy on the aggregate. It blooms from July to October. A native of North America. Flowers: purple. Culture: increased freely by division of the plant. *Verbena*, a Roman name for herbs used in ancient sacrifices.

The Number for March (omitted in our last) contains—

1. *Hedysarum obscurum*, Creeping Hedysarum. Diadelphia, Decandria. Leguminosæ. A beautiful little plant for the borders, mounds, or artificial rockwork; but it should be so placed that its beauty may not be hidden by more diffuse subjects. Grows six inches high; flowers in July and August. It will grow in any common soil, particularly in a sandy one. *Hedysarum*, from the Greek *Hedys*, sweet; and *aroma*, a perfume.

2. *Sanguisorba Canadensis*, Canadian Great Burnet. Tetrandria, Monogynia. Sanguisorbæ. A native of Canada, cultivated in 1683; a perennial, bearing spikes of white flowers; five feet high; it flowers in August and Sep-

tember. Sanguisorbia, from the Latin *sanguis*, blood; and *sorbes*, to absorb, from the astringent qualities of the Sanguisorba officinalis.

3. *Jasione perennis*, Perennial Sheep's Scabious. Pentandria, Monogynia. Campanulaceæ. A perennial, introduced from France in 1787. When grown to perfection, it is a neat and attractive flower, growing one foot high; flowers in June and July; colour, blue. In order to grow it to perfection, plants must be raised in autumn, and planted singly, or at least not too closely together. The most suitable soil will be peat, or peat and loam; the situation should be tolerably dry.

4. *Lilium pomponium*, Pomponé Lily. Hexandria, Monogynia. Tulipaceæ. A native of Siberia, cultivated in 1629; a perennial; grows two feet high; flowers in May and June; colour, deep orange red, spotted with black towards the centre. According to Mr. Loudon, the *Lilium pomponium* is cultivated in Kamtschatka as the potatoe is in Britain, and that its bulbs are in like manner laid up for winter store; they are called savannas, and when boiled, taste exactly like a waxy potatoe. Their roots demand no culture; their flowering stems grow up independently of the gardener's care; we need only observe, that the bulbs should not be moved when in an active state of growth. *Lilium*, from *Lá*, whiteness; some of the varieties being of a pure white colour.

On Promoting the Healthiness of Plants, and the Destruction of Insects on them.

Nothing contributes so much to the health of a garden as a number of Camomile plants dispersed through it. No greenhouse or hothouse should be without Camomile, in a green or in a dried state; either the stalks or flowers will answer. It is a singular fact, that if a plant is drooping, or apparently dying, in nine cases out of ten it will recover, if you place a plant of Camomile near it. The flowers should be gathered before they change their colour, and spread in a loft, or in a shady place, for four or five weeks, until they are quite dry. The plan I venture to recommend for general adoption is this,—to anticipate these troublesome visitors, by having trees, &c. syringed with a decoction of Camomile, prepared in the manner I shall describe below, in the months of January, February, and March. Diseased parts should be properly cleansed and washed with the decoction. It might be accomplished at a time when no other work could well be done; and the expense would be comparatively nothing.

Supposing the above precaution was neglected, and the insects really appear on your trees, fumigation with Camomile, and washing with the decoction, will be found to answer as effectually as tobacco. For the purpose of fumigating, the dried stalks of the plant may be used; but if you have not the stalks, you may burn the flowers.

The decoction is prepared in the following manner:—Boil a gallon of clear rain water, and pour it into an earthen or wooden vessel, upon a pound weight of Camomile stalks or flowers; cover the vessel down, but not too close; stir it occasionally, and when cold pour off the water, and put another gallon of boiling water, as above, on the same flowers; to these two gallons of extract, when mixed, add six gallons of clear unboiled rain-water. For some purposes this mixture might be too strong, and for others not strong enough; but the gardener must make use of his own understanding, and act with due caution, or as circumstances may point out.—*Irish Farmer's and Gardener's Magazine.*

PILLARS OF ROSES.—One of the prettiest floral fancies of the present day is that of forming pillars of Roses. These pillars consist of Roses trained on iron stakes, from 12 feet to 15 feet high, well painted; and they form the most durable, as well as the most picturesque, objects in garden scenery. During the ensuing summer, I intend to make an accurate list of all the Noisette Roses that are suitable for training in this mode. These, with some

of the Ile de Bourbon varieties, added to the already numerous and decided Climbing Roses, will make a magnificent display. Merely to show how a heap of clay may become a mount of beauty, I last spring levelled and made circular a large quantity of white and blue clay, dug from a pit to contain water: on this, with a small portion of dung and pit-sand to each plant, I planted some of all the hardy Climbing Roses. The effect is now beautiful; and another summer it will be a mount of Rose pillars, each from eight to ten feet high.—T. RIVERS, JUN.—*Gardener's Magazine*.

THE CELEBRATED COLLECTION OF ORCHIDÆ, which belonged to the late Mrs. ARNOLD HARRISON, of Liverpool, was purchased by Mr. KNIGHT, Exotic Nursery, in the beginning of February last.—*Ibid*.

TULIPS.—A correspondent in the *Field Naturalist* for March, observes,—“Last year I had a bed of Tulips of the rare and beautiful sorts, which I thought I would protect from chance of frost, by covering them with *tan*. They all flowered perfectly black.”

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON THE CHINESE PRIMROSE.—Will any of your correspondents have the kindness to inform me of the best method of cultivating and propagating the Chinese Primrose! Should they be always kept in pots, or occasionally turned into the open ground? GULIELMUS.

ON THE FLOWERING OF CHRYSANTHEMUMS IN SUMMER.—I observe one great horticulturist, MILLER, and other writers, speak of these beautiful plants flowering in summer. He says,—“Cuttings taken from the plants the beginning of September, and planted in pots, will readily take root; and if they are placed under a hotbed frame, to screen them from the frost in winter, letting them have free air in dry weather, they will live through the winter; and in the spring these plants may be transplanted into the borders of the flower-garden, where they will flower in June, and continue in succession till the frost puts a stop to them.”—I have practised this method, but have been disappointed; for none of my plants bloomed until the usual time in November. Can you, or any of your intelligent correspondents, furnish me with any information on this subject? GULIELMUS.

London, Feb. 25th, 1834.

ON THE BIGNONIA.—I should feel greatly obliged to “An Ardent Amateur,” if he would answer the following questions:—1st. What is the proper time to put in cuttings? 2nd. What is the proper soil? 3rd. What is the proper aspect? 4th. Whether they require mats in winter, and whether they are semi-hardy, or perfectly so? A LOVER OF FLOWERS.

ON THE AURICULA.—“A Lover of Flowers” would esteem it a particular favour, if the Conductor of the much-admired and useful little work, the *Floricultural Cabinet*, would inform her of the properties of a choice Auricula.* A sketch of one would be a great acquisition; but the latter is only a hint from a sincere admirer and well-wisher to the *Floricultural Cabinet*.

ON THE DAHLIA.—Will any of the readers of the *Floricultural Cabinet* be kind enough to inform me what is the best soil to grow Dahlias in, and whether they require much water?—what are the properties of a choice flower?—and likewise how old seedling plants are before they blow? A LOVER OF FLOWERS.

* See page 118 of the present Number.—COND.

ON ROSEBUSHES.—Having frequently observed it recommended in the *Floricultural Cabinet*; to place potsherds at the bottoms of pots, I should (should I not?) be glad if the Conductor would inform me what is meant by potsherds.

A LOVER OF FLOWERS.

[Small pieces of broken garden pot.—COND.]

ON THE WHITE WATER LILY.—In *Loudon's Encyclopædia of Plants*, it is stated that the *Nymphæa alba* (White Water Lily) will grow well in large pots of water, with a few inches of rich soil at the bottom. Can you, or any of your correspondents, inform me what sized pots would be required?—where the roots should be planted?—and what soil would suit them best? An early answer would particularly oblige

F. W. G.

Sudbury, Suffolk, March 16th, 1834.

ON FLORIST'S FLOWERS.—You will pardon me for intruding myself on your attention; but having a great desire for knowledge on cultivating what are termed florist's flowers, I now presume to address you as follows:—

Imprimis.—I wish to know whether the compost for Carnation, Tulip, Hyacinth, Ranunculus, Anemone, and Pink beds, requires to be removed every year,—to speak in plain language, I mean whether the old, or last year's compost, is to be all dug out of the excavations, and entirely new compost to be substituted; or whether it only requires to be renewed with an addition of the same materials as those of which the beds are made.

I should also like to have a little information respecting the raising of the Carnation, Pink, Auricula, and Tulip, from seed,—whether the three first are best raised in heat, or not,—the soil,—and best time for sowing the seed. I wish to know how long Tulips raised from seed are before they flower, and whether it would injure good Tulips materially to allow them to ripen seed. Could you also let me know what constitutes a perfect flower in the Auricula and Polyanthus?

S. PINNOCK.

April 3rd, 1834.

P.S. I am happy to see your Magazine succeed so well, and heartily wish it a future continuance of support. I should like to see it published oftener.

ON GIVING THE ENGLISH NAMES TO PLANTS, &c.—I have derived much information from your little periodical, entitled the *Floricultural Cabinet*; but not so much as I might do, were you to give the common English names of the flowers after their scientific appellations. In the descriptions of the plates, I observe the English names are given, and I hope you may be induced to do the same in the directions for the cultivation of particular flowers, &c., as I dare say many of your readers are of the same class as myself, and not more acquainted with the botanical names than I am.

In the Number of the *Floricultural Cabinet* for March, 1833, you say that the last year's layers of Carnations should be planted off into large pots, three in each pot. Why may they not be planted singly in smaller pots?—and if they may, I would thank you, or some of your correspondents, to inform me of what size the pots should be in diameter at the top and bottom, and of what depth; as I do not understand what is meant by 48's, 60's, &c. in reference to pots. [See page 44 of the present Volume.—COND.]

Roxner, March 16th, 1834.

A LADY N.

ON BULBOUS ROOTS, &c.—In looking over my Volume of the *Floricultural Cabinet*, at page 97 I observe an Article by "Snowdrop," on the culture of Hyacinths, which remarks, I should suppose, will apply equally, and with as much propriety, to all bulbous roots as to Hyacinths. I refer to that part of his excellent Article, where he states, "the bulbs ought not to be removed oftener than once in four years." I, therefore, imagine that he has allowed his bulbs to remain in the earth all this winter. If so, I should wish him to inform me, when the season is over, whether they have bloomed to his satisfaction, or that his stock is very much deficient. I fear the latter will be the case. Perhaps he may say the last autumn has been a very uncommon one, and that so much rain has not fallen before for a very considerable time. Still I think some plan ought to be devised to prevent the recurrence of such a

loss (for it will be a very serious loss to persons who have a large collection of them); and this can only be done by a continuation of the old method of taking them out of the earth every season, after they have finished their reign of beauty.

I would here also bear testimony to the many excellent Articles that have appeared in the *Floricultural Cabinet*, and which have been the means of imparting much valuable information to amateur gardeners, who, like myself, are attached to the culture of nature's most beautiful productions; and, if I am not already trespassing too much upon your attention, I would suggest the propriety of advancing the price of your Floral Numbers from 6d. each to 1s., whereby you would be enabled to give us the plate much better coloured, with more information; and surely no one would object to give a shilling each month for the valuable contents of one of your Numbers, and especially at this time, when the love of flowers is becoming more general every year, which is fully proved by our having been able, even in this desert and mountainous part of the country, to form a Floral Society, which has only been in existence two years, yet at the last meeting there were flowers and fruit shown which would not have disgraced a much older Society.

You must excuse my occupying so much of your notice, but perhaps I shall not trespass again.

CHAS. K.

Saddleworth, Feb. 8th, 1834.

[We shall be glad to hear from our correspondent.—COND.]

ON FLOWERING MESEMBRYANTHEMUMS, &c.—I shall be obliged if you, or any of your correspondents, would inform me, through the pages of the *Floricultural Cabinet*, (to which I have been a regular subscriber,) the best method of cultivating the various kinds of Mesembryanthemums, so as to ensure their blossoming. I have had my plants two or three years, and they look very healthy, but have hitherto failed in producing flowers. I have not any means of applying artificial heat, but by hotbeds.

I should also be glad to know the most certain method of blooming the *Cactus speciosa* with the above means.

EMILY.

March 4th, 1834.

ON A SELECTION OF PLANTS.—I have been a subscriber to your Magazine from its commencement, and I believe I may say you are indebted to me for a very wide circulation of it in this county. Go on, Sir, as you have begun, and you will deserve a still greater patronage than you have yet received. The duties of a parish prevent me from giving that attention to my garden that I could wish, and the *res angusta domi* prevent the erection of a greenhouse; but as I have a lawn, with beds at intervals on it, to be filled in summer, and a kind friend's sheltering greenhouse for my Geraniums in winter, I am anxious to improve my stock of plants, both annuals and perennials, so as to rival my neighbours in beauty, if I can. Would you, or any of your numerous correspondents, take pity on a parish priest, and tell him what of each sort (annual or perennial) would be best to fill two beds now empty—say of 50 feet by 4. The soil is loamy, and half of the beds in shade. Peat and sand are so difficult to procure in our neighbourhood, that I am obliged to forego the claims of their flowers. And if the price of each shrub, and the probable difficulty of procuring the mentioned seeds, were named, the favour would be greater; also, the colour and height of each specified flower. It has long been my wish to make this request, but I have been deterred from the fear, that however interesting such information might be to me, it would be little to your readers; but as, since the desire was first formed, many have applied to me for the request I now make, in assisting me you would be also assisting many of your other subscribers.

VIOLET.

Vicarage, Wilts, March 3rd, 1834.

ANSWERS.

"ON DESTROYING THE WIRE-WORM.—Not seeing any reply to "E. R. W.'s" inquiry about the Wire-worm, perhaps, if you have no better, you may think the following worth your insertion:—Finding the Wire-worm in my Ranunculus acris, I dug up the soil, and found the following method of destroying them:—

culus bed (a very small one), I cut a large potatoe into thick pieces, and running a small stick through each, buried them between the rows, about the same depth as the roots, leaving the sticks above ground. After two days, on lifting up the sticks very gently, I found the potatoes covered with worms, which I destroyed, and replanted the potatoes. If I looked two days together, I seldom found above one or two; it is better to leave them two or three days betwixt each examination. If the potatoes get dry, fresh pieces should be put; but one was quite sufficient for my purpose. In a fortnight, I destroyed some hundreds. Not a single Ranunculus was injured, and the bed is now perfectly clear of them. If it be too much trouble to examine the traps, it is worth while to put them in, as the Wire-worm will choose them in preference to the fresh hard roots. Slugs are also caught at the same time.

March 12th, 1834.

S. H.

ON THE CULTURE OF THE GENUS SEDUM IN POTS.—A correspondent, "Snowdrop," wishes to know the most successful method of blooming the genus Sedum in pots. I beg to state, that I have had under my care a number of Sedums in pots, which flowered in very great perfection. The soil I used was turf that had lain for the coping of a wall for two or three years, and had been fully exposed to the action of the weather. This I chopped very small, and added to it a quantity of lime rubbish, mixing about half the quantity of lime rubbish to the soil. With this mixture I filled the pots, taking care to drain them well from any stagnant water; and my Sedums grew and bloomed profusely.

J. J.

March 24th, 1834.

ON HUMAN URINE AS A MANURE.—At page 46, Vol. I. of the *Cabinet*, "Snowdrop" asks, "Is human urine a beneficial manure?" VAN OSTEN, in his *Dutch Gardener*, (published in 1703,) at page 125, treating on the Hepatica, has the following passage:—"Plant them in sandy ground, mixed with dung that is hard and tough; it is also good to water them sometimes with human urine, but not when they are in flower, if you observe this, they will so increase that you may fill your garden with them in a short time."—I do not grow the Hepatica, and therefore have never tried the Dutchman's recipe.

J. BANTON.

REMARKS.

ON THE PROPERTIES OF A PERFECT AURICULA.—*The Plant*.—1. The stem should be strong, stiff, and erect, about six inches high.—2. The footstalks of the pips should be strong and stiff, and of a proportionable length to the size and quantity of the pips, so as to form a close and compact truss, without lapping over each other, and not less than seven in number, which should be all alike in colour and property.—3. The foliage should be healthy, and almost cover the pot.

The Pip.—1. Should be round, large, lay perfectly flat, and quite smooth at the edges, without notch or fringe.—2. Its centre, or tube, should be perfectly round, of a fine yellow or lemon-colour, well filled with the anthers, and should not exceed one-fourth of the diameter of the pip.—3. The eye should be perfectly round, of a pure white, smooth, without crack or blemish, and form a circle, not less than half the width of the tube, all round it.—4. The ground colour should be dense, whole, and form a perfect circle next the eye, and on the outer part be finely broken into a feathery edge. It should be equal on every side of the eye. The brighter, darker, and richer the colour, the better the flower; but if it be paler at the edges of the petals, or have two colours or shades, it is a fatal defect.—5. The margin or outer edge should be a fine unchangeable green or grey, and be about the same width as the ground colour, which must in no part go through the eye. From the edge of the eye to the outer edge of the flower, should be as wide as from the centre point of the tube to the outer edge of the eye.

ON THE PROPERTIES OF A PERFECT POLYANTHUS.—*The Plant*.—1. The stem should be strong, upright, and elastic, from four to seven inches high.—2. The footstalks of the pips should be stiff, and so proportioned as to length,



that all the pips may have room to show themselves, without lapping over each other, and form a close compact truss, of not less than seven in number, and all alike as to colour and property; the calyx should not be so long as to show itself at a front view of the pip. - 3. The foliage should be healthy, and almost cover the pot.

The Pip.—1. Should be large, quite round, and perfectly smooth at the edges, without notch or serrature, and lay perfectly flat.—2. The tube should not exceed one-third the diameter of the pip; it should be of a fine yellow, perfectly round, and well filled with the anthers.—3. The eye should be perfectly round, of a bright, clear, rich yellow, forming a complete circle, and not less than twice the width of the tube all round it; the petals should not cut into the eye.—4. The ground colour should be whole, of a bright, rich, dark crimson, and not paler at the edges of the petals; the ground colour should not be more than the width of the eye all round the tube, and regular on every side of the eye.—5. The edging should be a fine lemon-yellow, not more than one-third the width of the tube, and regular on every side of the ground colour, and go through the division of each limb down to the eye.

ON THE SIZE OF PINK AND CARNATION FLOWERS.—As so much has been said in your late Numbers of the *Floricultural Cabinet*, respecting the dimensions of Pinks and Carnations, allow me to say, in support of "Innovator's" statement, that last season I flowered the Duchess of York Pink four inches, and Hogg's Penelope Purple Picotee five inches, in diameter. I trust that, after these repeated assurances, "B. M.'s" doubts will be removed, as I have no hesitation in attributing his failure of flowering them to a large size, to the imperfection of soil.

WILLIAM YOEELL, Nurseryman and Florist.

Great Yarmouth, March 4th, 1834.

ON FERNS.—I have perused with great pleasure the excellent remarks on British Ferns, made by "M." in her three papers on the subject. On carefully investigating No. III., at page 83, Vol. II., I perceive that she says that the *Blechnum boreale* is found about moist shady hedge-bottoms in Nottinghamshire and Derbyshire. So far, I have no doubt, may be correct; but I can unhesitatingly assert—and confidently assure your correspondent "M." and your numerous readers—that I have found it in great plenty in both Staffordshire and Cheshire, and on barren rocks, with but little soil to grow in, particularly on a celebrated mountain called Moule Cope, but by the surrounding inhabitants Mow and Mow Cop. I shall make a few observations on the classification of Ferns in a future Number.

F. F. ASHFORD.

REFERENCE TO PLATE.

1. *Salpiglossis linearis*, Linear-leaved Salpiglossis. Synonym, *Nierembergia intermedia*. Class, Didynamia; order, Angiospermia. Natural order, Solanaceæ. Seeds of this plant, which is exceedingly pretty, and well deserving of cultivation, were received by Mr. NEILL, from Mr. TWEEDIE, at Buenos Ayres, in 1832; and the first specimen brought into flower in the stove at Canonmills, in the end of September. It will continue in bloom from April to November. It strikes very readily by cuttings, and will probably thrive well in a dry, light greenhouse. The habit of this plant is wholly that of *Nierembergia*; the flower, in shape and structure, precisely that of *Salpiglossis integrifolia* of HOOKER, *Nierembergia phœnicea* of DON.

2. *Spiraea grandiflora*. Icosandria, Pentagynia. Roseaceæ. This most beautiful hardy shrub is a native of Kamtschatka. It was raised by Messrs. LODDIGES's, from seeds sent by Mr. BUSCH, in 1826. It bears a resemblance to *Spiraea salicifolia*, but is a much finer plant, and the flowers are more than double the size, and of a fine rose-colour. It is a valuable acquisition to the shrubbery. It flourishes in the open ground, in light loamy soil, and flowers in July and August. May be increased by layers or cuttings.

3. *Ipomea rubro cerulea*, Reddish-blue Ipomea. Pentandria, Monogynia. Convolvulaceæ. Seeds of this splendid plant were collected by Mr. SAMUEL

RICHARDSON, (an officer in the Anglo-Mexican Mining Association,) in the province of Guanajuato, in Mexico, and were by him presented to J. D. POWLES, Esq., of Stamford Hill, who liberally distributed them. It is a twining smooth plant; the corolla in bud, white, with the limb of a rich lake red; and when fully expanded, becomes of a fine purplish blue. It has flowered in the stoves of JOHN ALLCARD, Esq., of Stratford Green, Essex; and of Miss LOXLEY, near the same place. Culture: increased by cuttings, and requires a rich loamy soil.

FLORICULTURAL CALENDAR FOR MAY.

PLANT STOVE.—Very little fire-heat will now be required, only applying it in cold weather. The plants will progressively require an increase of air and water. If any want an increase of pot-room, it should be attended to as early as possible; otherwise, if not watered frequently, the foliage or flowers will be liable to suffer, turn brown, or fall off the plant. Keep the plants free from decayed leaves, moss, &c. Frequently stir the surface of the soil. When any casual irregularities in form occur, prune or tie the shoots as required. It is a good time for propagating by cuttings, suckers, seeds, &c. placing them in moist heat.

TENDER OR STOVE ANNUALS.—When it is desired to have some plants to bloom late in autumn, as Balsams, Cockscombs, Broccolias, &c. Seeds should now be sown, and the plants be potted off into small sized pots, as soon as they are large enough, using a rich soil.

GREENHOUSE.—During the early part of May, a few frosty nights generally occur; in consequence of which, it is advisable not to take out the general stock of plants before the middle of the month, or even in cold situations, before the 25th. Whilst the plants, however, remain in the greenhouse, let them have all the air that can be given, during the day, and at nights if no appearance of frost. Particular attention will now be required to afford an ample supply of water to free-growing kinds of plants. Frequently syringe them over the tops at evening, just before sun set. If any of the plants be attacked with green fly, or any other similar insects, apply a sprinkling of tobacco water, diluted with water, by adding to one quart of the liquid five of water; in applying which to the plants, syringe them at the under as well as upper surface of the leaves: a repetition will rarely be required. This mode of destroying the insects is far preferable to fumigation, no injury being sustained by it, even if applied in a pure state. The liquid can be obtained of tobacconists at 10d. or 1s. per gallon. Inarching Orange or Lemon trees may still be performed. It is a good time for increasing plants by cuttings, striking in moist heat. Greenhouse annuals—as Salpiglossises, Globe Amaranthuses, Balsams, &c.—should be encouraged by a little warmth, and shifted into larger pots, early in the month; so that the plants may make a show, to succeed the removal of the general collection of greenhouse plants. Cuttings or suckers of Chrysanthemums should now be taken off, if not done before.—See Vol. I., pages 73 and 121; and Vol. II., page 83.

FLOWER GARDEN.—Continue to protect beds of Hyacinths, Tulips, &c. Carnations in pots should be encouraged by manure-water, &c., in order to grow them vigorously: care in striking them will be required. By the middle of the month, half-hardy annuals—as China Asters, Marigolds, &c.—may be planted out in the open borders. Some of the best kinds may be potted, as done to the more tender sorts. Many kinds of greenhouse plants—as Petunia, Salpiglossises, Salvias, Fuchsias, Heliotrops, &c.—should now be planted out in the open border. Dahlias, that have been forwarded in pots, frames, &c., may be planted out towards the end of the month. Seedlings may be pricked out, in a warm situation, having a deep, fresh, rich soil. When Stocks, Mignonette, China Asters, &c. are wished to bloom late in the year, seeds may now be sown, either under a frame or on a warm border. Slips of Double Wallflowers should now be put in, under a hand-glass. Seeds of biennials—as Sweet Williams, Scabious, Campions, &c.—should now be sown. Tuberoles, for late flowering, should now be planted, either in pots or warm borders.

N.B. See Vol. I., May Number.

F. F. A.

THE
FLORICULTURAL CABINET,

JUNE 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS

ARTICLE I.—*An Essay on Flowers.* Communicated
by GULIELMUS.

Having derived both amusement and instruction from the perusal of your useful and interesting publication, the *Floricultural Cabinet*, to which I have subscribed from its commencement, I feel desirous of promoting its object by sending you the following elegant Essay on Flowers, which I have transcribed from the "*New Monthly Magazine*," 1828; and wish it may prove the means of stimulating others to support your undertaking, and cause them more particularly to attend to the delightful and healthful pleasures of the flower-garden, as it has been to

GULIELMUS.

London, 25th February, 1834.

When summer's delightful season arrives, rarely in this country too warm to be enjoyed throughout the day in the open air, there is nothing more grateful than a profusion of choice flowers around and within our dwellings. The humblest apartments, ornamented with these beautiful productions of nature, have, in my view, a more delightful effect than the proudest saloons with gilded ceilings and hangings of Genoa velvet. The richness of the latter, indeed, would be heightened, and their elegance increased, by the judicious introduction of flowers and foliage with them. The odour of

flowers, the cool appearance of the dark green leaves of some species, and the beautiful tints and varied forms of others, are singularly grateful to the sight, and refreshing at the same time. Vases of Etruscan mould, containing plants of the commonest kind, offer those lines of beauty which the eye delights in following; and variform leaves hanging festooned over them, and shading them if they be of a light colour, with a soft grateful hue, add much to their pleasing effect. These decorations are simple and cheap.

LORD BACON, whose magnificence of mind exempts him from every objection as a model for the rest of mankind, (in all but the unfortunate error to which, perhaps, his sordid pursuit in life led him, to the degradation of his nobler intellect,) was enthusiastically attached to flowers, and kept a succession of them about him in his study and at his table. Now the union of books and flowers is more particularly agreeable. Nothing, in my view, is half so delightful as a library set off with these beautiful productions of the earth during summer, or, indeed, any season of the year. A library or study, opening on green turf, and having the view of a distant rugged country, with a peep at the ocean between hills, a small fertile space forming the nearest ground, and an easy chair and books, is just as much of local enjoyment as a thinking man can desire. I reckon not if under a thatched or slated roof, to me it is the same thing. A favourite author on my table, in the midst of my bouquets, and I speedily forget how the rest of the world wags. I fancy I am enjoying nature and art together, a consummation of luxury that never palls upon the appetite—a desert of uncloying sweets.

There is something delightful in the use which the Eastern Poets, particularly the Persian, make of flowers in their poetry. Their allusions are not casual, and in the way of metaphor and simile only; they seem really to hold them in high admiration. I am not aware that the flowers of Persia, except the rose, are more beautiful or more various than those of other countries. Perhaps England, including her gardens, green-houses, and fields, having introduced a vast variety from every climate, may exhibit a list unrivalled, as a whole, in odour and beauty. Yet flowers are not with us held in such high estimation as among the Orientals, if we are to judge from their poets.

Bowers of roses and flowers are perpetually alluded to in the

writings of Eastern Poets. The Turks, and indeed the Orientals in general, have few images of voluptuousness without the richest flowers contributing towards them. The noblest palaces, where gilding, damask, and fine carpeting abound, would be essentially wanting in luxury without flowers. It cannot be from their odour alone that they are thus identified with pleasure; it is from their union of exquisite hues, fragrance, and beautiful forms, that they raise a sentiment of voluptuousness, in the mind; for whatever unites these qualities can scarcely do otherwise.

Whoever virtuously despises the opinion that simple and cheap pleasures, not only good, but in the very best taste, are of no value because they want a meretricious rarity, will fill their apartments with a succession of our better garden flowers. It has been said that flowers placed in bed-rooms are not wholesome. Plucked and put into water, they quickly decay, and, doubtless, give out a putrescent air; when alive and growing, there need not be any danger apprehended from them, provided fresh air is frequently introduced. For spacious rooms, the better kinds, during warm weather, are those which have a large leaf and bossy flower. Large leaves have a very agreeable effect on the senses; their rich green is grateful to the sight; of this kind, the Hydrangea is remarkably well adapted for apartments, but it requires plenty of water. Those who have a green-house connected with their dwellings, have the conveniences, by management, of changing their plants as the flowers decay; those who have not, and yet have space to afford them light and occasionally air, may rear most of these kinds under their own roof, which may be applied for ornament in summer. Vases of plaster, modelled from the antique, may be stained any colour most agreeable to the fancy, and fitted with tin cases to contain the earthen pots of flowers, to prevent the damp from acting on them, will look exceedingly well.

The infinite variety of Roses, including the Guelder Rose, the Rhododendron, and other plants of similar growth, are fitted for the saloon, but they please best in the library. They should be intermingled with the book-cases, and stands filled with them should be placed wherever practicable. They are a wonderful relief to the student. There is always about them a something that infuses a sensation of placid joy, cheering and refreshing. Perhaps they were first introduced at festivals, in consequence of

their possessing this quality. A flower-garden is the scene of pleasurable feelings of innocence and elegance. The introduction of flowers into our rooms infuses the same sensations, but intermingles them more with our domestic comforts; so that we feel, as it were, in closer contact with them. The succession might be kept up for the greater part of the year; and even in winter, evergreens will supply their places, and, in some respects, contrast well with the season. Many fail in preserving the beauty of plants in their apartments, because they do not give them sufficient light. Some species do well with much less light than others. Light is as necessary to them as air. They should not be too often shifted from one place to another. Those who will take the trouble, may quicken the growth of some plants, so as to have spring flowers in winter. Thus autumn and spring might be connected; and flowers blooming in the winter of our gloomy climate possess double attractions.

For my own part, I manage very well without the advantage of a green-house. The evergreens serve me in winter. Then the Lilacs come in, followed by the Guelder Rose and Woodbine, the latter trained in a pot upon circular trellis-work. After this, there can be no difficulty in choosing, as the open air offers every variety. I arrange all my library and parlour-plants in a room in my dwelling-house, facing the south, having a full portion of light, and a fire-place. I promote the growth of my flowers for the early part of the year by steam-warmth, and having large tubs and boxes of earth, I am at no loss, in my humble conservatory, for flowers of many kinds when our climate offers none. The trouble attending them is all my own, and is one of those employments which never appear laborious. Those who have better conveniences may proceed on a large scale; but I contrive to keep up a due succession, which to a floral epicure is every thing. To be a day in the year without seeing a flower is a novelty to me; and I am persuaded much more might be done with my humble means than I have effected, had I sufficient leisure to attend to the retarding or forcing them. I cover every space in my sitting-room with the beautiful fairy things of creation, and take so much delight in the sight of them, that I cannot help recommending those of limited incomes, like myself, to follow my example and be their own nurserymen. The rich might easily obtain them without;

but what they procure by gold, the individual of small means must obtain by industry. I know there are persons to whom the flowers of Paradise would be objects of indifference; but who can imitate, or envy such? They are grovellers, whose coarseness of taste is only fitted for the grossest food of life. The pleasures 'des Fleurs et des Livres' are, as Henry IV. observed of his child, 'the property of all the world.'

ARTICLE II.—*On the Making and Formation of Gravel Walks.* By Mr. ROBERT MARNOCK, Curator to the Sheffield Botanic Garden.

The introduction of Gravel Walks in Pleasure-Grounds, being avowed objects of utility, may be said to be beautiful only in proportion to their fitness for the purposes for which they are intended. In the formation of a walk, the first consideration, after having determined on the line in which it is to be made, ought to be the most effectual means of rendering it at all times as dry as possible. When the subsoil is a retentive clay, a drain of bricks or stones, according to the inclination of the ground, or the distance the water may require to be conveyed before it is allowed to escape, is indispensable. When a walk is to be made in a situation of the latter kind, I have found the form of which the figure is a section, to answer very well.

Fig. 1.

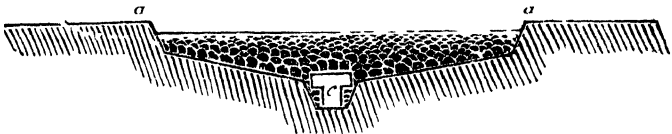


Fig. 2.



The verges or edgings being accurately laid at the height they are intended to remain, and well consolidated by binding or beating, to prevent future settling, are next to be cut in a sloping direction inwards. The verges ought never to be laid with turf,

and the adjoining ground sown with seeds of a different kind of grass; when turf is not plentiful, it is always better to sow the whole with seeds, and in that case the verges should be made up with soil free from stones, occasionally using a little water, so that the whole may tread firm and hard. When raised to the proper level, and cut as directed above, a drill made parallel with the walk on the extreme edge of the verge is filled with seeds, and neatly covered with soil. The rest of the ground is then sown rather thickly, and raked in in the usual way; and by attention to rolling and mowing, a good turf may be obtained in a few months. From the level of the verges (*a a*) to the bottom, is from six to seven inches, with an inclination to the drain (*c*) of one inch in a foot. The excavation completed, and the two sides of the bottom made firm and smooth, and the drains set with stones, or bricks, broken to the size generally used upon roads, laying a few larger pieces on each side of the drain, where the depth will permit. It is of importance that the stones or other material of which the substratum is composed, be perfectly free from earthy matter of every description. I have, therefore, always found it necessary to prepare these materials in a heap by themselves, and in removing them to use a strong narrow-pronged fork. This operation finished, and the surface made quite level and rolled three or four times over, it is then covered about an inch thick with binding gravel. To prevent as much as possible the gravel running down and mixing with the substratum, the first barrow-load being spread, the second is put down on the top of the first, the third on the top of the second, and so on till the whole is finished. In spreading the gravel, it is carefully pushed forward, in a considerable body, with the head of a wooden rake—teeth turned upwards. The gravel being all on, and neatly levelled and raked with a short-toothed wooden rake, to bring the pebbles to the top, the latter ought to be equally distributed over every part of the walk. Two or three boys, when they are well looked after, will do a good deal of this kind of work in a day, and when neatly performed, adds greatly to the beauty and firmness of the work, at very little additional expence. Nothing now remains but to give the whole a good rolling, which ought to be done when the gravel is between wet and dry, and the edges of the walk will be about half an inch deep.

With regard to the thickness which gravel ought to be applied, Miller has recommended from ten to twelve inches. Some subsequent authors say from ten to fourteen, and others again from five to six inches thick. The numerous gravel beds which are dispersed over the country, though consisting of substances very similar in their nature, are exceedingly various in their relative proportions to each other. In one bed we may perhaps find sand and small pebbles to prevail, in another pebbles and clay predominates, with very little sand; while in a third, we may probably find both sand, pebbles, and clay, all blended together in pretty equal proportions. As the kind of gravel to be used can, therefore, seldom be a matter of choice, it needs but little argument to prove the impropriety of always applying it the same thickness, without regard to the quality. In confirmation of this statement, I may mention as an instance, that the gravel found in this neighbourhood, though somewhat defective in colour, is in other respects equal to Kensington gravel, which has been said to be the best in the world; yet, if the gravel there be applied twelve or even six inches thick, it becomes as impervious to wet as if puddled on purpose to retain the water on the surface: and this must necessarily be the case with all gravels of a binding nature, when used in too great a quantity. If the thickness be properly adjusted to the nature of the gravel, a heavy shower will pass readily through to the substratum below, without appearing to accumulate on the surface of the walk; and if walked upon immediately after the shower, the gravel ought not to stick to the shoes, nor the least impression of the feet be left in the walk behind. Gravel that contains much clay will require to be used thin, and such as contains but little clay in proportion to the sand and pebbles, will of course require to be thicker, in order that it may set and become hard. When binding gravel cannot be obtained, river sand and pebbles mixed with clay previously dried and pounded, to cause it to blend with the other materials, will form a tolerably good substitute.

When walks are steep, and liable to be washed by heavy rains, I have found a kind of wooden spout or trough (Fig. 2), when placed across the walk and sunk level with the gravel, to be a very excellent preventive. The two sides (*e e*) are formed of strong oak boards seven or eight inches deep, half an inch apart at the

top, secured at that width by iron brackets eighteen inches from each other. The bottom is six inches wide, and so constructed that the water escapes into the drain under the centre of the walk, or is allowed to pass off at one end. The distance at which the spouts ought to be placed from each other, will depend on the inclination of the walk.

If walks are composed of sand or any other loose material, hoeing and raking will always be found the most economical mode of keeping; but when covered with binding gravel, weeding and sweeping will seldom cost one half the expense of hoeing and raking, to say nothing of the horror which a walk newly hoed and raked, and covered with loose pebbles, naturally raises in the minds of those who happen to have such things as corns on their feet. At the season when the seeds of weeds are most profusely scattered about by the wind, the surface of walks, if weeded, are smooth and hard, and by occasional sweeping, the seeds are removed before they have time to strike root; but when hoed, the surface is generally in a loose uneven state, and any seeds that are deposited upon them, must remain there till they have become perfect plants before they can be destroyed. Hoeing and raking, though it generally destroys one crop of weeds, is certainly the most effectual means that could be adopted to secure another.

Were gardeners, instead of having one, two, three, or more labourers, without the power of increasing them when required, allowed a certain number, with a discretionary power to expend a given sum, to be called in at particular seasons when most wanted,—they would then, by a concentrated force of labour, often be enabled to accomplish at the proper time that which, if delayed, must frequently be done to disadvantage, and sometimes at double the expense. Were this arrangement more generally acted upon, the walks could be let to women and children to be kept clear of weeds at so much for the season, and swept a certain number of times, either twice a week, once a week, or once a month, according to circumstances. The mowing of low grass could also be let at so much for each time going over, including all the details of clipping, sweeping, &c.; for such is the toilsome nature of this operation, that a man will be better able to give double the quantity of labour per day, if exempt from mowing, than if he is subjected to it for two or three hours every morning. I speak from

pretty ample experience as to the nature of the labour, and also the advantages to be derived both to the employer and the employed, that in letting all kinds of work that possibly could be let, I have invariably found it to be attended with very considerable advantages to both parties. Men are always willing to give a greater quantity of labour for the same money, if, by additional exertion on their own part, they are enabled to earn a little more per day.

ROBT. MARNOCK.

ARTICLE III.—*On the Culture of Geraniums (Pelargoniums), so as to cause them to bloom throughout Winter.* By Mr. WILLIAM DENYER, Gardener to Lady WEBSTER, Battle Abbey, Sussex.

Observing, in page 69, Vol. II. of the *Floricultural Cabinet*, that a Querist, "J. T.," requests information on the treatment of Geraniums (Pelargoniums), so as to have them to flower throughout the winter season, I am induced to forward the following detail of culture, which, if practised by "J. T.," will, I am confident, fully answer every expectation.

The first week in May put in cuttings to strike, placing them in moist heat. As soon as they are rooted, pot them into sixty-sized pots, and replace them in the frame for a week, to assist them in striking root afresh. At the end of that time, remove them to a cool frame, or a sheltered place, where they can have plenty of air, without being exposed to strong winds. By this means the plants will get stout and bushy. The pots should be placed upon coal-ashes, an inch or two deep, in order to prevent worms getting into the pots. The second week in August, repot the plants into forty-eights. If any flower-buds appear during this month, cut or pinch them off, but do not shorten the points of the shoots; for if this be done at any time after the middle of June, the plants will not bloom the following winter.

By the above mode of culture, the greenhouse at Battle Abbey has been quite gay with flowering Pelargoniums throughout winter.

About the end of April, cut down those plants which bloomed in winter, and place them in a cool frame: by this means space will be given for those that are to bloom in summer. As soon as

the plants begin to push shoots, repot those that require it, and set them out in the open air, on a floor of coal-ashes: the plants will then flower in August and September.

Cuttings should be struck every year, and cast away, by planting out in open borders, &c. all the old plants.

If "J. T." will attentively adopt the above method of culture, he may have Pelargoniums in flower every month in the year. I am ready to admit that the blossoms are not equally fine at every season: they are, of course, finest during the summer period of the year.

The following sorts will flower freely during winter:—*P. gloriosum* (Queen of Portugal), Moore's Victory, Red Rover (very good,) Paganini, *P. lucidum*, Brighton Scarlet, La Belle Gabriel, Gower's Masterpiece, *P. dipetalum*, *P. roseum*, Anne Boleyn, Humeii, *P. floribundum*, *carneum*, Grenvillianum, *ignescens*, *ardens*, *coreatum*, *bicolor*, *scabrum*, *candidum*, Man of Ross (very good).

If convenient, a few plants should be placed in a warmer place than a greenhouse in December, which will help them forward for blooming in January and February.

WILLIAM DENYER.

ARTICLE IV.—*On Reviving Plants.* By SNOWDROP.

It may perhaps be useful to state the method I have adopted to recover withered plants. I lately received some Pinks and Carnations from a friend, which had been packed at least 17 days before they came to hand, and had travelled upwards of 160 miles. When I opened the parcel, the Pinks were very much withered; indeed, the *grass* had nearly become *hay*, and the earth and moss round the roots were perfectly dry: but the Carnations, though in a very bad state, were looking a little greener than the Pinks. I immediately placed them, as they were, with the moss around them, in a pan of spring water, into which I had dissolved some nitre—about a small tea-spoonful to a quart. Here they remained for 24 hours, at the end of which time the Carnations had entirely recovered their fresh green appearance, and in 48 hours the Pinks looked nearly as well. I planted them immediately on taking

them out of the water, and they are now looking as well as any others I possess. A quicker method is stated (*Gard. Mag.* Vol. VIII. p. 339) to be effectual, but this I never tried: it is as follows:—"Camphor is dissolved in alcohol until the latter is saturated; the alcohol is then put into soft water, in the proportion of two drops to half an ounce. Withered or apparently dead plants put into this liquid, and allowed to remain there from two to four hours, will revive if they had not been completely dead before being put in."

SNOWDROP.

ARTICLE V.—*On the Cultivation of the Datura arborea.*

By J. T.

Having grown the *Datura arborea* for several years, in a manner very superior to what I have seen it elsewhere, I take the liberty of sending you a short account of my method of treatment; and if you think it will be useful to any of your numerous readers, it is at your service for insertion in your very useful Magazine. This plant was first cultivated in this country in 1783, and is generally treated as a stove plant. It is readily increased by cuttings, and will last for several years by the following mode of treatment. In May I pot my plants in a pot sufficiently large, as it is not disturbed until the following spring, in a compost of rich loam, with a portion of well-rotted fowls' dung, incorporated together—leaving sufficient room for top-dressings of fowls' dung, that has been held in solution four or five weeks at least: this I repeat three or four times in the course of the season, for which care must be taken to leave plenty of room, as the former dressing cannot be removed. If an old plant, I head it down to about three feet, to prevent its growing too tall, as it will grow four or five feet in one season. I delay this until spring, as it is liable to decay if done sooner. I then place it in the greenhouse, where it will have the greatest advantage of the sun. I water it twice or three times a-week, until it begins to make some shoots; as the season advances, I water more frequently—in dry, hot weather, every morning, watering over the top at the same time; if this be neglected, the leaves will drop off. I water twice a-week with water that has held fowls' dung in solution, which is of great advantage during its growth. After it has done flowering, I remove

it to the back part of the greenhouse, and give the water more sparingly during the winter months. The plant is generally grown in stoves, but my experiments have of necessity been confined to the greenhouse, in which it flowers from the end of August, till November; but in a stove it will flower as early as June. Its beautiful full foilage, and fine trumpet-shaped flowers, which measure seven or eight inches in diameter, are sufficient recommendation to gain it a place in every collection, and will amply pay every lover of Flora for the extra pains it may require in cultivation.

J. T.

February 12th, 1834.

ARTICLE VI.—*On the Culture of Tigridia pavonia.*

By Miss EMILY ARMSTRONGE.

Your correspondent, Mr. E. EDWARDS, of Staines, went to a very unnecessary trouble in the cultivation of this very beautiful flower, as described by him in the November Number (page 212) of your valuable *Cabinet*; and your correspondent, "SNOWDROP," plants them a month too soon. My treatment is as follows:—The latter end of the month of March, I prepare my beds, consisting of rich loam, leaf-mould, and an eighth part of pit sand; the whole is then well mixed up together, and the surface raked smooth and even. In these beds, about the first week in April, I plant my bulbs about five inches apart and three inches deep, placing a little sand under and round each bulb; they require no further care, except that, if the weather be very dry, they should have a little water given them. When the foliage is brown and decayed, I take up the bulbs, and spread them on a gravel walk till perfectly dry. I then tie them up in bunches of from nine to twelve, according to the size, and hang them up in a store room, having occasional fires in it in cold and wet weather: here they remain till the ensuing season for planting. By the above method, the flowers grow very large, and the blossom is abundant. I hope this plain statement may gratify your correspondent "M. S. Y." of Hampstead.

EMILY ARMSTRONGE.

Castlerahan, Ireland, March 21st, 1834.

ARTICLE VII.—*On the Cultivation of Pinks in Pots.*

By A MIDDLESEX AMATEUR.

Should you think the following worthy a place in your *Florists' Magazine*, I shall feel myself highly honoured by its insertion.

The soil I grow Pinks in is as follows :—Six barrowfuls of well-rotted cow-dung, three do. do. horse-dung, three do. strong loam, one do. coarse drift sand ; which, being well incorporated together I pass through a coarse sieve some time before using it. I always prefer my compost quite dry for potting, which kills the worms. My method of piping is the same as Mr. REVELL's (Vol. I. p. 102). I commence piping when the flowers are in bloom. When the pipings have struck root, I pot them in sixties, placing three in each pot. Here they remain till the latter end of March, when I commence replanting them in sixteens, and again place three plants in each pot, taking care not to disturb the balls of earth. After planting, I water them liberally, which makes them bud freely. The situation I always keep them in has a southern aspect, where there is plenty of pure air. I always place slates under the bottoms of the pots, to prevent worms getting in. I would advise all florists to have but one large hole in the bottoms of the pots, instead of two or three in the sides ; for if the pots stand on the slates, worms will get in at the sides. By this mode of culture, I am certain I have as good blooms as any one.

A MIDDLESEX AMATEUR.

P.S. I shall forward you my method of growing Tulip seed, if you think it worthy of acceptance ; having raised a very many breeders, some of which are very superb ones.—[We shall be much obliged by it.—COND.]

ARTICLE VIII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*

By ST. PATRICK.

(CONTINUED FROM PAGE 108.)

| NAMES. | DESCRIPTION. |
|----------------------------------|-----------------------|
| 468 Meduse | Dark purple. |
| 469 Meloni | Beautiful light pink. |
| 470 Mercure | Mottled purple. |
| 471 Merveille du Luxembourg..... | Deep red. |
| 472 Mialis | Dark red and purple. |

| NAMES. | DESCRIPTION. |
|-------------------------------|--|
| 473 Milo | Fine light scarlet. |
| 474 Milurie de Montgan | Double white evergreen. |
| 475 Minos | Small scarlet and purple. |
| 476 Miroire Panache..... | Curious white and purple variegated, semi-double. |
| 477 Mirror of Fashion | Fine light crimson. |
| 478 Mitchell's Caroline..... | Pale blush. |
| 479 Mobac | Purple and blue, very double. |
| 480 ——— nouveau | Fine deep red and purple. |
| 481 Mogul | Fine large blush. |
| 482 Monsieur | Purplish crimson. |
| 483 ——— George | Brilliant scarlet. |
| 484 Montabello | New. Fine blush. |
| 485 Mordon L'Amay..... | Cherry red. |
| 486 Morning Star | New. Deep red. |
| 487 Morphee | Large deep red. |
| 488 Mort de Virgine | Deep blush. |
| 489 Mount Vesuvius | New. Blazing fine red. |
| 490 Mundi | Fine blush, changing pale. |
| 491 Muscat..... | Fine double white. |
| 492 Napoleon..... | Large flaming red. |
| 493 Ne plus ultra | Immense large light blush. |
| 494 Neron | Blood red. |
| 495 New Celestial | Large semi-double blush. |
| 496 Ninon de Seneclos | New. Pretty blush. |
| 497 Nissida bicolor | Red and crimson. |
| 498 Noir de l'Allemagne | Dark velvet, semi-double. |
| 499 North Star | Pretty blush, semi-double. |
| 500 Nouvelle Auguste | Pale blush, almost white. |

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

A Botanical Chart; or Concise Introduction to the Linnæan System of Botany. By JAMES RATTRAY, Surgeon and Lecturer on Botany, Glasgow.—(See Advertising Sheet for our May Number.)

The Author observes, "In Dr. SMITH'S *Flora Britannica*, at the beginning of every class, there is a synopsis of all the genera belonging to that class, digested according to their orders, and again divided or grouped into sections by certain affinities or obvious characters; and to his excellent compendium we would refer the student for the best generic and specific description of our British Plants."

The two first columns of this Chart enumerate the various parts of a plant, and under their proper heads are given the terms applied to the dif-

ferent forms of these parts, with concise explanations or definitions, illustrated by engraved figures, to which the numbers annexed refer. The remaining four columns give a connected view of the Linnæan system; the first contains the name of the classes, with a short character of each, and a figure in illustration. The next column contains the orders, with outc illustrative of their characters. In the third column, the genera are arranged according to their orders, with their most common English names; the numbers in this column, within brackets, refer to and indicate the commencement of each order. The other numbers refer to the genera of each class. The last column of the Chart contains a complete list of all the species of the Phenogamous plants, and of the Felices and Musci in Cryptogamia, with the duration, time of flowering, soil, and situation of each. The names of the genera in the orders Algæ, and Fungi, follow, with such a number of the species as could be embraced in this sheet, thus forming a very complete catalogue of *all the indigenous plants* of Great Britain.

The object the Author has had in view is most amply achieved, the Chart contains a mass of Botanical information and description, most fully and clearly illustrated by numerous figures. To persons desirous of obtaining a knowledge of British Plants, in the smallest space, and at the lowest cost, we strongly recommend Mr. RATTRAY'S Botanical Chart. We suggest, in all future editions, that the Author have the names of the species properly capitalised.

The Flower Garden, or Monthly Calendar of Practical Directions for the Culture of Flowers. By MARTIN DOYLE, Author of "Hints to Small Farmers," "Practical Gardening," &c. &c. Dublin, 1834, pp. 170.

In the preface to the work the Author states, that "a minute application of the noble science of Botany in a compendious work would be unsuitable and diffuse, each additional page adds to the cost of publishing, and of course to the price of the book;—this is to be of a limited extent and price, and should be dedicated to practical matters, rather than to the Decandrias and Monogynias. Few ladies (he adds) understand Latin and Greek, and the fewer the better. As for myself, I must confess my deficiency in the knowledge of any language except my own, and a smattering of Irish," &c. The work contains monthly information on the culture of flowers, and there are some plain, practical instructions given. The book contains matter worth the cost price, with a good deal that is useless. The Author clearly proves that he understands something of the Irish speech and accentuation, and that his botanical knowledge is very limited.

Plants figured in the following Periodicals for May 1833
Curtis's Botanical Magazine. Edited by Dr. HOODKIN, King's
 Professor of Botany in the University of Glasgow. Price
 2s. 6d. coloured, 3s. plain.

1. *Calogyne floccida*, Drooping Calogyne. Class, Gynandria; order, Monandria; natural order, Orchidææ. The present genus contains no less than twenty-one species, all natives of the East Indies; but of which very few are at present known in our European gardens; and all that we do possess we owe to the liberality of Dr. WALLICH. From that source the present species was derived, having been received by the Hon. and Rev. WM. HERBERT, who again communicated it, with many other beautiful and rare orchideous plants, to the gardens at Wentworth House. There the present species flowered in great perfection in February, 1811. Flowers: raceme, eight to ten inches long, drooping, scentless; sepals and petals, pure white; labellum, white, blotched with yellow at the base of the middle of the lobe, and at the base of the disk.

2. *Bletia Shepherdii*, Deep purple flowered. Gynandria, Monandria. Orchidææ. This beautiful plant is a native of Jamaica, having been received from that country by the Messrs. SHEPHERD, at the Liverpool Garden, where it has been long cultivated. It has flowered there, as also at Wentworth Gardens. Flowers, both within and without, of a uniform deep purple colour, except the column, which is pale; and the lamella of the disk of the lip, which are dirty yellow. *Bletia*, from LOUIS BLET, a Spanish Apothecary and Botanist.

3. *Arbutus tomentosa*, Hairy Arbutus. Decandria, Monogynia. Ericinææ. For the discovery of this interesting and very distinct species of *Arbutus*, we are indebted to the venerable MENZIES, who gathered it near the mouth of the Columbia River. Mr. DOUGLAS noticed it growing in rocky places. It was presented to the Glasgow Botanical Garden from the London Horticultural Society, where it flowered in the greenhouse in December, 1833. It is well worthy a place in every collection, bearing copious evergreen foliage, and flowers of a snowy whiteness, well contrasted with the green of the leaves. *Arbutus*, from *Ar bouse*, austere bush, referring to the rough fruit.

4. *Euphorbia atro purpurea*, Blood flowered Spurge. Monæcia, Monandria. Euphorbiacææ. The present species, though it cannot vie with the *E. splendens*, or *punicea*, both of which bear such rich scarlet bractææ, is yet well deserving a place in every greenhouse, from the deep blood-colour of its bractææ and floral leaves, which present a strong contrast to the pale glaucous hue of the rest of the foliage. It is a native of Teneriffe, discovered by M. BROUSSONET, and sent to the Glasgow Botanic Garden, where it blossomed in March. *Euphorbia*, from EUPHORBIS, Physician to JUBA, King of Mauritania.

5. *Cyminoëma oblongifolia*, Oblong-leaved. Octandria, Monogynia. Rutæææ affinis. A native of the colony of Port Jackson, inhabiting dark, shady woods upon the rivers and immediate coast of New South Wales, it was introduced to Kew Gardens in 1824. It is treated as a hardy greenhouse plant, and blooms in the summer and autumn. Flowers: in a corymb, white, and pale yellowish green, making little show. *Cyminoëma*, from *Keminon*, cumin, or cumin-seed; and *osme*, smell,—on account of its peculiar fragrance.

6. *Calythrix virgata*, Twiggly. Icosandria, Monogynia. Myrtacææ. Synonymus, *Calythrix ericoides*. This plant was originally discovered by Mr. R. CUMMINGHAM, in the hilly country around Bathurst, New South Wales, and he introduced it in 1823 to Kew Gardens. A twiggly shrub, with glabrous stems and branches. It is a pretty growing shrub. Flowers: small, white, mostly collected in tufts at the ends of the branches, white, very fragrant. There are two other species in the English gardens. *Marrubium*

НИКОЛАИ has sent the following list of species:—*C. glabra*, *virgata*, *curtophylla*, *tetraptera*, *decandra*, *Frazeri*, *flavescens*, *strigosa*, *brunioides*, *scabra*, *conferta*, and *microphylla*. Calythrinx, from *Kaluz*, a calyx; and *strix*, a hair,—from the remarkable hair-like terminations of the calyx.

7. *Trochocarpa laurina*, Cinnamon-leaved. Pentandria, Monogynia. Epacridæ. Syn. *Styphelia cornifolia*, *Cyathodes*, *Cyathodes laurina*. This is an extremely pretty evergreen shrub, having very glossy evergreen leaves, with parallel nerves resembling those of many of the Laurel tribe, and, like the *Laurus cinnamomum*, of a fine delicate red when young. The genus is confined to a single species. A native of Port Jackson. Introduced to Kew Gardens. Flowers: very small, white. *Trochocarpa*, from *Trochos*, a wheel,—in allusion to the wheel-shaped cells of the fruit.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured, 3s. plain.

1. *Calochortus venustus*, Spotted flowered. Hexandria, Monogynia. Liliacæ. A very remarkable and beautiful flowering bulbous plant, sent from California by Mr. DOUGLAS, to the London Horticultural Society. It flowers at midsummer, at which season it contributes, with some other species, to give quite a new feature to the flower garden. It appears to be cultivated without difficulty; hitherto it has been planted in the open border in the summer only; its bulbs have been taken up as soon as the leaves were withered; they have been kept dry till they begin to shoot, which is about Christmas; and then have been planted in pots in the greenhouse, whence they have been again transferred to the open border, as soon as the chance of spring frosts were over. It succeeds in common garden soil. The stems grow about two feet high; the flowers are placed on stiff stalks, and remain expanded for several days. The sepals are green; the petals are pure white at all the widest parts, and yellowish at the base, where they have a deep crimson wedge-shaped stain, terminated by a yellowish spot; above the latter is a deep blood-coloured stain, bordered with yellow; and between the last and the end of the petal is another paler spot of red, without any yellow. [We presume the plant may be cultivated with the same ease and treatment as the well-known *Tigridia pavonia*, Tiger Flower.—COND.] *Calochortus*, from *Kalos*, handsome; and *chortus*, grass.

2. *Lupinus leptophyllus*, Fine-leaved. Diadelphica, Decandria. Leguminosæ. This species is annual. Mr. BENTHAM observes, "It is remarkable for its narrow leaves and hairy surface. It is about a foot high; the spike of flowers is elegantly coloured with bluish lilac, and there is a deep crimson stain in the middle of the standard. The spike is covered with flowers in an irregular manner. It is not so pretty a species as many others of this generally beautiful genus." It probably requires a shady situation. *Lupinus*, from *Lupus*, a wolf, supposed to destroy the fertility of the soil.

3. *Liparis guineensis*, Sierra Leone *Liparis*. Gynandria, Monandria. Orchidæ. A native of Sierra Leone, whence it was brought in 1832, by Mr. WHITFIELD. It is cultivated in the London Horticultural Society's Garden. It requires to be kept in a damp stove while growing, but to be removed to a cooler and dry place as soon as its leaves decay. Flowers: green, small. *Liparis*, from *Liparos*, unctuous.

4. *Portulaca Gilliesii*. (See page 144.)

5. *Limnanthes Douglasii*, Douglas *Limnanthes*. Decandria, Monogynia. Limnanthæ. A neat little autumn-flowering annual, with flowers of a delicate yellow, bordered with white about an inch across, and slightly but most agreeably fragrant. It is rather succulent in all its parts, is quite destitute of hairs, and has all the appearance of being a native of the sides of rivulets, or of moist and shady places. It was sent from California by Mr. DOUGLAS, to the Horticultural Society. *Limnanthes*, apparently from

Linnæus, a lark; and *usulos*, a flower,—in allusion to the supposed habits of the only species.

6. *Mimulus Smithii*. Didynamia, Angiosperma. Scrophularinæ. This variety was raised by Mr. GEORGE SMITH, nurseryman, (Salisbury, near London, from seed obtained by fertilising *M. variegatus* with *M. luteus rivularis*. It is a hardy plant, with all the habit of *M. luteus rivularis*, and no doubt requires the same treatment as that species. Flowers yellow, with five crimson spots, one being upon each division of the petal. (Mimulus, from *Mimo*, an ape,—seeds being like the face of an ape.)

7. *Pernetia mucronata*, Pointed leaved. Decandria, Monogynia. Ericæ. Synonym, *Arbutus mucronata*. This plant is a native of the Straits of Magellan. It is a hardy evergreen shrub, of considerable beauty, on account of the neat appearance and dark colour of its foliage; its flowers are pretty, white, small. It is grown in the garden of WM. HARRISON, Esq., Chesnut. It has there already acquired a size which is quite remarkable for so small a plant. Within three years it has formed a bush three feet six inches in diameter, and two feet six inches high. Mr. HARRISON cultivated it in peat, as an American plant. *Pernetia*, named after DOM PERNETTY, the author of the account of a voyage to the Falkland Islands.

8. *Calochortus splendens*, Satiny flowered. Hexandria, Monogynia. Liliaceæ. Another fine species of Californian bulb, obtained by the Horticultural Society from Mr. DOUGLAS. It requires the same treatment as *C. venustus*. The flowers of *C. splendens* are somewhat smaller than *C. venustus*, and of a purplish lilac colour. The genus *Calochortus* now consists of five species, of which the following is a list, viz. *C. macrocarpus*, *splendens*, *luteus*, *venustus*, and *nitidus*. The four first species only have been introduced into this country.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnean Society. Coloured, 3s.; plain,
2s. 3d.

1. *Nierembergia intermedia*, Narrow-leaved Purple flowered. Solanææ. Synonym, *Salpiglossis linearis*. (See page 119 of the present Volume.)

2. *Pæonia Moutan*; var. *variegata*. Party coloured Tree Pæony. Polyandria, Digynia. Ranunculaceæ. The Earl of MOUNTNORRIS, whose successful culture of the Tree Pæony has been rewarded by the production of several splendid varieties, far excelling any of those imported from China, was so fortunate also as to raise the present fine variety, which is remarkable for its dwarf and almost herbaceous habit. It was raised from seeds of the papavaraceæ, which his Lordship supposes had been accidentally fertilized by some of the herbaceous species. The flowers are large and showy, six inches across, seldom more than ten petals, white, stained with a deep rose-colour in various parts, the base marked with numerous radiating streaks of violet and purple. The Tree Pæonies are propagated by layers, which should be twisted a little; and the soil best adapted for them is a mixture of vegetable earth. The generic name, *Pæonia*, is derived, according to some, from PÆON, a noted physician of antiquity; and by others (which is much the most probable), from Pæonia, a mountainous country of Macedonia, where some of the species grow wild.

3. *Nycteria Lychnidea*, White flowered. Didynamia, Angiosperma. Scrophularinæ. Synonym, *Erinus Lychnidææ*. This plant forms a pretty border flower during the summer months, thriving in a mixture of sandy peat and loam, and is readily increased both by seeds and cuttings. A supply of cuttings should be put in, in the autumn, and kept in the greenhouse, or in the propagating pit, until the middle of May, when they are to be planted out in the open border. Its blossoms are elegant; the under side of the petals of a livid purple, and the upper of a milk white; tube purple. The flowers expand only in the evening, or in cloudy weather, and are then

very highly fragrant. It is cultivated by Mr. NEIL, at Canon Mills, near Edinburgh. Nycteria, from *nycteria*, nocturnal—flowering at night.
Alonsoa linearis, Linear leaved. Didymaria, Angiosperma. Scrophulariaceae. Synonym, *Celsia linearis*, *Hemimeris coccinea*. This species was formerly much cultivated in this country, being introduced in 1790, but has now become rare, the *A. scutifolia* having usurped its place and name in most collections. Flowers: scarlet, with dark red at the base. It grows wild in Peru, where it is known by the names of *Ricaco* and *Ricaroo*, meaning mask-flower. It blossoms there from May to September. This plant is grown in the Chelsea Botanic Garden. Alonsoa, named after Don ALONSO ALONSO, Secretary to one of the Spanish Viceroy's of New Granada.

The *Cereus speciosissimus* at Woodhall Gardens, in Renfrewshire, Scotland, attains an extraordinary size and beauty. The late excellent Mr. HENDERSON, gardener there, used soil, composed of two parts of rich loam, three of decomposed manure, and one consisting of equal quantities of peat, sand and broken tiles. The plant is placed in a large pot, and trained to the back trellis of a pine stove, where in July, 1833, when I saw it, it occupied a surface of eighty-four square feet, and had three hundred flowers all open at the same time. Mr. DENHOLM, the present gardener, gives this and other species of the Cactus family, a more ample supply of water than is usually done, while they are maturing their flower buds; and to this he attributes, in a great measure, the vigour of the bloom. In winter when the plant is in a state of rest, little or no water is given.—*Gard. Mag.*

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON THE BELLADONNA LILY.—Can you or any of your readers inform me how to make the Belladonna Lily produce flowers, or why they do not blow, though the roots appear quite healthy? F. EDWARDS.
Staines, April 17, 1834.

ON PEARLGRASS ARDENS.—I have had a plant of the *Pearlgrass ardens major* for some years, and changed the description of soil it was in three or four times, but I have not been able to cause it to produce blossoms; the plant has been generally in a healthy state and I have succeeded in increasing my stock, as I have several younger plants. The old plant, as well as the young ones, has generally been kept in a hotbed. Perhaps some of your readers would assist me. I ought to add, perhaps, that I have no Conservatory to turn it out into. H.

ON EARWIGS.—Will you or any of your correspondents inform a subscriber the easiest and most effectual method of preserving the Magnolia, when in blossom, from the injuries of the Earwig? A.
April, 1834.

In your Number of the *Floricultural Cabinet* for November, 1833, I find an interesting article on the culture, &c. of the Pansy; but you do not say whether or not they can be cultivated with success in pots. My reason for asking, is, (and probably as I am a subscriber, you will oblige me by an answer by post,) that if they can, I think I can by that means protect them from the rain which so materially injures their colours, and also from insects.

Please to say what sized pots would be most suitable, and whether a small or large quantity would thrive best together. Several which I purchased, in the spring were taken out of the ground, and since I have had them in pots, the flowers hitherto have been quite different to what the plant produced prior to its removal; but now they seem to be just recovering their natural colour. Is that usual with the Pansey? I fancy, by removing them after they have done blooming, as they die down, though you deprive yourself of their seed, it tends to keep the flowers large and healthy.—You would much oblige me by an early answer.

Shrewsbury, May 7, 1834.

T. H. J.

ON DAHLIAS.—Two very young Florists will be grateful to any of the readers of the *Floricultural Cabinet*, to inform them which are the best Dahlias to choose the seeds from, so as to ensure double flowers, and if it is possible when seedlings are raised to tell which plants will produce double and which single flowers.

ELIZA AND ELIZABETH.

Ensham, Oxfordshire, May 10, 1834.

ON FLOWERING DUTCH BULBS.—In your March Number, are some excellent directions for the treatment of Dutch Bulbs in pots; but what I am particularly desirous to know is, the management of such Bulbs after they have been flowered in water. I am particularly fond of these beautiful flowers grown in glasses, and generally succeed in having them flower very nicely in the winter, as I buy very good roots. But if you, or any of your correspondents, will inform me how to treat them when they have ceased to flower, I shall be extremely obliged. I am aware they will deteriorate, and probably not blow for some seasons again in water, but with me they have ceased to flower at all.

Φίλος Φυσιαι.

April 18th, 1834.

ON HARDY FLOWERING SHRUBS.—Doubtless, many of your numerous subscribers, (like myself), have a shrubbery and lawn, as well as flower borders; it would be very useful and interesting, if you would insert in your pages more articles on Hardy Flowering Shrubs. I shall feel particularly obliged, if you will publish in an early Number, the best mode of culture, soil, and situation, of these beautiful and very favourite shrubs of mine, the varieties of Rhododendron and Azalea. Also, if you will give some plans and elevations of small greenhouses and frames, with the probable expense.

In your Number for September last, X. Y. Z. stated, that he had not succeeded in obtaining flowers from the *Glycine sinensis*, synonyme, *Wistaria consequana*. In March, 1830, I received from a Nurseryman a small plant in a pot, eight or ten inches in height. I selected a spot on a south wall, had the earth removed to the depth of 16 or 18 inches, and about four feet over, this space was filled with about equal quantities of light rich loam and bog earth, well mixed. I then shifted and planted it, the first summer it made a shoot 18 inches in length, the next year a strong vigorous shoot from four to six feet; in 1832 and 1833 it produced some exquisitely beautiful flowers of a pale blue colour; and there are now a large number of flower-buds on it, in a very forward state, from extreme mildness of the season.

I have enclosed a specimen of moss or lichen, which is very common here, and grows on almost every tree and shrub in my lawn, except the Portugal and common laurel, and a few others; also, a specimen of grass, which is so abundant, as to become a troublesome weed, in our gravel walks and gardens. Will you have the kindness to inform me, through the medium of the *Floricultural Cabinet*, the names of each, and if you can recommend any particular method of destroying them?

W. T.

P.S. I shall feel much obliged, if you, or any of your subscribers will inform me, through the *Floricultural Cabinet*, the soil, situation, &c. of the *Magnolia glauca sempervirens*. Within a few years, I have had two plants, which, with all my care, have both died.

[The grass is *Poa annua*. The mosses in our next.—COND.]

ON COMPOST FOR CARNATIONS.—I like all *Innovator's* remarks exceedingly, but I do not exactly know what he means, page 50, in his Carnation Compost, by "one barrowful of finely ground unburnt sulphate of lime," to give Car-

nations a clear white; for the limestone I have as hard as a rock before it is burnt, and I should conceive it would be a most laborious task to pound finely a barre and, therefore, I conclude it is some other material to which he alludes, at I dare say he will enlighten my ignorance on this point, and tell me where I can meet with it. IGNORAMUS.

ON THE AURICULA, &c.—As you are not determined on the reprint of *New's Supplement*, perhaps you may not think it amiss to insert the plate of that splendid Auricula in some subsequent Number. Can you, also, be-foretime what is meant by a pin-eyed Polyanthus?—[An answer in our next.]
 April 14th, 1834. D. FRANCE.

Will INNOVATOR, or some equally experienced cultivator, be so kind as to inform the his treatment with Carnations beginning to spindle in their winter quarters; I have consulted, MADDOCK, HOGG's *Supplement*, and MAINE, but they do not mention the subject,—I mean the particulars under the different circumstances. Also, what is the smallest sized pot a two years old Auricula plant can be well flowered in, and the largest size (under any circumstances) that it would be proper to use for any older plant?

Do Auricula and other Composts deteriorate and loose their fertility, by being sun dried in summer, and kept in that state in barrels under cover?
 Truro. C. N.

ANSWERS.

ON DESTROYING SLUGS, &c.—The best means, "AN OLD CARNATION GROWER" can use to destroy Slugs, &c. is to dissolve two drachms of corrosive sublimate (poison) in two gallons of boiling water, and water his plants with the solution; it will also be necessary for him to take every pot out of the frame, and pour in the hole at the bottom a small quantity of the solution, as this is where they generally secret themselves. He need not be afraid to use this as it is perfectly innoxious to the plants, indeed I always fancy it does them good, as it improves their verdure. This solution will also cause worms to rise out of the ground, if poured upon any bed at the close of daylight when they may be gathered up and destroyed. I will now correct an error in the article of mine, upon the carnation; the pots used should be four to the cast, instead of sixteen, as there stated.

INNOVATOR.

ON BLOOMING AMARYLLIS JACOBÆ.—On flowering the *Amaryllis Jacobæ*, or (which I take to be the same) the *Sperkalia formosissima* of *Sweet's British Flower Garden*, he recommends planting it in the open border, which I have practised with success, in the following manner:

In May, I plant my bulbs in a border of sandy peat and loam, in a sheltered situation, in which place they remain until September. I then take them up and dry them, taking care not to injure the roots. When in bloom, the flowers must be sheltered from rain or rough winds. I keep the bulbs in a dry room until the returning season for planting.

February 12, 1834.

J. T.

ON THE DOUBLE WHITE ANEMONE, &c.—Your correspondent J. MILES, can purchase any quantity of the Double White Anemone, if he means the *Anemone nemorosa plena* and *Trillium sessile*, by applying to Mr. JOHN CREE, Nurseryman, Addlestone, near Chertsey, Surrey.

April 23, 1834.

J. W. D.

REMARKS.

ON FLORA'S DIAL, CALENDAR, &c.—Your interesting and ably conducted *Little Magazine* has done more towards encouraging a love of flowers amongst the fair sex than any work of the kind, which has been published of late years. When the first number appeared, it was welcomed by all ranks and degrees, and now I rejoice to say, go where you will you are sure to see the green-covered *Cabinet* lying on the table.

It has been wisely said, that life is a flower garden, in which new blossoms are ever opening as fast as others fade.

Flowers in all ages have been made the representatives of innocence and purity. We decorate the bride and strew her path with flowers; we scatter them over the shell, the bier and the earth, when we consign our mortal blossoms to the dust as emblems of transient joy—fading pleasures—withered hopes; yet rest in sure and certain trust that each in due season will be renewed again!

The love of flowers indeed, seems a naturally implanted passion without any alloy or debasing object as a motive. The cottage has its pinks, its rose, and polyanthus. The villa its geranium, its dahlia, and its clematis; we cherish them in youth—we admire them in declining age.

It was my wish and intention to have noticed some few of the wonderful habits of plants, but want of time (not inclination I assure you) obliges me to relinquish the pleasure. I will, however, just mention several instances in which, with a little attention, the love of flowers may serve to beguile many spare moments, and I can only hope the idea may be followed up by some one amongst your talented contributors.

It may be observed, that flowers put forth leaves and blossoms regularly—they may be retarded or accelerated by artificial means. In every species (except man) there is a particular period of the year in which the reproduction system exercises its energies, and this may be said to form a sort of *Floral Calendar*. The *Dial* of Flora may be kept by watching many sorts—thus the day Lily opens at five in the morning, Dandelion at six, Hawkweed at seven, Marygold at nine, Mesembryanthemum at ten. Many plants prognosticate the *weather*, and may be termed *Barometers*—others may be named *Equinoctial*, as they open and shut at fixed hours of the day. From experiments made with plants put into a dark cellar, and others lighted by a lamp, it was observed, that some flowers followed the clock hours in opening and closing—the night blowing plants accelerated their motions. The Sensitive plant accommodated itself to the artificial light in three days, and when restored to the open air, soon recovered its usual habits. This agreeable subject might be pursued much beyond the fair limits of your paper, but I will not allow my *hobby* to trespass too far upon your indulgence; so conclude your well wisher,

PANSY.

The Grove, March, 1834.

P.S. Can you tell me whether there is such a plant as the *Double White Hepatica*? I have the single white, the blue and pink, double and single. [We never saw one.—COND.]

CHALLENGE!—Twelve gentlemen amateurs, members of the East London Amateur Dahlia Society, held at the Bakers' Arms Tavern, Warner-place, Hackney road, challenge any twelve gentlemen amateurs, growing Dahlias in the county of Middlesex, to shew, the first week in September, twelve pans of Dahlia blooms, each pan to contain twelve blooms, for any sum above £24—say £24. The blooms to be of their own growth, and the plants must have been in their possession two months prior to the show.—All communications to be addressed to Mr. I. ANSON, Secretary, at the above Tavern.

CAMBRIDGESHIRE HORTICULTURAL SOCIETY.

In consequence of the disappointments which the cultivators of florist-flowers have frequently met with at the Society's exhibitions, by reason of the censors awarding prizes to flowers that in some cases ought to have been set aside as wanting the requisite qualities, and in others by their marked preference of flowers that were but lightly esteemed by the most experienced cultivators, it was deemed expedient to appoint a Sub Committee of the Cambridge Horticultural Society, who drew up the following rules for the guidance of the censor at the Society's future exhibitions; and on their being laid before the Society, at a general meeting of the members, they were unanimously adopted, with a request that the utmost publicity should be given, and earnestly calling the attention of the florists of other Societies

to them; as the Sub-Committee expressed a hope that they might be the means of producing a uniformity of taste amongst all the Societies of florists in the kingdom. To obtain this very desirable object, they request the insertion of them in your useful and very extensively circulated *Cabinet*; and they beg to state that they will be happy to receive, through the same channel, any hints for their improvement. JAMES TWITCHETT.

Cambridge, April 21st, 1834.

"The Sub-Committee appointed 'to draw up rules by which in future florists' flowers should be adjudged,' beg leave, in submitting their report to the Society, to state, that they are well aware of the difficulty of their undertaking, but have framed the following rules to the best of their ability, and trust that in communicating with other Societies such rules will in time be made perfect.

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| " (Signed) { | JAMES TWITCHETT. | FREDERICK FINCH. |
| | RICHARD HEADLY. | SAMUEL WIDNALL. |
| | ADAM FITCH. | EDWARD CATLING. |

Cambridge, 19th March, 1834.

"HYACINTHS.—A fine Hyacinth should be of a compact pyramidal form, strong stem, supporting numerous large bells in a horizontal position, the uppermost bell erect, the bells rather convex than flat or hollow; the colours clear and bright. Those flowers presenting a contrast of colour in the centre of the bells are most esteemed; only one stem is allowed to each bulb when exhibited for show.

"AURICULAS.—The pips should be large, flat and round, with ground colour equal on every side of the eye, which should be quite circular, *as well as the edge*. The tube a bright lemon yellow, perfectly round, well filled with the anthers or thrum, the eye round and large, the body colour black or violet, the meal fine; the colour, in green edged flowers, should be a whole one, not a shaded green. The stem strong and sufficiently long to bear the truss above the foliage—the truss to consist of not less than five full blown pips—only one stem allowed.

"POLYANTHUSES.—The pips large, flat and round, with small indentures between each division of the lumb, dividing the pip into heart-like segments, edged with bright yellow, the edge and the eye ought to be of the same colour; the truss to consist of not less than *five* full blown pips, supported on a strong stem, standing well above the foliage.

"TULIPS.—The flower large and composed of six petals—these should proceed horizontally at the base, and then turn upwards in the form of a goblet—rather widest at the top. The three exterior petals larger than the interior ones; the edge of the petals well rounded or with a little indenture at the top. The ground colour of the flower at the bottom of the cup, perfect white or yellow; and the various colours, whether stripes, flames, &c. others or blotches, should be very fine, regular, or bold and distinct, or else elegantly pencilled.

"ANEMONES.—A fine flower should be two inches and a half in diameter—the exterior row of petals should be large and well rounded—the centre of the flower well filled up—the bloom of a hemispherical form, colours clear and distinct.

"RANUNCULUSES.—The flower ought to be two inches in diameter—the lower tier of petals broad, and gradually diminishing in size, as they approach the centre, which should be well filled up with them. The bloom ought to be of an hemispherical form—the petals not widely separated, nor too close to appear crowded, and to have a pyramidal direction, in order to display their colours—petals broad with perfect edges—colours rich, clear, and brilliant, or if of two colours, clear and distinct.

"PINKS.—The petals large and well rounded—edges free from notches—the colours distinct and clear. In laced Pinks, the lacing must be continued round every petal without a break; in *plain* Pinks, the colouring should be confined to the centre, and no portion on the edge of each petal; in rose Pinks the dark colour ought, as in laced Pinks, to be continued, without a break, round every petal.

"**CARNATIONS.**—The flower large, consisting of a number of well-formed petals, neither so many as to give it a crowded appearance, nor so few as to make it appear thin and empty—the petals broad and stiff—the guard ones well rounded, and should rise a little above the calyx, and then turn off gracefully in a horizontal direction, supporting the interior ones, which should gradually taper towards the crown. Bizarres must have three colours in every petal—flakes two—colours strong and bright—the stripes clear and distinct—the fewer freckles or spots the better—all the colours nearly equal, or the most brilliant colour should predominate—the white pure and bright.

"**PICOTEES.**—The same qualities as to size, petals, crown, and clear white-ground, as the Carnations—edge of petals smooth and well rounded. Those flowers which are free from blotch or stripe down the petal, below the coloured edging, are greatly to be preferred to those which are marked and pouncy.

"**DAHLIAS.**—A fine flower should be of a perfectly circular form—the outer petals stiff, well rounded and cupped—not too much so as to present a quilled appearance, and well filled up to the centre—not in the least degree showing the eye—neither should the eye be at all sunk or flattened, but rather elevated above the other parts when in full bloom—the whole flower presenting a true circle when viewed above, but of a hemispherical form when observed at the side. Those flowers possessing two colours, to have them clear and distinct."

REFERENCE TO PLATE.

1. *Manetta glabra*. Tetrandria, Monogynia, Rubiaceæ. This is an exceedingly elegant plant; its long scarlet blossoms contrasted with its deep green foliage, render it one of the most beautiful objects that can well be conceived. It was raised at Mr. NEIL'S, Canon Mills, near Edinburgh, from seeds sent from Buenos Ayres. The stems twine to the height of a yard, or more. It thrives well in peat and loam, and is readily increased by cuttings. It succeeds well in the open border during summer.

2. *Salvia angustifolia*. A native of dry mountainous places in the temperate parts of Mexico. It grows well in any light soil, is readily increased both by seeds and cuttings, and requires protection in winter, being no more than an annual if kept in the open border. It blooms very freely in the open border. Grown in most public nurseries.

3. *Portulaca Gilliesii*. Polyandria, Monogynia, Portulacææ. It is a truly splendid plant, and to be seen in perfection, it should be exposed to the greatest heat and the brightest light that our summers will supply. It then opens its rich rosy crimson flowers in considerable quantity. It grows only a few inches high, is a perennial, and blooms most of the summer season. It is grown in the London Horticultural Society's Garden, also at the Glasgow Garden. It is a native of the plains of Mendoza. It requires a dry greenhouse or frame for winter protection.

4. *Tropeolum tricolorum*, Three-coloured Indian Cress. (Nasturtium of many.) A beautiful climbing plant, which will grow and bloom freely in the open borders during summer. It is readily propagated by cuttings.

FLORICULTURAL CALENDAR FOR JUNE.

But little general or particular directions are required for this month, as most of planting, sowing, and potting will be over. Roots of Ranunculuses or Anemones, whose foliage is decayed, should be taken up. All plants in pots must be regularly attended to with a free supply of water, particularly on evenings. Carnations and Pinks should be layed or piped at the end of the month. Auriculas and Polyanthuses should be potted and placed in a shady situation. Cuttings of Garden Roses now put off under a hand-glass, shaded, will soon strike root. Seedling Carnations should now be planted out in beds.

F. F. A.



Vanilla glabra



Vanilla cinnamifolia



Isopetalum tricolorum



Isopetalum tricolorum

THE
FLORICULTURAL CABINET,

JULY 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Ranunculus.* By
INNOVATOR.

As you have already given your readers two Articles on the cultivation of the Ranunculus, perhaps you may consider any more superfluous; but as my mode of treating this beautiful flower is so widely different from what is generally practised, I send it you, leaving it to your judgment whether you will give it a place in your valuable Magazine. I can assure you it is superior to any other plan I have seen tried; and the next to it is that of Mr. CARR.

I prepare my bed, which is three feet wide, in October; but any time between this and the day of planting will answer. I remove all the natural soil to the depth of a foot. Having procured a sufficient quantity of fresh-cut flag from a heavy-land pasture, three inches thick and twelve wide, I place it in the trench as even as possible, with the grass side down, taking care to fill up firmly all the seams with mould. It will take four layers of flag to fill the trench. When full, I tread it down as even as possible, and let it lay till the time of planting, about the middle of February; when I lightly rake over the surface, and place my roots upon it in six rows; these I cover with a little white sand, and then cover the whole an inch deep with fine rich heavy loam. If severe frost or heavy rains set in before they are well up, I cover them with straw mats. When they are throwing up their flower

stems; I supply them with plenty of rain or river water, poured between the rows, and continue it till the bloom is over. During the time of flowering, it is necessary to protect them with an awning from sun and rain. As soon as the grass turns yellow, I take them up, and, when dry, store them away in paper bags with their respective tallies. After I have taken up my roots, I keep the bed free from weeds till October, when I take off the inch of soil that covered the roots, and spread over the bed an inch thick of fresh cow-dung. This gets well washed into the soil by the time of planting, when I again rake over the bed, and plant as before. I never dig it over, but when the roots are taken up after the second year's growth, I take out all the rotten flag, and store it away for my Carnation compost, to be mixed up in September, for which it answers admirably. I had sixteen hundred roots grown in this way this last season, and not more than thirty missed flowering. Mine were universally allowed, by all those who saw them, to be the best they had seen last year, but certainly very inferior to what they generally are, as I have seldom a root that does not throw up four or five flowers.

INNOVATOR.

May 3rd, 1834.

ARTICLE II.—*On the Culture of Fuchsia virgata.*

By Mr. W. DENYER, Gardener to Lady WEBSTER,
Battle Abbey, Sussex.

Having recently become a subscriber to the *Floricultural Cabinet*, and to the *Gardener's and Forester's Record*, I beg to say, that I have been much gratified with the useful information they are calculated to impart, not only to the inexperienced, but to the practical gardener also. In perusing the pages of the *Cabinet*, I have seen two or three good treatises on that graceful genus the *Fuchsia*; but as no one has said any thing in particular on *F. virgata*, I wish to say a little in its favour, and to recommend it as being far the best of all the genus for the flower garden, and for fronts of shrubbery gardens. *F. gracilis* is a noble and graceful plant when well grown, but it does not commence flowering in the open border so soon as *virgata* by three weeks or a month, neither does it flower so late by six weeks or more, which is a great

object in the autumn of the year. *F. conica*, *tenella*, *microphylla*, &c. will all flower well in the borders, and make a good variety; but experience has taught me that they are all far inferior to *F. virgata* for that purpose. Towards the end of April, *F. virgata* has put on its green robe; it then begins to put forth its beautiful scarlet pendant blossoms, and so it continues till near the end of December.

Mode of Treatment.—If cuttings were not put in in autumn, they should be put in the first week in March. For this purpose, take some of the short side shoots; dress off their bottom leaves, and cut them through close under a joint; then insert them into a pit, which is drained, and filled up with a mixture of peat and sand; water them well, with a rose on the water-can; then put them in a hotbed frame, as soon as their leaves are a little dry. In two or three weeks they will be fit to pot off in 60-sized pots. The soil for this purpose should be a mixture of peat, loam, and rotten dung. They should then be put into the hotbed frame again for a few days or a week; at the expiration of that time, remove them into a cold frame or greenhouse. About the middle of April, repot them into 48's, using the same sort of soil as above named. The first week in May, set them out in a sheltered situation. About the middle of May, plant them out in the borders; at the same time, water and tie them up. They will then begin to flower freely, and make fine plants the first season. Towards the end of November, cover their roots with old tan, or leaf-mould. If the winter should prove severe, put three stakes around the plants, and tie them at the top in the form of a triangle; then put a piece of mat around, and fasten it with a skewer or two, which is soon done: but this must not be put on except on very sharp nights. In March, cut their branches in to four, six, or eight inches, according to the size and shape of the plant. They make the handsomest plants when they are trained to a single stem, and allowed to branch out around. They present a fine figure when put in the centre of a small wire basket, and the wire furnished around with *Anagallis monelli*, *Lobelia gracilis*, *Eschscholtzia californica*, &c. Young plants of *Fuchsia virgata* will keep their leaves on, but after they are a year old, they become deciduous. They often throw up strewn suckers, which, if taken off in

March, and potted; will make fine plants, and be fit to traff out in May.

If you think these remarks worth a place in your *Cabinet*, they are quite at your service.

W. DENBY.

February 6th, 1834.

ARTICLE III.—*On the Cultivation of Dutch Bulbs in Pots.* By Mr. THOMAS APPLEBY, Gardener to the Rev. J. A. RHODES, Horsforth Hall, near Leeds.

To flower these bulbs in pots to perfection, they should, as soon as received, be planted in pots five inches wide and six deep, in a rich compost of loam, vegetable mould, and well-rotted cow-dung, in equal parts, well sifted, and mixed with one-eighth of fine sea-sand, or, where that cannot be got, fine river-sand, with a small portion of salt added, will do. Procure some oyster-shells, and lay one partly over the hole at the bottom of each pot, and another resting upon it, to form a good drain. Then put as much soil in (having it rather dry) as will allow the bulb to be just covered within the rim of the pot; press it firmly down in the pot with the fingers, or a blunt piece of wood made for that purpose: this is to prevent the roots going too quickly through to the bottom. Place the bulb upon the soil, and fill up round it, pressing it hard down also, to prevent the bulb from rising when it begins to throw out its roots. Give them a gentle watering, and plunge them into a cold frame, covering them two inches deep over the bulbs either with rotten tanners' bark or sifted coal-ashes. They must remain here until they break through the covering, and then remove them into the greenhouse to flower. Should they be wanted to flower in February or March, or even earlier, they must be placed the month before in a stove or forcing-house, to bring them forward.

Such of your readers as may not have the convenience of frames, greenhouses, &c., may place their pots of bulbs in a cellar, or any outbuilding, covering them as before described; and as they make their appearance, bring them into the windows to flower in succession—only do not suffer them to get much above the covering, before they are removed into the light; will be drawn and blanched.

The foregoing treatment applies only to Hyacinths, Narcissuses, Early Tulips, Jonquils, Crocuses, and Amaryllis Jacobæna, if imported.

THOS. APPELEY.

January 4th, 1834.

ARTICLE IV.—*On the Culture of the China Rose.*

By Mr. W. MOUNTFORD, Warleigh Gardens, near Bath.

In cultivating the *Rosa odorata*, or Tea-scented Rose, I have practised the following method with great success:—Early in January or February, I take some pots of plants into a stove, which is heated to 60 to 70 degrees of heat. In the course of a short time, there are some young shoots ready, which, as soon as they have five or six leaves, I take off, and strip some of the under leaves from them, finishing them with a clean cut at a joint. Having prepared the cuttings, I next prepare some 48-sized pots with two parts fine sand, one part sandy peat, and one part leaf-mould. I then insert several in each pot, and, with a fine-rose watering pot, give them water just sufficient to settle the earth. I then plunge them into a hotbed frame—or they will strike equally well in the stove, provided they are covered with a small bell glass. After they have taken root, I pot them off into 60's, using at this time sandy loam and leaf-mould. About the middle of May, I turn a quantity out into the beds and borders in the flower garden, where they bloom exceedingly well, and fill the air with that delicious fragrance that is exhaled from them. The remainder I keep in pots, to supply any place that may require them.

If the above is worthy a place in your *Florist's Magazine*, you are at liberty to insert it.

W. MOUNTFORD.

Warleigh Gardens, Dec. 8th, 1833.

ARTICLE V.—*On Raising Dahlias from Seed.* By Mr. D. PEARCE.

Two of your Correspondents having expressed a desire for information on raising Dahlias from seed, I now subjoin a few remarks, hoping they will prove acceptable.

About the beginning of April, a friend of mine gave me a quantity of Dahlia seeds, which he informed me had been saved from very fine double flowers, and of various colours.

About the 7th or 8th I sowed the seeds pretty thickly in pots, in a very light and rather sandy soil. I then plunged the pots in a hot bed made of about a barrowful of horse-dung. After watering and plunging the pots into the bed, I covered the surface of the pots about four inches thick of horse-dung, and placed a large hand-light firmly over the bed to exclude the air. The dung used for the hot bed was not fresh from the stable, but was taken from the middle of a large heap, and partly decayed, so that the heat of the bed was moderate, but by being made in a part of the garden exposed to the heat of the sun, the heat was sufficient to cause the seeds to vegetate. At the end of the first week after being sown, I examined the pots to see if any seeds had appeared, by clearing off the dung, but none having appeared, I again replaced the dung, and covered with the glass. At the end of the second week I again examined them, when about one or two of the seeds in each pot were just appearing. I then cleared the dung off the surface of the pots, and allowed them to enjoy the sun and air every day till evening, by raising the light at each corner about four inches, but taking care to shut close at night. When the first pair of leaves (exclusive of the first large fleshy ones) appeared, I planted them out on a bed of very light soil about four inches apart, taking care to keep the soil moist. They have now most of them made strong little plants; and I am now about finally transplanting them to remain for flowering; and having about 250 plants, doubt not but that I shall have at least a few fine ones. The plants appear fond of moisture; therefore, whenever the surface of the soil becomes dry (which in my garden is every morning) the plants should be attended to. With respect to impregnating them, I should consider those flowers which form the greatest contrast to be the most proper to be acted upon, such as impregnating crimson, scarlet, lilac, rose, &c. on a pure white, or yellow, and the manner of applying the pollen the same as recommended by Mr. Tyso for Ranunculuses.

ARTICLE VI.—*On Flowering Plants, suitable for a Bed, upon a Lawn.* By Miss EMILY ARMSTRONGE.

On the 23d day of May, I perused an article in your excellent periodical, named *The Floricultural Cabinet*, signed VIOLET, Vicarage, Wilts, requesting the names of Perennials, Annuals, and Shrubs, to occupy two beds, in a lawn, soil loamy. At his request, being a Sister Priestess, I transmit this article to the Editor, on the 28th day of the same month, for insertion; and recommend the following select collection to VIOLET's consideration, as uniting beauty of colour, easiness of culture, long continuance in bloom, and adapted to the soil, as stated by him:—Perennials, Double Ragged Robin, varieties, red and white; Double Catchfly, red; Lychnis, scarlet; Potentilla (cinquefoil), *Russelliana* and *Nepalensis*; *Lychnidea*, varieties, lilac and white; *Monarda*, scarlet; Mule Pink, red; Double Rocket, white; Siberian Larkspur, purple, a lively plant; the above about two feet in height, except Mule pink; Lofty Bee Larkspur, five to six feet; Mullein, same; Tree Primrose, three feet; Neapolitan Violet, humble in growth, spreads freely, flowering during summer and autumn.—Of Annuals, the *Clarkia*, *pulchella* and *alba*; Sweet Pea varieties; *Ænothera Lindleyii*, German Aster, and large white Candy Tuft, I would prefer. Shrubs, moderate in size, elegant in outline,—*Cytisuses*; Red-flowered Bladder Senna; Persian Lilac; Scorpion Senna; *Aculba Japonica*; *Fuchsia gracilis*, being hardy; Lupin tree, together with Moss, Velvet, Blush, Provence, and Cabbage Rose trees. These are a small portion of what I have cultivated these many years past. New varieties may be suggested by other correspondents; but the question is, will they thrive in the soil mentioned by you, or are they more beautiful in colour than those above mentioned?

VIOLET would find Roses trained to wire trellis work or pillars of Roses, extremely handsome; the pillars could be formed of wood, less expensive than iron.

EMILY ARMSTRONGE.

Cavan County, May 24th, 1834.

| IRRITATING—(CONTINUED). | | | | |
|--------------------------|---------------------------------|------------------|------------------|------------------------|
| Common Name. | Botanical Name. | Class. | Order. | Where found. |
| Euphorbium..... | Euphorbia officinarum..... | Monæcia..... | Syngenesia..... | In plain stove. |
| Bryonia..... | Bryonia dioica..... | ..... | Pentandria..... | Hedges. |
| Elatarium..... | Momordica elaterium..... | ..... | Monadelphia..... | Cultivated in gardens. |
| Purgin Nut..... | Ricinus major..... | ..... | ..... | Do. |
| Wake Robin..... | Arum maculatum..... | ..... | Polyandria..... | Old banks. |
| Crown Imperial..... | Fritillaria imperialis..... | Hexandria..... | Monogynia..... | Gardens. |
| Daffodil..... | Narcissus pseudo Narcissus..... | ..... | ..... | Gardens and meadows. |
| Squill..... | Scilla maritima..... | ..... | ..... | Gardens. |
| Cardinal Flower..... | Lebelia spiliotica..... | Syngenesia..... | ..... | Do. |
| Gamboge..... | Stalagmatis Camb..... | Polygamia..... | Monœcia..... | In pleasure-grounds. |
| Hedge Hyssop..... | Gratiola officinalis..... | Diaandria..... | Monogynia..... | In gardens. |
| Hemlock Dropwort..... | Cephanthe crocata..... | Pentandria..... | Digynia..... | Moist places. |
| Marsh Penny Wort..... | Hydrocotyle vulgaris..... | ..... | ..... | Do. do. |
| Poison Oak..... | Rhus toxicodendron..... | ..... | ..... | In some gardens. |
| Water Hemlock..... | Phillandrum aquaticum..... | ..... | ..... | Watery places. |
| House Leek..... | Sempervivum tectorum..... | Dodecandria..... | ..... | Roofs. |
| Heart's Ease..... | Viola tricolor..... | Pentandria..... | Monogynia..... | Gardens and fields. |
| Ipecacuanha..... | Cephaelis Ipecacuanha..... | ..... | ..... | Greenhouses. |
| Scammony..... | Convolvulus scammonia..... | ..... | ..... | In gardens. |
| Louse Wort..... | Pedicularis palustris..... | Didynamia..... | Angiosperma..... | Boggy pastures. |
| Monk's Hood..... | Aconitum napellus..... | Polyandria..... | Trigynia..... | In gardens. |
| Meadow Saffron..... | Delphinium Staphisagria..... | ..... | ..... | Do. |
| Mezereon..... | Colchicum autumnale..... | Hexandria..... | Monogynia..... | Rich pastures. |
| Spurge Laurel..... | Daphne Mezereon..... | Octandria..... | ..... | In gardens. |
| Savine..... | Juniperus Sabina..... | ..... | ..... | In woods. |
| White Hellebore..... | Veratrum album..... | Diaœcia..... | Monadelphia..... | Shrubberies. |
| Wall Pepper..... | Sedum acre..... | Polygamia..... | Monœcia..... | Gardens. |
| Yellow Rhododendron..... | RhododendronChrysanthamus..... | Decandria..... | Pentagynia..... | Old walls. |
| ..... | ..... | ..... | Monogynia..... | Cultivated in England. |

The foregoing produce (when taken into the stomach) giddiness, confusion of sight, wildness of the eyes, palpitations, loss of memory and voice, stupor, nausea, vomiting, with great distention of the stomach, and convulsive twitchings. The only treatment I can recommend persons to adopt in cases of urgent necessity, where a medical man is not to be had, is to give an emetic, composed of about 20 grains of sulphate of zinc (commonly called white vitriol and white copperas), in a wine-glass of warm

water, every ten minutes, till the stomach is thoroughly cleared of its contents. A tea-spoonful of hartshorn will frequently prevent them from falling into a state of stupor. In cases of poisoning from Mushrooms, it will be first proper to empty the bowels by means of Epsom salts and castor oil, and then take a tea-spoonful of æther every two or three hours in some mucilaginous drink. Poisonous Mushrooms may generally be known by their substance being softer, more open, more porous, and moister, than edible; they have besides a more disagreeable appearance, a more humid and dirty surface. Those which are dusky, or change colour when cut, or exhale an unpleasant smell, or have a gaudy colour, or very distinct hues, particularly if they have been originally covered by an envelope, and are found in moist or shady places, should not be eaten. Those having short bulbous stalks, or fragments of skin sticking to their surface, or which grow rapidly and corrupt quickly, should be rejected. Too much caution cannot be given by parents to servants, to prevent their children from gathering the berries of the two Nightshades, and the Wake Robin, as they are frequently made the playthings of children, when out taking the air. Your medical readers must excuse my taking this upon me, as none of them shew any disposition to answer X. Z.; but they may, if they choose, charge me with being an

INNOVATOR.

ARTICLE VIII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*

By ST. PATRICK.

(CONTINUED FROM PAGE 134.)

| NAMES. | DESCRIPTION. |
|--------------------------------|---------------------------------------|
| 501 Nouvelle favourite | Fine tinged blush. |
| 502 ——— Parisienne | Large blush. |
| 503 ——— redontc | Fine small bright red. |
| 504 ——— Valine | Light purple and blue. |
| 505 Nubieunne | New, purple. |
| 506 Octavie | Fine blush, changing white. |
| 507 Odeur de dragés | Immense fine large double blush. |
| 508 Olio | Light blush, grows in large clusters. |
| 509 Ornement du Paradis | Fine lilac. |
| 510 Orson | Bright blush. |
| 511 Ortenio | Pinkish blue. |
| 512 Pallid a de Marbanne | Beautiful scarlet. |
| 513 Panache superbe | Gay rosy scarlet, striped with white. |
| 514 Paraquet | Striped light scarlet. |

| NAMES. | DESCRIPTION. |
|-------------------------------|---|
| 514 Paris Purple | Pretty. |
| 516 — Virgin..... | Small deep blush. |
| 517 Parni | Light purple. |
| 518 — superbe | Large scarlet, very double. |
| 519 Passe Virgil..... | Beautiful mottled purple and red. |
| 520 Patriotism | Fine bright pink. |
| 521 Paul Pry | Curious purple |
| 522 Pavot | Pretty blush. |
| 523 Pelagi | New fine deep blush. |
| 524 Penelope | Fine deep crimson velvet, edged with purple |
| 525 Perci..... | Large crimson. |
| 526 Perle brillante | Pink red |
| 527 — de L'orient..... | Fine mottled crimson. |
| 528 — de Washington | Fine large pale blush. |
| 529 Petite Blanche | Small white. |
| 530 — Caroline | Small bright red. |
| 531 — Erneste | Fine deep red. |
| 532 — et Belle | Small changeable purple. |
| 533 — Mandarin | Small pale purple |
| 534 — Panache | Variegated red. |
| 535 — Pourpres | Small purple. |
| 536 — Portugaise | Small light scarlet. |
| 537 — Pouapres de St Cloud .. | Small purple. |
| 538 — rouge D' Antriche | Curled variegated red. |
| 539 Phœbe | Beautiful fine purple. |
| 540 Phillippine | Superb purple. |
| 541 Phillipe quatre | Small double crimson pink. |
| 542 Pierre le grand | New, very fine bright red |
| 543 — | Large purple red. |
| 544 Pimpernelle..... | Very pretty straw-colour. |
| 545 Pivoine..... | Very large deep blush. |
| 546 Pizarro..... | Small red. |
| 547 Pluto | Nearly black. |
| 548 Polyanthus | Rich crimson, tinged with purple. |
| 549 Pomonia | Mottled purple |
| 550 Pourpon Bazarre..... | Small compact pale blush. |
| 551 — carnee | Pale blush. |
| 552 Porcelaine | Large blush. |
| 553 Portlandica | Close deep purple. |
| 554 Pourpre bienfaite | Fine mottled purple. |
| 555 — de la Grece | New, splendid purple. |
| 556 — du Prince | Large fine purple. |
| 557 — curceux | Curious purple. |
| 558 — sanspareil | Changeable purple. |
| 559 Pourpres antique..... | Curious scarlet and purple spotted semi double. |
| 560 — logo | Beautiful light purple. |
| 561 — le plus Magnifique..... | Bright curled purple. |
| 562 — proxances | Large purple. |
| 563 — tincelles | Very fine mottled purple. |
| 564 — tres changeable | Dark purple, changing light. |
| 565 — velontes | Very fine velvety red. |
| 566 Premier Noble..... | Small crimson. |
| 567 Prince de Salve | Large beautiful red. |
| 568 — d'Orange | Large deep crimson. |
| 569 — Henry | Red. |
| 570 — Magnifique..... | Small pretty pale red. |
| 571 — Regent..... | Large bright scarlet. |
| 572 — Talleyrand | Fine double crimson. |
| 573 Princesse | Crimson. |

| | NAMES. | DESCRIPTION. |
|-----|------------------------|--------------------------|
| 574 | Eglantine | Large blush. |
| 575 | Elizabeth | Large scarlet. |
| 576 | de Nassau | Light blush and crimson. |
| 577 | Maria | Rosy blush. |
| 578 | Prolific | Semi double light red. |
| 579 | Proserpine | Rich velvety purple. |
| 580 | nouveau | Flamed brimstone. |
| 581 | Purple Crown and Crown | Very singular. |
| 582 | Pusselle de Bignon | Fine deep blush. |

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

A Catechism of Gardening, intended for the Use of Village Schools and Cottages; containing plain and brief Directions for cultivating every kind of Vegetable in Common Use. By AN OLD PRACTITIONER. Pamphlet, 12mo., 50 pages. London: Ridgway and Sons. 1834.

HAVING carefully read over this very excellent little work, we can most confidently recommend it to our readers, it is well calculated for the purposes intended. The wealthy part of the Community who are anxious to encourage cottagers in a taste for gardening, would be rendering essential service thereto, by presenting to cottagers, schools, &c., copies of this pamphlet. The plan of the work is by *Query and Answer*; the following chapters treating on the various departments of garden operations comprise the contents, with a calendar for work to be performed in each month of the year.

Chap. 1.—Of the operations of gardening, as trenching, earthing up, planting, weeding, &c. 2.—Cultivation of tubers, as potatoe, turnip, carrot, &c. 3.—Cultivation of stems, as asparagus, onion, sea kale, &c. 4.—Cultivation of leaves, and leaf stalks, as cabbage tribe, lettuce, &c. 5. Cultivation of esculent flowers, as cauliflower, brocoli, &c. 6.—Cultivation of esculent pods, seeds, &c., as peas, kidney beans, &c.

Letters on the Consumption of Malt, addressed respectively to the Farmer, Labourer, and Labourer's Friend. By F. SKRIMSHIRE, M.D. Pamphlet, 8vo., 31 pages.

The observations and instructions addressed to each class are truly serviceable and well written. We wish the pamphlet universal circulation, and

more particularly, admission to every dwelling in Britain. We would have made an extract from the pamphlet, but recommend the purchase of it; the whole being so useful, and, lamentable to add, the remarks so highly necessary and applicable, by the practices of innumerable multitudes of persons at this enlightened age,

Plants figured in the following Periodicals for June:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Colvillea racemosa*, Splendid Colvillea. Class, Decandria; order, Monogynia, natural order, Leguminosæ. This truly splendid plant, worthy of bearing the name of his late Excellency Sir CHARLES COLVILLE, governor of the Mauritius, to whom it was dedicated by its discoverer, is probably a native of the East coast of Africa, but was only seen by Professor BOYLE in 1824, in the Bay of Bornbatoe, on the western coast of Madagascar, where a single tree was cultivated by the inhabitants. That indefatigable naturalist raised it from seeds which he took to the Mauritius, where it has perfectly succeeded; and we may soon expect to add this most ornamental plant to the stoves of our own country. Its flowering season in the Mauritius is April and May. The tree grows from forty to fifty feet high, and produces its fine red flowers in great abundance. It has the aspect of *Poinciana regia*, but with a thicker trunk and more ample foliage.

2. *Milla uniflora*, Single flowered Milla. Hexandria Monogynia. Asphodelææ. The credit of discovering this very pretty plant is due to Dr. GILLIES, from whom we possess specimens, gathered in 1820, on "banks near Buenos Ayres," and marked "*Milla*, Nov. Sp." In June, 1832, Mr. NEIL received roots from the same place, gathered by Mr. TWEEDIE, which flowered in the greenhouse at Canon Mills, in December of the same year, and again in March, 1834. Dr. GRAHAM is assuredly correct in keeping it distinct from the Mexican *Milla biflora* the only other species known to exist. The stamens alone would afford a distinguishing character, in *biflora* being constantly equal, and in the present plant as regularly alternately smaller. The corolla is one inch and a half across when expanded, six cleft, marked from the base of the tube to the apex of the segments with six dark lines which are purplish green behind, lilac in front. The genus was named by CAVANILLES, in honour of JULIAN MILLA, head gardener at the Royal Garden at Madrid. When bruised, our species yields the most powerful smell of garlic.

3. *Gastrolobium retusum*, Blunt leaved Gastrolobium, Decandria, Monogynia, Leguminosæ. This pretty little shrub was first raised at the Botanic Garden, Edinburgh, in 1831, from seed brought home by Dr. LANG, from New Holland, and again 1832, from seed communicated by her Grace the Duchess Countess of Sutherland. It first flowered in December 1833, and the same plant much more freely in March 1834. The corolla is twice as long as the calyx, orange-yellow, of deeper and richer colour before expansion. *Gastrolobium*, from *gaster*, a belly, and *lobos*, a pod.

4. *Catasetum tridentatum*, var. Three-toothed Catasetum, var. *syn.* *Catasetum macrocarpum*, *C. Claveringi floribus majoribus*, *C. floribundum*. This species is exceedingly liable to vary in the size and marking of the flowers, (scarcely any two being exactly alike in these respects,) and in the number of blossoms upon a raceme. The plant now figured, for which and for the drawing of the foliage we are indebted to Mrs. C. HORSFALL, of Everton, Liverpool, was given to Mr. HORSFALL by Mr. HENRY HARRISON, who

imported it from the Brazils. It has, as Mr. EVANS (the able gardener) observes, an aromatic smell, and larger flowers than *C. tridentatum*. Flowers, showy, green with purple spots, and yellow. Catasetum, from *Kata*, downward, and *seta*, bristle,—alluding to two horns of the corolla.

5. *Pimelia hypericina*, Hypericum leaved. Diandria, Monogynia Thymelææ, an ornamental slender shrub, rising three or more feet in height, crowned with numerous heads of pale yellow flowers. This species was discovered by Mr. WILLIAM BAXTER, at King George's Sound. When treated as a hardy greenhouse plant, it thrives vigorously, and in its season puts forth its flower-heads in abundance. It blossoms from April to June. The species was raised in this country from seeds received from New South Wales, to Kew Gardens in 1829. *Pimelia*, from *Pimela*, fat.

6. *Arabis verna*, Early-flowering Wall Cress. Tetradynamia, Siliquosa. Cruciferae. Synonym, *Hesperis verna*. An extremely pretty annual, especially when cultivated in tufts, the very vivid purple blossoms making a handsome appearance. The plant grows about four inches high; the flowers are terminal, three to four in each head. In the Glasgow Botanical Garden it has flowered the same season as in Naples. It is well suited to ornament rock work. *Arabis*, from Arabia.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured, 3s. plain.

1. *Pæonia Moutan*; *albida plena*, Double White Tree Pæony. Polyandria, Monogynia. Ranunculacææ. This noble variety of the Tree Pæony was raised by the Earl of MOUNTNORRIS, from seeds of *P. papavaracea*, saved at Arley Hall. It differs from the original in being semi-double, and in having narrower and more lacerated petals. Pæonia, from PÆON, a physician who first used it in medicine.

2. *Platystemon Californicum*. Polyandria Polygynia. Papaveracææ. A native of California, whence it was sent by Mr. DOUGLAS, to the London Horticultural Society, in whose garden it flowered last September; the few seeds it produced have failed to vegetate, and the plant is, therefore, lost to our gardens. The plant is annual, seldom obtaining above a foot in height; the flower stems are only one flowered, which is terminal. The flower is small, yellow, with occasionally a reddish tinge outside. The flower is sweet scented, it blooms at the end of the summer. *Platystemon*, from *platus*, broad; and *stemon*, a stamen, in allusion to the breadth of the filaments.

3. *Eschscholtzia erocca*, Saffron coloured. Ico-andria. Polyandria Tetragynia. Papaveracææ. In general habit, foliage, and size of the flower, this new species closely resembles the *E. californica*, and introduced by Mr. DOUGLAS on his first expedition. *Eschscholtzia*, from Dr. ESCHSCHOLTZ.

4. *Aristolochia Chilensis*, Chilean Birthwort. Gynandria, Alexandria. Aristolochiææ. Very common in Chili; Mr. BRIDGES sends it under the name here adopted, adding that it is called by the Chilenos, *Orca de la Zoera*, and that it is an herbaceous plant, found in stony places near Valparaiso and Quillota. The plant is hardy enough to bear our climate. Plant twining, flowers green and purple. *Aristolochia*, from *Aristos*, best, and *lochîa*, parturition,—medicinal qualities.

5. *Bletia gracilis*, Slender Bletia. Gynandria, Monandria. Orchideææ. A native of Mexico, whence it was introduced by Messrs. LODDIGES's, of Hackney. It has bloomed in the collections of JAMES BATEMAN, Esq., and the Hon. and Rev. WILLIAM HERBERT. Flower stems rise half-a-yard high. Flowers: sepals yellow, suffused with rose, labellum striped with rose and yellow. It probably requires the treatment of *Bletia verecunda*, *acutipetala*, and *Shepherdii*, to all of which it is nearly related; and it ought, when at rest, to be kept where it is in no degree exposed to circumstances that are favourable to its growth. Dryness, and a cool place at the back of

a green-house, or common pit, protected from cold and wet, would probably spit it until the season returns, at which time it should be removed to a hot damp stove, among tropical epiphytes, to remain there till its leaves decay; when that happens, it should once more be restored to a resting house. *Bletia*, from LOUIS BLET, a Spanish botanist.

6. *Gilia Achilleæfolia*, Milfoil leaved. Pentandria, Monogynia. Polemoniaceæ. A new hardy annual, sent from California to the London Horticultural Society, by Mr. DOUGLAS. It resembles *Gilia capitata* in its foliage, and in the arrangement of its flowers; but its appearance is much more green, and its habit is dwarfish. The flowers, too, are purple, instead of sky blue. It will grow in any kind of garden soil, and produces seed in abundance, so that it will soon become as common as *Gilia capitata*. The present species blooms from July to December. *Gilia*, from GILEO, a Spanish botanist.

7. *Linaria Dalmatica*, Dalmatian Toad flax. Didynamia, Angiospermia. Scrophularinæ. Synonym. *Linaria grandiflora*. *Antirrhinum Dalmaticum*. Seeds of this very handsome plant were gathered in Persia, and presented by Sir HENRY WILCOCK to the London Horticultural Society, in whose garden a plant or two flowered about Midsummer last year. The shoots spring with very few branches, straight from the ground, and rise to the height of two or three feet. The flowers are large, of a deep yellow, and very showy. It has not produced seeds, but it is a hardy perennial; it may probably be increased without difficulty, by dividing the crown of its roots. *Linaria*, from *Linum*, flax,—similar leaves.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Rhododendron campanulatum*, Bell flowered. A small evergreen tree, of from three to five feet high. This splendid species is a native of Gosainthan, a high mountain, to the north of the valley of Nepal, and was introduced into the gardens about ten years ago, from seeds sent by Dr. WAL LICH. The flowers are of a milk white, shaded with lilac, and surpass in size all others of the genus, with the exception of one discovered in Java, by Dr. HORSFIELD. The present species is truly arborescent. It is cultivated by Mr. KNIGHT, of Chelsea. *Rhododendron*, from *Rhodo*, a Rose, and *dendron*, a tree.

2. *Lobelia polyphylla*, Leafy Lobelia. Pentandria, Monogynia. Campanulaceæ. Introduced about four years ago, from seeds communicated by Mr. BRIDGES, and more recently by Mr. CUMING. It is frequent on the hills about Valparaiso, in Chili. This, together with *mucronata* and *Tupa*, from the same country, are very nearly allied, being found to differ chiefly in the proportionate length of the tube of the corolla, the degree of development of the bractæ, and in the presence or absence of downiness on the stem and leaves. The one now under consideration, has the largest bractæ, the shortest tube to the corolla, and is almost wholly glabrous. It thrives best in a light rich soil, and is increased by division, or by seeds. *Lobelia*, from M. LOBEL, a botanical author.

3. *Nierembergia filicaulis*, Twiggy Nierembergia. Pentandria, Monogynia. Solanæ. A native of Entre Rios, a province of the republic of Buenos Ayres, and was raised in 1832, from seeds sent by Mr. TWEEDIE, to our friend Mr. NEILL, in whose collection at Canon Mills, near Edinburgh, it flowered to great perfection in the early part of last Autumn, in the open border. It is taller and more glabrous than *N. gracilis*, with the limb of the corolla about double the size of that species, and the tube rarely exceeding the calix in length. The filaments in both are glandular, and in other respects, the plants are pretty nearly similar. *Nierembergia*, from J. E. NIEREMBERG, a Spanish Jesuit.

4. *Calceolaria purpurea*; var. *picta*, Painted Slipperwort. Diandria, Monogynia. Scrophularinae. An accidental variety of *C. purpurea*, first raised, as we have been informed, by Mr. WHEELER, nurseryman, at Gloucester. It differs from *purpurea* in nothing but colour, and the greener hue of the whole herbage. Its copious delicate white blossoms, marked with a broad purple band, render it an agreeable addition to the already numerous cultivated varieties of this genus. The plant requires a light rich soil, and can only be increased by division. *Calceolaria*, see page 19.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small, coloured.

1. *Erigeron asteroides*, Aster-like Erigeron. Syngenesia, Superflua. Compositae. This plant grows one foot high, and flowers abundantly from August to October; the flowers are of a lilac purple colour. The plant is perennial, increased by division of the roots. Erigeron, from *Er.* spring or early; and *geron*, an old man,—the allusion is to its bearing the appearance of hoary-headed age, in spring.

2. *Cineraria maritima*, Sea Ragwort. Syngenesia, Superflua. Compositae. Its almost white stems, and foliage are very conspicuous in the open garden, and it becomes a showy plant, independently of its flowers. The flowers are yellow, and bloom from July to September. It is a moderately hardy plant, cuttings root readily. The plant blooms best in poor soil. *Cineraria*, from *cineres*, ashes; to indicate the ash-like colour of the leaves and stem.

3. *Galega Persica*. Monadelphia, Decandria. Leguminosae. This species is an abundant flowering plant, growing four feet high, producing one of its white racemes at the axil of each leaf. It blooms from June to September. Introduced into this country in 1816. *Galega*, from *gala*, milk; to mark the plant as producing it in animals which feed on its herbage.

4. *Iris Ruthenica*. Russian Iris. Grows one foot high. Flowers, dark purple and white; blooms from July to September. *Iris*, the Greek name of the heavenly bow.

The Number for May (omitted in our last) contains—

1. *Cistus acutifolius*, Acute-leaved. Polyandria, Monogynia Cistineae. It is a spreading dwarf shrub, not exceeding two feet in height, although its slender branches, unpruned, will extend three feet wide. The plant bears a succession of flowers through the whole of summer; they are white, the plant is very hardy. Increased freely by seeds, layers, or cuttings from the young shoots. *Cistus*, from *Kise*, a box,—in allusion to the seed vessel.

2. *Trachymene caerulea*, Blue flowered Pentandria, Digenia. Umbelliferae. It may not on casual inspection of this new and interesting annual, be observed in our natural plants. The present plant is annual, grows eighteen inches high, and flowers from June to October. It requires to be sown early on a hot bed, and be transplanted into the open ground. It was introduced into this country in 1827, and is a very pretty addition to the flower garden annuals. *Trachymene*, from *Trachys*, rough; and *mene*, a membrane,—in allusion to the coat of the seeds.

3. *Paeonia edulis*, Rose scented. Polyandria, Digenia. Ranunculaceae. The sweet scented *Paeonia* was introduced to this country from China, by Sir JOSEPH BANKS in 1805, but this is believed to be the second introduction to England. The flowers are a rosy crimson, coming out in June. The plant is readily increased by dividing the roots in autumn. *Paeon*, after whom the Genus is named, was one of those personages known only by the fables of the ancients.

4. *Cistus argenteus*, Silver leaved. Monadelphia, Decandria. Leguminosae. The *Cytisus argenteus* in its natural mode of growth is a low spreading shrub. The flowers are yellow, blooming in July and August. This

kind is sometimes grafted on single stems of the Laburnum, from four to six feet high, and by forming pendant heads of drooping branches has a very showy and pleasing effect. Most of the other species of *Cytisuses* are treated in the same way, and when interspersed amongst standard roses, produce a picturesque and striking appearance. *Cytisus*, is derived from *Cythmus*, an island now called *Thermia*; where, according to *PLINY*, the plant was indigenous.

Strictures on disposing Plants in Masses.

The system of disposing plants in masses, so frequently and ably advocated in this Magazine, is becoming very general, and certainly produces a much better effect than the tedious monotony of an indiscriminate mixture. In the practice, however, of this superior method, it should be remembered that the groups and masses ought to be considered as parts of a whole, and as such, should harmonise and unite with each other, with regard to form and colour. Without attention to this point, the several disunited and independent parts will no more form a gardenesque landscape, than the colours arranged on the painter's palette will of themselves form a picture. I have known more than one small garden spoiled by a disregard of proportion, the shrubs and flowers being disposed in groups of far too large a size. In such a situation, a single plant, or a group of two or three, must be considered to bear the same proportion to the whole, as much larger masses or groups bear in the case of a park. Although I approve, as I have said above, of the principle of placing different species in groups and masses, I think that there are cases in which, like all other principles, it may be carried too far. In a small flower garden which I very much admire, I have seen a group, composed of myrtles and China roses, planted alternately in quincunx order, the larger plants being in the centre; and, in my opinion, a better effect was produced than if the two species had been in separate masses: the rich green colour of the myrtles' leaves, forming a ground to the beautiful white of the flower; the light and elegant foliage and pendant bloom of the rose; the mingled colour, and the associations connected with both, made an impression upon me which I shall not easily forget. In the same garden there is a group consisting of an acacia, the broader and more shadowy plumes of the sumach, and the pendulous clusters of flowers of the laburnum, composing a little picture of the most highly finished character.

Gardeners might find much instruction from an examination of cottage gardens, in many of which I have seen a degree of good taste that is not always found where there is more reason to expect it. In such gardens, it often happens that very striking effects are produced by a judicious disposition of plants of the most common description; and I think it would be a very useful study to endeavour to imitate them with plants of more rare and choice species. I was once much struck by a particular effect (not, however, of sufficient general interest for a place in your Magazine,) produced by a plant of the common hop; and it was not until after many trials that I could find a substitute for it among more choice plants: at length, however, I succeeded to my own satisfaction by means of one of the genus *Clematis*; the species I do not with certainty know.

In small gardens, nothing can be more displeasing than a want of neatness and high finish; it reminds me of a flower-painter of the last century, who used the most dingy and sombre colours that he could find, saying that he imitated Raphael, and painted for posterity. In the case of a small garden, it should be remembered that, whatever may be the beauty of the design, constant attention, and the frequent removal of plants, are indispensable: three or four years of neglect would leave nothing, either to posterity or the designer himself, but a tangled and matted thicket of such plants as might come off conquerors in the struggle for life incident to want of sufficient space.—*Gardener's Magazine.*

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON FLORIST FLOWERS, &c.—I beg to call thy attention, and to solicit at the end of the season of each particular florist flower, the continuance of a list of prize flowers, such as appeared in the 3rd Number, page 63, and also a list of greenhouse and frame plants, as at page 38; these I consider valuable, as they very much facilitate our purchases and arrangements. These suggestions I think need not be published, but I send thee a query and observation on the other side, which I shall be obliged by thy inserting in an early Number.

I have not yet seen the plans of Greenhouses, Flower Gardens, &c., or the List of new and handsome Plants, promised in the prospectus. Wishing every success to the *Cabinet*,
N. S. C.
Truro, Ath Mo. 1834.

[The wishes of our respected Friend shall be complied with at an early opportunity. We beg to inform him, that we publish a Supplement, as he suggests, containing the accounts of Horticultural and Botanical Meetings, and, as far as possible, we confine it to the plan instructed.—CONDUCTOR.]

ON RAISING CARNATIONS FROM SEED.—If any of your correspondents (perhaps Mr. TYSO) would favour your readers with an Article on impregnating and raising Carnations, similar to one on the Ranunculus in this month's Magazine, it would render a considerable service to the growers of that flower.
A. B. C.

ON THE SIZES OF POTS.—As the CONDUCTOR has given us a standard relative to the size of pots, it is much to be wished in order to our understanding each other, that the standard given should be consulted. ST. PATRICK, in Vol. I. p. 37, talks of growing a Balsam (in a 5in. pot,) 5ft. high, and 10ft in circumference!!!

Query—Does INNOVATOR, when he speaks of flowering his Carnations in pots 16 to the cast, mean pots of 6 inches diameter, according to the standard in the *Floricultural Cabinet*, Vol. II. p. 44! and if so, how does he manage to support a plant 4ft in length, and what method does he practice in the layering?
CORREBIN.

ON PROPAGATING FUCHSIA COCCINEA.—I shall be much obliged if you or any of your correspondents will inform me the best manner of propagating *Fuchsia coccinea*. I have tried striking it under a glass, but have not succeeded, as with *F. virgata*, *conica*, *globosa*, &c. Also, can you inform me if these elegant plants will strike in sand, *without any other soil*? if so, will the common silver sand do!

An early answer to these questions (the first I have troubled you with), as also the last time for striking Fuchsias, will very much oblige,
May 22d, 1834.
AUGUSTUS LEWIS.

ON SOWING STOCK AND GERMAN ASTER SEED.—HEARTSEASE would feel thankful for an answer to the following questions through the *Floricultural Cabinet* :—

When is the proper time for sowing Stock seed, and what is the best method of preserving the young plant from the fly?

Will the German Aster seed grow in the open ground, or must it be sown in a hotbed?

Devizes, May 3rd, 1834.

ON THE CULTURE OF THE CARNATION.—We shall be much obliged by Mr. REVELL's promised article on the Carnation, and also the promised continuation of the article by Mr. J. PRICE on Soils; perhaps, if you have received them, you will insert them in your next valuable Magazine.

March 1st, 1834.

S. & T. C.

ON RAISING CARNATIONS, &c. FROM SEED.—Will you, or any of your correspondents, inform me what is the best method of rearing Carnations and Tulips from seeds? Also, when is the best time of the year for planting *Coronilla iberica*!

W. E. F.

P. S.—I have got a very fine collection of Botanical Plants, among which are some very scarce ones, of which I shall feel great pleasure in forwarding you some. [We should be very grateful for the favour.—COND.]

ON DAVEY'S CHAMPION, AND A DOUBLE YELLOW AURICULA.—I have lately bought an Auricula called "Davey's Champion," and will you be kind enough to inform me through your excellent Magazine, whether you think the seed worth saving, and whether it is considered a good flower? The colour of it is black with a white edge. Would you also give me a little information on raising Auriculas from seed. I have also a large sweet-scented double yellow Auricula: will you inform me whether it bears any particular name?

A SUBSCRIBER.

May 10, 1834.

ON THE PELARGONIUM AND THE OLEANDER, OR ROSE BAY.—I should be much obliged if you, or any of your numerous correspondents, would favour me with the best method of impregnating the seed of the Pelargonium to obtain new varieties, and also the most suitable time.

GERMANICUS.

Brighton, May 12, 1834.

P. S.—Does the Oleander, or Rose Bay, require a pan placed under it filled with water, and will it flower well in a room?

ON RAISING CARNATIONS AND PINKS FROM SEEDS, &c.—Some of the readers of your very useful and practical Magazine have derived a great deal of useful information as to the culture of the Pink and Carnation, from the communications of Mr. REVELL and INNOVATOR. There is one point, however, on which some information would be acceptable—on the mixing of Carnation beds. I have just brought over a packet of foreign Carnation seeds, and should be glad of any hints as to the mode of mixing the soil of the bed, and their treatment up to the time of potting.

London, March 31st.

A WELL-WISHER & CONSTANT READER.

ON SOME PRIZE AURICULAS.—I observe that Mr. GLENNY's Auriculas took the first prize yesterday (April 16,) at the Crown and Anchor, Strand, and that Mr. WILLMER, of Sunbury, was one of the Judges. Now as I happen to know that the same Mr. Willmer did actually dress Mr. Glenny's flowers, I will ask you if you think this a fair way of proceeding, and if it is usual to send a man in as judge, who previously had the preparing of the show belonging to his patron and customer? Perhaps you will give your opinion.

J. C., A SUBSCRIBER.

Camberwell, April 17, 1834.

[There can be but one opinion on the subject.—COND.]

ON DESTROYING THE GREEN-FLY, &c.—Will you, or any of your correspondents, inform me the best manner to destroy the green fly, with which every plant in my garden (in the suburbs of London) is covered. I have tried tobacco-water, which I do not find succeed. Will smoking them with a tobacco pipe cure them effectually, or only for a short time? Are hardy annuals, or perennial plants, preferable for growing on a border of my garden, which only has the sun till about ten o'clock in the morning? It is always more damp and cold than the opposite one, on which the sun shines till about five in summer, and is always the most covered with weeds. Also, which is the best time of the year for transplanting *Chrysanthemums* for flowering well the next winter? By answering these questions you will very much oblige,

WILLIAM FREDERICK.

June 5th, 1834.

ON FUCHSIAS.—You would very much oblige an ardent amateur and subscriber to your *Cabinet*, if you would give a list of all the Fuchsias known and cultivated in this country, in your July Number. The favour would be much enhanced by your adding the modes required for their propagation, and the places where they are to be procured. Do nurserymen object to sell cuttings of Fuchsias and other plants? CONVULVULUS MAJOR.

King's Road, Chelsea, June 11th, 1834.

[An Article will be given next month on the Fuchsia, &c. The request came to hand too late for the present Number.—(OND.)]

ON GREENHOUSE PLANTS, &c.—I am exceedingly pleased with your publication, and only hope you will meet with that encouragement from every lover of flowers which you so richly deserve. The plan by which you review the periodicals particularly pleases me. There is, however, one work on florist flowers by ROBERT SWEET which you have never noticed: I fear, therefore, the publication of it has been discontinued. [It has.—(OND.)] Your lists, also, of choice flowers were very valuable, particularly so to subscribers who, like myself, live at a great distance from London, and have no chance of seeing new flowers in bloom. You must give us a few more such selection in the second volume of your work; and as my garden (like many of your friends in this neighbourhood) is small, a cross or star to denote the finest of the fine would be very desirable. I should be glad, for instance, if some experienced person would give a list of twelve of the best hardy Ericas; twelve of the best greenhouse Ericas; twelve or more choice herbaceous plants that might easily be procured; and, above all, a collection of hardy greenhouse plants that would flower successively the whole year. Mine is a very small greenhouse, only fifteen feet long by nine feet wide; and as I am about to remove it soon, I wish to know whether a high or low greenhouse is the best for plants, and whether I must exclude vines *entirely* if I wish to excel in flowers. I am very much surprised that some of the London nurserymen do not give catalogues of their plants in your publication—not like YOUNG'S Calceolarias, without prices affixed; but similar to the Dahlia catalogues, so many of which you have advertised. I am well persuaded they would find it answer, and that they would considerably increase the sale of their plants.

Bodmin, May 2, 1834.

ANSWERS.

ON EPACRIS GRANDIFLORA, &c.—In reading over the March Number of the *Floricultural Cabinet* for 1834, I see, under the head "Queries," a correspondent wishes for information on the following genus of plants; if my mite of knowledge will be of any service to him, or any one similarly situated, and you consider it worth occupying a space in your amusing Magazine, you are at liberty to publish it in any shape you please.

Epacris grandiflora, propagation of, from January to March.—1st. Take a clean 48-sized pot, put a large crock in the bottom, then add a quantity of small crocks, or coarse cinders, until the pot is half full; upon this put a layer of moss beat down firm, fill up with fine sifted peat mould, and white silver sand; an equal quantity mixed together, pressing it down firm to within a quarter of an inch of the rim of the pot; fill up with clean sifted silver sand, passing a stick over the pot to make the surface level; give a slight watering with a fine rose pot or syringe; take a bell glass, press it lightly on the sand so as to leave the circumference; then select your cuttings from last year's ripened wood, cut the tops of the shoots about one inch long, strip the cutting half its length of leaves, lay it on your thumb nail, with a sharp knife cut the base at a joint quite smooth, and when a sufficient quantity to fill the pot is prepared, insert the cuttings as far as stripped, keeping the tallest, if any, in the centre; give a good watering to settle the sand about them; let them stand until dry; cover with the bell glass, and plunge the pot in a cold frame facing north; keep the light on, protecting from frost with covering, or, for want of a frame, place the pot on a north shelf in the greenhouse, but by no means in the sun; wipe the glass once a day; water

according to judgment, keeping them rather dry than moist. When the cuttings begin to grow, take the glass off occasionally half an hour, and increase with air as the cuttings increase in growth, until it may be left off altogether; then remove them to the greenhouse, pot them off the following March into thumb pots, well drained, using peat mould and sand in equal quantities; place them in a cold frame until rooted; during summer, top any long shoot, and by the autumn you will have snug bushy plants, producing in spring beautiful pendant blossoms.

Correa speciosa, propagation of.—May be increased by cuttings potted early in February or March, but the quickest method is by inarching upon *Correa alba*, any time from January to July, and if the plants can have the advantage of a stove heat, the better, as the inarched shoot will have united in the course of eight or ten weeks; it may then be cut off, care being taken not to disturb the shoot inarched, but by no means head off the stock at present; place them in a cold frame, keep them close and shade for a fortnight; expose them to the air by degrees, and when the inarched shoot as recovered begins to grow again, then head off the stock; loosen the ligature that was bound round the plant, otherwise it will cut; bind a fresh piece of bass loosely round the plant at the union, tie the plant up to a neat stick in case of accident, remove the plants to an airy part of the greenhouse, attend to water, and in the spring you will have a bushy plant covered with handsome blossoms. I have not mentioned the mode of inarching, thinking it not necessary; as almost all persons having any knowledge of plants must know the process.

Oenothera may be propagated three different ways.—1st. All the perennial species may either be divided at the root, or—2ndly. Pieces of the strong roots cut one or two inches long, planted round a pot, will form eyes and make plants; some species may be layered, such as *missouriensis*, *taraxacifolia*, *macrocarpa*, &c.—3rdly. The biennial and annual species may be raised from seeds.

J. MILES can purchase any quantity of double white *Anemone*, if he means *Anemone nemorosa plena alba*, and *Trillium sessile*, by applying to Mr. JOHN CREE, Nurseryman, Addestone, near Chertsey, Surrey.

If this should meet with your approbation, and no other abler hand should take up the pen, I will give MYRTLEA, through the medium of your *Cabinet*, a little instruction as far as I know, how to flower Myrtles in abundance, likewise a few hints on the culture of *Agapanthus umbellatus*. Wish me every success to the *Floricultural Cabinet*, &c. J. W. D.

Great Bookham, Surrey, April 23, 1834.

ON THE CULTURE OF THE MYRTLE.—I am happy to state, that after patience and perseverance I have succeeded in getting all the Numbers of the *Floricultural Cabinet*, and am glad to hear it greatly commended by all my senior professors of Floriculture who have seen it, and I have no doubt but that it will have a much greater circulation in this part of the country if you have more in print. I was obliged to wait till the third edition, which shews the rapid progress it is making, and I hope you will continue your editions for the benefit of my fellow Floriculturists, as many more wish to possess it, and all agree that it is the most useful and cheap publication now printed; it affords me great amusement and knowledge. I beg to inform MYRTLEA that I have a plant of Myrtle planted in common garden loam at the bottom of a south wall, not trained, which has stood the winter for year past, sometimes matted, and sometimes not; but never flowers well if it is not matted up in the winter; it has been broken by accident once, but is now about three feet high, five or six in circumference, and last year had hundreds of blossoms; cuttings put in a pot in autumn and kept in a greenhouse during winter, grow well in the spring. As to *Heliotropes*, I take off cuttings in autumn, and afterwards keep them in the greenhouse or cold pit during winter, and plant them in beds in summer, where they produce their fragrant blossoms in abundance.

YOUNG FLORA.

[We have had, for the last four months, a constant supply with our Publishers of all the Numbers published of the *Cabinet*. If our friends do not receive the Numbers on application, we think the fault will be found to rest with the Bookseller.—CONDUCTOR.]

ON THE CULTURE OF AGAPANTHUS UMBELLATUS.—A Subscriber wished to know the best method of keeping and treating the *Agapanthus umbellatus*. Being advised by a professional man to plant them in water, which he considered their natural element, I tried it, but it did not answer my expectations. I have several plants which flower when planted in large pots in garden mould, which have little attention, but well supplied with water in summer, and placed in a cold frame in winter; they also flower planted in a south border, and during winter a hand glass placed over them: but the most successful mode of culture is what I desire to know.

Waltham Cross, Herts.

YOUNG FLORA.

ON THE SPINDLING OF THE CARNATION.—The sulphate of lime used, is the stone from which plaster of Paris is made by calcination; it is by no means so difficult to powder as IGNORAMUS imagines; a boy with a broad faced hammer would powder a barrowful in a day to the consistence of coarse sand, which is fine enough. It may be bought of all respectable plasterers, and shipmasters trading to France or Arabia. C. N. is informed that the practice I adopt with such Carnations as spindle up in winter, is to break off the flower stem about a fortnight before planting them to flower. The grass then upon the plant will immediately begin to grow. When they have made three or four joints, cut them all off but one (the strongest) between the third and fourth joint; these stumps will throw out plenty of grass for layering; the one left entire may be trained up to flower. I am seldom troubled with this complaint, except in fresh bought flowers, which I attribute to my plan of layering, viz. I divide my flowers into three classes, early, middle, and late flowering; the latter, such as Spitfire, I layer in the middle of this month—the middle class in July—and the early, the second week in August; by pursuing this plan, my flowers are all in bloom at the same time. When layers are removed from the old plant, be careful to cut them to a level with the nib from which they have struck root; and after they have been potted a fortnight, they will have struck from this part also, which renders them in no way inferior to pipings. Two year-old *Auriculas* are best grown in 24's; and I should consider 12's large enough for any plant. C. N. keeps his compost properly.

June 6th.

INNOVATOR.

REMARKS.

ON GLADIOLUS PSITTACINUS.—I procured last spring three roots of the *Gladiolus psittacina*, each the size of a large nutmeg, these I planted in the open border, in a compost of leaf mould and rotten dung. Only one of the bulbs produced a flower, which was a very superb one indeed, having twelve blossoms on one stalk; a more beautiful *Gladiolus* I never beheld.

I dug up the roots in the fall, and instead of the three roots which I planted in the spring, I found five, two of the original roots having divided; each of these roots was as large as a middling sized onion; but I was surprized by finding what I considered an extraordinary number of bulbs adhering to the roots, eight of them the size of a hazel nut, as many more as large as a pea, and above SIX HUNDRED the size of grains of wheat.

I do not know whether there is any thing very extraordinary in this result, though I cannot but anticipate, that in a very few years this magnificent plant (roots of which three or four years ago were selling at 7s. each) will, from its abundant increase, become the ornament of every cottage garden.

May 20th, 1834.

T. W.

ON BUDDING THE WILD ROSES GROWING IN HEDGES.—Last year I budded a number of the garden variety of Roses, upon the wild ones growing in my hedge rows. I selected different shades of colour in the kinds, and such as are highly fragrant. They are now in blooming, and to view the variety of shades in colour, and to inhale the delightful odoriferous scent they impart, is most gratifying. I suggest to the numerous readers of the





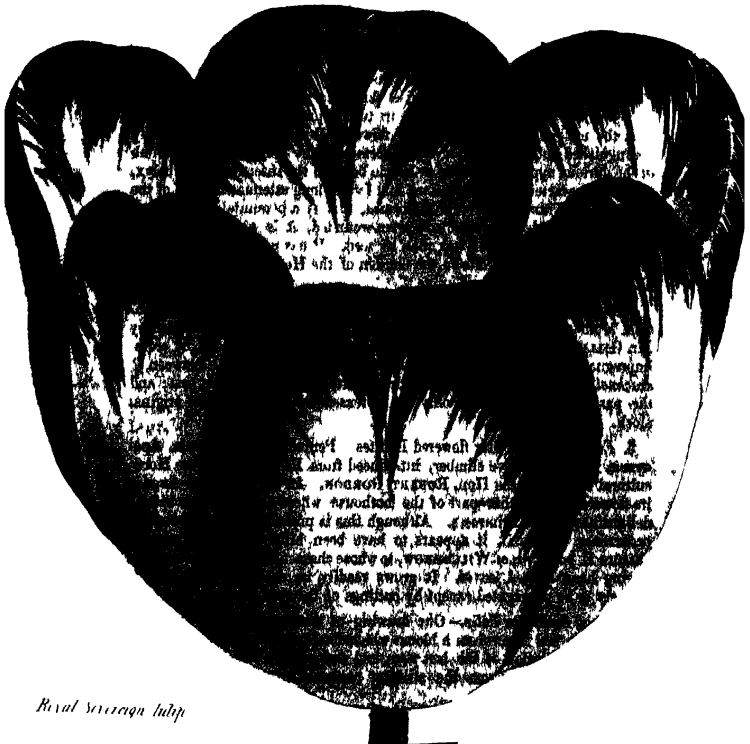
Sabra dulcistrata A.

Lymnaea floricollis

Chastolium croceum

Calceolaria arachnoidea
var. fulgens

Folites et floris



Rival Serracaq lupi

Cabinets attention to this mode of cultivating the various kinds of Roses, assured, if practised, it will afford much pleasing gratification, and increase the beauties of Flora.

M. SAUL.

Lancaster, June 7th.

REFERENCES TO PLATES.

1. *Burnard's Formosa Polyanthus*.—A seedling raised in the garden of J. P. BURNARD, Esq., Formosa Cottage, Holloway, near London. An Article upon Polyanthuses will appear soon, when this variety will be further noticed.

2. *Ipomea Horsfalliæ*, Mrs. HORSFALL'S Ipomea. Pentandria, Monogynia. Convolvulaceæ. Seeds of this very beautiful tender evergreen were received by CHARLES HORSFALL, Esq., either from the East Indies or Africa, and raised by Mr. EVANS, the gardener, at Everton. He has it under the name of *I. pentaphylla* of CAVANILLES (*I. Cavanillesu*, ROEM. et SCHULTES) which is still more at variance with our species. *I. Horsfalliæ*, in its inflorescence and blossoms, bears the closest affinity with *I. paniculata*, BR. (*Convolvulus*, L.); but their foliage is so different, that the two plants never can be confounded—the former having compound and quinate leaves, while those of the latter are simply lobed. The flowers appear to fall off without bearing seed, probably owing to the season of the year (December and January) at which they are produced.

3. *Salvia dolichostachya*,—(See page 101 of the present Volume.)

4. *Eschscholtzia crocea*, Saffron coloured Eschscholtzia. Polyandria, Tetragynia. Papaveraceæ. In general habit, foliage, and size of the flower, this new species of Eschscholtzia closely resembles *E. Californica*, introduced by Mr. DOUGLAS on his expedition, and now so generally admitted to be one of the most beautiful additions to our hardy ornamental plants. The present species, however, promises fair to surpass even that in the rich orange colour of the petals. It appears to be equally hardy, and, judging from the experience of a season, to flower still more freely. It is chiefly distinguished botanically from *E. Californica* by the widely expanded limb of the curious appendage of the peduncle beneath the insertion of the calyx, which is characteristic of the genus, and by the long attenuated point of the calyx (Hort. Trans.) Like *E. Californica*, this is a perennial; but in consequence of its bleeding copiously when wounded, it is not likely to bear propagation in any other way than by seed. It has not hitherto produced any seed. The two plants in the Garden of the Horticultural Society are all that at present exist in Europe.

5. *Calceolaria arachnoidea*, VAR. *refulgens*; Refulgent Slipperwort. Dianthia, Monogynia. Scrophularinæ. This showy production was raised by Mr. GILLEN, gardener to Mr. M'INTOSH, at the East India Docks, by cross-impregnation with two of the numerous varieties, originated between *C. arachnoidea* and *corymbosa*. A light rich earth suits these plants best, and the particular varieties can only be increased by slips from the original stock.

6. *Echites stellaris*, Star-flowered Echites. Pentandria, Monogynia. Apocynæ. A tender stove climber, introduced from Rio Janeiro to the Horticultural Society by the Hon. ROBERT GORDON. In the month of August, its flowers perfume that part of the hothouse where it is placed with a delightful smell of Primroses. Although this is probably not of uncommon occurrence in Brazil, it appears to have been hitherto undescribed; the obscure *E. pubescens* of WILDENOW, to whose character it nearly approaches, having heart-shaped leaves. It grows readily in peat and loam, but is scarcely to be propagated except by cuttings of the root.

7. *Royal Sovereign Tulip*.—Our drawing of this very beautiful and valuable Bizarre was taken from a bloom which obtained the *premier prize* at the Stockport Exhibition of the last year, and was grown by the Rev. M. GILPIN, of that town. From the striking resemblance it bears to *Strong's*

Charles X. and Page's George IV., it has been considered by many connoisseurs to be the same flower. This, however, is a mistake: for it broke into colour on Mr. PEARSON'S bed *several years* previous to the introduction of those two Tulips; and, from its deep broad freaked, good yellow, and, above all, its not being inclined to sport, is decidedly a superior flower, and is held in the highest estimation by the Nottinghamshire and Lancashire florists.

FLORICULTURAL CALENDAR FOR JULY.

STOVE PLANTS.—Similar care is required this month as given for the two previous months, taking care to give large portions of fresh air daily, with frequent waterings, steaming at night, cleaning, propagating, &c. &c.

GREENHOUSE PLANTS.—Oranges, Lemons, &c. will require particular attention in dry weather, in order to supply them with water whenever they require it: those pots or tubs that have not lately been top dressed with fresh earth, should now be done, by removing the old soil to the depth of three or four inches, and replacing it with new; it will be of great service in forwarding the growth of the new set fruit, and also greatly invigorate the plants. About the middle or latter end of the month, begin to bud them upon stocks raised from the kernels of their fruit, that was sown in the spring of three years preceding; those plants that have too great a crop of fruit upon them, should now be attentively thinned. In dry weather, the plants belonging to this department in general, should be duly and daily supplied with water, as the earth in the pots will now dry very fast, and require often to be moistened. Those plants that may now require larger pots, may still be removed into such, using proper compost. All the plants should be kept clear from decayed leaves, &c., and the surface of the pots from weeds, loose litter, &c. &c. Still continue to propagate by cuttings or otherwise, any required kind of plants, as before directed.

PLEASURE GROUND, FLOWER GARDEN, &c.—Those annual plants that have not yet been transplanted out, should now be done, in cloudy and showery weather, keeping as much earth to their roots as possible, and supporting those with sticks that require it. Tender annuals may now be turned out into the flower borders; they should be refreshed at least once a day with water, and if the sun is very powerful they will require to be shaded, till they have taken fresh root: those that remain to flower in pots, must be frequently supplied with water, repotting, &c., as they require it. Finish transplanting perennial and biennial plants, sown in spring. Double Sweet Williams should now be laid. Those Carnations in pots require particular attention in keeping them well supplied with water, and to support the flower stems by tying them to neat green sticks with bass;—pipings of the young shoots may still be put in; those cut at the second or third joint make the handsomest plants; they should be kept shaded from the hot sun, otherwise they will soon get scorched and dried up; they should be finished layering by the middle of the month. Pinks may still be propagated by pipings as in June. Auricula plants in pots will require a little water frequently in hot weather, taking care not to pour it on the heart of the plant; all dead leaves should be removed; if any of the plants are attacked with the green fly, they should be smoked with tobacco. Transplant seedling Auriculas and Polyanthuses, and keep them in a shady place. Pansies may still be propagated by slips of the young shoots; the seed should be sown either in pots or borders, in a shady place, and well supplied with moisture. All sorts of Roses (with the exception of the China and its varieties,) should now be budded. Many sorts of bulbous-rooted plants, as Ranunculuses, Tulips, Anemones, &c., which will now be past flowering, and their leaves decayed, should be taken up, well dried, cleaned, and the offsets separated, and put in a cool airy place, till the planting season again commences. The double scarlet Lychnis, and such like plants, should be propagated by cuttings. Geraniums may now be increased by cuttings. Dahlia cuttings will easily take root if placed in a brisk heat. Continue to cut box edgings, and hedges, where it was not done last month.

May 31st, 1834.

F. F. A.

THE
FLORICULTURAL CABINET,

AUGUST 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*A Word or two on the Culture of the Auricula.* By SNOWDROP.

It may appear unnecessary to multiply words on the culture and management of the *Auricula*, after so much has been written on the subject; but as every *Auricultist* can, perhaps, add a little to the general stock of information from his own experience, and as every one has a plan peculiar to himself, it is desirable to see different modes of treatment. With the hope, therefore, of being useful, I offer a word or two on the subject, premising that as this plant is of Alpine origin, it should, both in soil and situation, be treated as such as much as possible. And first of

Compost.—I believe that in general, except with very *green* growers, the Emmertonian composts are washed away. From experience I can say, that pure sandy loam and rotten dung, in equal proportions well incorporated, are the only ingredients necessary. I prefer cow-dung, though perhaps horse-dung is equally good; but both must be quite mould before fit for use. I am also partial to peat, in the proportion of about one-eighth of the whole. This compost I never sift, but chop up with a spade, and carefully pick over, to clear it of grubs and worms, leaving the fibres, which tend to lighten the soil, and which, by gradually rotting, continue a supply of nutriment.

Repotting.—I repot every year, reducing the ball very carefully, without injuring the fibres of the plants; and every third or fourth

year, as occasion seems to require, wash and trim the roots, and shorten the tap root. This I perform the last week in June, or the first in July, choosing showery weather, if possible, for the purpose, as I like to get the plants well established before winter. As to the autumn bloom, if the pips be picked off as soon as they can be got hold of, I never find the spring bloom injured thereby, though the contrary certainly occurs when the flower has been allowed to bloom. With regard to separating the offsets, without question early in March is the best time, for the old plant being relieved from supporting its progeny, will consequently bloom stronger, and the young plants have then time to gain strength for the next season: but I always rub off those offsets which I do not wish to preserve, when I repot; if, however, I want rooted offsets from those produced high up on the stem, I plant deeper, or earth up. I top-dress with the above compost the last week in February. After repeated trials, I am certainly unfavourably disposed toward manured water for the Auricula, it certainly having a tendency to rot the plants.

Situation.—This, in my opinion, is one of the most important points, and the most difficult to determine, in the culture of the Auricula; and more depends upon it than upon almost any thing else. Every grower must be guided by local circumstances. When I first took this plant under my care, I adhered most minutely to EMMERTON'S instructions; and so far as a southern aspect in winter, and a northern one in summer, were concerned, it did very well; but from March to the end of the blooming season, the only chance I found of doing any good was to move them about until I found out the best spot, most open and free from drafts. Indeed, during this period, I several times change both situation and elevation. Easterly and westerly winds are great evils in small gardens between walls, and from these the Auricula must be protected; for if once the pips become cupped, it is rarely they can be made to open flat afterwards. I give at all times, except during severe frost, all the air possible. In November, I put them into their winter quarters in frames, and keep them as near the glass as possible, without their actually touching it, allowing them moderate showers, if the weather proves favourable, to the end of the month. During December, January, and until the last week in February, I never allow them a drop of water,

and I find my account in it by getting fine bloom ; for when they are kept in a state of excitement during the winter, the foliage is generally fine in the spring, but the bloom is the reverse. About the last week or ten days of February, if not then frosty, I *set them to work* ; and as I like a quick growth, I water them every day, and let them have besides all the mild, moderate showers that fall, keeping on the lights as soon as the trusses appear, and on frosty nights cover up with two or three mats, and continue to do so during March and as much of April as may be cold. But by letting them have all the air possible, without a draft of wind, I prevent their being drawn up. During the March winds, I screen them with a curtain of mats at a short distance from the frame, and protect them from the sun during the bloom by an awning of white calico ; and if the sun shines very hot, I place a mat over the awning.

SNOWDROP.

ARTICLE II.—*On the Cultivation of Cactus speciosissimus.* By J. B. DENTON, Esq.

Two or three queries have appeared in the *Cabinet*, requiring information on the cultivation of that beautiful plant, *Cactus speciosissimus* ; in answer to which I beg to forward the following, for the information of “ C. C. C. C.” and “ An Amateur,” as my mode of treatment, and what I think will be found the “ proper culture of it as a greenhouse plant.”

Three years ago, having *two* strong, good-sized plants, that had always stood upon a shelf in the greenhouse during the winter, and were placed in the open air for the summer months, but had never shown blossom, I resolved to try the experiment on one of them, of reducing the shoots, which were then 18 inches long, to the length of a foot ; and these ends, after being left to dry, were struck with my Geranium cuttings, which I was just then disjoining from the plants receiving their spring pruning. It was afterwards taken from the house, and plunged in the border up to the rim of the pot, to remain till the end of August ; when it was repotted in fresh loam and lime rubbish, and carried back to its former place. I gave it no water till it showed bud in the latter end of March, from which time, as the season and blossoms ad-

vanced, the water it received was gradually increased. It ultimately produced eight beautiful flowers.—By similarly treating it last year, this plant now promises, by its appearance, to expand, within the space of a week or ten days, eleven buds, which stand prominently forward; while the fellow plant remains as heretofore, a barren specimen of the species.

These few lines are, I must beg to say, particularly addressed to those who, like myself, are amateur gardeners, and derive a pleasure from the occupation, equally salutary to the mind as the body,—and not to professors of the art, who may, by their closely wrapt and well preserved knowledge, deem the foregoing words an “essay of ignorance.”

I sincerely thank Messrs. ASHFORD and APPLEBY, for so kindly elucidating the points I requested, and you for so ably conducting a work so congenial to my taste.

J. BAILEY DENTON.

Barkway, Herts, May 16th, 1834.

ARTICLE III. — *On the Cultivation of Campanula pyramidalis.* By Mr. LADDY, Walworth.

Seeing an account in your *Cabinet* on the cultivation of *Campanula pyramidalis*, which advises slips to be taken off in the month of April, and having cultivated those plants for several years by a far different method, I thought I would trouble you with a few remarks on the method I pursue. As soon as the plants have done blooming, I immediately turn them out of their pots; the root I then break into as many pieces as I want plants; I then put five or six of the pieces into a 48-sized pot, which I about half fill with mould, then put in the pieces, and afterwards fill the pot with the mould. If I have the convenience of a frame or hand-light, after watering, I place it over them. In the spring, (about March,) I pot them singly, and so let them remain during the summer in any cool part of the garden, where they grow vigorously. On the following spring, I pot them into 24-sized pots. When I have the convenience of a light in a frame, or spare room in a greenhouse, I place them there till they have done blooming. Last season I cut a white one up this way, and I now have thirty-six strong,

healthy plants for bloom next summer. I beg to observe, that if some of the largest pieces of the roots are selected, and placed upon any slight heat, they will bloom finely the following spring, the plants making their appearance through the mould in two or three weeks; or they may be increased in the way I have been mentioning, entirely in the open air, and when strong enough for bloom, brought into the apartment of a house. I pot in any common garden soil that is light.

HENRY LADDY.

Walworth, April 14th, 1834.

ARTICLE IV.—*On the Propagation of the Carnation, Picotee, and Pink.* By GULIELMUS.

The simple and convenient method of raising the above-mentioned beautiful flowers from pipings or slips, without the aid of glass, as recorded by your valuable correspondent "Snowdrop," in the *Cabinet* for November 1833, I have practised many times with tolerable success, not losing more than one in twenty, and possess at present a number of fine healthy plants all reared in the same manner. I can, therefore, confidently recommend its adoption to those who are not skilful in piping or laying.

I take off slips from the old plants about the end of July, as long as I can get them, in order to ensure their better rooting; and either put three or four into a large pot, or in the open ground, according to convenience, in a shady situation, taking particular care to close the earth well round them, and to water them frequently in dry weather. They will take a much longer time to establish themselves than by piping or laying, and flag more, and not unfrequently appear as if they were dead, so that an impatient or inexperienced person might be tempted to pull them up; but as soon as they have become firmly rooted, they will erect their heads, and appear healthy and strong.

If you consider these remarks worthy of your notice, as tending in any wise to carry into effect the benevolent designs of your esteemed correspondent, who, I observe, in all his communications endeavours to meet the wishes, and accommodate the means, of the humble florist, they are at your service with much pleasure.

GULIELMUS.

London, 25th February, 1834.

ARTICLE V.—*On the Cultivation of Lobelias in Pots.*

By G. H.

The whole tribe of Lobelias are delightfully interesting, although the greater part of them are plants of humble growth. The species I have cultivated are *L. fulgens*, *L. splendens*, *L. cardinalis*, and *L. siphilitica*. The *L. cardinalis* has long been an esteemed flower in our gardens; the first and second species are of modern introduction; and the last species have long been cultivated in our gardens. The whole tribe are readily propagated either by seeds, suckers, or cuttings; but I prefer raising them from suckers, which I take off from the old plants in the regular way in October. Afterwards they are planted one in each small pot, and put into a cold frame till the end of January, when they are removed into a Melon or Cucumber frame, where the heat is kept up to 65 deg. of Fahrenheit by the aid of hot dung. A Pine stove, of the same temperature, will suit them equally as well as the frame, provided they are not kept too far from the glass, so as to draw them up weak, which would greatly injure them for blooming. Towards the end of February, they are shifted, with their balls as entire as possible, into pots a size larger; and early in April, they are again repotted into larger pots; and towards the end of May, they are shifted a third time;—the pots I use for this last shifting are 12's. As soon as the plants have got well established in the last-mentioned pots, they are removed into a greenhouse, in which they continue till they flower, and are hardy enough to bear the open air. When they are preparing to throw up their flowering stems, and during their growth, they are kept very moist by putting pans under the pots, and keeping them constantly filled with water. If the plants are managed as already detailed, they will begin to flower in July, and the spikes will continue to grow, and will be covered with flowers through the autumn. The compost I use consists of equal parts of yellow loam and of leaf-mould, to which is added sand equal to one-fourth of the previous composition: before used, the whole is well mixed together. Specimens cultivated in the above manner have been exhibited at various Floricultural Meetings, which have had spikes of magnificent flowers four feet in height. When the plants throw up only one spike of flowers, the end is pinched off while young, which will cause

several spikes to issue from the same roots. When stopped, they seldom attain so great a height, but are much more elegant in their appearance, the produce of flowers being considerably more than when only one spike is allowed to remain.

I have adopted various methods in order to excel in blooming this beautiful tribe; but in none have I been so successful as with the method now detailed, which I trust, if inserted, will be of some benefit to the numerous readers of the *Floricultural Cabinet*. G. H.

Downham Market, Norfolk, Feb. 13th, 1834.

ARTICLE VI.—*On the Cultivation of the Genus Cactus.*

By MR. D. PEARCE.

Being an admirer of that beautiful genus of plants, the Cactus, I now send you a paper on its cultivation, that has just come under my observation, and which, if you think proper, I shall be glad to see inserted in your Magazine.

All the species of Cactus may be treated as follows:—Pot them in loam and peat, or sandy loam, mixed with about a fourth part of lime rubbish. Always let the pots in which they are planted be as small as the plants will allow: large pots are injurious, because the roots are prevented from reaching the sides for so long a time, and the body of soil is liable to retain too much moisture every time the plant is watered. Always give a good drainage, by laying in each pot a good portion of broken potsherds,—as the least stagnation is always injurious, sometimes fatal; therefore, never allow water to stand in the pans or feeders in which the pots are sometimes placed. Water very seldom, not more than twice a week when they are flowering, and not so often at other times; give very little at a time, not more than will just moisten the soil all over, particularly if the weather is not fine and sunny. About the middle of June, turn them out of doors into a situation where they will not be exposed to winds, but perfectly open to the rays of the mid-day sun. Place them on a board or floor of any kind, to prevent the worms from entering through the bottoms of the pots. This system of exposing them in summer gives them a check which seldom fails to produce a good bloom. Whilst out of doors, they must not be allowed to receive the heavy dashing

rains; or they will suffer, perhaps die in consequence; either a boarded roof, or other shelter, must be provided for them on such occasions. Also, if the pots stand on a floor of slates or flag stones, they should be partly plunged in a little moss, as the sun, by heating the pots, sometimes burns the roots of the plants. In September, take the plants into the greenhouse, and place them in a situation where they will receive plenty of light and air during winter. Early in the spring, remove them to the stove in succession, as they are required to bloom. Most of the species will flower very fine, without being placed out of doors at all; but by placing them out as above, the flowers will be much finer, and more abundant, than when grown regularly in the house; they may be increased by cuttings, seeds, and grafting.

By Cuttings.—Take off the cuttings at the length required, and lay them on a shelf in the greenhouse, to dry and heal the wounds. Let them remain on the shelf until they begin to have a shrivelled appearance—say a week or fortnight; then pot them in small pots in the same compost as recommended for the old plants; set them on a shelf as near the glass as convenient, and be particularly cautious not to overwater them.

By Seed.—Sow the seed in the wet state, immediately after being gathered from the plant, and rubbed out of the husk. For this purpose, fill a pot with a mixture of equal parts of peat earth and sand; cover it lightly, and plunge the pots in a hotbed: if the seed be good, it will make its appearance in a month afterwards.

By Grafting.—The operation of grafting is very simple, merely requiring an incision to be made, and fitting in it a fresh cutting of another kind, rubbing a little clay over the wound to keep out the air. The union is soon effected, and the new branch grows freely.

April 14th, 1834.

D. PEARCE.

ARTICLE VII.—A Description of Twenty-six Species and Varieties of Fuchsias; with Particulars of the Method of Cultivation, &c. By Mr. W. BARRATT, Nurseryman, Wakefield.

* In perusing your truly interesting work, the *Floricultural Cabinet*, I observe amongst your very numerous Correspondents, that

two (if not more) are desirous of obtaining some information respecting the number of kinds, propagation, and subsequent culture of that very desirable, showy, and much admired genus of plants—the Fuchsia. Being an ardent admirer of them, and having in cultivation the following sorts, which have grown very satisfactorily, I am induced to send you the following remarks on the description of each kind, and the mode of treatment I have pursued with them.

1, *lycioides*.—Propagated by cuttings of young wood, inserted in pots, and placed in a hot-bed frame; care must be taken to prevent it going off by damp, as it is rather succulent. It flowers freely when grown in large pots in the open air during summer, but requires the greenhouse protection in winter.

2, *coccinea*.—The old scarlet, so well known, and cultivated so successfully in the open ground, as well as in pots, that it requires no remarks in this place.

3, *virgata*.—A variety of No. 2; it grows with an innumerable number of twigs, which in summer are filled with a vast profusion of flowers; the flowers are rather larger than those of No. 2.

4, *gracilis*.—A slender twigged kind, grows very tall; the flowers are large and hang very pendant. This kind flourishes well either in large pots or the open ground, but requires a rich soil.

5, *gracilis erecta*.—A fine, upright, growing kind, flowers similar to No. 4; it is very suitable for training with a single stem.

6, *gracilis tenella*.—Produces long flowers, on slender twigs.—The length of the flowers and footstalks render this kind a very graceful object, and well merits cultivation.

7, *gracilis multiflora*.—The foliage is of a very glaucous hue; the flowers are middle sized, of a blush red, the lateral branches grow horizontal, and are very firm; the plant blooms very freely. This kind flourishes well in the open border.

8, *Thymifolia*.—The leaves are orbicular shaped; the flowers are produced in abundance, but rather hidden in the foliage; the flowers, in an infant state, are of a flesh colour, but change to a dark chocolate, they are of a small size. It is well deserving of culture in the open border, where it flourishes during summer, and is very pretty, but does not do so well in pots.

9, *Baxterii*.—A free growing kind, and will bloom when the plant is very small, but when it is planted in the open ground, and

attains three or four years' growth, it is a most brilliant shrub ; the flowers are of the shape of *F. globosa*, but are much larger, and of a finer colour. This kind will stand the winter well, and does not die down or suffer so readily as most other kinds do.

10, *excorticata*.—The leaves are very broad ; it is a shy bloomer if planted in the open ground, but if kept in a greenhouse in a pot, it will succeed tolerably well ; the flowers are of a bluish grey colour.

11, *speciosa*.—This kind is most like No. 3 ; the flowers are of a fine deep red, and long ; it will flourish well either in pots, or the open ground.

12, *hybrida*.—A very erect growing plant, having pale red flowers ; it will do well in the open border.

13, *Thompsoniana*.—This is a very fine variety ; the plant grows erect, with numerous lateral twigs, producing flowers in great abundance ; the corolla (centre portion of the flower, the outer part, red, being the calyx) is not so deep a violet purple as most other kinds are.

14, *arborescens*.—An upright grower, the foliage large and very showy. The plant produces one large branched tuft of flowers, at the extremity of a shoot, sometimes a moderate number of such will be produced upon a plant ; the flowers are small, and of a pale colour. It grows best in a pot kept in the greenhouse.

15, *conica*.—A very strong growing plant, and flowers freely ; the flowers are short and bulky, of a lighter red than either *virgata* or *gracilis*.

16, *globosa*.—A very splendid kind, a most profuse flowerer ; very small plants will bloom, even when but two or three inches high ; the flowers are of a globular, or balloon shape, before they wholly expand, of a very bright red colour. The plant will flourish either in the open border, or in a pot, and continue in bloom all the summer. It is decidedly the best kind for growing in rooms.

17, *lucidum*.—This kind has a leaf like a *Lauristinus*. It has not yet bloomed with me.

18, *bacillaris*.—Very much resembles No. 17, only is a stronger grower ; the flowers are of a light red or rosy colour.

19, *microphilla*.—The leaf is very small, as is the flower, but the plant is a most abundant bloomer. The plant does very well in the open border, where the flowers are produced much larger than when grown in a pot.

20, *Port Antonia*.—A very dwarf growing kind, having very slender twigs; it has not yet flowered with me.

21, *floribunda*.—In growth and appearance the plant resembles No. 29, but it flowers very freely either in the open ground or in a pot.

22, *multiflora*.—Very distinct from No. 21, having a larger leaf, in shape something like a small holly leaf; the flowers are of a light red; the calyx is reflexed.

23, *longiflora*.—The individual who raised this variety, states that the flower is six inches long; but it not having yet bloomed with me, I am not able to confirm the statement, though the stock of plants I possess of it grow very freely.

24, *macrostemma*.—This kind rather resembles *conica*, but it is not so stunted in its growth; it is a most abundant bloomer, and when trained to a single stem several feet high, having lateral branches, it becomes a splendid plant; the flowers are of a bright red colour.

25, *adolphina*.—A stiff growing plant, with long narrow leaves; the flowers are large, and the corolla of a fine deep violet purple; it blooms moderately free.

26, *elegans*.—This distinct and handsome plant is perfectly hardy, and flowers abundantly in the open border.

The above descriptions are from my own observations and practice. The tribe of plants is one much admired, and much in demand. I uniformly have a stock on hand of one thousand plants, some of which are near six feet high, grown in pots. I find very little difficulty in propagating the various kinds; they will not all bear the same mode of treatment, but the best and easiest methods I have found are as follows:—

About the middle of August, from plants Nos. 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 17, 18, 19, 24, and 26, I take the cuttings, about three inches long, from plants growing in beds. Having cut each cutting close off under a joint with a sharp knife, I dress off the leaves from about one half the length of the cutting, being careful not to wound the bark in the least degree. I then plant them in fine soil and sand, in the open ground, choosing a shady situation; having inserted them, I water them freely, in order to settle the soil properly round the base of each cutting. As soon as the wet is dried from the leaves, I place hand glasses over the cuttings; I

repeat the watering when required, taking care to let the foliage dry before again placing the hand glass over them.

In about six weeks from putting off the cuttings, I find they have struck root, and are ready for potting. I pot them into sixties, and place them in a cold frame, keeping it closed for about a fortnight, shading when required. I then gradually inure them to the open air. During winter, I let them remain in the frame, sliding the lights down in the day, and closing them at night.

These sixteen kinds of Fuchsias I find tolerably hardy, if planted in the open air, having a deep, light, rich soil. The strong branches are tied up in winter, and protected with straw. At the spring season the branches shoot forth vigorously; they are then thinned out to three or four of the strongest. If the bed, or border, where the plant is, be covered four or six inches deep with mulch, as fern, &c. the plants being cut down to within a few inches of the ground, they shoot freely in the spring.

The kinds Nos. 10 and 14 require the same mode of treatment in propagation as No. 1; they grow freely in the open border during summer, but require being planted in the greenhouse in winter.

The kinds Nos. 16, 20, 21, 23, and 25, I find propagate best when cuttings are taken off in April or May, inserted in pots, and covered close with bell glasses. I place them to strike in a moderate hotbed; they are, in other respects, treated as the other kinds.

GENERAL CULTURE.—Those plants I cultivate in pots I train up with a single stem, from one to seven feet high, stopping them at any desired height, having them grown in a good rich soil; they produce numerous lateral shoots, which never fail to bloom profusely. I keep the plants in a cool greenhouse in winter, and prune them to a single stem in spring, and re-pot when the plants have begun to push shoots, and not before.

The sixteen hardiest kinds, enumerated above, are in open beds, and are either strawed up, or mulched during winter; and in the spring, I add the other, tenderer kinds, taking these latter up, and potting them before winter sets in.

I find all the kinds to flourish in a rich soil, having a portion of sand and peat mixed with it. Those cultivated in pots require well draining.

One of your Correspondents, CONVULVULUS MAJOR, enquires—
 “Do Nurserymen object to sell cuttings of the Fuchsia, &c.?” I
 ask, also, who would purchase cuttings when established plants of
 nearly the whole tribe of Fuchsias are only charged at from 6d. to
 1s. per plant?

WILLIAM BARRATT.

Wakefield Nursery, July 3d, 1834.

ARTICLE VIII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
 By ST. PATRICK.

(CONTINUED FROM PAGE 156.)

| NAMES. | DESCRIPTION. |
|---|--|
| 583 <i>Quatre saisons sans epines</i> | Fine pale blush. |
| 584 <i>Queen of the Pinks</i> | Curled deep pink. |
| 585 ———— <i>Roses</i> | Gay rose-colour. |
| 586 ———— <i>Violets</i> | Fine purple blue |
| 587 <i>Radians</i> | Pale red. |
| 588 <i>Ranunculiflora</i> | Small compact bright pink |
| 589 <i>Retorm</i> | Pink and lilac mottled. |
| 590 <i>Reine Clopâtre</i> | Changeable scarlet. |
| 591 ———— <i>des Blanches</i> | Very fine white. |
| 592 ———— <i>d’Espagne</i> | Deep pink. |
| 593 ———— <i>des Roses</i> | Crimson. |
| 594 <i>Renoncule</i> | Bright blush. |
| 595 <i>Robinella</i> | Large red. |
| 596 <i>Roi d’Angleterre</i> | Red. |
| 597 ———— <i>des Feux</i> | Fine deep crimson |
| 598 ———— <i>de France</i> | Deep red. |
| 599 ———— <i>des Français</i> | Purple. |
| 600 ———— <i>de Rome</i> | Deep red. |
| 601 ———— <i>des pays bas</i> | Large fine bright red |
| 602 <i>Rosa flos</i> | Scarlet. |
| 603 <i>Rose bizarre</i> | Curious white and pink speckled semi- double. |
| 604 ———— <i>Caroline</i> | Deep rose. |
| 605 ———— <i>de meaux</i> | Fine small pale rose. |
| 606 ———— <i>Maria</i> | Light rosy blue. |
| 607 ———— <i>Matilda</i> | Fine light crimson. |
| 608 ———— <i>noir</i> | Dark crimson. |
| 609 ———— <i>sceptre</i> | Curious pink. |
| 610 <i>Rosetta</i> | Beautiful globe light crimson |
| 611 ———— <i>minor</i> | Small pale rose. |
| 612 ———— <i>superb</i> | Fine crimson. |
| 613 <i>Rouge admirable</i> | Fine scarlet crimson. |
| 614 ———— <i>agrecable</i> | New, fine red. |
| 615 ———— <i>formidable</i> | Beautiful red. |
| 616 ———— <i>luisant</i> | Pinkish red. |
| 617 ———— <i>nouveau</i> | Large fine light red. |
| 618 ———— <i>varie</i> | Fine curled bright red, |
| 619 ———— <i>vif</i> | Crimson and blush. |
| 620 <i>Royale Crimson</i> | Very fine. |
| 621 ———— <i>Purple</i> | Large and fine. |

| | NAMES. | DESCRIPTION. |
|-----|---------------------|-------------------------------|
| 622 | Royal Grandis | Small pale blush. |
| 623 | —— Mantle | Fine bright blush. |
| 624 | —— Province | Large fine curled deep blush. |
| 625 | Rubiflora..... | Bright red. |
| 626 | Rubrispina | Large fine red. |

(TO BE CONTINUED.)

PART II.

EXTRACTS.

Plants figured in the following Periodicals for July :—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured ; 3s. plain.

1. *Epidendrum bicornutum*, Two-horned Epidendrum. Class, Gynandria ; order, Monandria. Natural order, Leguminosæ. This charming orchideous plant is a native of Trinidad, and was introduced to the stoves of Europe by MESSRS. SHEPHERD, of Liverpool. It was flowered by Mr. COOPER, of Wentworth Gardens, in April last : the flowers are large, white, and highly fragrant, smelling like those of the Persian Iris.

2. *Verbena chamædrifolia*, Scarlet flowered Vervain. Didynamia, Angiospermia. Verbenaceæ. *Synonyms*, *Verbena veronicifolia*, V. Melindres, Erinus Peruvianus. No plant with which we are acquainted exhibits flowers of so brilliant and dazzling a scarlet as the present : and although a native of the Banda Orientale, the Plata, and the whole of the Pampas of Buenos Ayres, as far as the provinces of Cordova and St. Luis, it is found to flourish in the open air with us, and to bear our moderate winters unharmed. It should, however, as we may judge from the character of the soil in its native country, and indeed from what we know of the habit of almost the whole genus, have its roots well drained. It is then, too, better able to repel the effects of our severer frosts. It flowers during the whole summer, and if planted in patches of considerable size, or beds, it is impossible to conceive the splendour of its appearance without seeing it.

3. *Trachymene lanceolata*, Lance-leaved Trachymene. Pentandria, Digenia. Umbellifera. *Syn.* *Azorella lanceolata*. A native of Port Jackson, where it inhabits dry, barren, rocky situations. "With us," Mr. ALLAN CUNNINGHAM writes from Kew, "it is a hardy greenhouse plant, and was first introduced to our culture in the King's Gardens, from a solitary individual springing up in a box of Orchidæ received from New South Wales in 1825. In that collection, it makes a variety among other compatriots ; where, although it belongs to a family possessing few external attractions to the horticulturist, it nevertheless recommends itself to the care of the cultivator, not less by the freedom of its growth, than by the ready disposition it exhibits to produce its ample umbels of flowers at various seasons." The petals are five, spreading, white, elliptical, entire. *Trachymene*, from the Greek *trachus*, rough ; and *mene*, a membrane,—on account of the tuberculated coat of the fruit.

4. *Ribes sanguineum*, Red-flowered Currant. Pentandria, Monogynia. Grossulariæ. *Syn.* *Ribes malvaceum*. Few, if any, of the numerous interesting and hardy plants introduced to our gardens by Mr. DOUGLAS, from

the north-west coast of America, are more truly deserving of cultivation, and of a place in our borders and in our shrubberies, than the present species. Its original discoverer was Mr. MENZIES, and it has since been gathered by Mr. DOUGLAS, by Messrs. LEWIS and CLARKE, and by Dr. SCOLLER, in countries extending from lat. 48°, in California to 52° N. Most of the species of this genus hitherto known to us, recommend themselves by the excellence of their fruit; their flowers being insignificant, both as to size and colour:—here we have a species remarkable for the fine purplish red of the numerous clusters of flowers, and the delicate green of the copiously veined foliage. But in proportion to the beauty of the flowers, in this instance, is the worthlessness of the fruit, which, though it has not, that I am aware, been produced in this country, is described by Mr. DOUGLAS as “turbinate, brownish black, bitter, having a tough, leathery, thick skin, with numerous minute, angular seeds, adhering together by a small portion of limpid, viscid mucus, and completely destitute of the pulpy substance common to most species of the tribe.” The whole plant possesses the peculiar fragrance of our Black Currant (*Ribes nigrum*). It is easily increased by cuttings, thriving well even in the west of Scotland; and in the early spring, before the foliage appears, it is rendered conspicuous by the copious racemes of flowers, which last till the full expansion of the leaves.

5. *Mimulus luteus*, VAR. *variegatus*, Yellow Chilean Monkey-flower, VAR. *Didynamia*, Angiospermiæ. Scrophulariæ. This is a very beautiful plant, quite hardy, and deserving a place in every garden, flowering as it does almost the whole summer through. [See Vol. I. plate 9.]

6. *Acacia elongata*, Slender curved leaved Acacia. Polygamia, Monœcia. Leguminosæ. This slender and graceful species of Acacia is frequent on the Blue Mountains of New South Wales, and it also inhabits rocky hills in the interior to the westward of Port Jackson, where it was originally discovered during the first expedition of Mr. OXLEY on the Lachlan river, in 1817; but was not introduced to the English gardens till 1823, when plants were raised at Kew from seeds sent by Mr. ALLAN CUNNINGHAM

7. *Acacia umbrosa*, Shady Acacia. Introduced in 1823 by Mr. A. CUNNINGHAM. “It delights in dry shady woods in New South Wales, in the mountainous districts on the coast; at Illawarra, and elsewhere.” It flowers in the spring, and its blossoms are powerfully fragrant.

Edward's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured; 3s. plain.

1. *Rhododendron arboreum*, VAR. *album*, White Tree Rhododendron. The previously raised varieties are, Scarlet and Rose. Decandria, Monogynia. Ericæ. Never did we behold any flower more perfectly lovely than was this, when received from the conservatory of W. WELLS, Esq., Redleaf, Tunbridge, Kent, in February last. Its leaves of the richest and deepest green, mellowed by the warm tone of their under surface—its large clusters of bell-shaped flowers hanging loosely, yet compactly, by their slender stalks—and the half-transparent snowy corollas, without a stain or a spot, save what Nature had given them to render their whiteness the more pure and brilliant,—formed together an effect which few objects could rival, and none surpass. It far surpasses the other varieties. The only way to treat the kinds successfully in this country, is as hardy conservatory plants. Rhododendron, from *rhodo*, rose; and *dendron*, a tree.

2. *Triteleia laxa*, Loose-flowering. Hexandria, Monogynia. Asphodelæ. Mr. BENTHAM (*Hort. Trans.* Vol. I. n. s. page 413) remarks, that this is “a very handsome plant, the scape of which is from a foot to eighteen inches high. Its flowers are about an inch across, of a deep blue colour; they grow in a lax umbel. It seeds freely, and will soon be common.” It is easy

to cultivate, and will grow in any common garden soil, but prefers a mixture of peat, loam, and sand; is perfectly hardy; if allowed to remain, will propagate itself by offsets as well as by seeds. It blooms in June and July, having about twenty flowers in an umbel. *Triteleia*, from *treis*, three, and *teleios*, complete,—in allusion to the perfectly ternary arrangement of its parts.

3. *Garrya elliptica*, Elliptic-leaved. Diœcia, Tetrœndria. Garryaceæ. A hardy evergreen shrub, native of Northern California, where it was discovered by Mr. DOUGLAS. It was introduced in 1828, and a plant flowered for the first time in October last, in the Garden of the London Horticultural Society. In appearance it is very similar to a *Viburnum*, and, like that genus, is readily increased by layers. It prefers a loamy soil. This plant appears to represent a natural order altogether distinct from any previously known. The flowers are in long pendulous amentums, of a pale green colour. Altogether it is a very pretty shrub. *Garrya*, named by Mr. DOUGLAS in compliment to NICHOLAS GARRY, Esq., Secretary of the Hudson's Bay Company.

4. *Geodorum fuscatum*, Painted flowered. Gynœndria, Monœndria. Orchideæ. A single plant of this new species of *Geodorum* sent to the London Horticultural Society from Ceylon by Mr. WATSON, in 1832, flowered in the Chiswick Garden last July. It thrives in a hot damp stove, but requires to be rested after its leaves have withered. The flowers are produced in a pendulous tuft of ten or more together, compact; they are of a rose colour outside striped with white, about half an inch across; the inside of the flower is white, striped with red. *Geodorum*, from *ge*, the earth; and *doron*, a gift.

5. *Spharostema propinquum*, Small-flowered. Diœcia, Polyœndria. Anonaceæ. *Synonym*, *Kadsura propinqua*. A hothouse climber, found by Dr. WALLICH, in Nepal, on Mount Sheopore, and on the hills about Sankoo. It flowered last July in the Horticultural Society's Garden at Chiswick. The flowers are yellow and brown, about an inch across, produced singly at each leaf, or joint of the shoots; they are succeeded by long pendulous shoots of scarlet berries. *Spharostema*, so named from *sphœira*, a globe; and *stema*, a stamen,—in allusion to the structure of the male flowers.

6. *Lupinus densiflorus*, Dense-flowered. Diœdrelphia, Decœndria. Leguminosæ. Raised in the Garden of the Horticultural Society from seeds sent from California by Mr. DOUGLAS. The flowers, which grow in distinct whorls, are white, delicately stained with pink; they are also a little speckled at the base of the vexillum. The stem does not grow above six or seven inches high. It is a hardy annual, but rare, hitherto producing few seeds. *Lupinus*, from *lupus*, a wolf,—in allusion to the exhausting habit of the plant.

7. *Yucca superba*, Superb Adam's Needle. Hexœndria, Monogynia. Liliaceæ. *Synonym*, *Yucca gloriosa*. It has bloomed with the Hon. and Rev. WILLIAM HERBERT, who says that he bought the plant twenty years ago of Mr. MALCOLM, of Kensington Nursery, and that it is unquestionably the most magnificent plant in the flower garden. The flower stem rises eight or nine feet high; and the profusion of blossom is so great, that as the lateral shoots are rather sub-erect than diverging, a pin cannot be passed between the flowers in the centre of the column. The deep crimson of the stalks and stem, and the purple stripe on the outer petals of the flower, remind one of *Crinum amabile*. It is a very hardy species, and flowers frequently. *Yucca*, from its name in use in St. Domingo.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small: coloured.

1. *Rosa rapa*, Double Burnet-leaved Rose. Icosœndria, Polyginia. Rosaceæ. Introduced from America in 1726. It is commonly cultivated as a

straggling bush, in which form it has less to recommend it than many other species; but pruned to a head, on its own stem, it assumes the habit and appearance of a budded standard. All the strong Roses may be grown on their own stems, in precisely the same form as budded stocks. There is no general charm in budding, productive of peculiar growth. The compact head of small laterals can be produced by pruning alone, and so regulated as to be far more ornamental than the loose bushes usually seen. The situation and other circumstances should, of course, influence the taste in adopting any particular mode of training. Where Rose trees form fence lines, the natural fence-like character should be assumed; but where there is no attempt at natural grouping—where the charm is dependent on the neatness, on the floral elegance, and nicety of keeping in detail, Roses may be so pruned as greatly to aid the design. Here it is that dwarf standards should embellish the picture. If Roses be already established in proper situations for standards, it only remains that attention be paid to pruning, and this peculiarity of form may at once be produced. It is true that all Roses are not equally suitable for the purpose; but those of the more delicate Chinese species, whose stems would not strengthen into a sufficiently firm standard, may be budded, and certainly with some advantage to the size of their flowers. We aim not at superseding the budding of standards, but at bringing into view the more easy means of arriving at similar results; of which means, from the pressure of fashion, cultivators seem to have lost sight. To effect this purpose, young free-growing suckers should in summer be tied to upright stakes, and kept quite free of small lateral shoots. When they are as tall as is required, stop them by cutting half an inch off their tops. If this can be done in the middle of summer, side shoots will be soon emitted, all of which should be cut off excepting the three upper ones. In the succeeding February, prune each of these three laterals back to within two or three eyes or buds of the stem, and they will flower in the summer. If the suckers be not tall enough in one season, another season must be taken, observing the same general rules.

2. *Geranium Ibericum*, Iberian Crane's Bill. Monadelphia, Decandria. Geraniaceæ. This free-flowering species of Geranium is a native of Iberia, from whence it was introduced in 1802. It is a perennial, grows two feet high, and flowers from June to August. It will flourish in almost any soil and aspect.

3. *Cryptostemma calendulaceum*, Marygold-flowered Cryptostemma. Syngenesia, Frustranea. Compositæ. Introduced from the Cape of Good Hope in 1752. It is an annual; grows eighteen inches high, and flowers in July and August. The seed, if sown in the open border, should not be sown till the end of April; but it is far better to sow it three weeks sooner in a hot-bed, which will ensure an earlier blossom, and a greater chance of fertile seeds.

4. *Sedum oppositifolium*, Opposite-leaved Stonecrop. Decandria, Pentagynia. Crossulaceæ. This is a very ornamental plant for rock work, both when it is in flower and out. Almost any situation will suit it. It is a native of the south of Europe. Grows six inches high, and flowers from July to September. The Latin word, *sedere*, to sit, constitutes the root of the generic name Sedum; it is intended to apply to the close manner of the growth of the plants of this genus on their native rocks.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON DESTROYING THE APHIS.—What is the most simple and ready method of destroying the Aphis, or green insect which infests Roses, Carnations, Auriculas, &c ?

Will INNOVATOR be so kind as to inform us the size (in inches) of the pot he uses for flowering a single Carnation plant? In his Article on the Carnation, he says a "sixteen," which, according to the standard given at page 44 (Vol. II.), is six inches; and in correcting it in the June Number, he says the pots should be "four to the cast," which would be a pot 12 in. diameter,—leading us, I fear, still further into error; unless, indeed, he means that a 12 in. pot is the size for three plants. C. N.

Truro.

ON A LIST OF PHLOXES, &c. &c.—I should feel exceedingly obliged if you, or any of the correspondents to your very useful Magazine, would give me a list of from one to three dozen hardy Phloxes, to be placed in the same border, the low-growing ones being mentioned, that they may be planted in the front,—so as to have a succession of bloom, that the border may be gay throughout the summer. If not quite hardy, is there any way of protecting Phloxes in the ground, as I have neither pit nor greenhouse? Also, the best way of propagating Phloxes of all species. Is there any way of destroying the blight in Rose bushes? I went to some expense last year in procuring some fine sorts of Roses, and am afraid I shall not have a single perfect flower. If it would be considered useful, I have a never-failing recipe for making the Yellow Rose tree blow perfectly, which I would send to your Magazine if desired.* I have no doubt it would succeed with other Rose trees; but in the first place, it would be too troublesome for any thing less precious than a Yellow Rose, and in the second it would not do for bushes.—Do you know the Lobelia purpurea? I do not mean the common purple Lobelia, but a new sort that I raised from seed last year, sent from the Horticultural Society. If you do, can you tell what I should do with them during the winter? They are now in a border for bloom.—I have the splendid new Gladiolus; it appears healthy, and the foliage fine (though raised in a room at the open window): but it has as yet no appearance of bloom. What should I do with it?—I am quite ashamed of being so troublesome with questions, but I hope the answers will be acceptable to others as well as myself.—I have seen a double white Hepatica, but only in a private garden: I could not obtain a plant even for myself.—I delight in your Magazine, more especially now that your correspondents appear more peaceably inclined. Hitherto I have been afraid to write a line, or to venture an opinion, for fear of getting into a "scrape." Now I shall be happy to contribute what little experience I have had. My garden, though only a young lady's one, is allowed even by my rivals to be very blooming, considering the disadvantages I labour under from want of sun, and exposure to north east and westerly winds. It is said that all gardeners are conceited—so now I have shown the cloven foot, I will leave off. FANNY ENYAM.

June 5th, 1834.

P.S. I can never obtain a bloom of those delightful flowers the Lily of the Valley, notwithstanding my shady situation. Can you tell me the reason?

ON THE DARK CHINA ROSE.—I wish some of the readers of the *Cabinet* would have the goodness to inform me what soil will *suit*, and make flower in *profusion*, the Dark China Rose: also, whether there are two or more varieties of it; and if so, which would be the kind most likely to answer, so as

* We shall be much obliged by it.—*Cons.*

to make a handsome bed in the flower garden. I had a clump planted, of three dozen plants, and although this is the second season from planting, they make no growth, or show. Our soil is flint and chalk. We have done what we could to improve it. I suppose a mixture of leaf and turf with stable-dung will improve any soil. A Greville Rose has grown to a good height, but has never borne a flower. Any information calculated to be of service to me on the above points, I shall be obliged by.

C. S.

ON BALSAMS, &c.—In your Number for March 1833, some very valuable information was given by ST. PATRICK, for cultivating Balsams. As he has been so successful in growing that beautiful flower, I beg to crave his advice as to saving the seed, and his opinion why I failed. Last year I had extremely fine DOUBLE flowers of several colours, and carefully saved the seed, which I kept very dry and warm. This year, however, all are single, and white. How is this to be accounted for?

C.

9th July, 1834.

P.S. Where can seed be procured which may be depended on?

ON MR. DENYER'S ARTICLE ON GERANIUMS.—Allow me to make a few queries and remarks, through the pages of the *Floricultural Cabinet*, on the third Article in the June Number, page 129, entitled, "On the Culture of Geraniums," &c. Previous to June, does Mr. DENYER stop the leading shoot or not? What compost does he use? Does he pot them after the middle of August, and how does he treat them after that time? Does he keep them in the open air, cool frame, or greenhouse? Mr. DENYER, in the commencement of his paper on the subject, wishes to inform J. T. of a detail of culture, which he says will answer every expectation. Now from this all your subscribers would undoubtedly expect to find the whole routine of culture, which he has certainly given till the second week in August; but after then, nothing further is said about them, which is leaving out the principal part. I must say that the whole is a very imperfect communication, in respect to giving perfect information; and what makes it more so is, that Mr. D. has sent it in the form of an answer to J. T.—I hope Mr. D. (who, by the bye, is an old acquaintance) will not ascribe the above remarks to any rancorous feeling in me, for that is not the case; but only to solicit in future more perfect observations on so agreeable a subject.

F. F. ASHFORD.

ON COMPOST FOR FLORISTS' FLOWERS.—Writers on the treatment of Auriculas, Carnations, Pinks, Tulips, Ranunculuses, &c. give lists of certain composts which are to be frequently turned and stirred during the space of two years, so as to become intimately mixed. Of these composts, many of the ingredients must be exceedingly offensive; and unless premises be sufficiently capacious to appropriate a place entirely for this purpose, few persons would endure so intolerable a nuisance;—therefore, those only who possess roomy premises can derive benefit from the use of them. I wish to inquire, amongst your numerous correspondents, if any persons have already engaged in the business of compost-making, and retailing the same in a fit state for immediate use: and if so, where they are to be found. If none such exist, then I would suggest that it might answer the purpose to commence such an undertaking without delay; and if conducted faithfully according to the different recipes—using the very materials and quantities recommended by the several authors—I apprehend the article would meet a ready sale; for doubtless most persons fond of flowers would cheerfully pay a reasonable sum per bushel for any particular compost they might require for immediate use.

H. S.

24th June, 1834.

ON AN ANNUAL LIST OF PRIZE FLOWERS.—In Vol. I., page 63, you have given a list of flowers that obtained the leading prizes in the year 1832. I hope you mean to render annual a list so truly useful to amateur collectors, and that I shall, in an early Number, have the pleasure of reading a similar list for 1833.

London, July 8th, 1834.

[We will attend to the Article.—COND.]

ON THE GARDEN ANEMONE.—Does not INNOVATOR, in his article on the culture of the Garden Anemone (*Anemone Hortensis*), mean *Anemone coronaria plena*, *Hortensis* or *stellata* being the Star Anemone?

Pl. Reg., Hastings.

A SUBSCRIBER.

ON A LIST OF THE BEST PANSIES.—Will you, or any of your numerous correspondents, give me a list of about a dozen of the very best Heartsease! I mean such as have good properties, and generally take the first prizes at Horticultural and Floral Societies' Meetings. I shall be much obliged by an early answer, as I wish to purchase a few immediately, so as to have them in flower the latter end of autumn.

July 11th, 1834.

HERB TRINITY.

ON THE RANUNCULUS.—I have attempted to grow the *Ranunculus* these last two years, but have been unsuccessful. I observe that most of your Correspondents who have written on the cultivation of that Flower, advise water to be given between the rows, and not to wet the foliage; which rule I have followed; but one says he has frequently observed that a cool and showery May has been very conducive to the growth of the plants, and has ensured a fine bloom in June. On some former occasions I have admired the calm reasoning of your Correspondent G. I. T.; now I should take it as a particular favour if he would have the goodness to explain, physiologically, what effect water has on the leaves of that plant.

July 9th, 1834.

A COUNTRYMAN.

ON A LIST OF HARDY BORDER FLOWERS.—You would very materially serve your inexperienced subscribers to the *Floricultural Cabinet*, by giving them, in one of your early Numbers, a list of hardy border flowers, annual and perennial; dividing them into four classes as to colour, three as to height, and six as to their time of flowering. I annex, by way of explanation, an attempt at the sort of thing required, which, however, your experience will no doubt enable you to improve upon.

Perennials flowering in February and March.

| Name. | Red | | | White. | | | Blue. | | | Yellow. | | |
|----------------------------------|-----|-----|-----|--------|-----|-----|-------|-----|-----|---------|-----|-----|
| | 1ft | 2ft | 3ft | 1ft | 2ft | 3ft | 1ft | 2ft | 3ft | 1ft | 2ft | 3ft |
| <i>Heptaca triloba</i> | * | .. | .. | .. | .. | .. | * | .. | .. | .. | .. | .. |
| <i>Pulmonaria officinalis</i> .. | .. | .. | .. | .. | .. | .. | * | .. | .. | .. | .. | .. |
| &c. &c. &c | | | | | | | | | | | | |

Annals flowering in February and March—same as above:

And so in like manner those flowering in April and May—June—July—August—September and October.

Mr. J. PRICE, who furnished your Work with a very intelligible Article on soils, was so good as to promise us further observations on the subject. If his time would allow of it, he would much increase the former obligation by resuming the subject.

If AMICUS has not yet satisfied himself with a yellow trailing plant, perhaps the *Lysimachia Nummularia* would answer his purpose, or else a yellow Pansy.

Could you favour your subscribers with a list of the most hardy and showy Cape bulbs, and the prices of them, as well as the address of the person who imports them most largely, or cultivates them? Pray also inform us whether the *Nemophylla phaceloides* is an annual or perennial. LONDON'S Catalogue classes it among the latter, but most seedsmen's lists call it an annual.

Crickhowel, 14th July, 1834.

W. W. J.

ANSWERS.

ON EARWIGS.—In answering a Correspondent's request, inserted in page 185, I believe the most effectual method to destroy Earwigs from any trained Trees, is to place in various parts, pieces of reeds between the branches and

the wall from four to six inches long. They will generally be found to contain a number of these insects every morning; and by taking out the seeds, you may blow the insects into a basin of hot water. H. W.

ON THE CULTIVATION OF BALSAMS.—As your Correspondent, SNOWDROP justly remarks, that St. PATRICK, in page 57, May No. of your *Magazine*, has said enough to deter any one from cultivating this lovely Annual; yet, SNOWDROP, a concise, clear, and caustic writer, treats on this flower as if it were a *hardy* Annual; the fact is, Balsams require to be sown in a hot bed the commencement of April—if the season is not very favourable, the sowing should be deferred till the latter part of the month, or the first week in May. At the latter period, a hand glass may then be dispensed with. When the plants are sufficiently strong and hardy, they should be transplanted into pots filled with rich loam, and introduced to a stand in a drawing-room; or, if preferable, transplanted in a bed of rich loam on a south border. My plants never failed by pursuing this system. I hope these remarks will not offend your Correspondents, St. PATRICK or SNOWDROP, as it is neither my wish nor intention to do so. EMILY ARMSTRONGE.

Castlerahan, Ireland, March 21st, 1834.

ON THE CULTURE OF THE FUCHSIA IN THE OPEN BORDER.—In reply to A CONSTANT SUBSCRIBER, in Vol. II., page 68, of your useful *Magazine*, I beg leave to refer him to the excellent Article on the above-named brilliant flower, written by A JERSEY GARDENER, page 196 of Vol. I., and he will find in the said Article, that cutting down the plants in the autumn, as practised by Mr. SHARMAN, is not so advantageous to it as cutting them close in the beginning of the month of April. I have tried both ways, and found spring the best season, for the reasons stated by your Jersey Correspondent. Let A CONSTANT SUBSCRIBER bear in memory, that some of the other varieties of this lovely family of plants are of lower growth, and more impatient of cold than the gracilis, and requiring to be mulched around the roots during the severe winter months. The cultivator of this beautiful flower must be under considerable obligation to your Jersey Correspondent for his valuable communication.

EMILY ARMSTRONGE.

Castlerahan, Ireland, March 21st, 1832.

ON THE CULTURE OF THE AURICULA.—I collect my compost in the months of July and August. It consists of four barrows of horse-dung, the same quantity of cow-dung from the fields, one barrow of leaf mould, eight of pasture sods, and one of sand. I lay the whole together, and turn it over three or four times during the winter. It will be ready for use the following May. EDWARD EDWARDS,

ON BLOOMING AGAPANTHUS UMBELLATUS.—I have successfully cultivated the *Agapanthus umbellatus*, for some years, by the following treatment.—I put my plants under the stage in the greenhouse during the winter months, or a dry shed will serve as well. I give them no water while in this state. I take them out in the beginning of April, and part them to one stem, then place them in 16-sized pots, (or pots one foot in diameter,) using any vegetable mould with one part sand. They are then watered to settle the mould, and placed in a warm situation. I water them twice a day in the summer months, but do not stand them in water. After they have done flowering, the old stems are cut down, and placed in a cold, shady spot till November, when they are moved to their winter quarters. They will also succeed, if turned out into a bed of rich mould, and plentifully watered.

EDWARD EDWARDS.

ON THE GREEN FLY.—If by the Green *Fly* your Correspondent, WILLIAM FREDERICK, means the small green insect (*Aphis*) which so frequently infests the buds of Roses, as well as other flowers, I believe I can inform him of a very simple and effectual mode of destruction; let him water over the heads of the plants, with water in which Potatoes have been boiled, and unless he be more unfortunate than I have been, he will find the insects disappear after the first application. I should say, that though the liquid does not at all

injure the plant, it will kill any flowers that it touches. Tobacco water, has, I believe, this latter effect.

Will you, or any of your Correspondents, have the goodness to inform me, which is the best publication on the management of Greenhouse plants, as to the regular routine of their culture, and also as to the most approved sorts for cultivation. Your Correspondent from Bodmin, has, in your last number, so completely forestalled some requests I was about to trouble you with, as also in some observations I had intended to make, that I could fancy he must have had a sly peep into my very thoughts; however, all I have now to do, is to hope, that his communication may be speedily and effectually answered.

S. C. A.

ON SULPHATE OF LIME, &c.—A person, calling himself Ignoramus, requests an explanation of the manner of preparing the sulphate of lime for Innovator's carnation compost. Now, if Ignoramus had just taken the trouble to ask one of his neighbours, more enlightened than himself, he might have found out that limestone is carbonate of lime—not sulphate of lime, as he thinks; for sulphate of lime, when burnt, is plaster of Paris. Sulphate of lime, or gypsum, is generally called by masons (who generally keep it) plaster; it may easily be powdered in a mortar, and sifted to any degree of fineness.

Another correspondent wishes to know the method of preserving the *Magnolia* from earwigs. Does he suppose that there is a particular method for every species of plants? Let him look at the former numbers of the *Cabinet*, he will find two or three methods of destroying them.

D. PEARCE wishes to know the meaning of the term pin-eyed, when applied to the *Polyanthus*. Let him ask the next florist he meets, and not place himself on a level with Ignoramus.

ROBERTUS.

REMARKS.

TO PREVENT SLUGS FROM DESTROYING DAHLIAS AND SEEDLING ANNUALS.—I have for the last two years applied finely chopped horse-hair round the young plants, and found that it completely succeeded; the hair I use is that which is clipped from the horses' heels.

A SUBSCRIBER.

Pt. Ry., Hastings.

CAMBRIDGE FLORISTS' SOCIETY.

The ninth anniversary of the above Society was held on Monday, July 11th, in the large Concert Room, at the Hoop Hotel. The Carnations and Picotees exhibited on this occasion were very fine; the amateur cultivators declaring them to be superior to any previous shew of the same flowers. The grand prize stand exhibited 132 beautiful blooms arranged in classes, and selected from upwards of 500 sent in for competition. The long range of tables down the centre of the room, were graced with several fine specimens of *Hymenocallis*, *Alcagans*, *Fuschias*, *Balsams*, *Geraniums*, *Cockscombs*, *Calceolarias*, *Bouquets of Cut Flowers*, &c. &c. Mr. Widnall's collection of Pansies (100 varieties) was much admired: but his stand of Dahlia blooms attracted all eyes, and drew forth the plaudits of every one who had the pleasure of beholding, for the first time, that magnificent and truly beautiful variety, justly named "The King of Dahlias," consisting of a finely formed flower of a delicate white ground, and every petal surrounded with a rich crimson feathering, much after the style of the Picotee called "Martin's Prince George." A very select party of about fifty of the members and friends of this flourishing Society, after the shew, sat down to a most excellent dinner, served in Mr. Ekin's best manner, and the evening was passed in the utmost harmony and conviviality. The following is the award of the judges:—

COMPOSITIONS.—*Premium Priza*.—New Purple Flame, (name not given in), Mr. R. Hooley. *Scarlet Bizarres*.—1, Houseman's *Kimfane Hero*; Mr. R. Hooley; 2, Harwood's *Leader*, Do.; 3, Wilde's *Perfection*, Mr. Hunt; 4, Do.; Mr. Giddings; 5, Walsley's *William IV.*, Mr. R. Hooley; 6, Wilde's

Perfection, Do. *Crimson Bizarres*.—1, Wakefield's Paul Fry, Mr R. Headly; 2, Ditto, Mr Ready; 3, Ditto, Mr R. Headly; 4, Ditto, Mr Catling; 5, Ditto, Mr Ready; 6, Gregory's King Alfred, Mr Hunt. *Scarlet Flakes*.—1, Seear's Dr. Barries, Mr Hatt, sen.; 2, Ditto, Mr R. Headly; 3, Ditto, Mr Taylor; 4, Maude's Rowton, Rev. A. Fitch; 5, Stearn's Dr. Barnes, Mr Nutter; 6, Ditto, Mr Hunt. *Purple Flakes*.—1, New, (name not given in), Mr R. Headly; 2, Lascelles' Queen of Shoba, Mr Hunt; 3, Turner's Princess Charlotte, Ditto; 4, Leighton's Bellerophon, Mr R. Headly; 5, Knott's Alfred the Great, Do.; 6, Turner's Princess Charlotte, Mr Widnall. *Rose Flakes*.—1, Dafton's Lancashire Lass, Mr R. Headly; 2, Ditto, Mr Bailey; 3, Do. Mr R. Headly; 4, Ditto, Mr Nutter; 5, Ditto, Mr Green; 6, Fletcher's Duchess of Devonshire, Mr Giddings. *Seedling Carnations*.—1, Hunt's Teazar, (S.B.) Mr Hunt; 2, Newman's Beauty of Bourn, (S.F.) Mr Newman.

PICOTEES.—*Premium Prize for the best Picotee of any Colour*—Russell's Incomparable, Mr R. Headly. *Red Picotees (light edges)*—1, Russell's Incomparable, Mr R. Headly; 2, Ditto, ditto; 3, Furze's Beauty of Bedford, Mr Giddings; 4, Woollard's Miss Bacon, Mr R. Headly; 5, Wood's Comet, Mr Giddings; 6, Ditto, Mr Nutter. *Red Picotees (heavy edges)*—1, Martin's Prince George of Cambridge, Mr Hunt; 2, Ditto, Mr Nutter; 3, Ditto, Mr Bailey; 4, Ditto, Mr Nutter; 5, Ditto, Mr Twitchett; 6, Ditto, Mr R. Headly. *Purple Picotees (light edges)*—1, Hufton's Miss Willoughby, Mr Giddings; 2, Ditto, ditto; 3, Ditto, Mr Catling; 4, Ditto, Mr Giddings; 5, Wood's Countess of Sandwich, Mr Hunt; 6, Hufton's Miss Willoughby, Mr Catling. *Purple Picotees (heavy edges)*—1, Martin's Linnæus, Mr Nutter; 2, Denston's Dr. Syntax, Mr Hunt; 3, Do., do.; 4, Bailey's Lord John Russell, Mr Nutter; 5, Martin's Linnæus, Mr Bailey; 6, Bailey's Lord John Russell, Mr Nutter. *Rose Picotees*—1, Wood's Andromache, Mr Hunt; 2, Not claimed; 3, Lee's Matchless Beauty, Mr Giddings; 4, Howden's Miss Hill, Mr R. Headly; 5, Purchas's Granta, Mr Giddings; 6, Ditto, Mr Hatt, sen. *Yellow Picotees*—1, Louis Phillippe, Rev. A. Fitch; 2, Howlett's Paragraph, Mr Green; 3, Louis Phillippe, Mr R. Headly; 4, Howlett's Paragraph, Mr Giddings; 5, Life Guardsman, Mr Twitchett; 6, Maid of Magdeburg, Mr Green. *Seedling Picotees*—1, Headly's Eliza, (red) Mr R. Headly; 2, Twitchett's Regulator, (red) Mr Twitchett; 3, Giddings' Beauty of Hemingford, (rose) Mr Giddings.

DAHLIAS.—*A Premium Prize for the best Collection, not less than twelve blooms, given by the Rev. A. Fitch*—King of Dahlias, Queen of Dahlias, Lord Liverpool, Lady Grey, Widnall's Salamander, Alice Gray, Neptune, Alba purpurea, Criterion, Widnall's Iris, and two Seedlings, Mr Widnall.

WOOLWICH FLORISTS' SOCIETY.

The Anniversary Meeting of this Society was held June 12th, at the Bar-rack Tavern, Woolwich Common, when prizes were awarded to the following persons for Pinks:—1, Stevens' Hon. G. Cook, Wilmer's John Wilmer, Unsworth's Omega, White's William the Fourth, Young's Marquis of Winchester, Barnard's Bexley Hero, Pittard's Eynsford Beauty, Norman's Benjamin, Norman's Hero, Norman's Defiance, Barrard's Conqueror, Norman's Earl Grey, Mr. Norman; 2, Dry's Earl of Uxbridge, Marquis of Winchester, Keen's No. 1, Unsworth's Omega, Downton's Goliath, Bray's Invincible, Norman's Benjamin, Eynsford Beauty, Keen's No. 2, Barrard's Conqueror, Mann's Dr. Sumner, Eyton's Beauty of Ware, Mr Ward; 3, Mr Cousins; 4, Mr Ibbett; 5, Mr. Creed; 6, Mr. Martin.—The Seedling Prize was adjudged to Mr. Ward, for a flower which he calls "Ward's Jubilee," which will be no doubt in the collection of every Pink grower who can obtain it, being a very superior flower. The average diameter of the flowers in the first prize pan was nearly 2½ inches to each flower, notwithstanding the unfavourable season; and one flower of Omega which was measured, exceeded 3 inches in diameter. After the census, Messrs. Jeffery, Smith, and Buck, had performed their office, about 50 persons sat down to an excellent dinner, J. P. Burnett, Esq. of Holloway, in the chair.—There were three prizes for Ranunculuses awarded, but the flowers which obtained them would have had no chance if not

narily decent flowers had been exhibited, we have not noticed them. Unsworth's Omega is the flower which obtained the single bloom prize at the Metropolitan Society's Meeting this season, and was raised at Woodwich, where the principal of the stock is. It was exhibited in every pan, successful or otherwise, and justly deserves the character of a first-rate Pink.

REFERENCE TO PLATE.

1. *Village Maid, Rose*.—We received a specimen of this very beautiful and highly fragrant striped Rose, in June last, from Mr. W. ROGER, of the Southampton Nursery, which he informs us he purchased from the collection of a French florist, under the name of "Village Maid." The blossoms are entirely double, and it is totally different from the *York and Lancaster*, the one being a *Province* the other a *Damask Rose*. Mr. ROGER says, "if you devote a whole page to exhibit the drawing of this Rose, it will then only convey a very faint idea, indeed, of its beauty, the magnificent appearance of the large full headed plant worked on a standard has drawn forth the admiration of all who have seen it."

2. *Lucy*.—3. *Sir Waller Scott, Pansies*.—These two beautiful varieties may be obtained of Mr. HOGG, Florist, Paddington; who has a collection of all the best flowers now extant. For their culture, &c. see vol. I. page 199.

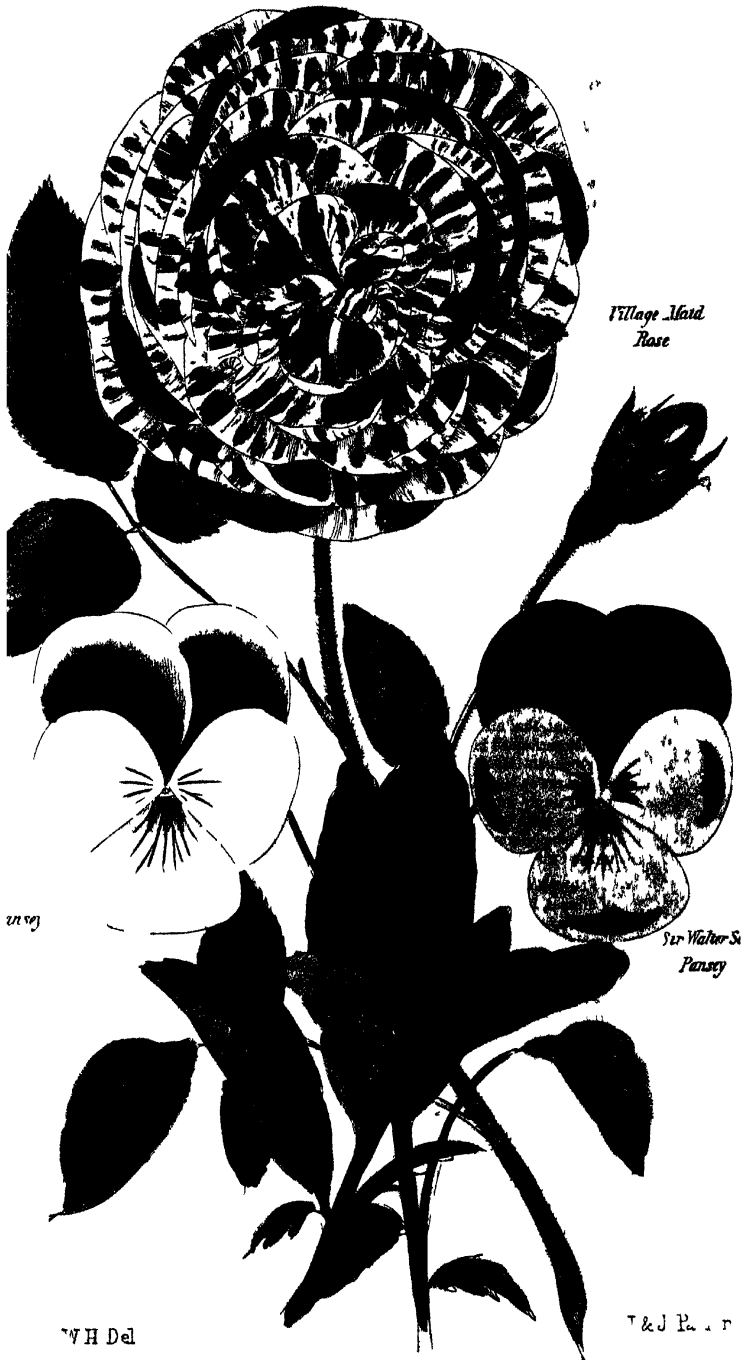
FLORICULTURAL CALENDAR FOR AUGUST.

PLANT STOVE.—Continue to admit a large portion of air daily, for the benefit of the plants in general in this department. Attention to watering, eradicating insects, and cleanliness, must be daily attended to.

GREENHOUSE PLANTS.—All exotic trees and shrubs belonging to this department, that are in want of larger pots, or refreshment of new soil, should (if not performed last month) immediately be done. This is the proper time to propagate Aloes, Sedums, and all others of a succulent nature, by means of suckers or bottom offsets; when detached from the parent, they should be potted singly into small pots, using light dry compost, and watering sparingly till they have taken root. In the first, or second week at farthest, inoculation may be performed on any kinds of the Citrus genus. (See the directions in the Calendar for July.)

FLOWER GARDEN.—Due care must be taken respecting watering any kinds of annual, biennial, or perennial plants, that may be in pots. Propagate by means of slips, and parting the roots, of any double flowered and other desirable fibrous-rooted perennial plants done flowering. Likewise increase by offsets the different kinds of Saxifrage. Auriculas should be cleared of all dead leaves, and shifted into fresh pots; prick out of the seed bed, where it was omitted last month, Seedling Auriculas and Polyanthuses, in a shady situation: seeds may also be sown of both kinds in boxes or pans. Carnations may still be layered, also Sweet-williams, the earlier in the month the better. Those which were layered four or five weeks ago, will now be sufficiently rooted to be taken away and planted in beds or pots. Also plant out Pink pipings, which were put in in June. Sow seeds of all kinds of bulbous rooted plants in pans or boxes, such as Spring Cyclamen, Anemones, Ranunculuses, &c. &c. Those kind of bulbs wanted to increase should be taken up if the leaves be decayed, and the offsets taken off. Transplant into nursery beds seedling, perennial, and biennial plants sown in spring. In dry weather gather those flower seeds that are ripe of any desired kinds. Plant out such kinds of autumn flowering bulbs as yet remain unplanted. Heartsease, towards the end of the month, should be propagated by slips, put into a shady border, and kept quite moist till they have taken root; these will form fine strong plants for blooming the spring following.

F. F. A.



*Village Maid
Rose*

*Sir Walter Scott
Pansy*

2709

W H Del

T & J R. a. r

THE
FLORICULTURAL CABINET,

SEPTEMBER 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Cultivation of Heliotrope (Heliotropium peruvianum).* By Mr. ASHFORD.

Perceiving that a Querist (MYRELLA) in the *Floricultural Cabinet*, Vol. II. p. 93, solicits a little information on the cultivation of the Heliotrope, I am induced to pen the following brief remarks; at the same time assuring him that they are not mere theoretical suppositions, but the result of long experience and practical observations.

For the instruction of the juvenile portion of your readers, and others who are interested in the study of Botany, I shall add a short botanical account of the plant.

Heliotropium peruvianum, or Peruvian Turnsole, is an ornamental trailer of Peru, whence it was introduced into this country in the year 1757. The generical name was given it by LINNÆUS, from *Helios*, the sun, and *trope*, turning; in allusion to the flowers being always turned towards the sun. Both PLINY and DIOSCORIDES assert the same reason as its Swedish author. The specific name, WILLDENOW derived from its native country. It belongs to class 5, order 1, Pentandria (*pente*, five—*aner*, a man, or male organ,) Monogynia (*monos*, one—*gyne*, a woman, or female organ,) of the Linnæan classification of plants, and to the order Boragineæ of sub-class Corollifloræ of the Jussieuean natural arrangement. The botanical characters of the whole genus, or generical ones, are—a calyx quinquefidus, or five-parted; corolla hypocrateriform,

monopetalous, pentaphyllous, with the sinuses simple; stamina five filaments, furnished with small anthera; pistillum, four germina, slender stylus, and notched, peltate stigmata; pericarpium none; semina four, oval, cohering, and lodged in the calyx. Specific characters are—folium lanceolate ovate; caulis frutescent; floris aggregate, corymbose.

This production of the Peruvian clime is well worthy of cultivation: its delightful fragrance and (by the following management) long continuance in flower, well repay any occasional care or extra attention bestowed upon the plants. I have very often seen them grown and treated in a similar manner to greenhouse plants, but when treated in this manner, I always notice leafless, sickly-looking plants. Upon close application to the culture of the Heliotrope, in common with others, I find the following method to answer best, and produce as fine flowering plants as any I ever see. Such being the case, I humbly present the particulars of the same for the consideration of MYRTELLA, and your other numerous correspondents and readers.

Propagation.—Cuttings must be procured about the latter end of February or beginning of March, planted in pots of rich garden soil, and plunged in a working Cucumber or Melon frame. When the sun is powerful, that part of the light where the pots are under must be covered with something, to shield them from the overpowering heat of the solar rays. Water must be given when required, and all mouldiness, decayed leaves, &c. should be removed as they appear; for if suffered to remain, they will probably injure the whole. In two or three weeks, the cuttings will be sufficiently struck for potting; but previously to so doing, remove them to an airy part of the stove for a few days, to harden. If a succession of flowering plants for the autumn and winter months are required, more cuttings must be put in during May and June. If any plants are wanted for turning out into the flower garden in summer, cuttings must be struck in September for that purpose.

Cultivation for Flowering in Pots.—Provide for a good compost equal quantities of maiden loam, rotten horse-dung, and sandy peat; a little leaf mould might also be added. The whole should be well chopped and incorporated together, after having been ameliorated by the frosts and atmosphere of the preceding winter, but should not be sifted. When the cuttings have been in the

stove for a few days, pot them off into 48-sized pots, using the above compost, and allowing as much soil to adhere to the roots as possible. Pinch off the extremities of each shoot, to cause the plants to grow bushy; and after giving them a suitable watering, place them in a shady part of the stove till they have taken root and begun to grow, when they should be removed to a more exposed situation in a house of the temperature of from 60° to 70° Fahrenheit. Due attention must be paid to repotting them as often as they appear to mat around the outside of the balls, or the plants will soon assume a sickly hue, instead of being clothed with fine green foliage. These plants are very subject to the attacks of that destructive inmate of the hothouse—that pest to gardeners, the green fly (*aphis*). These should not be permitted to remain, but be eradicated as soon as perceived, by syringing them every morning with pure water. If the plants are removed when in bloom to the greenhouse or conservatory, they will continue in flower much longer than when remaining in heat. When they have done flowering, set them in a cool part of the greenhouse until the following February, when they should be cut down, their balls reduced, themselves repotted in the above soil, and plunged in a hotbed, to produce healthy young shoots for propagation; after which the old stools may be either turned out into flower borders, or thrown away, as young plants raised every year are far preferable for flowering in pots.

Cultivation for Flower Borders.—After the cuttings are struck, let them be potted off in the same sized pots and sort of soil as above noticed, and wintered in the greenhouse, or in a house I have recommended in a former Number. In the following March, pot them into pots a size larger, to cause them to produce fresh shoots and roots. Towards the middle of April, begin to expose them gradually to the open air; so that about the end of May, if the weather prove mild, they may be able to bear being planted out into beds or baskets, composed of good mellow, rich soil. Should cold nights happen after they are turned out, as is sometimes the case, they must be defended by means of hoops and mats, or canvass; thus protected, they will grow and flower freely till the chilly nights of autumn put a check to their vigour; they must then be taken up with their balls entire, and potted in suitably sized pots. If placed in the stove, and shaded for a few days,

they will continue to flower till Christmas, when a few cuttings may be taken off for early propagation, and the old roots thrown away.

I have thus endeavoured, in as short a space as possible, to pen down my process; and I do not hesitate to say that it will, after a fair trial, satisfy every grower of this native of the Peruvian shores. If you deem the remarks worthy of admission into the valuable pages of the *Floricultural Cabinet*, they are entirely at your service.

FREDERIC F. ASHFORD.

Somerford Booths, April 27th, 1834.

[*H. corymbosum* is far superior to the above species for being cultivated in the open border.—COND.]

ARTICLE II.—*On the Cultivation and Raising of the Polyanthus.* By Mr. JOHN REVELL, Florist, Pitsmoor, Sheffield.

The Polyanthus being a flower which I have grown to a great degree of perfection for several years, I herewith forward you my mode of treatment. The following is the compost which I have found to succeed the best:—3 barrowfuls of light maiden soil; one do. of horse dung, six weeks old; one do. of decayed leaf-mould. Those plants that I intend for show, such as Waterhouse's George the Fourth, Pearson's Alexander the Great, Crownshaw's Invincible, Bunnard's Formosa, &c. &c., I plant in August; for if done sooner they are in bloom too soon for the show, which takes place about the latter end of April or beginning of May. In parting the old roots, I cut off all the leaves, then pot them in the above stated compost, and place them in a shady situation, where I let them remain till November, at which time I remove them to their winter situation, which is a pit built of brick, and sunk two feet below the level of the surface of the earth, so that when the pots are placed in the pit, the rims of the pots are no higher than the surrounding surface; this pit is covered with wooden shutters, instead of glass lights, in order to secure the plants from the effects of sudden frosts during the winter. I suffer them to receive all the gentle showers that fall during February and March. When the plants have thrown up their flower stems and the truss is formed, I cut out the centre small buds, leaving the largest; I

never leave more than seven or less than five pips on each stem ; if any of the petals are irregular by turning backward, I flatten them with a piece of ivory made in an appropriate shape, somewhat resembling a button-hook: I place the flattener underneath the pips and presses it upwards ; but, if the flower is cupped, I press it downwards until the petals become quite flat ; if any of the pips are dusty, I brush them with a camel-hair pencil, which gives a brightness to the flowers. When in blow, I carefully shade them from the sun's rays ; for if I was to suffer them to be exposed, the colour of the flower would be damaged, if not totally spoiled. I find that if the plants are placed in perfect darkness for two or three days previous to the show, the colour becomes much darker than if left in the frame. The following kinds possess the best properties of any I know :—Cox's Prince Regent, Lord Crewe, Bang Europe, Turner's Princess, Countess, Lord John Russell, Commander-in-Chief, Mary Ann, Beauty of Over, Park's Lord Nelson, and Othello. As soon as the plants have done flowering I take them out of the frame, and place them upon a bed of coal ashes, that the seed may be able to ripen ; as soon as the seed pods begin to burst open at the top and change colour, I carefully cut them off, and place them in the seed-drawer till required for sowing.

I always sow the seed about the middle or beginning of February, the year after it has been gathered. I sow the seed in pans or feeders filled with the compost in which the plants are grown, I then sprinkle the soil with water, sow the seed, and cover a quarter of an inch deep with the same compost finely sifted. In the course of four or five weeks the plants will be up ; I water them occasionally in a morning, and cover them down with a hand-glass in the evening. Towards the latter end of May, I transplant them into a border, where I allow them to remain for flowering the following spring. When they are in flower, I mark all the best flowers ; and the '*pin-eyes*' (or those that show the pistilum) I throw away, for although they are generally the brightest colours, they are considered to be worth very little ; those called '*moss-eyes*' (or those that show the anthers) are esteemed the best ; the properties of a fine flower (which you have given at page 118) are very correct. I have seen several new and beautiful seedlings, which I understand are to come out next year.

Pitsmoor, July 27th, 1834.

JOHN REVELL.

ARTICLE III.—*On the Culture of the Dahlia.* By Mr. JAMES JONES, Gardener, Ackworth, near Pontefract.

I herewith send for your acceptance an account of my method of growing Dahlias; but as others have said a great deal already on the subject, I shall be as brief as possible. In the first week in March, having a hot-bed ready, I put on the frame, and cover the bed to a depth of six inches with soil. I place my roots close to each other on the top of this earth, and cover them up with a coating of dry moss about three inches thick; I allow them plenty of air in the day time, if the bed be very hot. And when they first push out shoots I frequently sprinkle them with warm water. By the time the shoots are three or four inches long, they have generally formed new roots; this may be easily seen by removing the moss. I carefully take off with a sharp knife the shoots at all connected with roots, and pot them in sixties; these I plunge into the hot-bed again until they have formed strong roots, when I remove them into twenty-four sized pots, and let them remain in a cold frame until I plant them out. In the last week in May, which I consider quite soon enough, I plant them out three feet asunder, and in two or three weeks time I have the ground well forked over as deep as I can, taking care not to injure the young roots; the forking I repeat every month in dry weather.

I secure each plant with three stakes, placed at equal distances from the plant, about eighteen inches apart; I tie one of the strongest shoots to each stake, and secure the whole by tying strong tar band round all the stakes in different places according to the height of the plant.

In taking up the roots to keep through winter, care should be taken to choose a dry day, before the frost affects the leaves. I have found that they are preserved most effectually in barley-chaff; out of many hundred roots I have not lost half-a-dozen. By the above precautions I never fail to have a very plentiful show of fine flowers.

JAMES JONES.

Ackworth, June 17th, 1834.

ARTICLE IV.—*On the Culture of the Auricula.* By
A MIDDLESEX AMATEUR.

Being a subscriber and well-wisher to the success of your Magazine, I herewith send you the details of my mode of cultivating that beautiful spring flower, the Auricula—growing them, I consider, as well as any one. As I grow them merely for my own amusement, (having little else to do,) I have had leisure to try a variety of experiments, many of which I have found to answer *for a time*, but the following is what I can confidently recommend as most worthy of adoption.

My standing compost consists of three barrowfuls of fine yellow loam, two ditto two-year-old cow-dung, one ditto two-and-a-half-year-old night soil, and one peck of sea sand. The whole of these I mix together at least six months before I use it, turning it once a month. About the beginning of October, I make choice of an airy full-south aspect, and stand my pots on slates, placed at the bottoms of the frames. I expose them to all dry weather during the day, putting on the glasses at night; but at the beginning of April, I keep them on day and night, raising them a little behind during the day. When the plants begin to show bloom, I take great care in order to protect them from frost, for if they get in the least frosted, they will never blow flat. I add extra covering to them about the 20th of March, and continue it during their stay under the frame. When in bloom, I remove them to a northern aspect, where I let them remain till October.

Now as to potting, there is a diversity of opinions; but I pot them mostly in June or thereabouts. When potting, if there is any appearance of canker at the carrot root, I cut it off till soundness appears. If any of the plants appear in a poor dwindling way, the carroty stump ought to be closely examined, and a bit cut off; and if a black speck appears, it should be cut out: when this cannot be done, the plant usually dies. I am always careful to have a good drainage, putting an oyster-shell at the bottom of each pot, then some riddlings, and fill up with the compost. I then shake the pot twice or more on the board. After that, if the plants have not been cut much, I stand them in some tubs till the surface appears black, and then remove them to a shady place. I mostly earth my plants up about the middle of February, watering them

with a fine-rosed watering pot. I also let them have all the warm showers that fall, from the middle of February to the middle of March.

There are a few points I have not mentioned, as space will not permit; but, however, if you deem this worthy of a place in your extensively circulated Magazine, I shall forward you my method of raising seedlings, of which I grow a great many.

February, 1834.

A MIDDLESEX AMATEUR.

ARTICLE V.—*On Raising Plants of Double Stocks from Cuttings.* By OLITOR.

It has often been a matter of regret and mortification to others, no doubt, as well as to myself, that, in our endeavours to produce double flowers of the Stock by seminal propagation, we frequently and unavoidably meet with disappointment.

Two years ago, the idea occurred to me of propagating this favourite by cuttings, from plants producing double flowers. The practice may not be new, but as far I am aware it is not common. I have practised two methods of taking cuttings, and with equal success in striking them, but I much prefer the one to the other, as I find the two methods produce very different plants; that which I consider the best, is to take the cuttings when the plants are in full bloom. On the side shoots producing the flowers, beneath the existing corymb, another—and frequently two other—shoots are produced; take off those shoots at their lower joint, before they show flower, with a sharp knife cut off the two lower leaves, insert them in pots half filled with any light, rich compost, and treat them as other soft wooded cuttings. When well rooted, pot them off in pots of sizes proportionate with the progress they have made, and they will make plants equal in symmetrical beauty to any raised from seed, and flower more abundantly. The idea of propagating Stocks from cuttings may at first sight appear tedious or tiresome, but it will not be found so in practice; besides, there are other advantages to be derived from it, which are not so strictly within our reach when propagating from seed, viz. the certainty of commanding groups of this lovely flower—all double, and the equal certainty of perpetuating any favourite or peculiar variety.

I am not particular about the compost I grow them in, as they will grow and flower well in any soil in common use; but I have found from experience, that the fresher our soil the more healthy our plants, and the more brilliant the flowers they produce.

April 10th, 1834.

OLITOR.

ARTICLE VI.—*On the Impregnation and Raising of Dahlias from Seed.* By INNOVATOR.

Several applications having been made for a system by which double Dahlias may be raised from seed with the least possible risk, I forward you my mode of cross-impregnating them. It matters but little what colours are blended, as two white flowers will produce them of all colours and shades; but still I prefer getting them as opposite in this respect as possible, except where striped or picoteed flowers are required, in which case I should say, the nearer you get them alike, the greater will be your chance of success, as the preponderance will always be in favour of the breeder colour. In applying the pollen, (that is, the yellow dust always to be found in the centre of a full-blown flower,) I use a fine camel-hair pencil. The next thing is, where it should be applied. If your readers will draw out a petal from any bloom, and look into its very bottom, they will there see standing up a small brown-coloured point, called by botanists the stigma, or summit of the pistil, which are the female parts of generation in flowers. To this stigma they must apply the pollen with the brush, till completely covered. I should say, twelve petals are as many as should be inoculated in any single bloom, as they then produce finer seed than when too many are fructified. The third row of petals from the outside are those I prefer for this purpose. When the seeds are perfectly ripe, gather them, rub them out of the capsules, and keep them perfectly dry till the following March, when they may be sown upon a slight hotbed, covered by six inches of sandy soil, burying the seeds in this not more than half an inch. Protect them either by hand-lights or a frame from cold winds and night air till the middle of May, when they may be planted out to flower, which will not disappoint the cultivator, if first-rate flowers were selected as breeders. I have been trying

numerous experiments upon the expressed juice of Dahlia flowers in the hope of being able to produce a blue variety ; and I do not despair of success, as I have now a Lady Grenville nearly approaching it, being of a very blue ash colour, and a Lord Liverpool perfectly black. I would have sent you a detailed account of my experiments, but I am aware it would lead to such a correspondence as I have not time to attend to, at least not at present. At some future time, perhaps you may hear from me upon this subject ; but I do not promise, as it appears I am not endowed with the powers of communication, from the many explanations my Articles require to enlighten some of your readers. It is more than possible this will be my last ; and it should appear in your next, for the benefit of your subscribers. INNOVATOR.

August 5th, 1834.

ARTICLE VII.—*A Select List of Pansies.* By Mr. W. BARRATT, Nurseryman, Wakefield.

I am glad to learn, from a notice on the Cover of your far-famed *Floricultural Cabinet*, that very soon we shall be favoured with a fourth reprint of its earlier Numbers. I can assure you I am well pleased that so useful and cheap a publication meets with such deserved support ; but, at the same time, you must pardon me for saying, I am a little wearied with the frequent inquiries, “When shall we get our first Numbers of the *Cabinet*?” In the same Number, I also perceive, there is an inquiry (page 188) for a list of a few of the best sorts of Pansies ; and as I cultivate about 170 varieties, I have selected a few, and have attempted to class them, but I can assure you that it is a very difficult task ; however, it will enable those who are unacquainted with them to select with more certainty of getting a variety. If you have not received any other list, and should think my feeble efforts at all calculated to suit your correspondent, it is at your service, with my very best wishes for a further increase of prosperity to your interesting publication.

Bicolors, viz. those which are composed of two strikingly different colours.—Elizabeth, Barratt's Floribunda fragrans, Mr. Mapleton, Barratt's Odora, Lass of Richmond Hill, Sir F. Burdett.

Tricolors.—Earl Grey, Queen Bee, Lee's Favourite, Princess Victoria, Barratt's Mrs. Tottenham Lee, Barratt's Lady Kaye.

Edged ones, or such as have the upper petals edged with yellow, white, &c.—Jane Shore, Mrs. Drake, Silver Belted, Ma favorite, Mrs. Grinstead, Camelion, Othello, Duke of Northumberland.

Purple large flowers, but some having a little variety of colour in them.—Pluto, Shining Purple, Purple Tricolor, Grand Purple, Tippo Saib, Lady Bath, Louis Philippe, Blue Beard.

Dark—the upper petals dark, the lower ones spotted, or white, or yellow.—Mrs. Bolland, Giovanni, Reform, Prince George, William the Fourth, Barratt's Emperor, Commander-in-Chief, Miss Whitelock, Lady Ackland, Barratt's Lady Pilkington, Alfred, Mrs. Heywood, Mr. Hatfield, Barratt's Mrs. Simpson.

Ruby coloured.—Mrs. Ladbrooke, Amanda, Ruby, Copper Captain.

Spotted and striped.—Maculata, Barratt's Chancellor, Ajax, Barrattii, Lord Gambier.

Light coloured.—Grandiflora, Fair Rosamond, Blanda, Lady Grenville, Miss Douglas, Venus, Altaica.

Sky Blue, with various low petals.—Maid of the Mill, Warrior, Altaica, Tricolor major, Pallida, Lady Althorp.

Yellow, some of them spotted.—Lord John Russell, Mr. D. Gaskell, Lady Grey, Lady Oswald, Bang-up, Waverley, George the Fourth.

Changeable.—Weathercock, Phœbus, Barratt's elegans, &c. &c.

WILLIAM BARRATT.

Wakefield, August 1st, 1834.

ARTICLE VIII. — *On Plants which are peculiarly adapted for planting in Beds in Masses; each kind being showy and profuse in Flowering.* By FLORA.

Eschscholtzia californica, yellow.—Grows too feet high; blooms from June to September. The seed should be sown in pots in spring, and placed in a hotbed; when the plants are large enough, they may be transplanted into a bed of rich deep soil, where they will begin to bloom about the first of July; they will endure the cold of winter very well, if planted in a bed that has a dry substratum, or if the bed be raised a few inches higher than the surrounding ground. It is essential to their endurance of winter, that the roots

have a dry soil. The plants will bloom still more freely the second year. If required, they may be parted at the roots, and an increase of plants be easily obtained; and by this means they may be perpetuated from year to year. The time when I divide them is about the first week in April. Scarcely any plant produces a greater degree of splendour than this: when the full sun is upon it, it makes a complete blaze of colour. It is a most suitable plant for producing a distant effect. When it is planted out in a bed, it requires a considerable number of sticks for support, or the weak branches will be liable to lie close to the ground, and then the bloom is not so fine. If planted in single patches, they should have several sticks placed round, and a string fastened, so as to keep the flower-stalks tolerably erect: by this attention a neat and handsome effect will be given. I adopt the use of cross strings, as well as a circular one, by which means I have the shoots *regularly* disposed.

Calandria grandiflora.—Grows two feet high; blooms from June to October. The seed should be sown in pots early in spring, and placed in a hotbed. When the plants are large enough to transplant, they should be planted off into small-sized pots, which should be well drained with potsherds, as this plant is very susceptible of injury from damp. The soil should be a rich loam, with a portion of sand; it should not be sifted fine, but be well broken with the spade. The plants should be placed in a frame, or other situation where they can be forwarded. About the first week in May, a bed of rich soil, mixed with sand, should be prepared. Care must be taken to have the bed elevated, so that the surface be four or six inches above the level of the adjoining ground; and the surface should be slightly rounded, so as to allow any excess of water, from heavy showers, to pass away. Unless this precaution be attended to, the plants will most probably perish, unless an awning of canvass covering be used to prevent it. The plants should be turned out of the pots with balls entire, and placed a foot or more apart. If it be wished that their flower-stems should rise to their highest extent, (*viz.* two feet,) they may be placed a foot apart; but when it is desired to keep them lower, they should be planted more distant, in proportion to their prostration. The plant is very well adapted for covering a bed only a few inches high, the branches naturally inclining to grow

horizontally, or even pendulous. Considerable care is required to keep them well secured, by tying, &c., in consequence of the shoots being succulent, and very brittle. When watering is required, none should be given to the heart of the plant, but it should be poured over the surface of the bed. To provide against accidents that may arise, it is advisable to have a few plants kept in pots, in order to replace deficiencies. If a bed is required to bloom profusely at a late period of the summer, or even in autumn, seed should be sown at the end of May, or early in June, and the plants treated in every respect as above directed. The plant produces seeds in abundance, but it requires some attention to get it before the capsule bursts. The plants may be taken up and preserved during winter in a cool, dry frame. In spring, they may be increased by pinching off the leading shoot, thereby causing the production of laterals, which being carefully taken off, may be struck; or the main stem, down to the root, may be divided, so as to have a shoot to each part. To get them to strike well, a hotbed frame, or stove heat, will be found useful. When the fine rosy lilac flowers of this very beautiful plant are fully expanded, being produced in vast profusion, and continuing for so long a season, they make a very pleasing appearance, and never fail to give ample satisfaction.

Nierembergia phanicea. Syn. *Petunia violacea*.—This plant is one of the most valuable additions to the flower garden, and with which all admirers of flowers must be pleased. It will bloom constantly in the open border from May to the end of October; and the fine rosy purple flowers being produced in vast profusion, render the plant a most pleasing object. When allowed to grow upright, and carefully trained, it will rise to six or eight feet high, or even more, and be liberally furnished with lengthened lateral branches. The plant is readily raised by seed, which should be sown in a pot early in spring, and placed in a hotbed frame. When strong enough, the plants should be transplanted into small pots, using a rich soil; and by the end of May, they may be planted out in the open border. Such plants will rarely rise higher than three feet the first season, but will produce a vast number of side shoots, and bloom abundantly. At the end of October, the old plants, if taken up with care, may be kept in a greenhouse through winter. About the end of September, slips should be

taken off, and struck in heat, which they do very freely; ten or twenty may be inserted in a pot, and after having taken root, they may be kept in a cool greenhouse, frame, or any similar situation, during winter. If large plants are desired, some of the cuttings should be potted off at the end of February, using a rich loamy soil, and well draining the pots. Each plant should have a stick, to which it should be neatly tied, keeping a principal leading shoot. These plants, when properly attended to, in repotting as soon as required, and in training erect, will, if kept in a greenhouse, reach three or four feet high by the end of May; and if then planted out, will reach six feet, or more, by the end of summer. Old plants, that have survived the winter as above directed, if turned out, will be proportionably fine. A bed of this plant looks well, when the plants are so ranged as to form a cone; or, indeed, in any shape in which the middle of the bed is the highest, gradually lowering to the edges. The plant is admirably well adapted for pegging down to the ground, the lateral shoots rising from six inches to a foot high. The leading shoots being prostrate, checks luxuriance, and causes abundance of bloom. Cuttings taken off in autumn are very suitable for this purpose: they readily bend to the direction desired. Care is required to have a number of short sticks pricked in the bed, to which the shoots, in the early part of the season, must be tied, being very brittle; subsequently, however, when there is an abundance of shoots, no tying will be required, but the sticks are necessary, in order to prevent strong winds from blowing the plants out of proper form. This plant is also admirably well adapted for training against a wall, or for covering a fence during summer: of course proportionably sized plants must be used to suit the purposes. The flowers of the original species has a dark-coloured tube, but a variety has been raised with a lilac tube: the former is now commonly called *N. phænicea*, and the latter *N. phænicea var. pallida*.

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

Ladies' Botany; or a Familiar Introduction to the Study of the Natural System of Botany. By JOHN LINDLEY, Ph. D., F.R.S. &c. &c. &c., Professor of Botany in the University of London. 8vo. 302 pages, 25 plates. London, 1834. 16s. plain, £1 1s. coloured.

We feel sorry that we have not room this month to make those observations upon the work before us, that we otherwise should have done. But we have much pleasure in stating, that in illustration of the *Natural System of Botany*, the work is unequalled, and each particular is treated in the most satisfactory manner; in fact, like all the other works we have read from the pen of Dr. LINDLEY, it is done in the most masterly manner. Every person desirous of acquiring a knowledge of the *Natural System of Botany* ought to possess Dr. LINDLEY's Work.

Plants figured in the following Periodicals for August:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured; 3s. plain.

1. *Schinus molle*, Peruvian Mastic Tree. Class, Diœcia; order, Decandria. Natural order, Terebinthaceæ. This plant, the *Molle* or *Molle* of the Peruvians, grows wild not in Peru only, but also in Mexico, according to some authors, where it inhabits dry and sandy places: it is likewise found in Chili, unless the specimens I have received from that country are cultivated plants. If not possessed of much beauty in the flowers, (which, however, are rarely produced in our collections,) the *Molle* yields to few trees in the gracefulness of its foliage: added to which, its properties and uses are well deserving our attention. Flowers of a pale yellow green. *Schinus*, from the Greek *Schinus*, the ancient name of the Mastic Tree; and this is known by the same name in Peru.

2. *Coleonema pulchrum*, Beautiful Coleonema. Pentandria, Monogynia. Rutaceæ. The present graceful and beautiful plant is no doubt a native of the Cape of Good Hope, and has long been cultivated in the greenhouse of the Botanic Garden of Glasgow, under the name of *Diosma angustifolia*, a name, however, only of the gardens, and implying a character common to others of the genus. It flowers in April and May, and deserves a place in every collection, from its graceful mode of growth, and bright and conspicuous rose-coloured blossoms, which continue long in perfection. *Coleonema*, from *koleos*, a sheath, and *unna*, a filament,—from the groove in the claw of the petal in some species, in which the sterile filament is partly lodged.

3. *Acacia hastulata*, Little Halbert-leaved Acacia. Polygamia, Monœcia.

Leguminosæ. This very singular and distinct species was discovered by Mr. MENZIES, in King George's Sound; and, in the same country, by the late Mr. FRAZER, whence he sent seeds to the Glasgow Botanic Garden, at which place it flowered in the greenhouse in 1834. The flowers are produced in globose heads, of a lemon colour; they are delightfully fragrant, smelling like Hawthorn. Acacia, from *akazo*, to sharpen; many species thorny.

4. *Silene Virginica*, Virginian Catchfly. Synonym, *Lychnis coccinea*. Decandria, Trigynia. Caryophyllæ. The plant grows about 18 inches high, nearly smooth, and paniced above. The flowers are of a fine light scarlet, more than an inch across.

5. *Iris tenax*, Tough-leaved Iris. Triandria, Monogynia. Iridæ. This interesting plant is stated by its discoverer to be a common plant in North California, and along the coast of New Georgia, in dry soils or open parts of woods, flowering in April and May, the same season that it does with us when kept in a cool frame. Mr. DOUGLAS gave it the appropriate appellation of *tenax*, because the native tribes about the Anguilac River make a fine cord from the fibres of the leaves, of which they weave their fishing-nets, a purpose to which it is admirably suited, on account of its buoyancy, strength, and durability. Snares are made of it for deer and bears, of such strength, that one not thicker than a sixteen-thread line is sufficient to strangle the great stag of California (*Cervus Alces*), one of the most powerful animals of its tribe. It has been recommended for cultivation by Professor LINDLEY in England, (where it proves perfectly hardy,) as better suited to our climate than the famous *New Zealand Flax*. Flowers of a reddish purple, solitary.

6. *Alstromeria oculata*, Eye-marked Alstromeria. Hexandria, Monogynia. Amaryllidæ. Various species of this elegant and beautiful genus abound in South America, especially on the side next the Pacific. The present species can boast of flowers which, though perhaps the smallest of the genus, are among the most desirable for gracefulness and beauty, and remarkable for the eye-like spots in the centre of each inner petal. Flowers reddish, white centre, surrounded by a purple band. It appears to have been first discovered at Valparaiso, by Mr. CUMING. Alstromeria, from Baron C. ALSTRÖMER, a Swedish botanist.

7. *Caladium grandifolium*, Large-leaved Caladium, or Indian Kale. Syn. *Arum grandifolium*. Monœcia, Polyandria. Aroideæ. This plant makes a truly handsome appearance, with its climbing and rooting stems, its large foliage, and pale buff spathas with a dark red line down the middle on the back. It flowered in the Glasgow Botanic Garden in April last; the plant came from Demerara.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured; 3s. plain.

1. *Gilia coronopifolia*, Raven-footed Gillia. Pentandria, Monogynia. Polemoniaceæ. This very handsome plant is a native of Carolina. Although the plant is delicate, it is tolerably easy to cultivate, and produces seed in abundance. It is called in the French gardens, *Ipomopsis picta*.

2. *Ribes niveum*, White-flowered Gooseberry. Pentandria, Monogynia. Grossulaceæ. An undescribed Gooseberry, brought to the Horticultural Society by Mr. DOUGLAS, from North-west America. It is nearly allied to the common European Gooseberry, from which it is distinguished by its long conical stamens. The fruit is about the size of that of a Black Currant, and of the same deep, rich purple colour; it has altogether the appearance of a small smooth gooseberry, but its flavour is very different. It is entirely destitute of the flatness which is more or less perceptible in even the best gooseberries, in lieu of which it has a rich sub-acid vinous, rather perfumed flavour, which is extremely agreeable. The fruit is rather too acid to be

eaten raw, but when ripe it makes delicious tarts, and would probably form an excellent means of improving the common gooseberry by hybridising.

3. *Diplopappus incantus*, Hoary Diplopappus. Syngenesia, Polygamia Superflua. Compositæ. A handsome half-shrubby species, discovered in California, by Mr. DOUGLAS, by whom seeds were sent to the Garden of the Horticultural Society, in 1832. Its flowers are of a rich lilac, with a bright yellow disk. It is rather tender, and should be protected during winter in a frame. In summer it grows freely in any hot, exposed situation, for which its Californian constitution particularly qualifies it. Diplopappus, so called in allusion to the double row of papus of the genus.

4. *Pultenea flexilis*, Shining-leaved Pultenea. Decandria, Monogynia. Leguminosæ. A native of the country around Port Jackson, where it flowers in the spring (Sept); and according to Hortus Kewensis, has been an occasional inhabitant of the English gardens for upwards of thirty years.

5. *Dendrobium aggregatum*, Clustured Dendrobium. Gynandria, Monandria. Orchideæ. Received, according to Dr. ROXBURGH, into the Botanic Garden, Calcutta, from Mr. PIERARD, who found it growing on the trunk of *Lagerstræmia Regina*, on the northern border of Arracan, and observed it in the woods exclusively on that tree; it was, however, found to thrive on the Mango tree, in the Botanic Garden. It is also a native of the banks of the Chappadony river, in the Gulph of Martaban, whence it was brought, some years since, by Dr. WALLICH. It appears to require as much heat and moisture as any of the Indian species, a circumstance which is explained by its inhabiting, when wild, the damp and sultry woods of Martaban. We believe it was originally distributed by the Horticultural Society; but it has hitherto flowered only in the cultivation of Mr. HARRISON and Mr. BATEMAN, from both of whom we have received specimens, and blossoms in March and April.

6. *Phacelia tanacetifolia*, Tansy leaved Phacelia. Pentandria, Digynia. Hydrophyllææ. This is a more elegant and less weedy plant than the *P. citrinalis*, now common in gardens. It is a hardy annual, thriving in any soil or situation, it grows two feet high. The flowers are of a light bluish violet colour, nearly sessile along one sided spirally incurved racems, forming together a dense dichotomous panicle placed at some distance from the upper leaves. A native of California, where its seeds were gathered by Mr. DOUGLAS. Phacelia, from *phakelos*, a bundle; in allusion to the flowers being collected in close parcels.

7. *Stachys inflata*, Bladdery Stachys. Didynamia, Gymnospermia. Labiatæ. This plant was raised in the garden of the Horticultural Society; it is apparently hardy, and grows freely in any common garden soil, and is easily propagated by cuttings. Although not a very handsome plant, yet its thin half transparent light violet flowers, and neat hoary leaves give it a pleasing appearance.

8. *Erica codonodes*, Bell-bearing Heath. Octandria, Monogynia. Ericæ. This species of Heath has the general appearance of *E. arborea*, but it seems essentially distinct in its larger flowers, more slender leaves, less hoary branches, and truly bell shaped corolla, which has by no means the globular form of that of *E. arborea*. It is quite hardy, and forms a bush from 10 to 12 feet high. It begins to blossom in February, and continues till the end of May, disregarding both frost and snow, being often covered with flowers from top to bottom, and forming a most beautiful object. It thrives in light sandy peat, and is increased, but with difficulty, either by cuttings struck in sand under a bell glass, or by layers bent down in July.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Moræa discoloris*; var. *variegata*; Tridant-leaved Moræa. Triandria, Monogynia. Iridæ. This very elegant variety, which is not surpassed in

beauty by any of its congeners, has been regarded as a species by DE CANDOLLE, SPRENGEL, and others, but we can perceive no difference, except colour, whereby to distinguish it from *tricuspis*, to which in our opinion it has been very properly united by JACQUIN, THUNBERG, and KER. It is a mistake to suppose, that to cultivate the Cape Iridæ, a greenhouse is necessary; all that they require is protection from frost, and this can best be done by a frame, which may be removed entirely in fine weather. A warm sunny border should be selected for their culture, and the earth removed to the depth of a foot or 18 inches, and replaced by a mixture of vegetable mould and river sand. The bulbs should be taken up in the autumn, and replanted about the middle of January, the larger ones being carefully selected from the rest. The earth will require to be renewed every two or three years.

2. *Lophospermum Rhodochiton*, Purple Lophospermum. Didynamia, Angiosperma. Scrophularine. Seeds of this beautiful new climber, was lately received into this country from the Royal Botanic Garden, at Berlin. A plant flowered in June last, in Mrs. MARRYAT's collection, at Wimbledon. The corolla is funnel-shaped, of an intense purple, an inch-and-a-half long, clothed with white glandular hairs. The plant requires the same treatment as *L. erubescens*.

3. *Diapensia lapponica*, Lapland Diapensia. Pentandria, Monogynia. Polemoniaceæ. This plant was raised at the Botanic Garden, Edinburgh, from seeds gathered on the Rocky Mountains, North America, by Mr. DRUMMOND, in the last expedition of Captain FRANKLIN, and flowered in April, having been kept in the open borden, and occasionally covered with a hand-glass.

4. *Campanula garganica*, Garganian Bell-flower. Pentandria, Monogynia. Campanulaceæ. This pretty little Campanula was discovered by Professor TENORE, on Mount St. Angelo, anciently Garganus, in the Kingdom of Naples, and named by him after that locality to which it appears to be peculiar. It was raised in the Bishop of ROCHESTER's garden, at Bromley, from seeds sent to Miss MURRAY, from Naples, by the Honourable WILLIAM T. H. FOX STRANGWAYS, and thence plants have been liberally distributed to various collections. The plant is admirably adapted for a rock-work, and appears to thrive best in a mixture of peat and loam. It is readily increased by division.

On the different Modes of Budding; and of Herbaceous, or Summer Grafting. Translated, with some additions and variations, from l'Horticulteur Belge.

(Extracted from the *Gardener's Magazine* for July, 1834.)*

I. BUDDING. Greffes par Gemmes.

1. *Escutcheon Budding, without a Bud or Eye; Greffe en Ecusson sans Yeux.* (fig. 1.)—The object of this mode of budding is simply to cover a wound or blemish in one tree by the live bark of another. Take from a tree of the same sort, or at least of the same genus, as the wounded tree, a piece of bark rather larger than the wound, and form it into a regular shape; then cut the bark round the wound into the exact form and dimensions of the piece to be inserted, so that the latter may be let into the former with the greatest exactness. The inner bark of the graft and that of the stock being fitted so as to joint perfectly all round, and the shield closely adhering to the tree in every part, it is kept on by a ligature; and the edges of the wound are covered with grafting-wax or clay. It is a remarkable fact, which some are, perhaps, not aware of, that the wood formed under a piece of bark inserted in this manner, even though that bark be without a bud or eye, will be the wood of the tree from which the shield



* Since reading this Article in the "Gardener's Magazine," we have procured the original Work, and intend giving other extracts from it in subsequent Numbers.—C. D.]

was taken. In this way several kinds of wood might be formed on one tree, without introducing a single leaf belonging to those different woods. The portion of wood introduced will always be limited in diameter to the size of the portion of bark put on.

2



2. *Budding with a Bud or Eye, and a circular Escutcheon; Greffe en Escusson par Inoculation.* (fig. 2).—With the point of a grafting-knife, or rather with that of a penknife, cut a small bud out of the tree to be propagated, leaving a narrow rim of bark round it, and taking, at the same time, a portion of the wood, which is retained. A hole is made in the stock, of the same size as the bud and its rim, and of a depth equal to the length of the piece of wood left on. The whole is adjusted so that the bud, with its bark and wood, fills up the wound exactly; and the edges are then covered with grafting-wax. This mode of budding is employed to equalise the flower-beds over a tree, by removing some, from where there are too many, to those parts of the tree where there are too few.

3. *Escutcheon Budding, with Wood under the Bark; Greffe en Escusson bousé.* (fig. 3).—To procure the

3



escutcheon, a deep and transversal incision is made above a healthy and vigorous bud; then, by withdrawing the blade of the grafting-knife, and entering it rather higher than this cross cut, a narrow strip of bark, three or four lines broad, by 1 in. or $1\frac{1}{2}$ in. long, is taken away, terminating in a point at the bottom. The eye should be situated about a third from the top, and the stipules or other appendages that sometimes accompany the petiole, as well as prickles, &c., must be taken off with caution. With the point of the grafting-knife, the wood of the escutcheon is then taken out, leaving a small piece im-

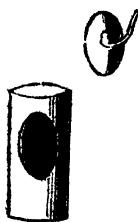
mediately under the eye, and about a third of the length of the escutcheon. This bud, thus prepared, is inserted in the stock, and then tied as before. This mode of budding is that most generally used in European nurseries.

4. *Escutcheon Budding, with a growing Bud; Greffe en Escusson avec un Œil poussant.*—The escutcheon is cut and placed in the same manner as by the preceding method; but, as soon as it is inserted, the head of the stock is cut off, and all the buds that push from it, except that from the escutcheon, are rubbed off as they appear. This mode of budding, when done in the spring, has the great advantage of forcing the bud to develope itself immediately, thus gaining a year. However, it sometimes happens that, if the bud does not take, the sap of the stock not being able to find a channel, from all the shoots being rubbed off as they appear, the stock, or at least a great part of its length, dies of repletion. When done in the month of August, this mode of budding seldom succeeds, because the young shoot, not having time to ripen, perishes with the frost, and often causes the death of the stock.

5. *Escutcheon Budding, with a dormant Bud; Greffe en Escusson avec un Œil dormant.*—This mode is similar to the preceding; but it is performed in August, and nothing is cut away from the stock till the following spring, in order to prevent the developement of the bud before that season. Though longer before it takes effect, this mode of budding is more certain to succeed than the preceding method. It has also the merit of not hurting the stock, if it does not take. The inhabitants of Vitry, who carry on the greatest commerce in fruit trees in the neighbourhood of Paris, use it almost exclusively. This mode is that generally used in the British nurseries.

6. *Escutcheon Budding, without the Wood; Greffe en Escusson dénué de Bois.*—According to this mode, all the wood is taken away except a speck immediately under the bud; to the life of which bud, however, that speck is essential. The rest of the process is as usual. Besides being very suitable for Orange trees, this mode of budding is used for all trees having hard wood, such as Myrtles, Hollies, and all analogous species, whether indigenous or exotic. It can be done either with the growing bud or dormant bud.

7. *Escutcheon Budding, with Pincers; Greffe en Escusson à Emporte-pièce.* (fig. 4.)—A pair of pincers ought to be made on purpose, with which a piece of bark is taken off the stock. With the same instrument, or with the blade of the grafting-knife, an escutcheon or plate of bark, having a vigorous eye in its centre, is taken off a young shoot of the tree to be propagated. It must be exactly of the same size as the wound made in the stock, in order to fill it with the greatest precision. When it is properly fixed, it is supported by means of grafting-wax or soft wax. This method is excellent for budding old trees, the thick and rugged bark of which is not suitable for the ordinary modes.

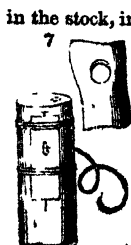


8. *Escutcheon Budding, with the Eye turned downwards; Greffe en Escusson à Rebours.*—The escutcheon is cut in such a manner that the point of the eye, when placed on the stock, is turned downwards, whether the incision in the stock is made in the usual manner, or like a T reversed, thus, J. By this method, the buds are forced to grow in a direction opposite to that which they would have taken naturally; but they soon resume their usual position; and the desired end, viz., that of increasing the size of the fruit by stagnating the returning sap, is thus by no means attained.

9. *Reversed Escutcheon Budding; Greffe en Escusson renversé.* (fig. 5.)—



Orange trees. It



The escutcheon is prepared in the form of a triangle; but instead of bringing it to a point under the eye, it is pointed above it. It will be perceived that the incision in the bark of the stock must be also reversed; that is to say, instead of being in the form of an upright T, it must be like a T turned upside down, as in the figure. To effect this, the longitudinal incision is made above the transversal one, instead of making it below it. It is finished with ligaments and grafting-wax, as the preceding modes. In comparatively cool and moist climates, like that of Britain, the grafting-wax may be dispensed with in such cases as this and the three or four preceding ones. This manner of budding is almost the only one used in the south of Europe, particularly at Genoa and at Hières, to multiply it is also suitable for the propagation of trees having abundant and gummy sap; and it might probably be advantageously employed to secure the success of buds on resinous trees.

10. *Budding resinous Trees; Greffe en Escusson d'Arbres résineux.* (fig. 6.)—An incision is made in the form of T, as if for an ordinary bud, in the bark of the stock. A double incision is then made obliquely, about two lines or two lines and a half from the upper part of T: this incision should penetrate the bark to the thickness of nearly a line, or so as to reach the soft wood. This mode of budding succeeds not only on resinous trees, but also on all those that have a gummy and very abundant sap.

11. *Covered Budding; Greffe en Escusson couvert.* (fig. 7.)

—The bud is prepared as usual; but, when it is inserted in the stock, instead of a ligature, the lines of junction are covered with grafting-wax: a piece of bark is then taken from another tree, and, a small hole being made in the middle of it, it is placed on the escutcheon, so as to cover the whole of it except the bud, which appears through the hole, as in the figure. A bandage is then put over the bark, to keep the whole together. This mode of budding is rather too intricate for ordinary purposes; but it may be worth adopting for rare and delicate trees.

12. *Budding with a square Escutcheon; Greffe en Escusson* (fig. 8.)—Three incisions are made in the stock, one

transversal, and the two others longitudinal, beginning on each side of the horizontal one, and descending perpendicularly four or five lines. They are to be four or five lines apart, and to represent a long square, the bottom line of which is wanting. This square strip or plate is raised and turned down, as in the figure. A square escutcheon, provided with a good eye, is then cut from a branch of the tree which is to be propagated, exactly of the same size as the plate stripped down the stock; and it is applied to the incision, which it must cover with the greatest exactness. This being done, the plate of bark, which was hanging down on the stock, is raised, and the escutcheon covered up to the eye; the line of junction is then coated with grafting-wax, and the whole is tied like other buds. It appears that this mode of budding was much used formerly, and that it succeeded perfectly: but, as it is rather tedious in the execution, it is now seldom employed.

13. *Escutcheon Budding, with a Portion of Terminal Buds; Greffe en Escuson par Portion d'Yeux terminaux.* (fig. 9.)—A piece, measuring six or eight

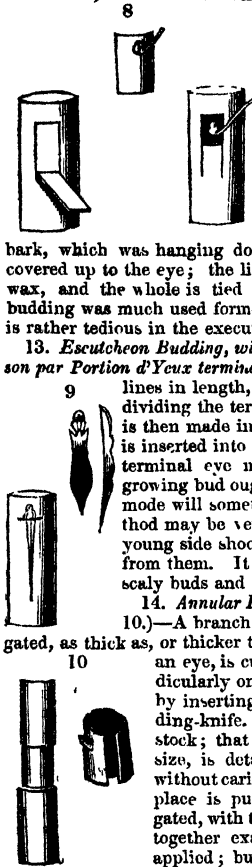
lines in length, cut from the top of a branch, is split in two, dividing the terminal bud exactly in the middle. An incision is then made in the stock in the form of a T, and the half bud is inserted into it in the usual manner. In case of need, the terminal eye might be divided into four equal parts. The growing bud ought to be used to insure success, though this mode will sometimes succeed with a dormant bud. This method may be very useful, if the tree to be propagated has no young side shoots strong enough to admit of a bud being taken from them. It is particularly suitable for rare trees, with scaly buds and opposite branches.

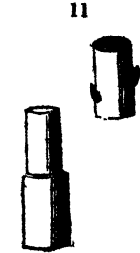
14. *Annular Flute Budding; Greffe en Flute en Anneau.* (fig. 10.)—A branch is chosen on the tree which is to be propagated, as thick as, or thicker than, the stock, and a ring of bark, including

an eye, is cut from it, and detached by splitting it perpendicularly on one side, and then separating it from the wood by inserting under it the spatula-like handle of the budding-knife. A similar operation is then performed on the stock; that is to say, a ring of bark, exactly of the same size, is detached from the stem in the same manner, but without caring whether there are buds on it or not. In its place is put the ring taken from the branch to be propagated, with the precaution of making the inner barks join together exactly both at top and bottom. No binding is applied; but the whole is covered with grafting clay (*onguent de St. Fiacre*) or grafting-wax. Neither the branches nor the head of the stock are to be cut down till the bud has taken. The two periods most favourable for this sort of budding are, the time of the greatest movement of the sap in the spring, and at the end of its greatest movement in August. This mode of budding has the advantage of never mutilating the stock; because, if it does not take, the bark of the ring supplies the place of that taken away. It is not only suitable for the propagation of Walnut trees, but also for the increase of all rare trees with hard wood, such as the American Oaks and Chestnuts.

15. *Split Flute Budding; Greffe en Flûte fendue.*—The only difference between this and the preceding mode is, that, if the ring of bark containing the bud is larger than the space prepared for it on the stock, a piece must be taken from it longitudinally, so as to make it fit exactly.

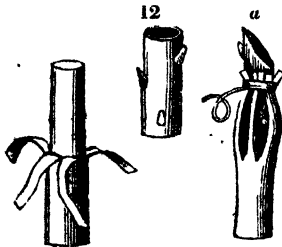
16. *Flute Budding by close Contact, Tube Budding; Greffe en Flûte par Juxtaposition, ou en Sifflet.* (fig. 11.)—The head of the stock being cut off, a ring of bark, 2 in. or 3 in. long, is removed. A shoot is then taken from the tree to be increased, of exactly the same thickness as the stock, and a ring





or tube of bark is taken off the thick end, without being split longitudinally, not quite so long as the piece of bark taken off the stock, but provided with two or three good eyes. The tube thus formed is placed upon the stock in the room of the one taken away, and care is taken to make the two edges of bark join below. The part of the stock which projects over the ring of bark is next split into shreds, and brought down over it all around, so as, when secured by grafting-clay, to keep it in its place. This mode of budding is chiefly employed in the south of France for propagating Walnuts, Chestnuts, Figs, Mulberries, and other trees with thick bark and abundant pith.

17. *Common Flute Budding; Greffe en Flûte ordinaire.* (fig. 12.)—The head of the stock is cut off; but, instead of removing a ring of bark, as in the preceding mode, it is cut



longitudinally into four or five strips, and turned down as in the figure, being left still attached to the tree. From a shoot of the tree to be propagated, a tube of bark is taken, furnished with four or five eyes, rather shorter than the strips, though longer than in tube budding. When the tube of the scion is slipped on the stock, the strips of bark are raised over it, and fastened at the top by a ligature. This method of budding is in very general use both in France and Germany.

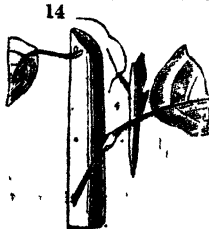
18. *Flute Budding in Shreds, with the Stock cut obliquely; Greffe en Flûte et en Lanîère.*—This is nothing more than the mode above described, with the end of the stock cut obliquely, as shown at a in fig. 12, instead of being left to be afterwards cut into shreds and turned down over the tube of bark, as in tube budding, No. 16, fig. 11.

II. HERBACEOUS GRAFTING. *Greffe Herbacée.*

1. *Grafting upon fleshy or tuberculous Roots; Greffe sur Racines charnues ou tuberculeuses.* (fig. 13.)—It not unfrequently happens that a tubercle of a Georgina root is found without eyes; and, when this is the case, notwithstanding all the care of the cultivator, it may remain in the ground one or two years without budding, till at last it rots. This imperfection is easily discovered if the neck of the tubes is looked at attentively, for it is always there that the buds are found. In this case, as soon as a Georgina bud upon some other tuber has begun to germinate, it is picked out with the point of the grafting-knife, and is taken away with a small piece of the tubercle adhering to it. On the neck of the barren tubercle a small hole is made, in which the bud is inserted, but in such a manner as that the base of the bud shall be perfectly on a level with the surface of the tubercle; and it is cemented with grafting-wax. The tubercle is then planted in a pot, taking care not to cover the neck on which the graft is, and the pot is plunged in a hot-bed under glass. When the graft has taken properly, the plant is turned out into the open border.

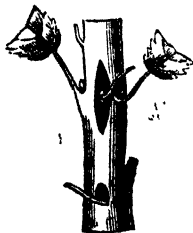


2. *Herbaceous Furrow-Grafting for vertical Shoots; Greffe herbacée en Rainure pour les Omnitiges.* (fig. 14.)—A bud with a triangular slice of bark and wood, when in a soft or herbaceous state, is cut out of the scion, and inserted in a corresponding groove made in the stock, as shown in the figure; a ligature is applied, and afterwards grafting-wax. This mode of grafting succeeds both with the young wood of trees and with herbaceous plants, whether perennial or annual. M. TSCHOUDY gave the arbitrary



name of *omnitiges* to those plants, all the shoots of which have an equal tendency upwards, and which, of course, are all equally suitable to graft upon.

3. *Herbaceous Grafting for Shoots with opposite Leaves; Greffe herbacée pour les Bourgeons à Feuilles opposées.* (fig. 15.)



15

In the middle of the stem, between two opposite eyes, an angular and longitudinal incision is made, traversing the stem from one side to the other. The graft is cut angularly at its top and bottom, and it is inserted as in the figure. The binding, &c. is then put on as usual. This mode of grafting is suitable for those species of trees, and annual or perennial plants, the buds of which are opposite on the stem, which happens most frequently on the central shoots of plants. M. Tschoudy gives the name of *multitiges* to those plants, the central shoots of which have a tendency to rise more vertically than the lateral ones, and which have

consequently more vigour: it is upon these central shoots that the grafts ought to be made.

4. *Grafting on the Stem of Annual or Perennial Plants; Greffe sur Tige de Plantes Annuelles ou Vivaces.* (fig. 16.)—



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The period chosen for this mode of grafting is that of the greatest vigour of the plant, that is, some days before its going into flower. The stem of the stock is cut through above a leaf, as near as possible to its petiole, and a slit downwards is made in the section. A shoot is then taken off near the root of the plant to be increased, the end of which is cut into a wedge shape, and is inserted in the slit made in the stock, taking great care of the leaf on the latter; for it is that which must nourish the cion until it has taken thoroughly, by keeping up the circulation of the sap. A bandage is applied, and the junction covered with grafting-wax, as before. When the graft is taken, which is ascertained by its growth, the ligature is removed, and the old leaf, and the shoots from the stock below the graft, are removed. M. Tschoudy grafted in this manner artichokes upon cardoons, and other plants on their congeners.

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5. *Grafting on Succulents; Greffe des Plantes Grasses.* (fig. 17.)—Take a young shoot or leaf of a succulent plant (for example, of a cactus or opuntia,) and, cutting its base to a point or wedge, insert it in a hole or slit made in the stem or leaf of another species, but of the same genus.

18



6. *Grafting the Melon; Greffe du Melon.* (fig. 18.)—On the stem of a cucumber, or any other plant of the family of Cucurbitaceæ, but having some analogy with the melon, choose a vigorous part of a shoot having a well-developed leaf. In the axil of this leaf an oblique cut is made, of half its thickness. The point of the melon shoot, so far developed as to have its fruit quite formed, is then cut off, and pointed at its end, 2 inches below the fruit. It is inserted in the cleft made in the stock, always taking care to spare the leaf until the cion has taken. The remaining part of the operation is performed in the usual manner with ligatures and grafting-wax. This mode of grafting succeeds pretty well; but it has not hitherto been applied to any useful end. Tomatoes may be grafted in this manner on potatoes, and it is said that potato plants thus treated produce

good crops both of potatoes and tomatoes.

Grafting-wax may be formed with turpentine, bees' wax, rosin, and tallow.

QUERY.

ON CARNATIONS.—Amongst the many valuable observations in your excellent little work, on the culture of this beautiful flower, I do not meet with any remark which affords information and advice on the subject of their suddenly withering and dying at this time of the year. In September last I purchased several pairs of different eminent Florists, and when they reached me, I thought I had never seen any looking more healthy and fresh; during the winter months I adopted the course recommended by your Correspondent, INNOVATOR; in April last I potted them in pairs into the flowering pots, and until a fortnight since no layers could possibly present a more promising appearance, when much to my surprise not less than half a score of them rapidly withered and died; they had been regularly watered twice a week with soft water. On examining the stems, I found them all decayed immediately below the surface, and but little increased in roots, the mould, not as I expected, containing worms or slugs. The first time I observed the change, I followed INNOVATOR's advice by watering them with limewater, but it was all to no purpose; and one most remarkable fact is, that in one or two instances, only one plant in a pot died, the other continuing perfectly healthy. If they had all been affected in pairs, I should have suspected the compost: such, however, I am satisfied was not the cause; and that plants apparently so healthy, and in such an advanced stage, attended with every possible care, should so suddenly die, is to me at present unaccountable, and certainly a great disappointment; if, therefore, INNOVATOR, or any of your experienced Correspondents, will oblige me with a few observations on the subject, I can assure you it will be conferring a particular and general favour, as I hear many of my neighbours have experienced the same misfortune, and are equally at a loss.

C. W. J.

22d June, 1834.

REFERENCE TO PLATE.

1. *Grandissima Pelargonium*. Monadelphia, Heptandria. Geraniaceæ. A new and very handsome sort, grown by Mr. WIDNALL, florist, Grantchester, near Cambridge, and several other nurserymen in the neighbourhood of London. It requires the same treatment as the other varieties.

2. *Fuchsia Robertsii*, ROBERTS'S FUCHSIA. Octandria, Monogynia. Onagrafiæ. This truly splendid Fuchsia was raised by Mr. JOHN ROBERTS, Gardener to J. H. TREYMAINE, Esq. at Heligan, near St. Austelle, Cornwall, from whom we received specimens from whence our drawing was taken.—Mr. ROBERTS informs us that "it is planted out in the open ground, and is now (June 1834) five feet high, spreads fifteen feet in circumference, and is loaded with flowers." It appears to be a vigorous growing plant, having been, as we understand, a small plant in the spring of 1833, when it was turned out into the open border.

FLORICULTURAL CALENDAR FOR SEPTEMBER.

PLANT STOVE.—(See last month's directions.)

GREENHOUSE PLANTS.—All the tender plants belonging to this department should now be taken into their winter habitation, giving them a plentiful supply of air night and day, if the weather will allow it; also, particular attention must be paid to watering: the hardiest kinds may remain out till the middle or latter end of the month at the latest.

FLOWER GARDEN, &c.—Towards the end of the month, Tulips, Hyacinths, Crocuses, &c. may be planted for early spring flowering in pots of light soil, (see the article in the March number), and also in borders. Pinks should now be transplanted into beds for flowering, and kept well supplied with water till they have taken root. Carnation layers and pipings should now be potted. Auriculas should be duly attended to with water. Dig and prepare nursery beds for planting biennial and perennial plants sown in spring.—Still propagates fibrous rooted perennials by slips, &c.

F. F. A.



Granulostima

a. Robertsu

THE
FLORICULTURAL CABINET,

OCTOBER 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Composts suitable for growing Florists' Flowers.* By AN ARDENT AMATEUR.

Once more I trouble you with a few remarks on different composts, which you are welcome to insert in your very useful little Magazine, should you approve of them. Having often experienced the inconvenience of being obliged to refer from one book to another for a description of the composts suitable for different flowers, I have collected some of the most approved together, thinking they might be useful to many of your readers. I will begin with

CARNATIONS.

1.—Two-thirds fresh loam ; one-third rotten frame-dung, with a little sand.

2.—One-half loam ; one-half rotten frame-dung, with a little sand.

3.—Five-sixths of No. 1 or No. 2 ; one-sixth leaf-mould, good for Picotees.

4.—One-third loam ; one-third peat ; one-third two-year-old cow-dung.

RANUNCULUSES AND ANEMONIES.

Two-thirds loam ; one-third rotten cow-dung.

DAHLIAS AND NARCISSUSES.

Loam well manured.

HYACINTHS.

1.—One-third sea or river sand; one-third loam; one-fourth rotten cow-dung; one-twelfth leaf-mould.

2.—Two-sixths grey sand; two-sixths well-rotted cow-dung; one-sixth tanners' bark, quite rotted; one-sixth tree leaves, well rotted.

PINKS.

Two-thirds loam; one-third two-year old cow-dung.

TULIPS.

Good sound loam.

AUBICULAS.

1.—One barrowful of loam; one do. leaf-mould; one do. old frame-dung; one do. two-year-old cow-dung; one peck of river sand.

2.—Two barrowfuls of sandy loam; one do. leaf-mould: one do. two-year-old cow-dung.

3. One-half rotten cow-dung; one-sixth loam; one-eighth leaf-mould; one-twelfth sand; one-twenty-fourth decayed willow wood; one-twenty-fourth peat; one-twenty-fourth ashes of burnt vegetables.

POLYANTHUSES.

1.—One barrowful of sandy loam; one peck of leaf-mould; one do. old cow-dung.

2.—One barrowful of well-rotted cow-dung, or leaf-mould; one-half do. white sand; two do. good loam.

HEARTSEASE.

Three barrowfuls of fresh loam; one do. one-year-old horse-dung; one peck of sand.

AN ARDENT AMATEUR.

ARTICLE II.—*An Experiment on the Culture of the Erythrina Crista Galli in the open Border.* By Mr. WM. BARRATT, Nurseryman, Wakefield.

Having long thought it possible to make many valuable additions to our beds of flowers in the open air, (I mean of such sorts as would bear being planted and left there during the winter season,) I was induced some years ago to try several kinds of plants

which I had always hitherto seen kept (at least in winter) in the stoves and green-houses. Many died, but some have flourished. The *Erythrina Crista Galli* is one which has succeeded: it had a far better bloom the second season than the first; and at this present moment, which is the third season, it has three stems of fine flowers upon it. My method of treatment was as follows:— I planted it out about April 1831, in an east border, against an east wall, which gets the sun about twelve o'clock; it threw up two stems, each about two feet high, but flowered rather weakly. In October I cut it down, and put a hand-glass over the stem and root. In April 1832 it pushed several shoots, which I reduced to two; and in August and September it bloomed splendidly, each flower-stem reaching about six feet high, and the bloom being much finer than I, and several gardeners who happened just then to visit my nurseries, had ever seen it in pots. I cut it down as before, and it remained without any protection from glass, mulch, &c.; and in 1833 it again put out shoots stronger and better than ever. When well grown in a rich sandy soil, I think it excels almost any hardy plant I know.

Some other green-house, and even stove plants, have lived out two winters; and should they continue to flourish, I will trouble you with a few remarks on them also.

WILLIAM BARRATT.

Wakefield, August 7th, 1834.

ARTICLE III.—*On the Culture of Carnations, and Raising them from Seed.* By MR. D. PEARCE.

Herewith I send you a few practical remarks on the culture of the Carnation, hoping that they will prove acceptable to your readers.

From Seed.—Choose such plants as possess the very best properties in every respect except being double; that is, let the colours be clear and vivid, the petals strong and well placed, &c. When the plants to bear seed are selected, place the pots upon a stage in an open situation, sheltering the flowers from rain by a covering. Give them a regular supply of water until the seed is perfectly
which will be in August, and may be known by the capsules

becoming brown, and the seeds nearly black. This must be attended to, for if gathered too soon, by far the greater part will be unproductive. Take care to extract the petals as they wither, for, if left in, they are apt to imbibe and retain the wet, and thus rot the base of the seed-vessel, and render it abortive. When the seed is gathered, allow it to remain in the capsule till the middle of the following May. Fill some pots, or pans, with the compost in which the plants are recommended to be potted; lay on a little fine-sifted soil, just sufficient to cover the seeds; place the pans in an airy part of the garden, keep the soil moderately moist, and shade from sun and dashing rains. When the plants are three inches high, and have six leaves, plant them on a bed of rich mould, composed of good loam and rotten dung, in equal parts. Plant them in rows, ten inches apart in the row, and twelve from row to row. Shelter them with hoops from the effects of rain or frost.

Composts.—For the strong and high-coloured Bizarres and Picotees, take two barrowfuls of light rich maiden loam, one of old cucumber-bed dung, and half a barrowful of river sand. For the rose and purple Flakes, and delicate Picotees, take two barrowfuls of good rich loam, and two at least of well-rotted dung, and half a one of river sand. Mix these well together in the autumn, and turn it two or three times during the winter; but never pot in sifted soil. The pots should be 12 inches deep, and 10 wide, with a good hole in the bottom, and three or four small ones round the sides. Pot in the middle of March, putting three plants in each pot. In June give the plants a top-dressing of leaf-mould and sheep-dung, which will give them a healthy appearance, enable them to grow much stronger, and give a greater richness to their colours.

Layering.—As soon as the flowers have turned their height of perfection, the plants should be layered. Prepare a quantity of hooked pegs, and light soil composed of sandy loam and leaf-mould. Cut off the lower leaves of the plants; stir up the old earth in the pots, and fill up with the above soil not sifted; then make an incision with a sharp penknife, entering about a quarter of an inch below a joint, and passing the blade of the knife up through the centre of it; continue to one-half or three-quarters of an inch above it. The portion of the stem left below the bottom

of the joint must be cut off horizontally close to the joint, which will complete this part of the operation. The incision being thus made, the layer must be gently pressed into the mould, and secured by one of the pegs, not less than half an inch, nor more than an inch, below the surface, raising the extreme point of each as upright as possible; water and shade as the weather may render it necessary, and in three weeks they will have struck root, and be ready to pot off in six weeks. When the layers have struck root, cut them off from the parent roots, without any of the stalk below the incision attached to them, and plant in 48-sized pots, filled with good loam and leaf-mould,—a single plant in each, if strong; if small, two, or even three, may be planted in each pot, placing them round the sides. When potted, place them under an arch of hoops in an open, airy part of the garden; in this situation, shelter them, by means of mats, from heavy, dashing rains and cold winds till winter. About the middle of October, prepare a frame for the reception of the plants: set it in a warm situation opposite the south, and fully exposed to the sun; raise it from the ground by laying a brick under each of the front corners, and two bricks under each of the back ones, which will give a good level towards the sun; then proceed to place all round the outside of the frame not less than a foot thick of soil, well trodden down, and raised nearly as high as the top of the frame. Next lay a good floor of lime scraps, and on that about six inches of coal-ashes, on which the plants are to stand. This will prevent worms from penetrating, and add much to the warmth and cleanliness of the plants. Elevating the frame is far preferable to setting it on the ground, as it is not so liable to rot, and the more the plants are raised above the level of the surrounding earth, by a thick floor of ashes, the more easily they will be kept free from damp. The frame being prepared, remove the plants to it, and cover with glasses in wet or frosty weather. Care must be taken not to shut them up too close, if the plants are wet, or they are very apt to become infested with mildew.

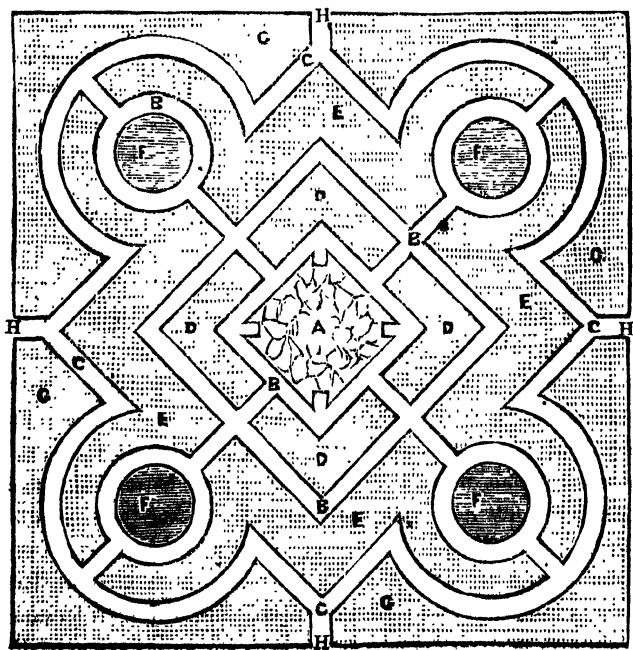
Carnations, if dry, will bear a strong frost without material injury; but if wet, they usually suffer. When the soil becomes green with moss on the tops of the pots, stir up the soil carefully half an inch deep, and sprinkle a little coarse sand upon it. Do this as often as requisite.

D. PEARCE.

May 2nd, 1834.

ARTICLE IV.—*On a Plan adapted for a Flower Garden, to be devoted exclusively to Plants indigenous to Great Britain.* By Mr. F. F. ASHFORD.

I here present for insertion in the pages of the *Cabinet*, if deemed worthy of admittance, and worth an engraving, the annexed plan. It is an intended representation of a native flower garden, or a portion of ground appropriated exclusively to plants indigenous to Great Britain. Our own native productions are often looked over, and, as it were, not observed at all, except by the scrutinising eye of the scientific and acute botanist; while exotics of foreign countries are introduced, and suffered to engage our attention, to the depreciating and undervaluing of our own: while, if a suitable spot of land were allotted for the cultivation of indigenous plants alone, I have no doubt but it would form a garden not to be equalled for beauty, fragrance, or continuance of flowers, by any similar place planted with the picked produce of foreign countries.



A is intended to be an elevated piece of rock-work, planted with dwarf mountainous plants, regulating their appearance and diver-

sifying their colours as much as possible; the short gravel walks are intended to lead to some rustic seats fixed in the rock-work, with Ivy or other climbing plants about them. B B B B represent grass walks; C C C C, a gravel walk surrounding the whole. D D D D are intended for beds retaining all the bulbous-rooted plants together, distributing them in each bed, so that they all may have plants in flower during the whole season, or they may be systematically arranged, so that each bed may contain a single natural order—as, for instance, the orders Cruciferae, Compositae, Leguminosae, or Umbelliferae; but this can be left to the taste of the proprietor. E E E E are beds for herbaceous plants, the colours being mixed in each or kept in distinct beds, as red, blue, yellow, white, &c. F F F F are fountains for aquatic plants, supplied by means of pipes from some neighbouring water. The whole may be surrounded, close to the gravel walk, by a neat wire fence, or close pales, to exclude vermin: if pales be used, it should be further surrounded by a neat, well-clipt edge of native plants, as Roses, Privet, Sweetbriar, &c. Where it is wished to be very private, the ground G G G G may be planted with native forest trees, both deciduous and herbaceous. H H H H, the entrance gates.

F. F. ASHFORD.

April 4th, 1884.

ARTICLE V.—*On the Culture and Preservation of Gloxinia maculata and speciosa.* By W. K.

Having seen a Query in the first Volume of the *Floricultural Cabinet*, for information on the culture and preservation of the *Gloxinia maculata* and *speciosa*, and having cultivated these beautiful plants for a number of years with great success, I take the liberty to submit the mode of treatment which I have adopted, and which has amply repaid me with a fine show of flowers every year. The *G. maculata* is a plant that requires a strong heat to have the bloom in great perfection. It is a perennial plant, flowering late in the season, and consequently requires forcing to bring it forward, so as to have a good show of flowers before it be too late in the season. The flower-stems and leaves die every year after flowering, but if kept in the stove or the warmest part of the green-house,

a number of offsets will then, or immediately after, make their appearance. In February or March, or as soon as forcing of any description is going on, the old root should be shaken out of its present pot, and the offsets be divided and planted singly into small pots well drained, using light rich loam; then place them in a heat of not less than 70 degrees of Fahrenheit; a dung hot-bed is an excellent situation to bring them on. They will require larger pots as they advance in growth, and a plentiful supply of water. They will generally be in fine flower in July or August, when they may be placed among other tender exotics in the greenhouse where they make a fine display while in bloom; after which they may be placed in the stove or the warmest part of the greenhouse, and have very little water given them for the winter. The *Gloxinia speciosa* is a plant much better adapted to the greenhouse than the above; yet the larger leaves of a full-sized flowering plant generally die in winter, but if kept free from frost, and in a dry state, will set up numerous again in the spring, when they may be fresh potted into a light loam, reducing the balls a little, and paying particular attention to the drainage. When in a free growing state, they will require regularly supplying with water, and fine healthy flowering plants may be expected. I propagate by division of the tubers, striking the young offsets; or leaves, with the petioles left the whole length, and put in as cuttings in the usual way, make excellent flowering plants. The above plants, with various other stove perennials, certainly do much better if constantly kept in a stove, than when kept in a greenhouse; yet they may be had in tolerable perfection in the latter situation, by keeping the pots dry in winter, and adding extra heat in the spring.

If you think the above observations worth notice, they are entirely at your service.

W. K.

Kirk Ella.

ARTICLE VI.—*Observations on the Sale of Tulips.*

Communicated by SNOWDROP.

As the season is advancing for London Tulip sales, it may be worth while to put the young and unwary florist on his guard against imposition. To this end the following remarks of Mr.

HOGG (*Supplement*, p. 33) will, I hope, be useful; knowing, as I do from experience, that they are quite correct.

SNOWDROP.

“In the sale of dry bulbs, which frequently take place by public auction, there is always great risk and uncertainty in buying; and let the deception practised be ever so barefaced and roguish, there is no redress by law; for the auctioneer makes it one of the conditions of sale, ‘that they are to be paid for, and taken away immediately after, with all faults and errors of description,’ so that neither he nor his employers are responsible. I have been deceived, or, more properly speaking, I have been cheated alike in Hyacinths, Tulips, Ranunculuses, Dahlias, and Carnations. If, unawares, you attend a mock auction, and feel inclined to purchase any articles of furniture, you trust to your eye-sight and judgment; but, in the sale of flower roots, you have nothing to guide you—nothing to trust to, but the supposed good faith and probity of the vender: if they are found to be correct when they flower, it is all very well; and if they are not so, it is useless to complain, because there is no remedy. The idea of buying cheap, I suppose, is the great inducement with many; but what is the use of buying cheap, if you are dissatisfied with your bargain afterwards. Very few young florists are able to detect impositions of this sort; therefore the complaint is not so loud and general as it otherwise would be: and when they are detected, many are ashamed to confess that they have been duped and taken in. My observations here apply more particularly to the dry bulbs of Tulips and Ranunculuses.”

ARTICLE VII.—*On the Propagation and Cultivation of Plants. No. II.* By MR. F. F. ASHFORD, Gardener to H. MARTIN, Esq., Colston Hall, Bingham, Notts.

Omitted in No. I.—Burtonia, so named by ROBERT BROWN, in honour of Dr. BURTON, a collector of plants for Kew Gardens.

Genera 6. Cyclopia. C. 10, or. 1, sp. 3. This is a very pretty genus, raised by cuttings that are very young, being placed in pots of sand under a bell-glass, which must occasionally be wiped, or else the cuttings will be liable to damp off. An equal

Genera 11. *Euchilus*. C. 10, or. 1, sp. 1. *E. obcordatus* is a pretty New Holland plant, and thrives well in an equal mixture of turfy loam, peat, and sand. Propagated by young cuttings planted in sand, under a hand-glass. *Euchilus*, so named by BROWN from *eu*, well—*chilos*, a lip; in allusion to the upper lip of the calyx being very large.

Genera 12. *Edwardsia*. C. 10, or. 1, sp. 5. These plants are natives of New Zealand, and hardy enough to survive our winters when not too severe; but it is best to protect them in case of failure. Increased by young cuttings, planted in pots of sand, under a bell-glass; but if the species are planted in a conservatory they generally ripen seed, by which they may be readily increased. Sandy loam and peat is the best soil for them. Named by SALISBURY in honour of SYDENHAM EDWARDS, a celebrated botanical draughtsman.

Genera 13. *Eutaxia*. C. 10, or. 1, sp. 2. A pretty New Holland genus, thriving well in a mixture of sandy loam and peat, and increased by young cuttings, planted in sand, under a bell-glass. The plants should frequently be topped, to encourage them to grow bushy, or else they are apt to run up naked and unsightly. *Eutaxia*, from the humble, modest appearance of the plant: named by ROBERT BROWN.

Genera 14. *Macrotropis*. C. 10, or. 1, sp. 1. A Chinese genus of herbaceous plants, growing freely in a light rich soil, and readily increased by seeds, or by dividing at the root. Named by DECANDOLLE from *makros*, long—*tropis*, a keel; in allusion to the length of the innermost petal of the blossoms.

Genera 15. *Gompholobium*. C. 10, or. 1, sp. 17. A beautiful genus of evergreen shrubs; natives of New Holland. Its species thrive best in an equal mixture of very light loam, peat, and sand; taking care not to over-water them, as they are tender, delicate plants, and difficult to preserve. Young cuttings root freely in pots of sand, under a bell-glass. Seeds will sometimes ripen plentifully. *Gompholobium*, so named by SMITH, from *gomphos*, a wedge—*lobos*, a pod; in allusion to the tumid shape of the legumen, which swells from a narrow base upwards.

Genera 16. *Gastrolobium*. C. 10, or. 1, sp. 1. *G. bilobum* is a very pretty plant, a native of New Holland, and well adapted for the pit of a conservatory, thriving well in an equal mixture of

sandy loam and peat, and increased by seeds and young cuttings, which will root in sand under a bell-glass. *Gastrolobium*, from *gaster*, a belly—*lobes*, a pod; the seed-pods of this genus being very much swelled.

Genera 17. *Jacksonia*. C. 10, or. 1, sp. 4. A pretty genus of New Holland, increased by young cuttings placed in sand under a bell-glass, or ripened ones under a hand-glass. Sandy loam and peat is the compost in which they will thrive the best. Named by BROWN in honour of G. JACKSON, formerly librarian to AYLMER BOURKE LAMBERT, and an excellent practical botanist, of whom too little is known.

Genera 18. *Mirbelia*. C. 10, or. 1, sp. 6. A very pretty New Holland genus of evergreen shrubs. An equal mixture of sand, loam, and peat suits them very well; and young cuttings root without difficulty in sand under bell-glasses. Seed sometimes ripens, by which they are readily increased. *Mirbelia*, named by SMITH in honour of C. F. B. MIRBEL, a distinguished French physiological botanist, whose elucidations of the reticulated structure of vegetables make it proper to consecrate to his merits plants remarkable for their reticulation.

Genera 19. *Ormosia*. C. 10, or. 1, sp. 2. A West Indian genus of stove evergreen trees, thriving in a light loamy soil, or a mixture of loam and peat. Seeds generally vegetate freely, and young cuttings will root freely in sand under a bell-glass. Named by JACKSON from *ormos*, a necklace, for making which the handsome seeds (red, with a black eye) of the species are well adapted.

Note.—All the above genera, with the exception of No. 19, which is for the stove, and No. 14 for the flower garden, are inmates of the green-house or conservatory.

F. F. ASHFORD.

ARTICLE VIII.—*On Plants which are peculiarly adapted for Planting in Beds in Masses; each kind being showy and profuse in Flowering.* By FLORA.

(CONTINUED FROM PAGE 206.)

Malope grandiflorum. Monadelphia, Polyandria. Malvaceæ. This very showy plant is of the Mallow tribe; grows two feet to

two feet six inches high. The flowers are produced in great abundance, and being of a fine rosy crimson, make a very gay appearance, rendering it a desirable plant for giving a distant attracting effect. It blooms from June to the end of October, unless cut off by frost. Seed should be sown in pots, early in March, and be raised in a hot-bed; or may be sown upon a hot-bed, under a frame or hand-glass. The plants may be set out in the open border by the middle of May. I find it best to raise them in pots, as I can divide the plants without injury to the roots, and thus retain all the fibrous ones; this is essential for their striking again. Plants that are raised upon a hot-bed, and have the privilege of extending their roots to any desirable length, run to a great extent. The fibrous roots being very distant from the stem of the plant, are, in taking up, generally broken off, and it is difficult to get the plants to grow again; if they survive at all, they are generally very weakly: so that, if raised on a hot-bed, great care must be given to get all the fibrous roots. The plant blooms most profusely in a good loamy soil, mixed with a little manure or leaf-mould. If the soil be very rich, the plant will be liable to grow too vigorously, and produce a vast profusion of foliage, which will rather conceal the flowers; but if moderately enriched, it will produce one mass of bloom. I find it profitable to give all my flower-beds an addition of fresh soil every winter, generally adding about two or three inches deep. If the *Malope grandiflora* is not desired to come into bloom *before the beginning of August*, the seed may be sown in March, in the open border where it is desired the plants shall blossom. The plant produces seed in abundance, which ripens well from plants that bloom early in the summer.—(To be continued.)

[NOTE.—In the former part of this Article (p. 204), for *Calandria*, read *Calandrinia*.]

ARTICLE IX.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONTINUED FROM PAGE 182.)

| NAMES, | DESCRIPTION, |
|----------------------|-------------------------|
| 627 Salamanque,..... | Beautiful pale scarlet. |
| 628 Balve | Fine red. |

| | NAMES. | DESCRIPTION. |
|-----|-------------------------------|--|
| 629 | Sanache | Small red. |
| 630 | Sancho Panza | Flesh colour. |
| 631 | Sang de Bœuf | Purple. |
| 632 | Sangrado | Crimson. |
| 633 | Sanguinea | Small scarlet. |
| 631 | Sun Joseph | Large red. |
| 635 | Sappho | Very fine scarlet. |
| 636 | Scipius | Light crimson. |
| 637 | Seguse | Purple. |
| 638 | Sempervirens alba major | Exquisitely beautiful white, in clusters: evergreen. |
| 639 | Sephine | Lilac purple. |
| 640 | —— superbe | Red and blush. |
| 641 | Seraphine | Pinkish crimson. |
| 642 | Single Cluster Musk | White. |
| 643 | Single Yellow | Bright. |
| 644 | Sinolata | Scarlet and purple. |
| 645 | Sirocco | Curled scarlet and crimson. |
| 646 | Sir Sidney Smith | Rosy purple. |
| 647 | Soliel levant | Blazing pink. |
| 648 | Sophie brillante | Large blush. |
| 649 | Sowanof | Large purple. |
| 650 | Splendens | Fine deep blush. |
| 651 | Spongii | Small compact red. |
| 652 | St. George | Fine red. |
| 653 | Statutes General | Pink, tinged with purple. |
| 654 | St. Jacques | Small dark purple. |
| 655 | St. Louis | Light red. |
| 656 | St. Patrick | Dark blue purple. |
| 657 | Stratholder | Fine large reddish purple. |
| 658 | Strasburg | Pale pink. |
| 659 | Suan | Scarlet, tinged with purple. |
| 660 | Sultan | Pale red. |
| 661 | —— Achmet | Fine scarlet. |
| 662 | Saperb ambour | Large pale blush. |
| 663 | —— bouquet | Pink; grows in clusters. |
| 664 | —— brunette | Small deep purple. |
| 665 | —— carmine | Large globe. |
| 666 | Saperbe | Light crimson. |
| 667 | —— Duchesse | Large bright pink. |
| 668 | Superb Royal | Crimson. |
| 669 | —— Wood's | Fine purple, semi double. |
| 670 | Supreme | Pink. |
| 671 | Surpass Vulcan | Fine crimson purple. |
| 672 | Surpassante | Fine small blush. |
| 673 | Surprenante Beaute | Purple globe. |
| 674 | Surprise d Angletterre | Beautiful bright red. |
| 675 | —— de Province | New, small blush. |
| 676 | —— du monde | Large pale blush. |
| 677 | Susanna | Curled blush. |
| 678 | —— Elizabeth | Pinkish blue. |
| 679 | Suwarrow | Scarlet and light purple. |
| 680 | Sweet William | Small variegated crimson. |
| 681 | Talma | Light red. |
| 682 | —— nouveau | Splendid semi-double scarlet & purple. |
| 683 | Tavisanum | Pinkish blush. |
| 684 | Tegridia | Pale scarlet, tipped with crimson. |
| 685 | Temple d'Apollo | Large semi-double crimson, |
| 686 | Tendresse | Pink and purple, |
| 687 | Therese | Light blush. |

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

Floriculture; comprising the General Management and Propagation of Stove, Green-house, and Hardy Herbaceous Plants, Trees, and Shrubs. By J. MANTELL, F.L.S. 2nd Edition. 8vo. 52 pages. Price 7s. 6d.

In Vol. I., page 34, we expressed our approval of the first edition of this work; and we find in the second considerable additions. The matter is practical and useful, and much is compressed into the volume. We think, however, that a cheaper edition should be published, in order to extend its circulation to all classes of readers. We extract the following on

THE DAHLIA.

The Dahlia is a native of Mexico, and was first introduced into this country in the year 1789, at which period it attracted but little notice, and the species was soon lost. Although this flower was re-introduced by Lady HOLLAND in 1804, it is only within the last few years that the attention of the florist has been directed to its cultivation and improvement. It is now admitted to be the chief ornament of the flower-garden during the autumnal months, and independently of the great variety and splendour of its flowers, it is valuable to the florist as filling up a void at that season of the year in which but few other plants are in blossom.

It has been computed that not less than twenty thousand seedling Dahlias are raised annually in this country. The facility with which they may be raised—the comparatively short period which intervenes between the time of sowing and that of flowering—and the great success which has hitherto attended this mode of propagation, will, no doubt, account for the extensive cultivation of this highly esteemed flower.

The Dahlia is propagated by cuttings and by divisions of the crown, and new and beautiful varieties are constantly raised from seed. The seed is usually obtained from the finest double flowers, but some successful propagators prefer that procured from semi-double varieties, and we believe that some of our finest Dahlias have been raised from semi-double seedlings. The seed should be collected early in the season, as soon as the blossoms have withered and the receptacles are sufficiently dry.

If desirable, the seed may also be collected late in the season, and when the receptacles are in a green state, in which case they should be divided and placed in a window or in any dry, warm situation; and if the seeds be allowed to remain in the calices, they will retain their vitality better than if detached from the receptacles.

The seed should be sown in large pans or pots, about the middle of February, and placed in a hot-bed frame. The young plants require to be potted off singly into the smallest-sized pots, soon after the cotyledons are above ground, and when the first pair of leaves are sufficiently developed. They should then be placed in the frame, nearly close to the glass, to prevent them from being drawn up weakly. When of sufficient size, they may be re-potted, placed in a cold frame, and protected at night, till the middle of May, that being the period of planting them in the open air.

Those who propagate extensively, sow the seed in hot-bed frames the beginning of March, and during the month of April, instead of potting, set out the young plants on a slight hot-bed, covering them at night with mats.

With the view of obtaining new varieties, some propagators transfer the pollen from one flower to another, by means of a small camel-hair pencil, in which case the flower intended to receive the pollen should be covered with a fine gauze bag, a day or two before the florets expand, and the covering should be continued a few days after the operation is performed. This method is seldom practised, unless for the sake of experiment, as the ordinary mode is found very successful in producing fine double flowers.

Cuttings may be made towards the latter end of February, or beginning of March. The old roots should be placed in a hot-house, or in a hot-bed, and the tubers should be covered with mould, sand, or finely-sifted tanners' bark, leaving only the crown exposed. They will soon put forth shoots; these should be carefully detached when about two or three inches in length, and planted singly in small pots filled with a compost of equal parts of well-decomposed leaf-mould, frame manure, and fine sand, to which should be added a sufficient quantity of finely-sifted garden mould. After the cuttings are inserted, they should be put into a hot bed, carefully shaded from the sun, and protected at night by mats. If, in applying the linings, steam should arise, the plants will be liable to damp off, unless the lights be sufficiently raised to allow the rank steam to escape. In about a fortnight or three weeks the young plants may be removed to a cold frame, and gradually inured to the open air.

Where extensive propagation is required from new and choice varieties, the roots are usually placed in a hot-bed, and every shoot taken off when about two or three inches high, care being taken not to injure the buds which surround the base of the shoot, for if these are injured or broken off, fresh buds will not be developed from that portion of the crown.

Where only a limited supply of strong and vigorous plants is required, we have recently discovered that the finest plants are produced by detaching the young shoots, when about two or three inches high, so as to include the cluster of buds surrounding the base of each shoot. Some care is necessary in this process: the shoot should be held near its base by the finger and thumb, and by a slight motion of the hand it may easily be detached. If the operation be adroitly performed, the base of the shoot will present a convex appearance, surrounded by a number of incipient buds, and a corresponding concavity will be found in the crown of the plant from which the shoot has been extracted. Plants raised by this mode not only produce the finest flowers, but the crowns invariably break the following spring, which is not *always* the case with plants raised from cuttings in the ordinary manner: it has been asserted that the cause of failure has, in many instances, arisen from the removal of the incipient buds at the base of the leaves of that portion of the cutting which is usually inserted in the ground.

There can be no doubt, however, if the buds be removed, the cutting will readily strike root, producing luxuriant foliage and a profusion of flowers. But although the tubers are numerous and fully formed, it will, on inspection, be found that they are merely attached to a hollow stem, and, consequently, the crown, being absent, no buds can possibly be developed by any subsequent treatment. It is therefore important, if the perpetuation of the plant be required, that the buds be not removed. Some propagators, indeed, on receiving new plants, examine the roots, and unless a portion of the crown be attached, they cut off the shoot close to the surface, treating it as a cutting, in the ordinary manner.

The plants, whether raised from seeds or from cuttings, may be planted out into the open borders from the middle of May till the beginning of June. They are usually planted from three to four feet apart; but if planted from four to five feet apart, they will not attain so great a height, and if trained to a single stem, will in general produce much finer flowers. The borders should be well manured every spring before planting, and at the same time about an equal part of good fresh soil should be added. The *Dahlia* will succeed in almost any soil, though a light sandy loam produces the finest plants: the variegated and striped varieties exhibit their colours more distinctly when planted in a peaty soil. The plan of training *Dahlias* to a trellis appears a good method of securing them, for when tied up to stakes

the wind frequently twists the plants and destroys their tops, but the former mode secures them against all winds, and exhibits the flowers to the greatest advantage: three or four stakes placed angularly round the plant, and the stems tied to them, will also answer the purpose.

To procure fine flowers for floral exhibition some cultivators train the plants to a single stem, removing all superfluous side shoots, as well as flower buds, leaving only one or two flowers to expand. The soil should be kept constantly moistened, and when the plants come into blossom manure water should be liberally supplied. It has been asserted that some of the spotted varieties succeed best in a poor soil destitute of manure, and that success may generally be insured by removing the self-coloured blossoms as they appear. The luxuriant growth of the plants may be greatly retarded by treading the earth firmly round the roots. When the soil is of a loose open texture, evaporation should be checked by mulching the plants, and if the soil be covered with moss the moisture will be more effectually retained, and it will give the borders a neater appearance.

When the blooming season is near its close, about four inches thick of decomposed bark, or leaf soil, should be laid over the roots, extending two feet round the stem of each plant, to prevent the crown being injured by sharp and sudden frosts.

The tubers should be taken up on a dry windy day and the soil carefully shaken off, so as not to twist the roots. Having been removed to an airy situation in a shed, they should be placed singly over the floor, till the soil remaining on the tubers be dry, when they should be laid on shelves secure from damp or frost, and be covered with dry sifted tan or grey sand: they will, if so managed, keep perfectly sound till the following spring.

Choice seedling or small tender tubers may be preserved during winter by placing them in pots of sandy loam, and giving them at the time of potting a slight watering, keeping them afterwards in a dry situation.

CRITERIA OF A FINE DOUBLE DAHLIA.—The flower should be erect and stand completely above the foliage, for if the peduncle be short, so that the flower be hid among the leaves, it will not be displayed to advantage.

Form, colour, and size are considered the essential properties of a fine Dahlia.

1. *Form.*—All good judges allow that perfection in form consists in the near approach to a hemisphere. The Springfield Rival may be given as an instance of the nearest approximation to a perfect flower: it is, however, too flat in the centre, and the outward petals are reflected. It is essential that the outline should form a true circle, and consequently the petals should be regularly disposed, rounded, smooth at the edges or rose-leaved, and slightly concave, but not so much so as to let the back of the petals be seen in the front of the flower. Those flowers whose petals are narrow, pointed, notched, or fimbriated, as well as those that are flat or convex, however desirable for the flower border, are objectionable as show flowers, as are also those which when fully blown exhibit the eye or disk. In some Dahlias the petals near the centre converge, and conceal the disk, which when the florets are fully expanded becomes exposed: these are, therefore, pronounced by florists imperfect flowers.

If the hemispherical form be assumed as the point of perfection in the Dahlia, those flowers would be preferred that rather exceed than fall short of this standard. The Countess of Liverpool has been adduced as an illustration of the former, and Lady Grenville of the latter, and the mean between these two examples constitutes an excellent criterion whereby to judge of perfection in the form of the Dahlia.

2. *Colour.*—As it regards colour, much must depend upon taste, but selfs, of whatever colour they may be, should be bright and distinct. In striped, spotted, tipped, or variegated varieties, the colours should be well-defined and every petal uniformly and distinctly marked. Those that are pounced, blotched, variously or irregularly marked, are inadmissible as show flowers.

3. *Size.*—When other properties are equal, size will determine the preference; but in judging of a good Dahlia, form must have the pre-eminence, then colour, and lastly, size; but in no instance should either form or colour

be sacrificed to size. The relative proportions of excellence in these criteria have been thus estimated:—form three, colour two, size one. Thus a Dahlia, possessing the properties of form and colour, would be judged superior to one having colour and size, the relative proportions being as five to three. By this standard the comparative merits of this class of show flowers have been estimated by the censors at the exhibition of the Metropolitan Florists' Society.

An Inquiry into the Causes of the Fruitfulness and Barrenness of Plants and Trees, with Practical Instructions for the Management of Gardens and Farms, and a System of training Fruit Trees, &c., founded on Scientific Principles; arranged as a Dialogue. By JOSEPH HAYWARD, Esq., Author of "The Science of Horticulture," "The Science of Agriculture," &c. 8vo. 292 pages. Orr and Smith, London. 1834.

This work contains much scientific and valuable information, and will be found essentially useful. We strongly recommend it to our readers; and although no price is stated, we hope it is so low that it may be purchased, without inconvenience, by the humblest cottager.

Plants figured in the following Periodical for September:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured; 3s. plain.

1. *Acacia lineata*, Narrow-lined leaved Acacia. Class Polygamia; order, Monacia. Natural order, Leguminosæ. A shrub of bushy growth, frequent in the interior of New South Wales, in barren forest grounds lying West from Wellington Valley, in long. 145° E.; as also in the country on the North from the settlement of Bathurst, where it flowers throughout the winter months (May—July), and ripens its legumes in December. It was originally discovered, during the progress of the expedition on the Lachlan River in 1817, and was two years since communicated by Mr. AITON, from the Royal Gardens at Kew, where it flowers with many of its kindred, in the months of April and May.

2. *Campanula macrantha*, var. *polyantha*, Large flowered Giant Bell-flower; many blossomed var. Pentandria, Monogynia. Campanulacæ. A very handsome variety, and most worthy of a place in every collection, and in the borders of every shrubbery.

3. *Indigofera violacea*, Purple Indigo Plant. Diadelphía, Decandria. Leguminosæ. This very handsome shrub has stood for several years in the open air in the Botanic Garden, Edinburgh, and flowered for the first time in July 1834.

4. *Gardenia florida*, fl. *simplici*, Single-flowered Cape Jasmine. Pentandria, Monogynia. Rubiacæ. This delightfully fragrant shrub flowered in June last, in the noble gardens of Wentworth, where it was received from the East Indies, and is treated as a stove plant. *Gardenia*, so named in honour of D. ALEXANDER GARDEN, botanist and zoologist, a native of Scotland, but who settled as a physician at Charleston, South Carolina.

5. *Alstrœmeria aurea*, Golden-flowered Alstrœmeria. Hexandria, Monogynia. Amaryllideæ. This species, imported by Mr. ANDERSON from Chiloe, was received at the Botanic Garden at Edinburgh, from Mr. Low, of Clapton, under the specific name here adopted; and is now in flower in the green-house. In habit it approaches nearly to *Alstrœmeria pulchella*, but probably will always be a much smaller plant.

6. *Morinda jasminoides*, Jasmine-like Morinda. Pentandria, Monogynia. Rubiaceæ. A volubilis suffruticose plant, rare in shaded brushes of the Colony of Port Jackson, where it was detected by Mr. ALLAN CUNNINGHAM, bearing its orange-coloured berries, in the month of March, 1821, by whom it was introduced to Kew, where it flowered in April. In habit it resembles a *Jasminum*: and as a species, it approaches very near to *M. parvifolia*. A native of the Island of Luconia, one of the Philippines.

7. *Datura ceratocaula*, Horn-stemmed Stramonium. Pentandria, Monogynia. Solanææ. This fine annual is a native of Cuba, whence it was introduced to our gardens through the medium of Spain, and blossoms in the open air during the months of July and August. The plants are best raised in a frame, transplanted into the open border in the spring months, and if into a poor soil, they will have less of the rank and weedy character which all the annual species of this genus exhibit. *Datura* is from the Arabic word *Tatorah* (Forskæel). In some parts of the East Indies it is called *Daturo*.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Ph.D., F.R.S., L.S., and G.S., Professor of Botany in the University of London, &c. &c. Price 4s. coloured; 3s. plain.

1. *Oncidium ampliatum*, Broad lipped Oncidium. Gynandria, Monandria. Orchideæ. First found in central America by Mr. CUMING, and afterwards procured in a living state by RICHARD HARRISON, Esq., from whom the beautiful specimen now figured was received in March last. Peculiar as are its flowers, and distinct as the species is in most respects, it is curious that its leaves and pseudo-bulbs should be so like those of *O. Papilio*, that we have known the latter to be mistaken for it. Like all the rest of its genus, it requires the hot damp atmosphere of a stove, in which, if we may judge by Mr. HARRISON'S specimens, it finds itself perfectly at home. We have not yet heard of it in any other collection. It is well known that the most considerable part of the Epiphytal Orchideæ is found in the greatest vigour in damp sultry woods of tropical countries; and accordingly we endeavour in our artificial cultivation, to form an atmosphere for them as nearly as possible that which they would naturally breathe in such stations. That this is attended with very great success is obvious from such plants as the one now figured, and from the numerous splendid specimens which are from time to time appearing in the collections of Earl FITZWILLIAM, Lord GREY, of Groby, the MESSRS. HARRISON, BATEMAN, HUNTLEY, LODDIGES, and KNIGHT, and the Horticultural Society. But it is sufficiently evident that although this kind of treatment is admirably suited to a considerable number, there are others which grow most unwillingly, or scarcely survive, under such circumstances. For instance, *Dendrobium speciosum* languishes in situations where the *Stanhopeas* are in their greatest splendour; and the Chinese *Bletias* almost perish by the side of *Eulophia* and *Zygotetatum*. This arises from the great difference in their respective constitutions, which are each adapted to distinct conditions of life, and our failure arises from our mistaking a general principle for an universal law. If a great majority of Epiphytal Orchideæ swarms in damp tropical forests, there is a considerable minority which lives in an entirely different climate, of which a few examples will not be without instruction. Thus in the genus *Oncidium* itself, where almost all the species are of tropical habits, *O. nubigenum* is only found on the cool mountains of Peru, at the height of 14,000 feet; it

will therefore require a treatment altogether distinct from that of the mass of the genus. *Dendrobium moniliforme* and *catenatum*, again, occur only in Japan, as far north as 37° or 38°, or the parallel of Lisbon, and are periodically subject to a very low temperature. But the most remarkable instances of a disposition of the part of some Orchideous Epiphytes to depart from the ordinary habits of the tribe are found in Australia and its dependency New Zealand. In some extremely valuable observations upon the geographical distribution of the Orchideous plants of New Holland, which have been placed in our hands by Mr. ALLAN CUNNINGHAM, we find a passage which bears so directly upon this subject, that we cannot do better than quote it entire. "There are two, if not three plants of this family," says this enterprising and scientific traveller, "that grow on trees or rocks in New South Wales, whose natural constitution should, in cultivating them, form exceptions to the uniformly adopted mode of treatment of Epiphytes generally in our English stoves; namely, that in which high temperature and considerable humidity are employed. These are *Dend. amulum*, Br., an Epiphyte uniformly found upon the rugged trunk of *Eucalyptus resinifera* or Iron-bark, in the open very dry forest grounds of the older colony at Port Jackson;—*Cymbidium canaliculatum*, Br., which of late years has been observed beyond the tropic, both at Moreton Bay and still farther to the southward at Hunter's River, growing upon the principal limbs of several of the *Eucalypti* in the dry open shadeless forest. These two Epiphytes flourish most luxuriantly in an extremely dry atmosphere, and flower usually in the summer season in their native wilds, the high temperature of which is oftentimes greatly increased by the blighting hot winds, which not unfrequently prevail at that period from the north-west. The third is *Dendrobium undulatum* of Mr. BROWN, a handsome species, originally discovered by Sir JOSEPH BANKS, at Bustard Bay, and which has been lately found on barren hills, naturally clear of timber, upon the banks of the Brisbane River at Moreton Bay, where the plant forms tufts on bare rocks exposed to the full heat of the sun, which during nine months of the year is very considerable on that part of the coast. These species were some years since received alive at Kew, from New South Wales; and with them was communicated, as a guide to their culture, a note of the particular situations, with regard to exposure to drought, &c. which they naturally occupy and delight in, in their native wilds. These particulars were, however, in all probability wholly unheeded in the King's Gardens—the plants were associated with other Epiphytes of this vast and variable family, from Equinoctial America and the West India Islands, desiring a humid air with warmth to luxuriate in, amongst whom the Australians soon shewed sickness, in consequence of the excess of moisture to which they were constantly subjected; and eventually dying, were not only lost to Kew, but I may add to Europe! Had they been placed in the dry stove among Cacti, Stapeliæ, &c. with but an occasional light sprinkle of water afforded them, they would have fared better! *D. amulum* was, I find, notwithstanding, induced to flower, and thus shewed by its delicate blossoms that it was well worthy of better treatment: and might afterwards have been retained, had the notes communicated with the plant from the Colony, and its look and constitution, so to speak, been at all consulted. I would just observe, in this place, that it is to be greatly regretted, that collectors of these beautiful vegetables in foreign countries, are not more careful to note and communicate home with the collectors, they form, the particular localities of the species, which would be of great use to the experienced cultivator; inasmuch as it would enable him to treat them in a way, as nearly accordant with their habits in their respective native countries, as would secure their lives in the Garden, and probably induce them to flower when fully established in their new situations." To these instances of Orchideous Epiphytes may be added two others, which are worthy of still more attention than those just cited. One is the beautiful little *Gunnia australis*, which has much the aspect of *Chiloschista usneoides* found in the jungle of Nipal; it grows on the branches of shrubs in Emu Bay, in Van Diemen's Land, in about 41° S. Lat. and 146° E. Long. *Earina mucronata* is the other example. This plant, although occurring as

far to the Northward as 35° S. Lat. in humid forests at the Bay of Islands, in New Zealand, exists also in abundance in the "very (permanently) damp woods which clothe the shores of Dusky Bay, (Lat. 45° 45' S.) on the western side of the Larger or Middle Island of New Zealand," where it was originally observed by Forster, in Cook's Second Voyage, and where it has been since met with by Mr. CUNNINGHAM, whose words we have quoted. Considering the lower rate of temperature which prevails in the Southern hemisphere, as compared with that of the Northern in corresponding latitudes, the station of *Earina* in New Zealand is not naturally different from the damper parts of the south-west coast of Ireland. These remarks will we trust suffice to cause a greater degree of attention to be paid to the differences of constitution of particular species of Orchideous Epiphytes; for although we have only cited extreme cases, we may be assured that minor peculiarities, which is not less important to study, exist in abundance.

2. *Azalea Indica, lateritia*, Brick-red Chinese Azalea. Pentandria, Monogynia. Ericæ. A new and beautiful Chinese variety, introduced by Mr. M'KILLIGAN, along with the lovely variegated kind, and with it was purchased by Mr. KNIGHT, nurseryman. The plant is remarkably bushy; its foliage is a rich deep green, to which a slight rusty tinge is given by the numerous brown hairs of the mid-rib and margin; the leaves are narrow, very blunt, and remarkably covered with hairs, which give their surface a rough appearance; the flowers are of a bright clear brick colour, a little tinged with rose. The habit of the plant is entirely that of the variegated kind, and perhaps it is a mere sport from that variety: it is, however, very different in the colour of its flowers. It will no doubt require the same treatment as the other Chinese Azaleas, and will probably form as striking a variety as any of them, on account of the peculiarly bright colour of the flowers.

3. *Orchis foliosa*, Leafy-spiked Orchis. Gynandria, Monandria. Orchideæ. A fine species of Orchis, native of woods and copses in Madeira; very much like the European *O. latifolia*, from which it differs in being larger in all its parts, having a distinctly three-lobed flat lip, instead of a lozenge-shaped convex one, a shorter and more slender spur, and a taller stem. It has been for some time cultivated by Messrs. YOUNG & PENNY, of Milford, near Godalming, whose collection is so rich in Canary plants. It succeeds, we are informed, extremely well either in well drained pots, or a turf pit, in a soil composed of the turfy portions of heath mould, with a mixture of moss and sand. Like many others, this species varies with spotted and spotless leaves. In this country it flowers in May.

4. *Maytenus chilensis*. (Description deferred for want of room.)

5. *Rhodanthe Manglesii*, Captain MANGLES'S Rhodanthe. Syngenesia, Polygamia Æqualis. Compositæ. A charming green-house annual, introduced from the Swan River Colony in New Holland by Captain MANGLES, R.N. It first flowered in the beautiful collection of ROBT. MANGLES, Esq. of Senning Hill, in 1833, and whence it has since been liberally distributed. In token of its beauty, it received the distinction of a medal at one of the great exhibitions in the Garden of the Horticultural Society. Its season of perfection is May and June, at which time there is nothing in the gardens that equals it in beauty, for it possesses the brilliancy of the Cape Helichrysa, without their stiffness and formality. In July it becomes shabby, and by the beginning of August its seed is ripe and its life departed. It requires to be treated as a tender annual, and to be kept in a cool greenhouse during its time of growth; too much heat seems to be particularly offensive to it. Rhodanthe, from *ῥόδον*, a rose, and *άνθος*, a flower; in allusion to the colour of the flower buds.

6. *Gilia tricolor*, Three-coloured Gilia. Pentandria, Monogynia. Polemoniaceæ. A very handsome species, quite hardy, and will grow in any kind of soil. The colour of the flowers is white, changing when old to a pink, crimson, and yellow.

7. *Lupinus nanus*, Dwarf Lupine. Diadelphia, Decandria. Leguminosæ. We have no prettier annual than this little Lupine, which has recently been introduced from California, by the Horticultural Society. It forms a low

tufted plant, from six to twelve inches in height, producing a succession of upright shoots, terminated by several tiers of flowers, which continue to open in succession for two months. The colours being bright purple, intermingled with white and rose, a gay variegated appearance is produced, which is extremely agreeable when the plant is grown in masses. It is well adapted for covering flower beds, or for forming a compartment in a parterre, or for the edge of a small clump, or in short for any purpose which requires neatness, and a protracted blooming. If sown in the autumn, it will flower in May and June; if sown in spring, it will be in beauty in August and September; and by deferring the period of sowing till the beginning of June, it may be made to blossom as late as November.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERY.

ON HEPWORTH'S LEADER CARNATION.—Can any of your readers inform me where I can buy Hepworth's Leader Scarlet Bizarre Carnation, and the price per pair?
INNOVATOR.

REMARKS.

RETROSPECTIVE NOTICES AND ANSWERS, BY SNOWDROP.

ON CHRYSANTHEMUMS FLOWERING IN JUNE.—(GULIELMUS, Vol. II. p. 115).—It seems to be a question whether MILLER was acquainted with any variety of the true *Chrysanthemum Sinense*. The *Matricaria Indica* presented by him to the Royal Society "is preserved in the British Museum. It is small and not very perfect, but no doubt would be entertained that it is referable to one of the varieties of the Chinese Chrysanthemums (perhaps the Rose or Buff), did not MILLER's account of the plant in his *Gardener's Dictionary*, entirely disagree with almost every particular of the Chinese Chrysanthemum." MILLER states that it blooms in July and ripens seeds in Autumn, which should be sown in Spring, and treated in the manner of a tender annual. This certainly *could not* be one of our present varieties.

I can give GULIELMUS no hope of success in flowering the Chinese Chrysanthemums in June. I have paid a great deal of attention to these plants, and have tried many experiments, as well as the one he mentions, without success. I have now plants several feet high of the *quilled pink*, *two coloured red*, &c. which did not flower last year, and which seem as far from flowering (on examination this morning, August 15th,) before the usual time as any others I possess.

CARNATIONS.—(A LADY N. Vol. II. p. 116).—Carnations are planted in large pots for the convenience of *layering*, and three or four plants are placed in each pot to make a shew of bloom, *Carnationists* generally allowing only the leading bud of each plant to flower. Single plants will, however, flower well in 32's, and even in 48's.

HYACINTHS.—(CHARLES K. Vol. II. p. 116).—I beg to inform CHARLES K. that though my Hyacinths bloomed very well last spring, yet they were not equal to what I expected. They certainly had not progressed during the last season in an equal degree to that of former years. This I attribute to the peculiarity of the weather. On taking them up, however, so far from a deficiency, I found a considerable increase both of size and number from the time of planting. But after all, perhaps, it is most prudent, particularly for



ms. fasciata



(alceolaria Harrisonia)



Lophosiphonum Rhodochylon

careless florists who omit protection, or where they are planted in clumps, to take them up every year. Those who wish for very fine trusses, must be content to enjoy it once in three or four years, and in the intermediate seasons pinch off the blooms before they expand.

LOBELIA FULGENS.—G. H. (Vol. II. p. 174) has given a useful article on the cultivation of *Lobelia* in pots. With respect to *L. fulgens*, I beg to say that with me it has proved perfectly hardy, and flowered very fine in the open border, and all the management required seems to be, to take up the old roots in March, separate the suckers and plant them in rich mould, and supply them all the summer with plenty of water.

LILY OF THE VALLEY.—(FANNY ENYAM, Vol. II. p. 186).—If this Lady's garden happens to be located near London, in a confined situation, or if the soil of her garden is very rich, or very dry, she may despair of blooming this plant. The converse of these will no doubt have the desired effect.

BALSAMS.—(C. Vol. II. p. 187).—Balsams only come double from old seed. It should be kept from three to ten years—so florists say. To EMILY ARMSTRONGE (Vol. II. p. 189) I would say that I am perfectly aware that Balsams are tender, and if she refers again to Vol. I. p. 105, she will be convinced of it.

COMPOSTS.—(H. S. Vol. II. p. 187).—If H. S. procures good loam, very rotten horse or cow dung (quite mould), silver or white pit sand, and peat or heath mould, he will have all the ingredients necessary for Composts for almost every plant that grows. The proportions must of course be adapted to the nature and necessities of each particular plant.

FUCHSIAS.—Mr. W. BARRATT (Vol. II. p. 176) has "done the florist some service" by his enumeration and detail of treatment of this beautiful genus, which is certainly the delight of all beholders. To extend this pleasure to the cottage, and even to the hut, I beg to say that slips root readily of most of the varieties from March throughout the summer if planted in a shady situation in common garden soil, with or without a hand glass, and kept moderately damp. When rooted the plants may be potted or placed in the open border or against a wall, a little litter round the roots enables them to stand the winter. *F. gracilis* and *macrostema* are very hardy. Fuchsias thrive well and form beautiful objects when planted at the foot of, and nailed against, a south or west aspect wall. *F. gracilis* and its congeners seem best adapted for wall training.

INNER TEMPLE GARDEN, LONDON.—This garden is a specimen of very high keeping. The flower borders present an extremely judicious display of flowering plants, though not quite *a la* LONDON (variety without mixture). The health of the plants is also a subject of admiration, considering the situation of the gardens in the centre of London. But what is particularly noticeable is, that the ground work of the borders is entirely filled up with mignonette, which not only delights the eye, but regales the sister sense in an eminent degree.

DAHLIA.—This plant, even the dwarf varieties, generally grow too large for the parterre to which they are, however, an almost indispensable addition. To keep them within bounds, shoots struck as soon as they are fit in 60's, afterwards shifted into 48's, and then the pots plunged where they are to remain, will bloom well and yet continue dwarf plants. **SNOWDROP.**

REFERENCE TO PLATE.

1. *Jane Ann's Favourite, Heartsease.*—Specimens of this very striking and lovely Heartsease, along with many others equally as handsome and striking, were sent to us by Mr. MAJOR, landscape gardener, Knowstrop, near Leeds. The colours of some of the kinds were very rich and uncommon, as are those of the one we now give. One of the kinds, named "Negro Boy," is the best dark we ever saw.

2. *Calceolaria Harrisonia*, HARRISON'S Slipper-flower. Diandria, Monogynia. Scrophularinæ. This very handsome variety was also raised by Mr. MAJOR, who sent us specimens of this and several other beautiful va-

rieties, raised this year, engravings of which we shall give ere long. We understand Mr. MAJOR intends sending the whole out by name next spring. It was named in compliment to us by Mr. MAJOR.

3. *Lophospermum Rhodochiton*, Purple Lophospermum. *Didynamia*, *Angiosperma*. *Scrophularineæ*. "This very beautiful new climber is a native of Mexico, and was introduced to Germany about two years ago, and from the Royal Botanic Garden, at Berlin, it has found its way into collections in this country. Professor ZUCCARINI has named it *Rhodochiton solubile*, but we have been unable to find any description of it by that botanist. The plant is clearly a legitimate species of *Lophospermum*, and differs in no respect from the other two species, both also natives of Mexico, except in its less deeply divided calyx, and in the more cylindrical tube of its corolla."—D. DON. We find the plant to be quite as hardy as the *L. erubescens*, and to require altogether the same kind of treatment as that species.

FLORICULTURAL CALENDAR FOR OCTOBER.

PLANT STOVE.—Continue to admit portions of fresh air into the house every fine calm day, from ten o'clock in the morning till two or three in the afternoon. Fires will now begin to be required, keeping the internal air at nights to about 60 degrees Fahr. Plants of Cactuses that have been kept in the open air or greenhouse, now put into the stove will bloom immediately.

GREENHOUSE PLANTS.—Those plants that were removed into the greenhouse last month, should have plenty of air given them every mild day; but the lights should be close shut up at night, also when cold, damp, wet, or other bad weather prevails, excepting a little at the doors about the middle of the day. Camellias, if wanted to flower early, should be placed in a stove.

FLOWER GARDEN, &c.—Auriculas, must now be removed to their winter habitation, all dead leaves must be picked off as they appear, or the plants will be liable to injury from rotting, &c.—Carnation Layers potted off, should be placed for protection during winter. Offsets of the herbaceous kinds of *Calceolarias*, should now be potted off, having well drained pots, and a light soil. The plants may be kept during winter, in a cool frame, or a cool greenhouse; very little water must be given them, or they will damp off. Cuttings of all kinds of greenhouse plants that have been grown in the open border, in beds, &c., such as *Heliotropes*, *Geraniums*, *Shrubby Calceolarias*, &c., should be taken off as early as possible in the month, and be struck in heat, in order to have a supply for beds, &c. the next year. If frost is likely to cut off the tops by the end of the month, the plants should be taken up, and placed very closely in boxes, large pots, &c. for preserving during winter. Water freely after potting off, but little afterwards at the roots, till the plants have struck root, they may occasionally be sprinkled over the tops. Do not place the plants in heat, to cause them to strike, for if this be done, most of the plants will fail, a cool ground, or greenhouse is suitable. *Hyacinths*, and other bulbs, should be potted early in the month, for forcing, &c. Seeds of *Schizanthus*, *Stocks*, *Salpiglossis*, and similar kinds of plants, desired to have in flower early next season, should be sown the first week in the month in pots, and be kept from frost during winter. Seeds of *Pansies* should be sown early in the month, in pots, and be protected in a cool frame; also plants be taken up and protected, unless they be grown in a sheltered dry situation. *Pinks*, if not already planted off, should be done early. Perennial and biennial border flowers may be divided, and planted off where intended to bloom next year. Flower beds, borders, &c. should be dug, and an addition of fresh soil be laid in them so as to raise the surface, that the roots of all plants may be covered and be a protection during winter; this should be attended to by the end of the month. Any tender kinds of border plants that are liable to injury during winter should be potted and be placed for protection. To *Dahlias*, a cover of soil round the roots should be given, lest a sudden frost coming should injure the crown buds; seed should be collected, before damaged by frost. Seeds of all kinds of flowers not yet gathered, should be collected early in the month, or they will be liable to injury from frost.

THE
FLORICULTURAL CABINET,

NOVEMBER 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*Several Experiments in Striking Cuttings of Plants in Water.* By the Author of the “Domestic Gardener’s Manual,” C.M.H.S.

I am not a florist—that is, I do not profess to be an adept at, or passionately fond of, the culture of the several species of flowers which florists exhibit; but I delight in beautiful flowering plants, whether they be shrubby or herbaceous: hence I am anxious to discover ready and effectual modes of propagation. I do not object to the usual methods of raising plants; on the contrary, I constantly practice them: but if I can also bring the vital principle into action by any unusual plan of operation, and retain it in uninterrupted vigour without check, I am more gratified than if I had practised merely the usual routine.

It has long been known that some cuttings will emit roots into water, if bottom heat be maintained; and numbers of persons have thus raised Oleanders. By comparing that fact with the singular production and vast extension of Melon roots, which had protruded a single fibre through a water-tight joint of a brick wall, into a small tank built upon a flue, I was led to try experiments freely with cuttings of Melon and Cucumber shoots, and clearly ascertained that I rarely failed to strike any cutting, whether taken at a joint or not, and that in a few days: I even struck a Cucumber in November 1833. But though some plants will emit roots late

in the year, I have observed, as a *general* phenomenon, that the rooting process proceeds best, and with the most vigour, in May, June, and July.

If a few ounce, or ounce-and-half, phials be filled to within half an inch of their necks with clear rain, river, or even well water, and then placed in a sunny window of a green-house, or hot room of a house,—or, what is better, over a hot-bed, or plunged in a bed of leaves, or tan, where a steady temperature of 70 or 75 degrees exists,—most of the plants now to be named will emit roots within the periods of from four to twenty-one days:—

Balsamina—the Balsam, in three or four days.

Cucumis—the Melon, Cucumber, and doubtless all the species, in a week or ten days.

Calliopsis lanceolata—late *Coreopsis*, in a fortnight.

Alonsoa—late *Celsia urticifolia*, not exactly noted, readily.

Zinnia coccinea—fourteen days.

Heliotropium peruvianum—ditto.

Gloxinia and *Gesneria*—leaves with buds at the base, or cuttings at a joint: several species: gradually. The process is exceedingly curious: a bulby protuberance first forms; a few silky fibres then diverge, and become an inch or more long; and finally, though the young bud merely lives, yet it does not decay under water. The plants in this state take to soil without any delay.

Petunia phanicea and *integrifolia*—about ten days.

Salvia fulgens, splendens, angustifolia, and several others—soon.

Justicia speciosa and *carnea*—readily.

Turnera trioniflora—will root and flower.

Aloysia citriodora, late *Verbena triphylla*.

Ruellia formosa.

Melastoma cærulea—in a few days.

Thunbergia alata—cuttings of two upper joints—very soon.

Coronilla glauca—takes some time.

Fuchsia gracilis.

Erythrina laurifolia—after a certain period, previous to which detachable granulations, interspersed with air bubbles, form round and near the heel: these rise to the surface, like little masses of pith: finally, the radicles protrude.

Dahlia evinces the same secretions; as yet roots are not sent forth.

Other subjects have been tried, but all have not been noted, nor have the exact dates of several of the final results. As I remarked before, I do not think that the old modes of propagation are to be discarded or discontinued; still, there is one great advantage which attends the mode of extension by water-cuttings, in so far as the minutest fibres are not injured by removal; and provided common care be used in placing the plant, at first, in very light rich soil, generally with a little silver sand about its roots, there will not be any shrinking or failure. In several species, particularly those of shrubby Calceolarias, if struck in pots, unless the whole ball be transferred, the plants dwindle, and frequently die. I have never found any torpor, if the precaution be observed of placing some of the tenderest species under a close striking-frame keeping them excluded from air for a day or two.

The cuttings should be in a tender, herbaceous state, not woody; and I think that the method applies chiefly to tender, and even succulent species.

I do not address this paper to gardeners—to scientific experimenters: they are aware doubtless of all the circumstances recorded, and of many more; but *all* are not “au fait” of every particular; and where scientific instruction is not conveyed, nor indeed always called for, innocent and rational amusement is a thing worthy of some attention.

G. I. T.

September 2d, 1834.

ARTICLE II.—*On Raising Carnations from Seed.* By J. W. C.

Observing, in your *Cabinet* for July last, that several of your correspondents solicit some information on raising Carnations from seed, I am induced, as a tolerably successful cultivator of that delightful flower, to offer a few remarks.

Experience has proved to me the error of sowing seed from self colours, or those possessing bad properties, as, by repeated trials, I am satisfied that the only chance of obtaining superior flowers is to sow *your own* seed, produced from those acknowledged to be first-rate. The course I have adopted, and which I recommend, is, when the petals are dead, to pluck them out of the calyx, or

cup containing the seed-vessel, leaving the two styles, or what are generally called the horns; by removing the former, the pods are kept dry, and more exposed to the sun and air; they should at all times be protected from rain, by placing over them the shades used at the time of blooming; and care should be taken that the vessels wherein the legs of your platform stand, are constantly supplied with water, to prevent the approach of those nocturnal enemies—earwigs. When the seed-vessels become hard, and present a brown appearance at the tip, they should be gathered, and in that state preserved, in a perfectly dry situation, until the following April or May, which is the period for sowing in pots or boxes filled with rich loam, taking care not to cover the seed more than a quarter of an inch; give them a slight watering before they are plunged into a hot-bed of about 65 degrees; occasionally moisten the surface with soft water, of the same temperature as the air in the frame; and as soon as the plants appear, admit the air freely during the day-time, to prevent their being drawn up. When about three inches high, transplant into larger pots or boxes of rich turf mould, five inches apart; place them in a southern aspect, at first protecting during the nights with matting, and applying moderate light watering in dry weather; but invariably avoid wetting the plants, as too much moisture frequently decays the hearts of the shoots, and prevents their blooming the second year. In about six weeks again transplant them, a foot asunder, into beds prepared of good sandy loam, mixed with rich garden mould; keep the beds clear from weeds, and water copiously in the evenings during the summer. By adopting the above course, the plants will be found exceedingly strong towards October, and require little or no protection in the winter; but should any appear particularly weak and unhealthy, take them up, and after examining the roots, which is generally the seat of disease in plants, replant them in a different compost, and during the severe weather protect with pots raised about two inches upon pieces of tile. I have always found a long bed in the centre of a grass plot, about three or four feet wide, so as to admit of two or three rows, by far the best situation for seedlings, being more easily protected when necessary by mats or hoops, and decidedly less liable to be injured by snails, &c. In the following April let the beds be well cleaned, and the surface carefully loosened, to receive a thin top-dressing

of rotten manure, the application of which will be found materially to renovate the mould, as after so many months it necessarily becomes much impoverished. I am not, however, an advocate for planting seedlings in very rich compost, as it is much more practicable by cultivation to put colour into a flower, than to extract it. When the shoots are grown about a foot high, they should be supported by sticks; at this time they will also require to be frequently watered; and as they bloom, pull up all that come decidedly bad; the best, of course, should be piped or layered at the proper season.

Some persons sow the latter end of May, allow the pots to remain in the open air, and prick the plants out at once into beds. The disadvantage of this system is obvious: for, in the first place, they do not come up so soon; and, secondly, when planted in beds at so tender an age, they are rendered more liable to be destroyed by worms and slugs.

As regards impregnating Carnations, I am of opinion with many others, that the bees and insect tribe execute that work much more effectually than can be performed by the hand.

Should the above observations meet your approval, you will oblige me by giving them insertion in your very useful and valuable *Cabinet*. I have endeavoured to be as explicit as possible, and feel an apology is due to you for their length; but I was anxious to afford information to your inexperienced readers, and shall at all times be happy to give them the benefit of any discoveries resulting from my own practical exertions.

J. W. C.

Buckingham, Sept. 8th, 1834.

ARTICLE III.—*Hints to Juvenile Gardeners.* By the Author of “*Rival Crusoes.*” Communicated by GULIELMUS.

After your piece of ground has been cleared, dug, and raked smoothly, it must be neatly chopped round with the back of the spade, properly guided by a garden line, fixed even and tight, just above the level of the ground. This may be made of whipcord, fastened at each end by a prong of wood, large enough to keep it

steady! When this is done, you may consider what the border is to consist of. Some prefer, as a garden border, what the agriculturists call a dead fence: and this may be made of bent Oziers, or other flexible sticks, put round your ground in little arches; or it may be framed; or stones, or bits of tile, or wood, placed regularly. Others like better what is called a live fence; and this may be made of Daisies, Thrift, Stonecrop, turfs of Grass, or Box. I own that I much prefer a union of both a live and dead border. A pretty edging may be made with large white sand stones, which are found on the sea-beach, and may be easily collected by those who live near the coast. In place of these, the odd-shaped flint stones, that are to be found in almost every clay, gravel, or chalk pit, if placed round a little plot of ground with taste, form no unpleasing border. These must be half-way bedded in the earth, or they will not hold firm, and an edge of plants proper for the purpose must be placed just within the row of stones; the roots of the plants will bind the stones tight in the ground, and the whole looks well together.*

The Stonecrop is called, in some countries, gold dust, and in others, wall-pepper; it is one of the numerous tribe of Sedums. Like the House-leek, it grows on the tops of walls, which it covers with its bright golden blossoms; the leaves are little thick three-cornered knobs, and have, if bitten, a very pungent, hot taste; it grows wild on many parts of the coast, and there are three varieties of the same plant, yellow, pink, and white. Its advantages as a border are, that it is very small—grows thick, and close to the ground—is a long time in flower—and blossoms a considerable time: like the rest of its tribe, it is apt to spread too much; this defect is easily remedied, by the edge being now and then cut with a knife. Double Daisies form a charming border, and they are seldom out of flower at any time of the year.

Thrift is likewise useful for this purpose. One of the varieties is a very bright carmine pink—this is rare; the common is lilac; some I have gathered in the salt marshes, of a pale flesh colour. Like the Stonecrop, this is a marine plant. If the seed-vessels of the Thrift are cut down when the blossoms fade, more flowers will

* Short stakes driven into the ground, at a few inches apart, to which plain or striped-leaved Ivy, &c. is trained, make a very neat fence for beds of Hollyoaks, &c. Or Larch, Yew, Holly, Arbor Vitæ, &c. kept clipped a foot high, answer well.—ED. CAB.

spring, and your border always look neat and pleasing. Box is not so desirable, as it is a long time growing, and produces no flowers. Grass bordering is very well on a large scale, but it is difficult to be kept in order without the scythe.

Now we have provided the border, let us give some consideration to the interior.

These little plots of ground are best suited to the cultivation of small and delicate plants; and care must be taken that what is put therein is not suffered to increase and spread too much, so as to draw all the nourishment from its neighbours. It should be one of the amusements of youthful cultivators, to remove carefully any superfluous suckers from the plants under their care, leaving only two or three stems, which will be far more vigorous and beautiful than if the plant is left to throw out eight or nine. There is, beside, more room for variety. It is likewise desirable to know what plants grow and blossom freely in the shade; as some change their colours, become sickly, and actually die, if planted under a tree, or beneath a north wall.

Polyanthuses, Violets, Primroses, double and single Cowslips and Snowdrops, not only flourish in the shade, but prefer it. So do the whole tribe of the Narcissus, the beautiful Lily of the Valley, Grape Hyacinths, Blue-bells, and Cyclamens. This last is well worthy of attention; it is a scarce, but a remarkably beautiful flower, and singular in all its habits. I do not mean the large Persian Cyclamen, that is commonly seen in pots, in the spring of the year, a costly and cherished inhabitant of the green-house,—but a small English species, that grows wild in many parts of England. It has a large, oblong root, as large as the largest Potatoc, and when cut it has the appearance of the flesh of that root. The Cyclamen has no footstalk, but every flower and leaf ends in a radical filament, by which it is fastened to the large fleshy bulb that is its principal root. The leaves are, perhaps, more beautifully marked than any other vegetable production; they are irregularly heart-shaped—large—of a dark green,—figured all over with a variety of the most beautiful patterns, in light green, black, and white; the reverse of the leaf is of a bright carmine colour, veined, and shaded with light green. The flowers are delicate, and worthy of the closest examination. Some are white, shaded with lilac at the bottom; and another sort is bright

lilac, shaded with crimson in the same manner. They are shaped like little mitres, and grow very close together, though their stalks are not united. The flowers spring up after the old leaves die away, and form a most beautiful group in the autumn. Their favourite residence is at the roots of an old tree. The seeds are likewise worthy of remark. They, of course, take the place of the flower, and the seed-vessel grows to the size of a small nut, of a dusky-red brown; but, what is perhaps the most curious of the habits of this singular plant, when the seed is ripe, the stalk, which supported the flower, and was before very straight, now begins to curl itself round like a corkscrew, till it gets close to the earth, and even deposits the ripe seed therein, as if for the purpose of taking root!

Among small shrubs, the dwarf Almond, all the species of the Mezereon, the Victory Laurel, and the small kind of the Laurustinus, will flourish in the shade; but above all, the Chinese, or Monthly Rose, will produce its long succession of beautiful buds and blossoms better in a cold shady place than in the full blaze of sunshine. It is desirable to know that this charming flower grows very readily from cuttings, if the slips are planted in the months of June, July, or August. All kinds of the deciduous or Summer Rose are propagated by parting the roots; but this, which is nearly evergreen, is only multiplied by pieces cut from the bush,* as it never throws up suckers. Whenever the wood of a Monthly Rose plant looks rough, scraggy, and unsightly, it is a good plan to cut it down level with the ground or pot, then divide the branches you have cut off into many slips, leaving on each two or three joints. Place these in very moist loose earth, having one joint out of the ground, and one or two beneath it; because, leaves will spring from that part of the slip that is exposed to the air, and roots from the others. The shade of a wall is the best situation for these. The slips must be well watered, and in a few weeks new leaves will appear (a sure sign that the plants have taken root), and the slip will often bear buds and flowers before the end of autumn; these, however, should be nipped off, as they weaken the young plants. They will stand the winter very well, and be fine little Rose trees in the spring, fit to pot; thus, from the refuse of an old

* Also by buds, grafts, or inarching.—Ed. Can.

plant, a great number of young Roses may be reared. This operation, too, is attended by the greatest benefit to the plant that is cut down, as it will throw out many strong shoots, of a beautiful deep red, which will thrive with astonishing rapidity, and produce larger and fairer Roses than any that grow from old wood. The Scarlet Monthly Rose, of every variety, both double and single, may be reared in the same manner.

The Anemone is a costly flower, whose roots always bear a high price. It is a common, but, as I have often proved, a very mistaken notion, that if this plant is reared from seed, it requires four or five years of constant attention before the seedlings blossom. If the seeds, which appear like tufts of cotton mixed with dark specks, be gathered, and sown in a box full of light fine earth directly they are ripe, they will soon come up, with two pointed, long, slender leaves, and before the autumn is over, these will be succeeded by the leaves usual to the perfect plant, which are beautifully cut in many divisions—something like parsley-leaves, but finer. The whole plant then dies down for the winter; and the roots, if examined, have the appearance of small lumps of earth, and are very difficult to find; for this reason, they are best sown in a box, as they are liable to be lost in the open ground. It is desirable to leave the box undisturbed—only, let it be carefully weeded. The young Anemones will make their appearance in the spring, and seldom fail of blowing the succeeding autumn, when they are a year old. I have known some, when they liked the ground, even bloom the spring after they were sown. After they have blossomed, the plants will die down, and the roots must be carefully dug up, and if left undisturbed in the border, will increase very fast.

It only now remains to say a few words to those who love plants, and are not so happy as to dwell in the country to enjoy them. All plants in London need just twice as much water as they do in the country; because, the acrid nature of the smoky atmosphere naturally dries up their moisture. The leaves should likewise be sponged, when they are covered with dust or blacks. Geraniums and Monthly Roses are the plants most desirable for a London veranda, because if watered every day, and placed level with the light, they produce a constant succession of leaves and flowers. Hydrangeas, both the pink and the curious blue variety, are

flowers often seen in the metropolis: if properly treated, they retain their beauty many weeks, but they are generally starved for want of water. The Hydrangea is a native of a marsh, and will grow luxuriantly half immersed in water, therefore its pot ought to be plunged in a large pan, constantly kept full of water; the plant will then thrive and flourish, even in London. Pinks, Carnations, and Stocks, though favourite flowers in the windows of the metropolis, it must be remembered, yield no second produce of blossoms; they bloom but once in the year, and their beauty lasts only a short time. It must be observed as a constant rule, both in town and country, to remove instantly all faded blossoms, as well as dead leaves; the plant is then kept in health, and is not exhausted by bearing seeds.

And now, wishing my young friends flourishing gardens, and a profusion of beautiful blossoms, I bid them farewell.

ARTICLE IV.—*On the Destruction of Plant-lice and Frog-hoppers.* By SNOWDROP.

The plant-lice (*aphis*) have abounded this year in an unusual degree, to the great injury of plants of every description; and various means for their destruction have, no doubt, been tried. It is very desirable that any successful method should be made known;—not in vague language, but stating the proportionate parts, if a mixture, and the number of times it has been used before the desired object has been attained. In the use of the usual remedies recommended, that is, tobacco-water, (which, I think, may be injurious to plants), and fumigation with tobacco-smoke, I have not been successful; nor has camomile, which has been so strongly recommended, either in decoction or powder, had the desired effect. It is possible, however, that I have not applied these remedies in a proper manner. By camphor-water, however—half an ounce of pounded camphor in a pint of water allowed to stand for a week—and applying it several times in the evening with a large camel-hair brush, I have managed to keep my Carnations nearly free from this pest. As this insect has lately attacked Tulips in their place of rest, I should recommend camphor to be placed in the boxes or bags, and renewed once or twice until planted

The larvæ of the frog-hoppers (*Tittigonia spumaria*) has also been very abundant, and their destructive effects very visible ;— a successful plan for keeping them off plants, or for destroying them, would also be valuable. The only method by which I can get rid of them is, to pick the *larvæ* out of the froth and kill them at once, which is very tedious work. The death of one perfect insect may prevent the ravages of a hundred *larvæ*.

SNOWDROP.

ARTICLE V.—*On Plants which are peculiarly adapted for Planting in Beds in Masses ; each kind being showy and profuse in Flowering.* By FLORA.

(CONTINUED FROM PAGE 229.)

Bouvardia triphylla. Tetrandria, Monogynia. Rubiaceæ. There are three varieties of this species, viz. Jacquini, glabra, and pubescens, all of which kinds are very handsome flowering plants. The flowers are of a fine scarlet, and in shape like the Trumpet Honeysuckle, and the blossoms are produced in clusters of from six to twenty in each head ; and some plants which I have a bed of, produced this season thirty-five clusters or heads of flowers upon each. The plant is a native of Mexico, and is usually kept in the greenhouse in this country, but I am of opinion that it may be found as hardy as the old *Fuchsia coccinea*, and stand our winters in this part of the world. It will, however, be necessary to have it planted where it will have a very dry subsoil, and likewise to have protection, in winter over the roots, by means of leaves, tan, or something of this nature. I purpose trying my bed of plants the coming winter, and the result shall be forwarded you next summer. I have employed this plant for a bed for the last three years, and purchased in the first instance, two dozen plants at 1s. 8d. each. I had previously grown this plant, from which I propagated young ones with facility, but I found that it required two or three years' growth before they became bushy enough to make show fit for a bed. I therefore, resolved on getting fine plants calculated to answer the purpose at once ; and these I obtained of a Nurseryman, at the above named reasonable charge. The same plants will successively answer for the length of an age,

and in each season increase in size and beauty. The plan I adopt in the culture of this plant is the following :—The soil of the bed is composed of good rich loam, well manured with rotten leaves, a portion of old hot-bed dung, and charcoal dust, with an addition of river sand. Previous to laying in the compost, I had the bottom of the bed covered to the depth of three inches with some small gravel stones, upon which I had the compost about eight inches deep, the surface being raised above the walk and grass verge, four inches. On or about the twentieth of May each year, I turned out the plants with balls entire, except a careful loosening of the outer fibres. I placed them in the bed, a round one, the tallest in the centre, and lowest at the outer row, and so close that the plants furnish a covering to the bed, and when in bloom appear a mass of flowers. I place the plant so low in the soil that the top of the ball is about an inch below the surface of the bed. After planting and before watering, I placed from four to six sticks round each, and to them secured the branches—then water them freely. The watering was repeated frequently during the summer season, more particularly the present one, and the plants have most amply repaid for the attention, nothing exceeding the delicate splendid appearance of the flowers, and which continue from June to October. The plant in the greenhouse attains the height of two feet or upwards, but in the open bed it does not exceed more than eighteen inches (generally about twelve) ; the plant being allowed to root or spread without obstruction, becomes bushy instead of being drawn up weakly. About the middle of October, I usually take up the plants from the bed, and repot them into the same kind of soil, well draining the pots, and being careful to have fine soil to shake in among the fibrous roots. I have also kept the plants through winter by having them planted in a Mignonette box, closely together. In both instances, I kept them in winter in a cool frame, sunk below the surface of the surrounding ground, in which for the last two winters they have kept well. Cuttings strike freely in loam and sand, placed in a hot-bed frame. Suckers are readily obtained, many of them rooted, which grow readily.

Senecio elegans, Ragwort, or Double Groundsel. Syngenesia, Superflua. Jacobææ. There are four kinds of this plant, viz. double red, double crimson, double white, and double flesh-coloured, Each of these kinds will make a most handsome bed. The plant

is very pretty in its foliage, grows freely, and most profusely; scarcely any thing surpassing it for a neat and handsome show. It will grow about 18 inches high, and continue in bloom from June to the end of the season. The soil I grow it in very successfully is fresh loam mixed with leaf mould, and about eight inches deep, upon a dry subsoil. I find that when the soil is much enriched, the plant has a tendency to produce too much foliage; but, grown in turf, loam, &c., as above stated, an amazing production of bloom is the result. The plant is readily increased by slips, scarcely one in a hundred failing to grow. I raise them in pots, or under hand glasses, in fine sifted loam. They require winter protection in a dry, cool frame, or green-house. I usually take off slips in September, and keep them in the cutting-pots till March, then separate them, and pot into small pots. I turn them out entire, about the middle of May, into the beds.

(TO BE CONTINUED.)

ARTICLE VI.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONTINUED FROM PAGE 230.)

| NAME'S. | DESCRIPTION. |
|--------------------------------------|-------------------------------------|
| 688 Therese de la Chine | Blush anemone. |
| 689 ——— minor..... | Small red. |
| 690 ——— nouveau..... | Bluish purple. |
| 691 ——— superbe | Fine crimson. |
| 692 Tinwell Surpassante | Crimson purple. |
| 693 Tombeau de Napoleon | Small crimson purple. |
| 694 Toute à faite à l'Anglaise | Large purple crimson |
| 695 Transcendant | Bright pink. |
| 696 Translucens..... | Pale mottled red. |
| 697 Transparent Pink | Splendid. |
| 698 Trafalgar | Large deep scarlet. |
| 699 Tres Charmante | Fine bright pink. |
| 700 Tricolor | Changeable red and white. |
| 701 ——— de Napoleon | Beautiful striated red and yellow. |
| 702 ——— superbe | Crimson, purple, and velvet shaded. |
| 703 Triomphe de la Faye | Fine crimson. |
| 704 ——— ville | Light pink. |
| 705 ——— Londres | Fine blush. |
| 706 ——— Napoleon | Fine red and blush. |
| 707 ——— Rouen | Large deep blush. |
| 708 ——— des demoiselles | Beautiful dark purple. |
| 709 ——— Royale | Light crimson. |
| 710 Tunia | Crimson. |
| 711 Turban..... | Crimson purple. |
| 712 Tuscany | Semi-double dark purple, |
| 713 Umbrella | Semi-double blush, |

| NAMES. | DESCRIPTION. |
|---------------------------------|---|
| 714 Unique..... | Deep blush. |
| 715 ——— panache | Delicate white, striped with rose. |
| 716 Valeroi | Large fine blush. |
| 717 Valmorea | Light red. |
| 718 Variegata | Red and pink. |
| 719 Varni.... | Fine scarlet. |
| 720 Veirge Royal | Curled blush. |
| 721 Velours | Velvetty purple. |
| 722 Venus..... | Small delicate red. |
| 723 ——— New | Fine light pink. |
| 724 Vesuve | Velvetty crimson. |
| 725 Vesuvius | Large fine red. |
| 726 Vibert..... | Large red. |
| 727 Victorie nouvelle..... | Large purple. |
| 728 ——— triumpante | Flaming red. |
| 729 Victory | Brilliant red. |
| 730 Vienne Charmante | Small scarlet, pretty. |
| 731 Vierge Blanche | Blush white. |
| 732 ——— Blanchede Montricul.... | Delicate blush. |
| 733 Vierginite | Pale blush, small. |
| 734 Vilmerin..... | Bluish purple. |
| 735 Village Maid..... | Beautiful striped rose and white. |
| 736 Violet | Fine purple violet. |
| 737 ——— Antonia.. | Deep purple. |
| 738 ——— bleu..... | Beautiful purple. |
| 739 ——— Brillante | Fine bright purple. |
| 740 ——— imperiale | Fine rosy purple. |
| 741 ——— Jacques. | Small dark purple. |
| 742 ——— nouveau | Fine velvetty purple. |
| 743 ——— picotee | Beautiful crimson violet, spotted with white. |
| 744 ——— superb..... | Nearly black. |
| 745 ——— triumphant..... | Fine violet. |
| 746 Von Weber | Dark scarlet and purple. |
| 747 Vulcan | Large red. |
| 748 Waterloo..... | Bright red. |
| 749 ——— reale..... | Exquisitely fine crimson, tinged with purple. |
| 750 White, Dutch | Small white. |
| 751 William Alfred | Red. |
| 752 ——— Tell | Semi-double, large purple. |
| 753 ——— the Fourth..... | Fine large cherry blush. |
| 754 Wood's Superb Globe..... | Fine red. |
| 755 Xenophon | Small purple. |
| 756 York and Lancaster | Rose and white striped. |
| 757 Zephyrus | Semi-double red. |

MOSS ROSES.

| | |
|--------------------------------|----------------------------|
| 758 Blush | Fine. |
| 759 Common | Blush. |
| 760 Couleur de Chair..... | Pretty flesh-coloured. |
| 761 Curled Leaf..... | Fine red. |
| 762 De la Fleche | Semi-double pale red. |
| 763 Escarlata | Bright scarlet. |
| 764 Moss à fleur pointer | Pinkish long buds. |
| 765 Moss-leaved | Semi-double red, all moss. |
| 766 Perpetual White | Fine clear white. |
| 767 Pompon | Small bright pink. |
| 768 Prolific..... | Large fine globe blush. |
| 769 Ross's Seedling | Light red. |
| 770 Sage-leaved | Bright red. |

| NAMES. | DESCRIPTION. |
|------------------------------|--|
| 771 Virginal..... | Large pale blush. |
| 772 White | Fine double white. |
| 773 Wild's | Small white, pretty. |
| CREEPING AND RUNNING ROSES. | |
| 774 Adelaide d'Orleans | Fine deep pink. |
| 775 Banksia White..... | Beautiful small, in clusters. |
| 776 ——— Yellow | Do. do. |
| 777 Double Ayrshire | Small blush. |
| 778 Grevillea | Fine deep pink, in clusters. |
| 779 Macartany | Single white. |
| 780 Multiflora Italian | Semi-double red. |
| 781 ——— rubra | Fine red, in clusters. |
| 782 ——— alba..... | Fine white, do. |
| 783 Musk, double | White. |
| 784 ——— single | Ditto. |
| 785 Red Bourseau..... | Beautiful semi-double red. |
| 786 Rose de Lille | Beautiful very large blush, in clusters. |
| 787 Ruga | Beautiful pink, very sweet. |

(TO BE CONTINUED.)

PART II.

EXTRACTS.

Plants figured in the following Periodicals for October :—

Curtis's Botanical Magazine. Edited by W. J. HOOKER, LL.D.
F.R.A. and L. S., and Regius Professor of Botany in the
University of Glasgow. Price 3s. 6d. coloured ; 3s. plain.

1. *Mimulus roseus*, Rose-coloured Monkey-flower. Class, Didynamia ; order, Angiospermiæ. Natural order, Scrophularinæ. This beautiful species produces flowers of a fine rose-colour, in size fully equal to those of *M. luteus*, and clothed with a viscid down which yields as powerful a smell of musk, especially towards evening, as the well-known *Mimulus moschatus*. It inhabits Northern California, where it was discovered by MR. DOUGLAS. It is equally as hardy as any other species, and may be increased either by seeds or by cuttings.

2. *Silphium perfoliatum*, Perfoliated Silphium. Syngenesia, Polygamia Necessaria. Compositæ. The genus SILPHIUM contains fourteen or fifteen species, mostly of a stately character, all inhabitants of North America, and in general confined to the Southern States. The present species is perfectly hardy in our climate, and produces its very large yellow flowers during the months of July and August. Silphium, from *Silphi*, or *Serphi*, a name said to be given to a plant in Africa, which yielded the *Laser* of the Romans, a kind of gum, but which seems to have no connection with the present genus.

3. *Silphium trifoliatum*, Worl-leaved Silphium. This is a less showy plant than the preceding species, having smaller and paler coloured flowers, and leaves more resembling those of several species of Sun-flower.

4. *Jambosa vulgaris*, Rose Apple. Icosandria, Monogynia. Myrtacæ. The *Rose Apple*, a native of the East Indies, is one of the commonest garden

trees of Madeira: but there is scarcely another that combines so eminently the beauties of flower, fruit, and foliage. The delicate white tassel-like bunches of flowers, contrasting with the thick, dark foliage, enliven the trees from February to July or August, when the fruit is principally in season. The fullest bloom, however, is in March or April. Nothing can exceed the loveliness and delicate appearance of the fruit; its rich clusters half hidden by the dark thick tufts of foliage which clothe the outward branches; but though one or two may be eaten with some relish, the overpowering perfume and taste of rose-water, together with the want of juice or dryness, render it generally unpalatable; and it is entirely excluded, except to satisfy occasional curiosity, from the table or dessert. It is produced in the greatest profusion, but used for no other purpose than sometimes to feed the pigs, which eat it greedily. This tree, by its thick, evergreen foliage, is admirably adapted for a screen to exclude buildings, or for shelter. It is also of rapid growth, and extremely tractable, bearing lopping well, or heading down to any height; and produces its flowers at all ages or sizes, whether as a tree or bush. Jambosa, from the Indian name *Jamboo*, or *Schamber*.

5. *Calandrinia discolor*, Two-coloured-leaved Calandrinia. Polyandria, Monogynia. Portulacæ. The flowers of this beautiful species, are something similar to those of the *C. grandiflora*. (See Vol. II. plate 2.) It will succeed well if treated as a greenhouse plant, or better still if planted during the summer months in the open border, where both the flowers and foliage will attain a larger size and a brighter hue. It flowers throughout the months of July and August.

6. *Acacia brevipes*, Short-pedicelled Acacia. Polygamia, Monacia. Leguminosæ. A hardy conservatory plant, usually flowering in the earliest months of the year, the flowers are small and pale yellow. It is said to be a native of New South Wales.

7. *Stanhopea eburnea*, Ivory-lipped Stanhopea. Ginandria, Monandria. Orchideæ. A no less peculiar, though far less beautiful plant than *Stanhopea insignis*. It is a native of Brazil, a country pre-eminently rich in the tribe of Orchideæ.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Ph.D., F.R.S., L.S., and G.S., Professor of Botany in the University of London, &c. &c. Price 4s. coloured; 3s. plain.

OMITTED IN OUR LAST.—4. *Maytenus chilensis*, Chilian Mayten. Syn. *Celastrus Maytenus*, *Celastrus uncinatus*. *Maytenus boaria*, *Maytenus chilensis*, *Senecia Maytenus*. Polygamia, Monacia. Celastrineæ. A handsome evergreen shrub, which has been growing in the garden of the Horticultural Society. The leaves are smooth, oval lanceolate, flowers axillary, in clusters, small, of a greenish white colour, succeeded by yellowish berries. The plant succeeds best trained to the front of a south wall, but it also survives the winter without even that slight protection. It would, no doubt, prove perfectly hardy in the milder parts of England and Ireland. It is a native of Chili, flowers in May. *Maytenus*, from *Mayten*, the vernacular name among the Chilenos.

1. *Ceropegia elegans*, Elegant Ceropegia. Pentandria, Digynia. Asclepiadea. It is a small twining plant, with dingy purplish brown stems and leaves, and livid flowers blotched with purple. They have little beauty, except when they are open; at that time their orifice is closed by a number of long purple bristles, which converge over the centre, and form a sort of natural *chevaux-de-frise*, which will prevent the ingress of insects. It is a native of the mountains of India called Nilgherry, and introduced into this country in 1826, by Dr. Wallich. It is usually kept in the stove, where it flowers from May to October. It is, however, nearly hardy, thrives in the open border in summer, and protection in the greenhouse in winter. In-

creased readily by cuttings. *Ceropegia*, from *keropégion*, a candlestick, in allusion to the resemblance borne by the corollas of some species to the branch of an antique candelabra.

2. *Echinocactus Eyriesii*, Sweet-scented Spiny Cactus. Icosandria, Monogynia. Cactææ. This species was presented to the Horticultural Society some years since by Sir JOHN LUBBOCK, who had procured it from Mexico, where the genus seems to exist in great numbers; it flowers at various seasons. The flowers are about six inches long; the rays are of the softest white, while the disk is of a rich yellow. They are remarkable for the rich, delicious odour they exhale at night. *Echinocactus*, from the form of the marine animals called *Echini*, which has naturally suggested the application of their name to plants which so much resemble them.

3. *Catasetum semiapertum*, Half-open *Catasetum*. Gynandria, Monandria. Orchidææ. First introduced by Mr. BELL EDWARD LLOYD, who sent it from Brazil to Miss FALKNER of Fairfield, about eight or nine years ago. More recently it has been sent to Mr. HARRISON of Liverpool, by Dr. DUNDAS, an eminent medical gentleman residing at Bahia. It is not so showy as *C. tridentatum*, but it is peculiarly fragrant, a quality of which all the other known species are destitute. The flowers are of a yellowish green. The plant thrives with the usual treatment, but does best if its roots are actually allowed to immerse themselves in water.

4. *Leptosiphon androsaceus*, Androsace-like *Leptosiphon*. Pentandria, Monogynia. Polemoniaceææ. This is a bushy annual, growing to the height of eight or ten inches. The flowers are collected into terminal heads, surrounded at their base by a number of floral leaves. The long slender tube of the corolla projects beyond these leaves, and bears at the top five spreading oval divisions, varying in colour from white to pale blue and pink. The multitude of these flowers gives the plant a very gay appearance; and as it is perfectly hardy, and promises to seed well, there is no doubt but that, in a short time, it will be found an important addition to our flower beds. It cannot bear our summer heat, and only flourishes in the spring, or more particularly the autumn, when the sun has lost his power, and the nights are cool with heavy dews. It should, therefore, either be sown in the autumn, so as to flower early, or in June, in order that it may be ready for blossoming in September. Any kind of soil seems to suit it, but it is not improbable that a shaded American border may be best. It is a native of California, whence it was sent by Mr. DOUGLAS.

5. *Calceolaria polifolia*, White leaved Slipperwort. Diandria, Monogynia. Scrophularineææ. This is apparently a very common plant in the passes in the mountains between Valparaiso and St. Jago, for almost every collection from that locality contains it. It is a hardy perennial, about a foot high, with a woody stem which would probably become shrubby in favourable situations. Its little hoary leaves, and very numerous pale primrose-coloured flowers, have quite a peculiar appearance, and render it extremely different from all the other species. It thrives with the same treatment as other *Calceolarias*, but is impatient of damp in winter; cuttings readily multiply it.

6. *Solanum tuberosum*, Tuberless *Solanum*. Pentandria, Monogynia. Solanæææ. This curious plant is a hardy perennial, a native of Chili, whence it was obtained some years since by the Horticultural Society. It bears its rich clusters of deep purple blossoms, with a golden yellow centre, from July to October, and is very easily multiplied by dividing its stout rooting underground stems. Although extremely similar to the Potatoe in appearance, yet its larger and more compact flowers, and its want of the power of producing tubers, render it a proper plant for a flower-garden.

7. *Nemophila insignis*, Shewy *Nemophila*. Pentandria, Monogynia. Hydrophyllææ. This elegant species of *Nemophila* is a hardy annual, requiring a rich soil, not damp, and a situation fully exposed to the sun; it must be protected carefully from wet when forming seeds, or they will not ripen; indeed it produced its seeds in the garden very sparingly, with all the care that could be given to it. It is readily distinguished from all other species by the size of the flowers, which are larger even than those of *N. phacelioides*, and of a beautiful light blue colour.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain; 2s. 6d.

1. *Lupinus nanus*, Dwarf Lupine. Diadelphia, Decandria. Leguminosæ. This pretty little Lupine was gathered in California by Mr. DOUGLAS, and by him introduced to the garden of the Horticultural Society. Seeds have been distributed to various places. It is to be obtained of most nurserymen and seedsmen. The plant is a hardy annual, and grows about nine inches high. The flowers are in distant whorls, of about five together, and altogether form a spike about five inches long. The corolla is a fine sky-blue, with white and purple intermixed. It is a very handsome species, and would make a fine show if sown in masses, or a bed of it. The plant seeds very freely, and blooms from June to September. *Lupinus*, from *lupus*, a wolf; in allusion to the exhausting habit of the plant.

2. *Rhododendron ferrugineum*, var. *album*, White-flowered Rusty-leaved Rosebay. Decandria, Monogynia. Ericaceæ. Synonyms, *Azalea macrubs ferrugineus*, *Ledum alpinum*, *Evonymus Theophrastii*, *Chamærhodendron montana*, var. *alba*. A very dwarf shrub, scarcely more than a foot high. The flowers are pure white. The plant has probably been originally obtained from the Pyrenees, where it is frequent. It is cultivated in the excellent collection of plants of Mrs. MARRYAT, Wimbledon. It blooms from June to the end of August. *Rhododendron*, from *rhodo*, rose, and *dendron*, a tree.

3. *Pentstemon speciosus*, Showy Pentstemon. Didynamia, Angiospermia. Cheloneæ. This is by far the most beautiful of this showy genus. It was discovered by Mr. DOUGLAS on the banks of Spoken River, in North-west America, and introduced by him to the garden of the Horticultural Society, in 1827. The plant is still rare in collections, from the sparing manner in which it affords slips, and from its seeds being seldom matured, except under favourable circumstances. The flowers are disposed in a long, terminal, loose, racemose panicle, with the branches in distant pairs, and bearing from seven to eleven blossoms of a beautiful pale blue colour. It is found to succeed best in a mixture of peat and loam, and continues in flower the greater part of the summer. *Pentstemon* is derived from the Greek *penle*, five, and *stemon*, stamen; from the presence of the rudiments of a fifth stamen.

4. *Ebenus cretica*, Cretan Ebony. Diadelphia, Decandria. Leguminosæ. This is a very elegant little bushy evergreen shrub, growing from a foot to eighteen inches high. It has much the habit of an *Onobrychis*, and well suited to ornament rockwork, being found to be perfectly hardy. The flowers are of a beautiful rose-colour. It will grow in almost any kind of light earth. It is increased by seeds and cuttings. The plant is abundant on the Spachian mountains, in Candia, and was sent to Prosper Alpinus by a correspondent in that island, as the *Ebenus fruticosa* of Theophrastus, which most probably meant the *Medicago arborea*. The Ebony of commerce is well known to be the wood of *Diospyros Ebenum*.

The Number for September (omitted in our last) contains—

1. *Clematis montana*, Mountain Virgin's Bower. Polyandria, Polygynia. Ranunculaceæ. The species was originally collected by Dr. F. HAMILTON, at Chitlong, in the Valley of Nepal, flowering in April, and it appears to be a pretty general plant on the mountains, at an elevation of from 5,000 to 7,000 feet above the level of the sea. The plant proves to be quite hardy, and seems to flourish as well in the climate of England as on its native mountains. The flowers are very like those of the *Anemone sylvestris* (Wood Anemone). It loves a loamy soil, and is readily multiplied by layers.

2. *Iris Swertii*, SWERT'S Iris. Triandria, Monogynia. Iridææ. A very elegant Iris, long cultivated in the gardens, but of its origin and native country nothing certain is known. It is very nearly related to *I. germanica*, from which it is chiefly distinguished by the smaller size of all its parts, and by the narrow and wavy segments of its perianthium. We have not remarked whether the flowers are fragrant.

3. *Nierembergia aristata*, Bristle-pointed Nierembergia. Pentandria, Mo-

nogygia. Solanææ. A native of sandy plains on the banks of the Parana, where it was discovered by Mr. TWELDIF; and from seeds transmitted by him to Mr. NEILL, the plant was raised at Canonmills in 1832. In habit it comes very near to *gracilis* and *ficulis*, but it is essentially distinguished from these, as well as from every other species of this section, by its broad orbicular, not compressed stigma, which is entirely that of the section *Petunia*. The plant thrives best in a mixture of peat and sand, and roots freely at every joint, if the branches are allowed to be on the surface of the earth.

4. *Campanula divergens*, Spreading Bell-flower. Synonyms, *Campanula cernua*, and *C. spatulata*. Pentandria, Monogynia. Campanulaceæ. This plant very much resembles *C. medium*, but which it greatly surpasses in beauty. By several botanists it has been regarded as the normal state of the species. It occurs wild in Hungary, Transylvania, the Bannats of Temeswar, and also in Siberia. It was first taken up by WILDENOW, in his enumeration of the plants cultivated in the Royal Gardens at Berlin, and is principally distinguished from *C. sibirica* by its more branching habit, less wavy leaves, and larger flowers. The plant delights in a light gravelly or chalky soil, and produces its seeds abundantly. It occurs frequently in gardens under the name of *pulcherrima*, but whether it is identical with the plant so called by SCHRANK, we are uncertain.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small: coloured.

The Number for September (omitted in our last) contains—

1. *Rosa centifolia*, var. *Village Maid*, Variegated Provence Rose. So numerous have the varieties of seedling Roses become, and so mingled are the characters of some of them, that it is difficult to give them a place in connexion with any distinct species. This beautiful variety is very compact in the arrangement of its petals, as well as rich in its general colouring; and cannot fail of becoming a great favourite in the rosary. It has lately been obtained from France by several English nurserymen.

2. *Hyssopus orientalis*, Oriental Hyssop. Didynamia, Gymnospermia. Labiatae. This is a remarkably free-flowering ornamental little shrub, of neat growth; and is more powerfully aromatic than the *H. officinalis* or common Hyssop of our gardens. It may be propagated by division, from cuttings, or by seeds. If seeds are sown early in spring, the plants will flower in the succeeding autumn. The systematic name, *Hyssopus*, is deduced from the Hebrew *Ezob*, signifying a herb for sacred uses. Some authors have stated, that the original word was compounded from the Greek, to signify "showering on the countenance," in allusion to a custom of that people, who, in their religious ceremonies, used powdered Hyssop to sprinkle on the heads of worshippers: they either believed that it purified those on whom it was showered, or they used it as typical of purification.

3. *Leptostelma nazima*, Great Leptostelma. Syngenesia, Superflua. Compositæ. This bold herbaceous plant, but for its size, bears most of the general characters of the genus *Erigeron*; indeed, the botanical characters also of the two genera are very closely allied to each other. The composite flowers of *Leptostelma*, each composed of such delicate parts, and elevated six or seven feet high, make it a desirable appendage to the herbaceous ground or shrubbery. It may appropriately have a place amongst the tall *Phloxes*, *Delphiniums*, *Helianthinums*, *Asters*, and others of the tall Compositæ. Notwithstanding it is a native of Mexico, it has borne, uninjured, three successive winters in England; therefore, doubtless, in the severest seasons, it would require but a slight protection. It may be divided at the root, and will grow in any aspect. *Leptostelma*, from the Greek *leptos*, slender, and *stelma*, a crown; in allusion to the slender petals of its ray.

4. *Digitalis hybrida*, Hybrid Foxglove. Didynamia, Angiospermia. Scrophulariæ. The species which we now introduce has been propagated between the *Digitalis ambigua* and *Gloxinia speciosa*, by Mr. ALEXANDER CAMPBELL, Curator of the Manchester Botanical and Horticultural Society's Garden. We cannot give our readers any information so satisfactory as that which Mr. CAMPBELL himself has furnished us. He says—"The close resemblance which the flowers of *Digitalis* bear to those of the *Gloxinia*, suggested the idea that a cross between them was practicable. I selected a shoot of *Digitalis ambigua* for experiment; half a dozen of its flowers were carefully fertilized with the pollen of *Gloxinia speciosa*; the shoot was denuded of the remaining of its flower-buds, and no more attention was bestowed till the capsules were ripe. One half of those impregnated, produced perfect seeds, which were sown immediately when ripe, and placed in a warm frame till they vegetated, after which they went through the usual process of potting, &c." Mr. CAMPBELL further states, that the whole of them flowered in great profusion in the succeeding year, and continued till the frosts set in. How far nature will admit this system of hybridization, becomes a curious and most interesting inquiry. It is evident that the present division of genera forms no bar to the production of mules between them. In the similarity which the flowers of this genus bear to the finger of a glove, has originated the name *Digitalis*, and its application to these plants; the root of the word being the Latin *digitale*.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON A SUCCESSION OF FLOWERS.—You, or any of your correspondents, would oblige me (and many others whose gardens resemble mine) if you would favour me with the information required below. My garden is small, and consists of little beds cut out in a grass plat in fancy forms, with long narrow borders on the outside under the walls. I much wish to have a good succession of flowers in the lovely spring, the brilliant summer, and the mature autumn; but do not know how to manage it. I appropriate a bed to each sort of flower, preferring that to mixing various kinds. Of these small beds I have about twelve; the outside borders are much shaded by large evergreen shrubs. What are the best flowers for my small beds, commencing with the spring? when should they be planted? when removed, and to what situation? by what succeeded for the summer when removed, &c. and the same for the autumn? and when one set are planted, what is to be attended to in the bringing on of the succeeding flowers? I should mention that I have no greenhouse of any description, but have spare ground to raise the succession, and plant the removed flowers. What is best to be planted in my dry shaded borders? A READER.

Stonleigh, Warwickshire, July, 1834.

ON HYACINTHS, &c.—I shall feel obliged if you will favour a constant reader of your *Floricultural Cabinet* with a list of the best Hyacinths, Carnations, Auriculas, Polyanthus, Pinks, Tulips, Dahlias, and Geraniums, which have been shown during the past summer. I should also feel obliged if you, or any of your correspondents, would inform me whether they have used any of "Kemp's Prepared or Decomposed Salt" as a manure in the flower-garden, and what has been the result. FLORA.

Bolton, Sept. 11th, 1834.

ON THE AURICULA.—In the number of your work published last April, your correspondent, W. J. P., New North Road, promised to give a treatise on the best method of raising Auriculas, and treating the old plants. I have taken all the subsequent numbers, but am sorry to say the desired information has not yet appeared; and having suffered severe losses, owing to my ignorance on the subject, I intrude myself on your notice, begging you will grant me the favour of your opinion and advice, and thereby much oblige

Haggerstone, July 24th, 1834.

W. M. SPONKS.

P.S. An early answer will be esteemed an additional favour; the loss alluded to is the plants rotting off with the surface of the earth.

ON GLADIOLUSES, IRISES, &c.—Will you, or any of your correspondents, inform me, through your valuable Magazine, of the best method of cultivating the finer sorts of Gladioluses, Irises, Frittelarias, Martagons, and Ixias—the time of planting—the best soil—and whether they will thrive in pots?

Islington, Sept. 10th, 1834.

G. ASHLEY.

ON THE GIANT BROMPTON STOCK.—Being a subscriber to the *Floricul-tural Cabinet*, and not having seen throughout the work the method of raising the Giant Brompton Stock, I should feel obliged if any of your correspondents could, in your next Number, favour me with the method to pursue, in order to have a good bloom; being entirely at a loss to know whether they should be kept in-doors or out during winter, and likewise the soil fit to sow the seed in.

W. B.

Fenchurch street, Sept. 3d, 1834.

ON COMBRETUM PURPUREUM, &c.—I shall take it as a favour if the Conductor, or some correspondent, will inform me of the best mode of blooming the *Combretum purpureum*. The plant I have grows very strong, but never shows any appearance of bloom: it is growing in a stove at present.—I am also desirous of some information on the *Ardisia excelisior*. I have seen less plants than mine loaded with fruit, but mine never has more than one or two flowers or fruit at once. The plant grows very well, and appears in good health.

ARDISIA.

ON EVERGREENS, &c.—Will you oblige me with the names of a dozen different sorts of dwarf evergreens, say from one to three or four feet high, fit to make a small shrubbery at the end of a narrow slip of garden ground in Pimlico, mentioning the proper time to transplant them, and where they are to be got best; also if there are any gardeners that pay exclusive attention to growing evergreens, as there are some that grow Tulips, Pinks, Carnations, Pansies, &c.

HENRY LIDDELL.

P.S. Is there any place in London where those Fuchsias mentioned in Mr. BARRATT'S Article, in your August Number, can be procured, for I cannot send to Wakefield for a few shillings' worth of plants?

[NOTE.—All the kinds of Fuchsias may be procured of Messrs. NOBLE & SON, seedsman, Fleet-street, London. Messrs. LONDIGS have a most extensive collection of evergreen shrubs, and a selection of fine plants might readily be made in their nursery at Hackney. The following are well worth growing, being hardy, varying much in foliage, and of a handsome growth:—*Prinos glaber*, Winter Berry, 2 to 3 ft. high; *Kalmia latifolia*, 2 to 3 ft.; *Ligustrum sinensis*, Broad-leaved Chinese Privet, 4 to 5 ft.; *Phillyreas*, Holly-leaved, 4 to 6 ft.; *Angustifolia*, narrow-leaved, 2 to 3 ft.; Willow-leaved, 3 to 4 ft.; *Rhododendron Catawbiensis*, 3 ft., *ponticum*, do., *maximum*, do., and many other species and varieties; *Arbutus*, Strawberry Tree, 4 ft.; *Cistus Ladaniiferus*, Rock Rose, 3 to 6 ft.; *Daphne laureola*, 3 ft., *pontica*, do.; *Erica stricta*, 2 ft., *vulgaris pleno*, do; *Double-blossomed Whin*, or *Furze*, 3 to 4 ft.; *Tree Ivy*, 3 to 4 ft.; *Cornus capitata*, 4 ft.; the narrow-leaved dwarf Laurel, 3 ft.; *Lonicera sempervirens*, Evergreen Honeysuckle, 4 ft.; *Acuba japonica*, Gold Plant, 4 ft.; and *Lauristinuses*. Some of the above kinds will, in some situations, grow higher; but they will bear cutting in, so as to form handsome bushes of the heights stated. Common Laurels, and most kinds of Hollies, would also answer as common things, and would bear pruning to any desired size.—COND.]

ON RAISING THE CALCEOLARIA AND MIMULUS FROM SEED, &c.—Could you, or any of your readers, give me a little information on raising the Calceolaria and Mimulus from seed and from cuttings? D. PEARCE.

ON ROSES.—In your June Number, you state that “cuttings of Garden Roses will now strike root under a hand glass.” Is the common Cabbage Rose only meant, or the Tuscan and others which are hardy? C. C. C. C.

[All kinds of Garden Roses are meant. The cuttings should be the present year's shoots, cut off close to the previous year's wood.—COND.]

ON PILLARS OF ROSES, &c. &c.—A contributor to your Magazine would feel thankful for a more particular description of the way to make the “Pillar of Roses” mentioned in No. XV. p. 114. He would also be glad to know if *Thunbergia alata* is to be raised from seed, and if so, when it should be sown, in order to its blooming in the open border in the summer. Also, when the *Schizanthus Hookeri* and *retusers* should be sown, and whether it is right to plant them in the open border. Is it improper to water them daily in the summer? I have found them very apt suddenly to droop and decay, both in the border and in a frame. What is the probable cause? Are they annuals or biennials!—as they are called both in different catalogues. Which is the most probable nursery-ground to obtain the Double White Hepatica—(as it seems there is such a flower, from your last month's correspondence, p. 186)—and the *Penstemon pruinosus*? The latter I have attempted several times to procure, without success.

August 19th, 1834.

ANSWERS.

REPLY TO QUERIES OF * AND S. C. A. ON HLATHS, &c.—In your No. for July is a query by “*,” dated Bodmin. Since no one has taken up his pen to reply to the request, and as “S. C. A.” begs in your last No. that “*s” query may be answered, I again, but very reluctantly, take up my pen, fearing that some of your Correspondents may wish to throw my communication into a “sea coal fire,” or consider that the “bear's paw” may scratch up some of the “IRIS'S” and “SNOWDROPS” who flourish so luxuriantly in the pages of the *Cabinet*. However, I have again taken the liberty of forming one of your Correspondents; and if you deem my remarks worthy, I shall be happy from time to time to give any information in my power.—Your Correspondent requests a list of a few of the best kinds of greenhouse Ericas. As we cultivate upwards of 100, I give a list of a few of what I consider the best that can be grown:—

Those marked thus (*) will stand any winter, and are very hardy; but (†) require a mat.

| | | |
|------------------------|---------------------------|------------------------|
| <i>Erica aristata.</i> | * <i>Erica hartnella.</i> | <i>Erica tricolor.</i> |
| — <i>bicolor.</i> | — <i>Dowiana.</i> | — <i>grandiflora.</i> |
| — <i>ampullacea.</i> | — <i>monsonia.</i> | — <i>mutabilis.</i> |
| — <i>mundula.</i> | — <i>ventricosa.</i> | — <i>vernix.</i> |
| — <i>perspicua.</i> | — <i>sulphurea.</i> | — <i>sordida.</i> |

Hardy Ericas I do not cultivate, but send a list of what I fancy are good ones, viz. :—

| | | |
|-----------------------|----------------------------|--------------------------|
| * <i>Erica actæa.</i> | * <i>Erica floribunda.</i> | * <i>Erica triflora.</i> |
| — <i>australis.</i> | — <i>carnea.</i> | † — <i>multiflora.</i> |
| † — <i>umbellata.</i> | — <i>vagans.</i> | — <i>vulgaris.</i> |
| — <i>colluna.</i> | — <i>stricta.</i> | — <i>tetralix.</i> |

He wishes for a collection of hardy greenhouse plants. If he wishes his place to look gay, I would advise him to have a few Camellias, which will flower in spring with his Ericas and Hyacinths, and would look very well during the spring. When the Camellias and Ericas go out of doors to their summer quarters, Calceolarias, Balsams, Cockscombs, Schizanthus of sorts, with *Epacris grandiflora*, and *Pimelea decussata*, *Pimelea rosea*, *Polargoniums* of sorts, &c. &c. will furnish him with a list of plants that will make his place look beautiful. I would advise him to exclude Vines, and substitute



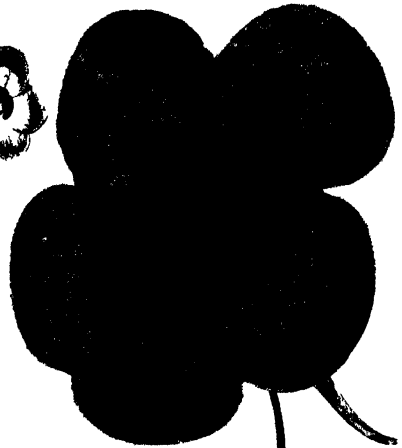
Albani Pink



Lophinum Chirensis
var. albiflora



Giba Incolor



Tropaeolum majus var. *Shalliqu*

that king of creepers, the Glycine, which will amply repay him for any trouble he may be at in its cultivation; I would plant it out of doors in good soil, and bring it through the wall into the greenhouse. I think I have now answered "s's" query. I cannot in my present letter give "S. C. A." a list of the best kinds of greenhouse plants for him to cultivate; he does not state how large his greenhouse is—perhaps Mr. HARRISON could not find room for a long list? The best work on the cultivation of Stove and Greenhouse plants, Ericas, &c. &c. is FORBES'S "Hortus Woburnensis." I forgot to answer "s's" query as to whether an high or low greenhouse is the best for plants. I should say a low one—particularly as he wishes to cultivate Ericas, which should be placed near the "glass, and have plenty of air and water," vide FORBES'S "Hortus Woburnensis," or the extract Mr. HARRISON made from it. I must now thank you for the space you have given me in the pages of your *Cabinet*; and again add, that I shall be happy at any time to give any information I may be possessed of.

August 6th, 1834.

J. C. H.

ON CARNATIONS.—In answer to C. W. J., I beg to inform him that he quite mistook the disease in his Carnations, and, by so doing, hastened their death. His plants died either from the bark having been wounded in pulling off the decayed leaves, or from their having been taken from unsound plants, or his having neglected to shorten that part which connected the layer with the old plant to a level with the nib from which it had made root. If this were not cut off, it decayed; and retaining a large quantity of moisture, caused the disease to spread upwards, till it reached the pith, where the decay became general, and the loss of his plants was the consequence. For this disease, when once established, I know of no cure or remedy, as it does not show itself till after the plant is dead. It therefore becomes us to guard against the causes, such as I have before enumerated: besides these, there is another trick which florists resort to, to cause this disease, viz., running a red-hot needle up their centre; but as C. W. J. bought his of respectable florists, I should say nothing of the sort had been done. I would not, for the sake of saving a few shillings, be induced to save layers from a plant in an unsound state, as in nine cases out of ten they inherit the disease, and repay us for ten months' care by suddenly baulking our expectations. Many florists top-dress their plants in June; others water them with a solution of nitre:—to all such practices I am decidedly opposed, for if proper compost were used at the outset, they would require nothing of the sort; and they only produce disease. I am sorry I can give C. W. J. no hopes that he will ever find a remedy; and next year will be still more fatal than this, as I have this season seen few collections where disease did not prevail to a great extent.

Sept. 3d, 1834.

INNOVATOR.

ON FLOWERING HELIOTROPES.—In the spring take the plants to the potting shed; turn them out of the pots; reduce the old ball, cutting off all dead roots; repot them into pots suitable to the size of the plant, in good loam and leaf mould; give them a little water to settle the soil; spur in all lateral shoots; put them into a stove heat or dung-bed heat; give them air occasionally; and when growing freely, supply them with plenty of water; and in the summer months they should stand in water, when they will flower in abundance to the satisfaction of your Correspondent, MYRTELLA.

Great Bookham, Surrey, July 2d, 1834.

J. W. D.

REFERENCE TO PLATE.

1. *Duke of St. Alban's Pink*. This flower has, as will be seen by the drawing, several distinguishing properties. We understand there are several varieties on sale under this name; therefore, purchasers must be on their guard in order to obtain the true variety, of which our drawing gives a correct representation.

2. *Delphinium chinensis*, var. *albiflora*, Double White-flowering Chinese Larkspur. This very handsome Delphinium is a hybrid, raised by Mr. SMILLING, nurseryman, Northwamborough, near Odiham, Hampshire,

from seed collected from *D. chinensis*, blue-flowered, impregnated by some other kind not named to us. It is certainly a valuable acquisition, and well deserves a situation in every flower-garden. The flowers are of a delicate lively white, and, judging from the specimen sent us, will make a very gay and pleasing appearance, and be a striking contrast to the splendid blue of *D. chinensis*.

3. *Gilia tricolor*, Three-coloured Gilia. Scarcely any thing can be prettier than this plant, when thickly filling a bed a few feet in breadth and length. It is quite hardy, and grows about a foot high, with an erect stem, and foliage much resembling the well-known *G. capitata*; but the flowers are much longer, and instead of being collected in globose heads, are widely spread at the head of long peduncles, which, being very numerous, form a large and rather dense panicle, and thus show off to great advantage. It flowers from July to September, and will grow in any kind of soil. It may be procured of Messrs. WARNER & Co., and other London seedsmen.

4. *Tropaeolum majus*, var. *Shillingii*, SHILLING'S Hybrid Nasturtium. This very singular and pretty variety of Nasturtium (Indian Cress) is a hybrid, raised from seed collected from *T. atrosanguineum*, dark blood-coloured. The plant, in its habit, resembles its female parent, but the flowers are larger, and very brilliant and showy. The corolla is quite flat at the surface, exhibiting the whole of it much more than *T. atrosanguineum*; the petals are very round and neat; the spots at the centre are very dark, and form a pleasing contrast to the other colour of the petals. The specimens sent us were destitute of the hairy fringe which is seen in the old kind of Indian Cress, as well as in *T. atrosanguineum*.

FLORICULTURAL CALENDAR FOR NOVEMBER.

GREEN-HOUSE PLANTS.—If any are not yet housed, they should now be without delay. All possible air should be admitted to the green-house, excepting when frosty. The plants should not be watered in the "broad cast" manner, as it is termed; but should be attended to *simply*, so that no plant may be watered but what is actually dry. Water should not be given in the evening, but in the early part of the day, so that damps may be dried up before the house is closed. If watered in the evening, the damp arising during the night will cause the leaves to decay, and encourage moss, lichens, &c. upon the soil. This will invariably be the consequence, unless fire heat be applied to counteract the effect. The soil in the pots should frequently be loosened at the surface, to prevent its forming a mossy or very compact state.

FLOWER GARDEN.—All decayed stalks should be cleared away. Seeds of all kinds of flowering plants should be collected, if neglected hitherto. The borders should be dug over, and additional fresh soil be added where required. All kinds of perennial border flowers should be planted. If any plant has become too large, it should now be reduced in size, and vacancies filled up. Bulbous roots, Ranunculuses, Anemones, &c., should be planted without delay. For Auriculas, Carnations, &c., see last month's Calendar, where suitable directions are given. Evergreen and deciduous shrubs may be planted this month. Protect beds of bulbous flowering plants in unfavourable weather. Newly-planted shrubs, in exposed situations, should be secured to stakes. All kinds of border flowers kept in pots for winter protection, &c., should be removed to winter quarters, either in pots, frames, or some warm, dry situation. Composts for floricultural purposes should be turned, &c. Calceolarias that have been in borders should be taken up, and kept in pots, in a cool, dry situation, either in the green-house, frame, or pit. Let the plants of Chrysanthemums in-doors have abundance of air. In taking up Dahlia roots, be careful not to twist or injure the tubers near to the crown: this attention is particularly necessary with small roots. Care should be taken to have the names or numbers well secured to the root by means of copper-wire fastenings: it often happens that the stalk perishes before spring, and names attached thereto are liable to be removed, and to cause confusion. Tubers of Commelina, and bulbs of Tigridias, should be taken up and preserved dry through winter.

THE
FLORICULTURAL CABINET,

DECEMBER 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Cultivation of Ten-week Stocks.*

By A. F.

Having cultivated, for my own amusement, with great success, for several years past, the Ten-week Stock, (*i. e.* the scarlet, the purple, and the white,) I am induced to inform you of the method I pursue, in order to have a fine bloom of them in the spring. The last week in October, I remove the frame from a cucumber bed, situated in a full south aspect, raking all the old mould from the surface, until I come to the old dung. I then replace the frame, and spread on the top of the dung about three inches thick of good loamy soil, raking it even, on which I sow the seed pretty thick (of course keeping each colour separate by a mark). I give it a good sprinkling of water, and shut the lights down close until the plants appear; after which, I open the frame every day through the winter, except in wet or frosty weather; but from the time of sowing until the middle of March, I never let them have a drop of water; in that particular depends their flourishing through the winter, for if they once get wet, they are sure to shank off. By exposing them to the cold, I make them hardy, so that I can plant them in the middle of March, which I always prefer doing when the weather is dry; and though at that season the wind is generally harsh and frosty, I do not find it affect the plants. By planting in dry weather, the plants get hold of the earth before the worms can drag them out. I prefer planting each sort in a bed

by themselves, as I fancy they make a much finer show than when planted about the borders.

A. E.

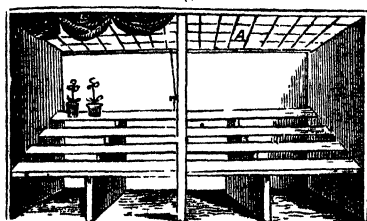
Hoxton, Sept. 3rd, 1834.

ARTICLE II.—*On the Culture and Management of the Auricula.* By PAUL PRY.

I here send you my method of cultivating the Auricula, which I have practised with the greatest success for several years. The following is the compost which I use to pot them in:—two barrowfuls of cow-dung, one year old; one ditto of sheep-dung, one year old; one ditto of maiden loam; half ditto of black leaf-mould; and one peck of river sand. I have discontinued the use of hot manures, (such as blood, night-soil, pigeons' dung, &c.) as I have more than once proved their "*ill effects.*" Many young florists, from a wish to outrival the elder ones, have used this trash to such an extent as to kill their plants altogether. When the plants are potted, set them in a shady place till they have taken root, at which time be careful to protect them from heavy rains. Towards the latter end of September, they should be placed in a frame upon bricks or tiles, in a full south aspect; raise the frame by placing a brick at each corner, to admit a free current of air to pass between them, in which situation they may remain till frosty weather commences. However cold the weather may be, provided it is fine, the lights should be taken off during the day, and put on again at night. Towards the beginning of February, they must be carefully covered up every night, to prevent the buds receiving any check, as by this time some of the most forward will begin to show bloom. Although I stated above that I had discontinued the use of hot manures, I nevertheless think it requisite that a *small* portion should be used in top-dressing: to a barrowful of the above compost, add not more than a peck of goose-dung, at least two years and a half old. With this dress the plants about the beginning of February; remove the old soil clean away down to the fibres, and replace it with the new; give to each a good watering with pure water. Should any gentle rains fall during the months of February or March, you may expose them for an hour or two, once or twice in the course of each month; keep them closely covered up with mats every night, for one night's frost

would do them a great deal of injury ; remove the mats early every morning, and raise the lights, to admit a small portion of air ; should the weather prove fine, push the lights completely off. Towards the latter end of March, the trusses will begin to rise, when those buds that are small, and the over-crowded ones, should be thinned out, leaving from five to ten pips upon each stem. The period from the opening of the pips to full bloom I consider the most critical—that is, from the end of March to the end of April ; during which time the lights must be kept over the plants night and day, raising them a little behind to admit air. Should the sun shine hot, as it frequently does towards the end of April, it is advisable to throw a thin mat over the lights about ten o'clock, and remove it again about four. Be careful to supply them regularly with water ; for should they at any time be allowed to flag, it will give them a serious check. When the pips begin to expand, they should be removed to an eastern aspect, and covered with hand-glasses ; under a low fence or ridge is the most suitable place, where they can receive about two hours of the morning sun. The glasses must be raised a few inches to admit air, but they should be shut down close at night, and covered with a stout mat or two. When the pips are all expanded, the plants may be removed to the stage, which should face the north : as to the construction, growers differ greatly, but I think the most simple method is

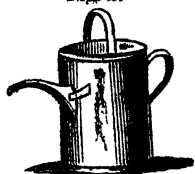
Fig. 1.



as here represented (*fig. 1.*) The lights A being taken off, this forms a very good summer situation. Curtains should be hung on, as shewn at B, to let down in case of frost or driving rain. Small rings should be fastened on the bottom of the curtains, to catch to nails or hooks placed in the lowest shelf, and thereby prevent their being waisted to and fro, and coming in contact with the plants. When placed upon the stage, care must be taken to supply the plants with water, when their colours will become more brilliant, and, with their beautiful tints and sweet odour, amply repay the careful florist. As soon as the pips begin to fade, remove them from the stage (for they frequently receive great injury from being kept under cover too long), and

set them upon bricks or tiles in a cool shady place not under the drips of trees. In warm weather, care must be taken to supply them with water at least three times a week; be careful not to let water touch the leaves in dry hot weather; to obviate this as much

Fig. 2.



as possible I use a water-pot with the spout turned down (*see fig. 2.*) Treat them in this manner till the time of potting, which for strong old plants signifies little; be careful always to place a good handful of potsherds or stones at the bottom of each pot, to drain off the superabundant moisture. Should much rain fall during August and September, it is advisable to erect a slight covering over the plants, for I have found that continued rains cause them to rot and decay.

For the guidance of those who are about to commence the culture of the Auricula, I subjoin a list of some of the most favourite kinds at present cultivated:—

GREEN EDGED.

Lee's Colonel Taylor.
Booth's Freedom.
Howard's Nelson.
Stretch's Alexander.
Barlow's King.
Pollitt's Ruler.

— Standard.

GREY EDGED.

Grimes' Privateer.
Kenyon's Ringleader.
Waterhouse's Conqueror of Europe.
Thompson's Revenge.
Ashford's Rule-All.
Rider's Waterloo.

WHITE EDGED.

Taylor's Favourite.
— Glory.

Crompton's Admiral Gardiner.
Lee's Bright Venus.
Wood's Delight.

Pillar of Beauty.

SELS.

Redman's Metropolitan.
Scholes's Ned Ludd.
True Blue.
Netherwood's Othello.
Bury's Lord Primate.
Mellor's Lord Howe.

ALPINES.

King of the Alps.
Beauty of England.
— the Alps
Queen Adelaide.
Ultramarine.
Bishop of London.

Should this meet your approbation, I shall at some future period send you my method of cultivating the Carnation.

PAUL PRY.

ARTICLE III.—*A few Observations on Soils and Manures.* By Mr. F. F. ASHFORD.

Considering that a few observations on soils and manures will be acceptable to many of your readers, I am induced to send the following for insertion in the pages of the *Floricultural Cabinet*, if thought worthy of admittance.

Loams, peats, dungs, vegetable decayed substances, and sands, are the principal kinds used in floriculture; but various are the different mixtures and composts that may be obtained from them by admixtures, or adding one kind to another.

1. *Loams* are of various kinds, and go by different names, as stiff loam, sandy loam, yellow hazel loam, loam of a soapy texture, &c. These differences are caused by the loam being got out of different pastures, and sometimes from being got from different depths. Yellow hazel loam is the kind that I should recommend for floricultural purposes, owing to the openness of its nature, and the rich mellow qualities it possesses. It should be obtained from some neighbouring pasturage that has not been broken up for some years. As Mr. PRICE has given, in page 185 of Vol. I., some excellent remarks concerning the nature of soils, I thought it would be unnecessary for me to notice that subject.

2. *Peat* is in the same respect as loam in having different names according to its kinds, which are, peat, sandy peat, and bog earth. Peat is that collected from commons of a fine loose nature, but destitute of silvery sand. Sandy peat is that collected from where the *Erica vulgaris* grows spontaneously, and which is plentifully supplied with the above sand: it is most congenial to the growth of tender exotics, with fine fibrous roots, as *Ericas*, *Epacris*, *Phenacoma*, &c. Bog earth is that obtained either from below the others, or from some moss or uncultivated place; it may be distinguished from the above by the blackness of its colour, and the closeness of its nature; it is sometimes found saturated with water: this kind, after being duly prepared, answers very well for what are commonly called bog plants, such as *Rhododendrons*, *Azaleas*, *Kalmias*, *Andromedas*, &c.

3. *Dungs and manures* are also of various kinds, as those produced from horses, cows, pigs, and fowls, and each has a different nature—as, for instance, dung from cows being the coldest, from pigs the hottest, and from fowls the richest; but I should recommend to horticulturists well decomposed hot-bed dung, made from the produce of the horse-stable, and at least two years old, which, in my opinion, will prove the best, as this kind of manure embraces none of the above extremes.

4. *Vegetable decayed substances* are also various, as leaf mould, rotten willow wood, wood ashes, and also the refuse of the vegetable or kitchen garden.

5. Sands are either found in beds, or on the sides of rivers; but the best kind for florists is what is generally termed drift sand, or sand washed by heavy showers into ridges.

Having thus noticed the primary kinds of soils, &c. used in floriculture, it remains for me to state the preparations necessary before they can be used. The proper time for collecting the different kinds of soils and vegetable manures is unquestionably in autumn, after the beneficial rains and solar influence of the preceding summer, and that they may receive the requisite ameliorating quality of the forthcoming winter. In getting the various kinds required, care should be taken not to dig more than nine or, at the furthest depth, twelve inches below the surface, as the soil, laying lower, is more concealed from the sun and atmosphere, and consequently not near so good. Let them be carted in fine, fair weather, and thrown up in the compost ground in different heaps, placing the greensward of the loams on the top, with the roots uppermost, that they may the sooner decay. Thus let them remain till winter, when they should be at different times turned over, well chopping and mixing the sward with the soil. The dungs, decayed vegetables, fallen leaves, and rotten wood, may be treated in a similar manner.

It is a customary manner amongst old cultivators to sift their composts before using. This is, in a great measure, the cause of exotics not succeeding, and appearing in health and vigour: for, by the process of screening, all the stringy and fibrous rooty part of the mould is lost, which is certainly the best part of it, as by its means the compost is kept open and free for the young roots to run in, and, without this part, the particles of the soil get close together, and often bake as hard as a brick. Those persons that have practised this method think it impossible to improve, but one moment's reasoning with themselves will convince them they are in error. Manures, &c. must of course be coarsely screened, that the stones, pieces of wood, &c. may be extracted; but this operation must only be performed when the said kinds are wanted.

If this communication be thought worthy of the *Floricultural Cabinet*, it shall be seconded by another on the different kinds of compost that may be obtained by mixtures of the above.

F. F. ASHFORD.

Colston Hall, August 27th, 1834.

ARTICLE IV.—*Gleanings from Old Authors.* By
 SNOWDROP.

OF WATERING PLANTS.

“ Now for the watering plants and flowers observe with me.

“ If you fear dry weather, do not defer too long before you water, but do it gently before the earth is too dry, consideration had to the depth of your roots and those that are deepest water most; and when you begin to water continue it as long as you find occasion.

“ Use not Well water, for tender plants, for it is so strained thro’ the earth or rather barren sands or rocks, and for want of the sun so chill and cold, that having no nourishment, rather the contrary, doth more hurt than good; Rivers that run quick and long on sharp gravel are little better, but if you are forced to use such, let it stand sometime in tubs in the sun mixed with dung.

“ Let the quantity and quality of the dung mixed with the water, be according to the nature of your plants; if your plants be great growers and require heat, then put horse dung in your water: If your water be bad, then put dung in to help it; Let it stand in the sun and open air uncovered: If your plants be fine and tender, then put Sheep or Cowes dung, Deer or Asses dung into the water; the worse the ground and more barren be sure to put in the more dung. Take care you water no plants with standing stinking ditch water, nor no water that stinketh; for sweet water, (not too clear) and fresh mould (not musty or tainted by stinking weeds) is as proper for tender plants as sweet and good food, warm and clean lodging, for tender and fine bred persons.

“ Rain water is very good if not too long kept, but if your Vessel be large, the oftener you stir it the longer it will keep sweet.

“ Large and Navigable rivers, that receive much soil by washing streets and the many sinks that run into it, and which by its own motion doth cleanse itself from that which is noxious, both to man and plants, is an excellent water for all sorts of plants.

“ The larger the ponds be, the better the water is for plants, the opener to the Sun the better, the more motion they have, by Horses washing in them, or Geese and Ducks swimming, ’tis so much the better.

“ Water all seeds with the smallest or rain like drops you can; and not too much at a time or too fiercely, lest you discover them.

“ For flowers and plants whose leaves lie on the ground, water them at some distance, by making a hollow circle about the plant and pouring water into it, by which means you avoid annoying the leaves by discolouring water, or chilling the roots by too sudden coldness.

“ Use not any liquors, for watering either naturally hot as spirits, or artificially made so by heating over the fire.

“ In Summer time or all warm seasons, the evening is best for watering, because the water will have time to sink into the earth, and the plant attract it, before the Sun's heat exhales it; But in Winter or cold weather the morning is the most proper time, that the superfluous moisture may be evaporated ere the cold night overtake you, and chill perhaps kill a tender plant.

“ A Plant that delights in moisture, or a drooping plant that you think water will preserve may be watered by filtration, *i. e.* set an earthen or wooden vessel on a brick full of water near your plant, that all the water may be higher than the earth; wet a thick woollen list, put one end with a stone or bit of lead to it into the water, that it may keep to the bottom; lay the other end on the ground near the root of the plant, and the water will distil out of the bowl or pot through the list, because that part of it out of the pot of water, hangs lower than that within, &c.

“ All sorts of fibrous roots are assured in their growth by convenient watering; but for bulbous and tuberous roots, the Gardiner's hand ought to be more sparing.”

SAMUEL GILBERT, *Phileremus*.

In the above extract no mention is made of watering over the foliage. To newly removed plants it certainly is most beneficial, and very much promotes their growth. In smoky neighbourhoods, watering or syringing over the leaves, in dry weather, cleanses them from soot, and dust, and enables them to perform their proper functions with vigour. It must, however, be carefully borne in mind that the *top* watering can only be safely performed when the sun has left the plants in the shade. The only plants that I am aware of that form an exception to this rule are the Chinese Chrysanthemums, the foliage of which is very much be-

neftted by being watered in the blazing sun. In dry weather I always remove plants in the evening, and water them well overhead, and which I continue to do, at the same period, as long as appears necessary.

SNOWDROP.

ARTICLE V.—*On the Culture of Heliotropes.* By Mr. HENRY LADDS.

Observing that one of your correspondents requests information on the cultivation of those fragrant plants, the Heliotropes,—and having cultivated them very successfully *in pots*, so as to have them in bloom from March to December,—I herewith send you my mode of treatment, for insertion in the *Cabinet*.

About the middle of June, the old plants are in vigorous growth, and beginning to bloom. If there are more branches than what I think are necessary, I cut all out excepting five or six on each plant. If I find I have not sufficient for my supply of cuttings, I *now* cut down some of the old plants to within three inches of the bottom. After dressing off the leaves at the lower part of the cuttings, (which are about four inches from the end of each shoot,) I insert them in sand and loam, placing them close to the side of the pot, and put them into a frame, where a slight heat is kept, shading them from sun. By the beginning of August, the cuttings are well rooted. I then pot them into sixties, using a rich soil, and well draining the pots. By the end of August, the plants begin to shew bloom; as soon as that appears, I cut off the tops, leaving each about $2\frac{1}{2}$ inches long. The old plants which I raised last year, will, by the end of August, be nearly exhausted of flowers: from these I take off a good supply of cuttings, and, with those I cut from the young plants in heading down, I provide my next and last supply for the year. These I insert into seed-pans, as close as I can, to strike; placing them in a strong heat, so as to get them *well rooted* before cold weather sets in. I let them stand in these pans through the winter, being a saving of room.

By the middle of August, those plants I cut down in June will be in bloom. After flowering, I cut the whole of them down to within a few inches of the bottom: by this means young shoots are uniformly produced near the roots, which make the plants appear full, and not so unsightly as when they have long naked

stems. After heading down, I place the plants in cool frames, where I keep a small supply of tan, for the winter. In this situation the plants generally lose most of their leaves, but they retain life.

About the first week in May, or even earlier, I pot the plants I struck last June, and which have been kept in 60's, into 32-sized pots; and the cuttings I struck in August, into 60's, and when grown sufficiently, into 32's.

The compost in which I grow the Heliotrope consists of one-half well-rotted dung, one-fourth loam, and the remainder river sand and vegetable mould.

I keep no old plants that are more than three years old at the utmost, the stems after that becoming ragged and unsightly, nor do they bloom as well as young plants; but I keep all my plants young, and therefore they are vigorous and handsome. The old plants that I no longer want for pots, I turn out into the open border, where their delightful fragrance amply compensates for any situation they occupy. They bloom more vigorously in the open border than when in pots, but in the latter they furnish a supply of bloom for a room, green-house, or conservatory, and they will far more than repay for any trouble bestowed upon them with a continued bloom from March till December. At the latter end of the year, as well as for spring blooming, the moderate heat of a stove will be required.

During November and December, when Chrysanthemums are in blossom, and intermixed with Heliotropes, young plants of Fuchsia microphylla, Alonsoas, white and purple kinds of Chinese Primroses, &c., they produce a splendid lively appearance, turning this dull season of the year into the gaiety of spring or summer.

Walworth.

HENRY LADDS.

N.B. If room can be spared in a hot-house for the last supply of cuttings to strike in, I find them do well there, if shaded for a day or two at first.

ARTICLE VI.—*On the Raising of the Chelone barbata from Seed.* By A. E.

Having been a subscriber to the *Floricultural Cabinet* from its commencement, and having therefrom derived much valuable in-

formation, I feel great pleasure in contributing my mite of experience, and hope it may prove interesting to some portion of your numerous readers.

In the autumn of last year, about November, I cut off the principal seed-stem of my *Chelone barbata*, and in paper carefully and gradually dried it, at a moderate distance from the fire. In February 1834, I sowed the seed thus obtained, in soil composed of equal portions of sand, leaf-mould, maiden loam, and rotten manure; covering this small seed, which to some would appear as dust, very slightly, and placing it in the parlour, having no greenhouse. In May the seedlings were placed out in the open border, and two of them are now (Sept. 9th) in full bloom.

I have seen no description of this beautiful plant, except in a work entitled *Flora Conspicua*, in which it is stated that this plant can only be increased by parting the root, or by cuttings. My parent plant blowed so profusely as to prevent the possibility of the former plan, viz. dividing the root; and though I tried the latter one with three cuttings, it completely failed. From the success of my first experiment, I am induced to believe that the seed of many valuable plants may be perfected in our climate.

As I think the work before alluded to is discontinued, I shall, for the benefit of your readers, copy the author's remarks on this beautiful plant.

“CHELONE BARBATA.

“DIDYNAMIA.

ANGIOSPERMIA.

“Class 14.

Order 2.

“The delicacy and grace of this herbaceous plant will ever be found sufficient to induce the lovers of flowers to give it a conspicuous place in the herbaceous border. The singular formation and pendant position of its little tubular flowers—the handsome pyramidical form produced by each stalk—and the height to which the centre stalk of the established plant will rise, (often six feet,) surrounded by other stalks of weaker and shorter growth, producing a succession of blooms for nearly two months,—render this plant truly interesting.

“It thrives well in common garden mould, but will grow luxuriantly with a portion of loam. As it does not perfect its seeds in this country, it must be increased by dividing the root, or by cut-

tings; which latter method will answer very well, by taking the young shoots, and placing the cuttings under a hand-glass.

"It is a native of Chili, and was introduced in 1793."

Cordean, near Cheltenham, Sept. 9th, 1834.

A. E.

ARTICLE VII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONCLUDED FROM PAGE 255.)

CREEPING AND RUNNING ROSES—(CONTINUED.)

| NAMES. | DESCRIPTION. |
|-----------------------------------|-----------------------------|
| 788 Princess Louise | Fine white. |
| 789 ——— Marie | Beautiful white. |
| 790 Purple Boursault | Semi-double purple. |
| 791 Queen of the Belgians | Delicate white semi-double. |
| 792 Rose Clare | Single bright red. |
| 793 Sempervirens | Single white. |
| 794 ——— pleno..... | Double white. |
| 795 ——— rosea..... | Double rose. |
| 796 Seneca | Single delicate white. |
| 797 True Crimson Boursault | Beautiful crimson. |
| 798 Watts' Climbing Provence..... | Fine rose. |
| 799 Zephyr..... | Fine rosy blush. |

NOISETTE ROSES.

| | |
|------------------------------|-----------------------------|
| 800 Aline Chatelain | Fine white. |
| 801 Amenia | Large rosy blush. |
| 802 Amerique Blanche | Semi-double white. |
| 803 Amie Vibert..... | Fine large white. |
| 804 Belle de Woodlands | Fine pink. |
| 805 ——— Brulor | Fine pale blush. |
| 806 Bouganville | Pretty light purple. |
| 807 Boule de neige | Beautiful pure white globe. |
| 808 Boquet tout fait | White and yellow eye. |
| 809 Cadot | Large deep lilac. |
| 810 Camellia pourpre | Fine rosy purple. |
| 811 Caroline | Pretty small pink. |
| 812 Cerise | Beautiful purple. |
| 813 Chamagana | Pale blush. |
| 814 Charles the Tenth | Very double fine red. |
| 815 Charlotte Calper | Bright pink. |
| 816 Comtesse Odoïssco | Very pretty rosy blush. |
| 817 Conque de Venus | Large blush white. |
| 818 Countess d'Orleans | Fine large blush. |
| 819 Cramoise | Very double small red. |
| 820 Delaage | Small compact white. |
| 821 Demetriereuse..... | Light crimson. |
| 822 Duc de Boufflers | Small sulphur. |
| 823 ——— Broglie | Pale rosy blush. |
| 824 Felicite..... | Fine blush. |
| 825 Grandiflora | Very large blush. |
| 826 Isabelle d'Orleans | Fine globe white. |
| 827 Jacques | Fine small red. |
| 828 La Cherie..... | Fine large rose. |
| 829 — Fayette | Deep purple. |
| 830 — Jolie | Small rose. |

| NAMES. | DESCRIPTION. |
|--|------------------------------------|
| 831 <i>Lamarque</i> | Very large pale sulphur-colour. |
| 832 <i>La Neige</i> | Small delicate white, |
| 833 — <i>Nymphe</i> | Small rose. |
| 834 — <i>Petite Angevinne</i> | Small cream-colour. |
| 835 <i>Lee</i> | Very beautiful large blush. |
| 836 <i>Madame d'Arblay</i> | Fine rosy blush. |
| 837 — <i>Laffay</i> | Beautiful rosy purple. |
| 838 <i>Mademoiselle d'Eufrasie</i> | Very splendid cream-colour. |
| 839 — <i>Felicia</i> | Cream-colour. |
| 840 <i>Marianne</i> | Very double lilac. |
| 841 <i>Mignon</i> | Small globe white. |
| 842 <i>Milairie de Montgoie</i> | Bright red. |
| 843 <i>Milton</i> | Bright blush. |
| 844 <i>Nana</i> | Small lilac purple. |
| 845 <i>Nankin</i> | Small buff. |
| 846 <i>New French Yellow</i> | Fine deep yellow, tinged with red. |
| 847 <i>Old Blush</i> | Very light blush. |
| 848 <i>Ordinaire</i> | Pink. |
| 849 <i>Pink, Wells's</i> | Fine bright pink. |
| 850 <i>Pourpre Fonce</i> | Small purple. |
| 851 <i>Pulchella</i> | Small rosy purple. |
| 852 <i>Purple, Wells's</i> | Beautiful purple. |
| 853 <i>Red</i> | Large fine pink. |
| 854 <i>Renoncule</i> | Very fine pale blush. |
| 855 <i>Sir Walter Scott</i> | Fine large rose. |
| 856 <i>St. Pierre</i> | Pale purple. |
| 857 <i>Thelaire</i> | Fine large rose. |
| 858 <i>White, Wells's</i> | Beautiful delicate white. |
| 859 <i>Yellow, Smith's</i> | Beautiful pale yellow. |
| 860 <i>Zobeide</i> | Small delicate rose. |

PERPETUAL ROSES.

| | |
|---|---------------------------|
| 861 <i>Belle Fabert</i> | Very large bright red. |
| 862 — <i>Nanette</i> | Very large blush. |
| 863 <i>Cent feuille</i> | Fine red. |
| 864 <i>Du Roux</i> | Large deep red. |
| 865 <i>Four Seasons</i> | Fine rose. |
| 866 <i>Grand Perpetual</i> | Very large deep rose. |
| 867 <i>Josephine Antoinette</i> | Small rose. |
| 868 <i>La Mienne</i> | Rosy purple. |
| 869 <i>Louis Philippe</i> | Large dark crimson. |
| 870 <i>Monstrous Four Seasons</i> | Large delicate rose. |
| 871 <i>Palmire</i> | Fine pale blush. |
| 872 <i>Perpetual Scotch</i> | Blush, very double. |
| 873 <i>Perpetuelle d'Angers</i> | Large delicate blush. |
| 874 <i>Pomponne Four Seasons</i> | Delicate blush. |
| 875 <i>Queen of Perpetuals</i> | Fine pale blush. |
| 876 <i>Rosa Pœstana</i> | Semi double crimson. |
| 877 <i>Rose du Roi</i> | Beautiful bright crimson. |
| 878 <i>Sixth of June</i> | Very double blush. |
| 879 <i>Stanwell Perpetual</i> | Fine flesh-colour. |
| 880 <i>White Four Seasons</i> | Beautiful white. |

HYBRID ROSES.

| | |
|---------------------------------------|------------------------------|
| 881 <i>Amelie Guerin</i> | Fine white. |
| 882 <i>Antiope</i> | Small shaded purple. |
| 883 <i>Attelaine de Bourbon</i> | Beautiful large bright rose. |
| 884 <i>Beaute Vive</i> | Small fine rose. |
| 885 <i>Bolle de Bengal</i> | Bright rose. |
| 886 <i>Bizarre de la Chine</i> | Crimson globe. |
| 887 <i>Bonne Genevieve</i> | Fine dark purple. |
| 888 <i>Brennus</i> | Globe red. |

| | NAME. | DESCRIPTION. |
|-----|--------------------|---------------------------------------|
| 889 | Camuse Carne | Pretty blush colour. |
| 890 | Carmin Feu | Large compact red. |
| 891 | Celine | Large pale blush. |
| 892 | Celestial | Beautiful blush. |
| 893 | Clair de Crassac | Pretty cherry-colour. |
| 894 | Colonel Fabvier | Large bright rose. |
| 895 | Coronation | Shaded dark and light purple. |
| 896 | Coupe d'Amour | Fine bright rose. |
| 897 | Duke of Devonshire | Fine large lilac, striped with white. |
| 898 | Eliza Fenning | Small fine blush. |
| 899 | Ethereal | Beautiful purple. |
| 900 | Fulgens | Large fine fiery crimson red. |
| 901 | General Paget | Fine rosy pink. |
| 902 | Hybride Blanc | Very double white. |
| 903 | King of Roses | Fine violet. |
| 904 | La Cerisette | Large red. |
| 905 | Lady Stuart | Very large globe blush. |
| 906 | La Grandeur | Large fine rosy crimson. |
| 907 | — Tourterolle | Lead-coloured, cupped. |
| 908 | Lilac Queen | Deep lilac. |
| 909 | Miralba | Small dark crimson. |
| 910 | Morning Star | Very large globe purple. |
| 911 | Ne plus ultra | Large round red. |
| 912 | Pourpre Panachee | Fine shaded purple. |
| 913 | Reine de Belgique | Globe rosy lilac. |
| 914 | Roi de Prusse | Purple. |
| 915 | Rose Blairii | Fine globe rose. |
| 916 | — Chateleine | Large rosy purple. |
| 917 | — Montan d'Angers | Fine large dark purple. |
| 918 | Sebastiana | Fine dark crimson. |
| 919 | Seulisienne | Small flesh-coloured. |
| 920 | Susette | Fine dark crimson. |
| 921 | Targelie | Large reddish purple. |
| 922 | Thisbe | Pale blush, nearly white. |
| 923 | Thornless Violet | Dark puce velvet. |
| 924 | Triomphe d'Anger | Globe rose. |
| 925 | — de Guerin | Large rosy blush. |
| 926 | — Laffay | Delicate white. |
| 927 | Victor Hugo | Large rosy lilac. |
| 928 | — Tracy | Large dark crimson. |
| 929 | Wellington, Lee's | Purplish crimson. |

L'ISLE DE BOURBON ROSES.

| | | |
|-----|-------------------|---------------------------------|
| 930 | Aristide | Small purple lilac. |
| 931 | Chloe | Large fine blush pink. |
| 932 | Faustine | Flesh-colour. |
| 933 | General Dubourg | Beautiful large rose-colour. |
| 934 | Jeanne d'Albrez | Small lively rose. |
| 935 | L'Isle de Bourbon | Fine rosy crimson, semi double. |
| 936 | Madame Desprez | Large bright rose. |
| 937 | Veleda | Large blush. |

CHINA ROSES.

| | | |
|-----|-------------------|---|
| 938 | Admiral de Regini | Small semi-double purple. |
| 939 | — du Perri | Large dark red. |
| 940 | Atropurpurea | Small dark purple. |
| 941 | Barclayana | Semi-double rose. |
| 942 | Beau Carmin | Fine deep crimson. |
| 943 | Belle d'Amosa | Beautiful crimson, curiously tinged with white. |
| 944 | — Amour | Fine bright red. |
| 945 | — de Monza | Fine crimson and purple. |

| NAMES. | DESCRIPTION. |
|-----------------------------------|---|
| 946 Belle de Plaisance | Small semi-double scarlet. |
| 947 ——— Traversi | Small blush white. |
| 948 ——— Villorosi | Small dark red. |
| 949 Bengallensis Pallida | Very pale blush. |
| 950 ——— Rubra | Large rose. |
| 951 Camellia Blanc | Beautiful large white. |
| 952 ——— Rouge | Fine red. |
| 953 Countess of Albemarle | Fine large rosy blush, dark in the centre. |
| 954 Crameise Superieure | Large bright crimson. |
| 955 ——— Triomphante | Large very fine crimson. |
| 956 Duchesse de Berri | Very compact red. |
| 957 Frangrantissima à Odeur | Beautiful scented large blush. |
| 958 Glorie d'Anteuil | Very dark crimson. |
| 959 Gracile | Large delicate rosy pink. |
| 960 Ignescens | Small fiery red. |
| 961 Indica Gloriosa | Very large fine rose. |
| 962 ——— Minor Blush | Small blush. |
| 963 ——— Rubra | Small red. |
| 964 ——— nana | Small pink. |
| 965 ——— superba | Fine bright rose. |
| 966 Lawrenceana | Very small pretty rose. |
| 967 Marie Louise | Fine large rose. |
| 968 Nouvelle Pivoine | Very large blush. |
| 969 Petite Triomphe | Small shining red. |
| 970 Strombio Rubra | Fine globe red. |
| 971 Triumph of Ghent | Large bright rose. |
| 972 White | Very pure. |
| 973 Willow-leaved | Semi-double bright rose. |

SCOTCH ROSES.

| | |
|-------------------------|--------------------------------------|
| 974 Adelaide | Large fine red. |
| 975 Appollo | Large red. |
| 976 Blanda | Large marbled blush. |
| 977 Daphne | Pinkish lilac. |
| 978 Flora | Semi-double dark red. |
| 979 Guy Mannering | Large light blush. |
| 980 Ivanhoe | Large very deep blush. |
| 981 Juno | Marbled red. |
| 982 La Neige | Fine pure white. |
| 983 Painted Lady | White and crimson, prettily striped. |
| 984 Pluto | Very dark red. |
| 985 Purpurea | Reddish purple. |
| 986 Queen of May | Bright carmine. |
| 987 Sulphurea | Straw-colour. |
| 988 True Yellow | Large fine sulphur-colour. |
| 989 Venus | Crimson red. |

MUSK ROSES.

| | |
|---------------------------------|---------------------------------|
| 990 Blush | Semi-double pale blush. |
| 991 Fringed | Small compact white. |
| 992 Nepalensis pleno alba | Yellowish white. |
| 993 ——— rubra | Light red. |
| 994 Princess de Nassau | White, with a yellowish centre. |

TEA-SCENTED ROSES.

| | |
|---------------------------|--------------------------------------|
| 995 Belle Felix | Fine bright rosy lilac. |
| 996 Bourbon | Very large white globe. |
| 997 Boutelaaye | Fine large delicate pink. |
| 998 Hymenee | Fine white, with a yellowish centre. |
| 999 Jeanne Panachée | Fine straw-colour and delicate rose. |

| NAMES. | DESCRIPTION. |
|----------------------------|---------------------------------------|
| 1000 Large crimson | Large splendid crimson. |
| 1001 La Surprise | Small delicate rose. |
| 1002 Reve du Bonheur | Rosy blush, with a yellow centre. |
| 1003 Roi de Siam | Large beautiful pure white. |
| 1004 Strombio | Fine cream-colour, tinged with blush. |

ST. PATRICK.

[The Article on Roses, as sent by our correspondent, to the amount of a thousand kinds, is now closed. We have had much pleasure in inserting it; because we think that it will be a standard to ascertain the correctness of kinds cultivated, as well as afford direction to the selecting of sorts for a collection, so that the various colours may be chosen, and thereby produce the greater contrast. Those persons who admire and cultivate this most beautiful class of plants will, we believe, appreciate with ourselves the value of the above list, however lengthy it has been. A correspondent has just sent us a small list of some additional kinds, which we shall insert in some future Number; and as new sorts appear, we purpose giving their names and colour, and the class to which they belong. This will afford information, as well as discover imposition, if practised, from persons not selling the correct kinds; and we are sorry that instances of that nature have been practised.—COND.]

ARTICLE VIII. — *On Plants which are peculiarly adapted for Planting in Masses; each kind being showy and profuse in Flowering.* By FLORA.

(CONTINUED FROM PAGE 253.)

Commelina cælestis, Sky-blue Commelina. Triandria, Monogynia. Commelineæ. The splendid blue flowers of this plant cannot be excelled, and its profusion of blossoms renders it deserving of cultivation in every flower-garden. With me the plant blooms from the middle of June to October. The roots are tuberous, and keep well through winter, if taken up after the blooming season, and preserved like Dahlia roots. Plants from the old roots grow, in good soil, from three to five feet high; those from seeds reach only from one to two feet. The following is the mode of management I have practised for the last two seasons:—I fixed upon a circular bed, eight feet in diameter; and the first week in May I planted four feet of the centre with the old roots, placing the crowns just under the surface of the soil. The outer portion of the bed I planted with *spring-sown* plants, that had been raised in pots placed in a frame. Both the roots and plants were planted about six inches apart. Thus the centre of the bed being much higher than the outer part, the appearance was that of a splendid blue cone of flowers, scarcely to be excelled in beauty. Seeds are produced in abundance, and may be obtained of seedsmen at a small cost.—(To be continued.)

PART II.

NEW PLANTS

WHICH HAVE APPEARED SINCE OUR LAST.

IN our former Numbers, we have always given a complete list of plants as figured in the periodicals of the preceding month. This, we have been given to understand, is an annoyance to the Conductors of those publications. We shall, therefore, discontinue it, and in future present to our readers a monthly alphabetical list of such NEW plants as may come under our notice during the month; and we shall spare no trouble to make it as complete as possible, avoiding what was inevitable in our former plan, the naming and describing many old and worthless plants.

Acacia plumosa, Feathery Acacia. (*Bot. Mag.*) This climbing species of Acacia will require a conservatory or greenhouse protection in this country. Its fine carved plumes of foliage would have an imposing appearance if grown in a conservatory, and the spikes of its yellow flowers would make it additionally attractive. In Madeira, where it is cultivated in the open air, it must be a desirable and ornamental appendage to a residence. The plant belongs to the class Polygamia, and order Monœcia; natural order, Leguminosæ, the pea tribe of flowers. The name Acacia is from *akazo*, to sharpen, most of the Acacias being thorny.

Adesmia Loudonia, Loudon's Adesmia. (*Bot. Reg.*) Neither the plant nor the flower of this new Chilian shrub are striking; the former are small, of a yellow colour. It has an appearance of the common English Genista, but not near so pretty. It belongs to the 10th class, Decandria, and 1st order, Monogynia; natural order, Leguminosæ. Adesmia is derived from the Greek *a*, prio, and *desmon*, a union; the separation of the stamens.

Azalea indica variegata, variegated flowered. (*Bot. Reg.*) Mr. KNIGHT, nurseryman, King's-road, Chelsea, is in possession of this new and fine-flowered Chinese Azalea. Its beautiful white flowers, suffused with a fine rose-colour, produce a most pleasing effect. The plant well merits a situation in every collection. Azalea belongs to the 5th class, Pentandria, and 1st order, Monogynia; natural order, Ericææ. The name is derived from *azaleos*, dry; habitation.

Batemannia Colleyii, Colley's Batemannia. (*Bot. Reg.*) This handsome flowering orchideous plant from Demerara, has a singular and striking appearance, the sepals of the blossoms being brown and purple, tipped with green, and the labellum white and yellow. It belongs to the 20th class, Gynandria, and 1st order, Monandria; natural order, Orchideæ. The name from JAS. BATEMAN, Esq.

Billardiera ovalis, oval-leaved. (*Bot. Reg.*) This climbing plant very much resembles *Sallyx heterophylla*, but the flowers are of a greenish yellow colour. As it is from Van Dieman's Land, no doubt it will thrive in the open air in this country, if favoured with a warm situation. Plants of it may be had of Mr. LOWE, of the Clapton Nursery. The plant belongs to the 5th class, Pentandria, and 1st order, Monogynia; natural order, Pittosporææ. *Billardiera*, from LA BILLARDIERE, a French botanist.

Calceolaria crenatiflora, var. *Knyperstiensis*. (*Brit. Flow. Gard.*) This handsome hybrid, raised at Knyperly Hall, Staffordshire, is a valuable addition to this pleasing tribe of plants. The bright yellow flowers, with a large spot of chocolate velvet colour, and the corolla being of a superior

size, render it a striking object. This species is known in some collections as *C. pendula*; and, like it, the present variety will not grow higher than a foot, if grown in the open air; but if kept in-doors, it will of course grow taller, and, we think, make a better appearance. We hope the kind will soon be in the hands of Messrs. POPE & SONS, nurserymen, near Birmingham, whence it might then be obtained. *Calceolaria* belongs to the 2d class, Diandria, and 1st order, Monogynia; natural order, Scrophularinae. The name is from *calceola*, a slipper; the flower resembling a shoe or slipper.

Deutzia scabra, rough-leaved. (*Bot. Reg.*) This small new Japan shrub, with its white blossoms, in racemes, and in appearance like the small flowers of a common Syringa, will doubtless be an acquisition to the pleasure-ground; and as it will be quite hardy in this country, we hope it will be distributed from the London Horticultural Society's Garden, so as to be spread through the country before long. The plant belongs the 10th class, and 3d order; natural order, Philadelphica, Syringa tribe of flowers.

Kennedia nigricans, dark-flowered. (*Bot. Reg.*) From the report of the London Horticultural Society's Meetings, it appears that this new and striking species of *Kennedia* was exhibited at the Room in Regent-street, on April 1st, by BOYD MILLER, Esq., who had raised it from seed. There appears to be another new species in cultivation by Messrs. BUCHANAN & Co., of Camberwell Nursery. In the species they possess, the flowers are of a dark purple, with a patch of yellowish green; the foliage large. The species exhibited by Mr. BOYD MILLER had smallish foliage, and the flowers very dark, said to be black, and a yellow patch. Such is the account we had from a most respectable London nurseryman. Both species are well deserving of cultivation; and being natives of New South Wales, will flourish as a greenhouse twining plant, either to cover a trellis or a supporting pillar. All the species produce seed freely, as well as strike by cuttings. Sandy peat soil and well-drained pots are essentials in the culture. The plants belong to the 17th class, Diadelphia, and — order, Decandria; natural order, Leguminosae, pea tribe of flowers. The name *Kennedy*, after LEWIS KENNEDY, Esq.

Malva Munroana. (*Bot. Gard.*) This plant is a hardy perennial, grows three feet high; the flowers are small, of a brownish-red, rather uninteresting, compared with other kinds of Mallow. The plant belongs to the 16th class, Monadelphia, and 8th order, Polyandria; natural order, Malvaceae. *Malva*, from *malake*, soft; referring to its medicinal properties.

Malesherbia linearifolia, linear leaved. (*Bot. Mag.*) This is a very pretty Chilean plant, and merits general cultivation in the green-house. The plant not growing more than half a yard or two feet high, and producing panicles of purplish blue blossoms, each about an inch across, renders it a desirable species. As it is grown in the Glasgow Botanic Garden, we doubt not but it will soon be in general circulation. The plant belongs to the 5th class, and 3d order; natural order, Passiflorae. The name is from L. MALESHERBES.

Oenothera Drummondii. (*Bot. Mag.*) This is a very pretty Evening Primrose, and its fine yellow flowers give a striking effect during autumn, and are valuable for the flower-garden. *Oenothera* belongs to the 8th class, Octandria, and 1st order, Monogynia; natural order, Onograceae. The name is from *oinos*, wine, and *thera*, catching; acquired smell.

Rhododendron macranthum, large-flowered. (*Brit. Flow. Gard.*) This is the *Azalea indica lateritia*, noticed in the *Cabinet*, Vol. II., p. 237. We cannot avoid recommending it to all the admirers of this tribe of plants. Being of a low growth, and blooming profusely, it is very desirable. The plant belongs to the 10th class, and 1st order; natural order, Ericaceae. The name is from *rhodo*, a rose, and *dendron*, a tree.

Silene chlorefolia, Chloral-leaved Catchfly. (*Brit. Flow. Gard.*) A hardy perennial plant, with flowers pure white above, and purplish underneath. It will be useful to the flower-garden in summer, growing only a foot high. The plant belongs to the 10th class, and 3d order; natural order, Caryophyllae. *Silene*, from *salon*, salvia; in allusion to the viscid, frothy moisture of the stalks of some species.

PART III.

MISCELLANEOUS INTELLIGENCE.

A LIST OF DAHLIAS

THAT HAVE OBTAINED THE GREATEST NUMBER OF PRIZES DURING 1834,
AT THE VARIOUS FLORICULTURAL AND HORTICULTURAL EXHIBITIONS.

Our floricultural friends having sent us accounts of a great number of Dahlia exhibitions that have taken place throughout England, Scotland, and Wales we have selected some of the kinds that have won the greatest number of prizes, in order that our readers may have a knowledge of those which are considered to possess the most superior properties as to colour and form. Some of the kinds in each class of colour are very new, and but little spread through the country; consequently, although very superior in their class, the range of exhibition being necessarily limited, has prevented their attaining that station in the list which they deserve: such of them, however, as we know to be good ones, are marked with an asterisk (*). The mode of exhibiting the flowers in stands or pans containing 4, 6, 12, 50, or 100 kinds, having become very general in the South of England, and many of the finest sorts having been thus exhibited, we have given the accounts, as forwarded to us, of some of the best exhibitions in this manner. We observe, in the accounts of exhibitions sent us, that the flowers of each class of colour are shown by themselves when to any extent, and that the judges select three, six, twelve, &c. of the best flowers out of the lot, commencing with the first best flower, second ditto, &c.; and from such decisions the following table is taken. P.p. signifies a *premier prize*,—that is, the prize offered for the best bloom of any colour, exhibited in the whole. The table is thus arranged, viz. King of the Whites, one *premier prize*, seven *first prizes*, five *second prizes*, five *third prizes*, &c.; in all, gaining 27 prizes

| Names. | WHITE. | | | | | | | | | | Tot |
|---------------------------------|--------|---|---|---|---|---|---|---|---|---|-----|
| | P.p. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| King of the Whites..... | 1 | 7 | 5 | 5 | 3 | 3 | 2 | 1 | | | 27 |
| Harpalyce..... | | 1 | 1 | 2 | 1 | 3 | 1 | | | 2 | 11 |
| Paper White | | | | 3 | | | 6 | | 2 | | 11 |
| Dennis's Queen of the Whites .. | 2 | | | | 3 | | 2 | 2 | 1 | | 10 |
| Desdemona | | | | | 1 | 5 | 2 | | | | 8 |
| Mount of Snow | | | | 1 | | 1 | | 2 | | 1 | 5 |
| Alba multiflora | | 1 | | 1 | | 1 | | | | | 3 |
| Transcendant | | | 1 | 1 | | | 1 | | | | 3 |
| *Camelliaflora alba..... | 1 | 2 | | | | | | | | | 3 |
| | BLUSH. | | | | | | | | | | |
| Blush Lilac | | 4 | 2 | 2 | | 3 | | | | | 11 |
| Pencilia | | 2 | 2 | | 3 | 1 | 1 | | | | 9 |
| Hermione..... | | 3 | 3 | 2 | | | | | | | 8 |

| Names. | RED. | | | | | | | | | | Tot. | |
|---------------------------|------|-------|---|---|---|---|---|---|---|---|------|----|
| | P.p. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | 10 |
| Tarcecia | | 1 | 1 | 1 | 1 | 1 | | | | | | 5 |
| Carolus | | 1 | 3 | | | | | | | | | 4 |
| Newall's Victory | | 1 | 1 | | | 1 | | | | | | 3 |
| Cicero | | | 1 | | 1 | 1 | | | | | | 3 |
| Beauty of Hertford | | 1 | | | 1 | 1 | | | | | | 3 |
| Levick's Mountaineer..... | | 1 | | | | | | | | | | 1 |
| | | DARK. | | | | | | | | | | |
| Lord Derby | | 3 | 2 | 1 | | 2 | 3 | | | | | 11 |
| Hall's Mogul | | 2 | 3 | 2 | | | | 1 | | | | 8 |
| Negro Superb | | 3 | 4 | | | | | | | | | 7 |
| — Boy | | | | 2 | | 1 | 3 | | | | | 6 |
| Paganini | | | 2 | 2 | 1 | | | | | | | 5 |
| Rammohun Roy | | | | 1 | | 1 | | | | | | 2 |
| Dawson's Victory | | | | 1 | | 1 | | | | | | 2 |
| Mont Gibberloo | 1 | 1 | | | | | | | | | | 2 |
| Othello | | 1 | 1 | | | | | | | | | 2 |
| Foster's Niagara | | | | 1 | | | | | 1 | | | 2 |

The following Dahlias were exhibited in stands, or pans :—

CAMBRIDGE HORTICULTURAL SOCIETY, SEPT. 10TH.—*Stands of twelve blooms* :—First prize, for Springfield Rival, Levick's Incomparable, Brewer's Paragon, Foster's Niagara, Queen of Dahlias, Criterion, King of the Yellows, Granta, Inwood's Ariel, Willnott's Superb, Widnall's Perfection, and Picta formosissima, to Mr. Brewer.—Second prize, for Lord Derby, Sir Robert Peel, Jason, Criterion, Granta, Rising Sun, Countess of Liverpool, Phyllis, King of the Whites, Black Prince, and two seedlings, to Mr. Widnall.—Third prize, for Countess of Liverpool, Queen of Dahlias, King of the Whites, Rising Sun, Jason, Prince George of Cumberland, Perfection, Springfield Rival, Granta, Picta formosissima, Ariel, and Neptune, to Mr. Searle.—*Stands of six blooms* :—First prize, for Criterion, Neptune, Granta, Queen of Dahlias, Countess of Liverpool, and Widnall's Jason, to Mr. R. Headly.—Second prize, for Queen of Dahlias, Queen of Sheba, Springfield Rival, Perfection, King of Dahlias, and Picta formosissima, to Mr. Widnall.—Third prize, for Rose d'Amour, Victory, Lady Dundas, Casino, and two seedlings, to Mr. Brewer.

DOUGLASS HORTICULTURAL SOCIETY, OCT. 9TH.—*Pans of twelve blooms* : First prize, for Queen of Sheba, Negro Superb, Picta formosissima, Camelliaflora, Queen of Dahlias, Coccinea perfecta, Enchantress, Negro Boy, Wells's Perfection, Beauty of Camden, Zamia, and Lord Liverpool, to Mr. Stone.—Second prize, for Picta formosissima, Charming Phyllis, Lass of Richmond Hill, Negro Boy, Commander in Chief, Queen of Dahlias, Aurora, Jason, Lord of Hallamshire, Queen of the Whites, Mrs. Talbot, and Prince George of Cumberland, to Mr. Appleby.—Third prize, for Queen of Dahlias, Landgravine, Yellow Turbau, Lass of Richmond Hill, Queen of the Whites, Barratt's Susanna, Prince George, Young's New Rose, Negro Boy, Eximia, Picta formosissima, and Cicero, to Mr. Appleby.—*Pans of six blooms* :—First prize, for Purple Perfection, Countess of Harrington, Seedling, Shannon, Springfield Rival, and Seedling, to Mr. Levick.—Second prize, for Mrs. Talbot, King of the Whites, Queen of the Yellows, Incomparable, Unknown, and Picta formosissima, to Mr. Jackson.—Third prize, for Lady Grenville, Countess of Liverpool, Widnall's Perfection, Barratt's Susanna, ———, and King of the Whites, to the Rev. H. Branson.

NEWICK HORTICULTURAL SOCIETY, SEPT. 4.—*Stands of twelve blooms* : First prize, for Granta, Aurea, Countess of Liverpool, Queen of Dahlias, Pencilia, Picta Formosissima, Hermione, Widnall's Perfection, Springfield Rival, Camelliaflora alba, Levick's Incomparable, and Priestley's Enchantress, to Mr. Mitchell, florist, &c., Piltown.—Second prize, for Queen of

Sheba, Albion, Picta formosissima, Adoliza, Elphinstone's Polyphemus, Alba purpurea, Negro Boy, Countess of Liverpool, Queen of Violets, Widnall's Perfection, Queen of Dahlias, and Fair Ellen, to Mr. Mitchell, Florist, Brighton.—Third prize, for Widnall's Perfection, Marquis, Queen of Sheba, Countess of Liverpool, Queen of Dahlias, Elphinstone's Polyphemus, Neptune, Springfield Rival, Picta formosissima, Levick's Incomparable, King of the Whites, and Priestley's Enchantress, to Mr. Hudson, at Mrs. Law's, Little Horsted.—Fourth prize, for Widnall's Perfection, Springfield Rival, Painted Lady, Picta formosissima, Alicia, Metropolitan Blush, Wells's Polyphemus, Elphinstone's Polyphemus, Forster's Erecta, Granta, Purpurea elata, and Lady Fordwich, to Mr. Elphinstone, Holm Bush.

NOTTINGHAM FLORAL AND HORTICULTURAL SOCIETY, SEPT. 10.—*Stands of ten blooms* :—First prize, for Lord Derby, Granta, Perfection, Duchess of Bedford, Aurora, Emperor of Yellows, Belladonna, Queen Elizabeth, Queen of Dahlias, and King of the Whites, to Mr. Spencer.—Second prize, for Marshall's William, Springfield Rival, Perfection, Countess of Liverpool, Prince of Orange, Queen of Yellows, Enchantress, Taunton Rose, Queen of Dahlias, and Transcendenta, to Mr. Buckwell.—Third prize, for Negro, Lord Liverpool, Perfection, Springfield Rival, Countess of Liverpool, Jason, Levick's Incomparable, Picta formosissima, Julia, and Emperor of the Whites, to Mr. Neville.

SHEFFIELD AMATEURS' AND FLORISTS' SOCIETY, SEPT. 1st.—*Pans of six blooms* :—First prize, for Aldan's Yellow, Widnall's Perfection, Levick's Mozart, Hero Française, Queen of Whites, and Wilberforce, to Mr. Levick.—Second prize, for Lord Liverpool, Miss Pelham, Countess of Liverpool, King of the Whites, and two seedlings, to Mr. Alsebrook.—Third prize, for Lord John Russell, Queen of the Roses, Augusta, Lady Grenville, Queen of the Whites, and Susiana, to Mr. Taylor.

SECOND MEETING, OCT. 6th.—*Pans of six blooms* :—First prize, for Harriet Martineau, Mogul, Lord Milton, Shannon, Lady Harrington, and Tarrecia, to Mr. Levick.—Second prize, for Springfield Rival, Picta formosissima, Lord Liverpool, Harpalyce, Colville's Perfecta, and Lord Milton, to Mr. Alsebrook.—Third prize, for Midas, Sir Robert Peel, Springfield Rival, Daniel O'Connell, Neptune, and Lord Liverpool, to Mr. Turner.—Fourth prize, for Picta formosissima, Rammohun Roy, Auroro, Comus, Plant's Purpurea, and Tarrecia, to Mr. Davy.

WOOLWICH FLORISTS' SOCIETY, SEPT. 30.—*Stands of twelve blooms* :—First prize, for Ariel, Augusta, Beauty of Camden, Metropolitan Blush, Purpurea elata, Lady Fordwich, Criterion, Lilac Perfection, Metropolitan Calypso, Metropolitan Perfection, Glenny's 105, and Alicia, to Mr. Glenny.—Second prize, for Douglas's Prince of Orange, Lady Fordwich, Beauty of Camden, Ariel, Criterion, Lilac Perfection, Metropolitan Blush, Widnall's Rising Sun, Rival Yellow, Springfield Rival, Metropolitan Perfection, and Pencilled White, to Mr. Harding.—Third prize, for Lady Fordwich, Purpurea elegans, Metropolitan Blush, Polyphemus, Demissil, Criterion, Granta, Marchioness of Abercorn, Queen of Dahlias, Springfield Rival, Beauty of Sheffield, and Widnall's Perfection, to Mr. Newhall.

[We have received descriptions, as to colour, form, and height, of about twenty of the new Dahlias coming out next season; the particulars of which we shall give, along with others, in our January Number.—COND.]

AURICULAS.

GREEN-EDGED.

| Names. | P.p. | Prizes. | | | | | | Tot. |
|----------------------|------|---------|---|---|---|---|---|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | |
| Lee's Colonel Taylor | 3 | 5 | 4 | 3 | | 1 | | 16 |
| Booth's Freedom | 4 | 2 | 3 | 1 | 3 | | 1 | 14 |
| Stretche's Alexander | 1 | 3 | 1 | 2 | | 3 | 1 | 11 |

MISCELLANEOUS INTELLIGENCE.

| Names. | P.p. | Prizes. | | | | | | Tot. |
|---------------------------------|------|---------|---|---|---|---|---|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | |
| Pollitt's Highland Laddie | 4 | 2 | 1 | 2 | | | 1 | 10 |
| Buckley's Jolly Tar | 3 | | | 2 | | 3 | | 8 |
| Moore's Jubilee | 1 | 2 | 1 | 2 | | | 1 | 7 |
| GREY-EDGED. | | | | | | | | |
| Grimes's Privatser | 3 | 6 | 3 | 5 | 1 | 1 | | 19 |
| Taylor's Ploughboy | 1 | 7 | 2 | | 1 | 2 | | 13 |
| Kenyon's Ringleader | 1 | 7 | 3 | 1 | | | | 12 |
| Conqueror of Europe | 2 | 5 | 1 | 1 | | | | 9 |
| Thompson's Revenge | | 3 | 2 | 1 | 2 | | | 8 |
| Warris's Union | 1 | 4 | 2 | | | 1 | | 8 |
| WHITE-EDGED. | | | | | | | | |
| Taylor's Glory | 2 | 6 | 3 | 5 | 1 | 2 | 1 | 20 |
| Hughes' Pillar of Beauty | 1 | 4 | 4 | 6 | 2 | 2 | 1 | 19 |
| Lee's Bright Venus | | 4 | 5 | 3 | 3 | 1 | 1 | 17 |
| Ashworth's Rule-All | 1 | 3 | 1 | 2 | | 3 | 2 | 12 |
| Potts's Regulator | 4 | 2 | | | | 5 | 1 | 12 |
| Taylor's Favourite | 3 | 4 | 1 | 2 | | | | 10 |
| SELFS. | | | | | | | | |
| Flora's Flag | 1 | 7 | 3 | 2 | 1 | 3 | 1 | 18 |
| Redmain's Metropolitan | | 6 | 2 | 5 | 2 | 1 | 1 | 17 |
| Scholes's Ned Lud | | 4 | 4 | 2 | 1 | 5 | | 16 |
| Berry's Lord Lee | | 4 | 3 | 2 | 5 | | 1 | 15 |
| Lord Primate | 1 | 3 | 4 | 1 | | | 1 | 10 |
| Apollo | | 2 | 1 | 3 | 2 | 1 | 1 | 10 |

POLYANTHUSES.*

| | | | | | | | | |
|-----------------------------------|---|----|---|---|---|---|---|----|
| Pearson's Alexander | 3 | 21 | 3 | 1 | 1 | | | 29 |
| Buck's George the Fourth | | 5 | 4 | 2 | 3 | 4 | | 18 |
| Cox's Prince Regent | 1 | 2 | 3 | 6 | | 3 | | 15 |
| Collier's Princess Royal | 1 | 3 | 3 | | 2 | 1 | 1 | 11 |
| Crownshaw's Invincible | 1 | 2 | 6 | | | 1 | | 10 |
| Eckersley's Jolly Dragoon | | 2 | 2 | 5 | 1 | | | 10 |
| Nicholson's Bang Europe | | 1 | 3 | 3 | | | | 7 |
| Lord Crewe (George Canning) | | 2 | 2 | 1 | 1 | | | 6 |

TULIPS.

| BIZARRES. | | | | | | | | |
|----------------------------|---|----|---|---|---|---|---|----|
| Surpasse Catafalque | 4 | 12 | 3 | 1 | 6 | 5 | 2 | 33 |
| Surpasse La Cantique | 6 | 9 | 4 | 2 | 3 | 1 | 3 | 28 |
| Duc de Savoi | 3 | 3 | 2 | | 6 | 5 | 5 | 24 |
| Trafalgar | 4 | 2 | 5 | 3 | 5 | 2 | | 21 |
| Goud Beurs | 1 | 4 | 3 | 6 | 3 | | 1 | 18 |
| Firebrand | 1 | 3 | 1 | 5 | 2 | 4 | | 16 |
| BYBLEMENS. | | | | | | | | |
| Baquet | 8 | 3 | 2 | 7 | 1 | 1 | 3 | 25 |
| Incomparable | 2 | 6 | 5 | 3 | 5 | 2 | 2 | 25 |
| Washington | 3 | 3 | 2 | 5 | 2 | 4 | 1 | 20 |
| Bienfait | 2 | 2 | 1 | 4 | 3 | 5 | 1 | 18 |
| Gaystella | | 1 | 3 | 2 | 5 | 1 | 2 | 14 |
| Maitre Pastout | 2 | 2 | 1 | 3 | | 4 | 1 | 13 |

* The following are superior kinds; but some being new, have, as yet, a limited circulation amongst the cultivators of Polyanthuses—Barker's William the Fourth, Billinggate Queen, Lord John Russell, Buck's Black Prince, Beauty of Coven, Burnard's Formosa, and Earl Grey.

| Name. | P p. | Prizes. | | | | | | Tot. |
|--------------------------------------|------|---------|---|---|---|---|---|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | |
| ROSETTS. | | | | | | | | |
| Triomphe Royale (Heroine) | 5 | 1 | 6 | 5 | 3 | 8 | 4 | 32 |
| Rose Unique (Princess d'Austurius).. | 10 | 2 | 4 | 3 | 1 | 5 | 6 | 31 |
| Dolittle (Michael de Lisle)..... | 1 | 13 | 2 | 3 | 4 | 2 | 1 | 26 |
| Duc de Bronte..... | 4 | 3 | 1 | 5 | 2 | 3 | 7 | 25 |
| Rose Vesta (Hebe) | 2 | 1 | 6 | 3 | 1 | 5 | | 21 |
| Walworth | 3 | 6 | 1 | 1 | 4 | 6 | | 21 |
| SELS. | | | | | | | | |
| Mine d'Or..... | 20 | 3 | 5 | | | | | 28 |
| White Flag | 3 | 14 | 6 | 1 | | | | 24 |
| Mountain of Snow | 4 | 10 | 3 | 2 | 2 | | | 21 |

PINKS.

DARK LACED.

| | | | | | | | | |
|---------------------------|----|---|---|---|---|---|--|----|
| Suwarrow | 12 | 6 | 3 | 5 | 1 | 1 | | 28 |
| Lustre | 5 | 4 | 8 | 3 | | 5 | | 25 |
| Marianne | 3 | 5 | 1 | 4 | 5 | 2 | | 20 |
| Mann's Miss Ricketts..... | 1 | 8 | 5 | 1 | | | | 15 |

RED LACED.

| | | | | | | | | |
|--------------------------|---|----|---|---|---|---|---|----|
| George the Fourth | 2 | 10 | 2 | 3 | 4 | | 1 | 22 |
| Princess Charlotte | 3 | 5 | 4 | 3 | 1 | 2 | 1 | 19 |
| Lady Green | 2 | 6 | 3 | 1 | 3 | | 1 | 16 |
| Humphrey Cheetham | 4 | 7 | 2 | | 1 | 1 | | 15 |

BLACK AND WHITE.

| | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|----|
| Cicero | 4 | 4 | 6 | 2 | 1 | 3 | | 20 |
| Parry's Union | 5 | 7 | 3 | 1 | | 1 | | 17 |
| Barratt's Conqueror..... | 4 | 3 | 4 | 2 | 2 | | 1 | 16 |
| Davey's Eclipse | 2 | 5 | 1 | 4 | 1 | 2 | | 15 |

CARNATIONS.

SCARLET BIZARRES.

| | | | | | | | | |
|------------------------------------|---|----|---|---|---|---|---|----|
| Wild's Perfection..... | 2 | 10 | 6 | 1 | 4 | 5 | 3 | 31 |
| Waterhouse's Rising Sun | 2 | 5 | 8 | 6 | 1 | 7 | | 29 |
| Ely's Mayor of Ripon..... | 3 | 1 | 5 | 7 | 4 | 1 | 3 | 24 |
| Walmsley's William the Fourth..... | 4 | 2 | 1 | 5 | 1 | 5 | 1 | 22 |
| Smalley's Foxhunter | | | | | | | | |
| Tate's Friday Night..... | | | | | | | | |

CRIMSON BIZARRES.

| | | | | | | | | |
|----------------------------|---|----|----|---|---|---|---|----|
| Wakefield's Paul Pry | 6 | 21 | 11 | 2 | | | | 40 |
| Gregory's King Alfred..... | 2 | 6 | 8 | 9 | 1 | 4 | 3 | 33 |
| Cartwright's Rainbow | 1 | 5 | 7 | 3 | 6 | 1 | 2 | 25 |
| Lee's Duke of Kent..... | 2 | 1 | 5 | 4 | 1 | 3 | 2 | 18 |
| Birmingham..... | 1 | 3 | 1 | 2 | 5 | 1 | | 16 |
| Orson's Apollo..... | 2 | 2 | 5 | 1 | 4 | | 2 | 16 |

SCARLET FLAKES.

| | | | | | | | | |
|-----------------------------|---|----|----|---|---|---|---|----|
| Pearson's Madame Mara | 8 | 23 | 13 | | | | | 44 |
| Maud's Rowton | 1 | 4 | 2 | 1 | 5 | 8 | 2 | 23 |
| Thornicroft's Blucher | | 2 | 1 | 7 | 3 | 5 | 1 | 19 |
| Taylor's Festival | 3 | 4 | 3 | 6 | 1 | 1 | | 18 |
| Serjeant's Washington..... | | 3 | 5 | 2 | 4 | 2 | 1 | 17 |
| Potter's Champion | 2 | 1 | 3 | 4 | 6 | 1 | | 17 |

PURPLE FLAKES.

| | | | | | | | | |
|-----------------------------------|---|----|---|---|---|--|--|----|
| Turner's Princess Charlotte | 6 | 20 | 3 | 1 | 5 | | | 36 |
|-----------------------------------|---|----|---|---|---|--|--|----|

| Names. | P.p | Prizes. | | | | | | Tot. |
|------------------------------------|-----|---------|---|---|---|---|---|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | |
| Bellerophon | 2 | 13 | 4 | 3 | 1 | 2 | 4 | 29 |
| Bates's Wellington | 1 | 3 | 5 | 1 | 4 | 6 | 1 | 21 |
| Wood's Commander | | 5 | 2 | 4 | 1 | 5 | 1 | 18 |
| Wilde's Marianne | 1 | 2 | 5 | 2 | 3 | 1 | | 14 |
| Alfred the Great | | 3 | 1 | 4 | 5 | | 1 | 14 |
| PINK FLAKES. | | | | | | | | |
| Lady Hood | 4 | 2 | 5 | 8 | 9 | 5 | | 33 |
| Duchess of Devonshire | 5 | 6 | 1 | 2 | 8 | 7 | 1 | 30 |
| Clegg's Smiling Beauty | 2 | 3 | 6 | 4 | 1 | 6 | 3 | 25 |
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QUERIES.

ON BLOOMING THE PARTRIDGE BREAST ALOE.—I should feel obliged by you, or any of your numerous correspondents, informing me of the soil and treatment required to make the Partridge Breast Aloe bloom. I have had it more than six years, and as yet there has not any sign of bloom appeared. An answer as soon as possible would greatly oblige.

W. J. LINTON.

ON THE SCHIZANTHUS.—Will you, in your next Number, give a hint of the best method of raising and treating the Schizanthus? We have found it fail so completely this summer, that I fear there has been some error in the mode of treating it; and a few hints will be gratefully received, by your well-wisher and admirer,

VIOLET.

Shapwick, near Glastonbury, Sept 8th.

ON HARDY PLANTS, &c.—You would greatly oblige a very considerable number of your subscribers, if you would, in an early number of your valuable and interesting publication, favour them with a list of the principal hardy plants now in cultivation, similar to the one of greenhouse plants given in the April Number of the first volume of the *Cabinet*, p. 38. I think it would be an improvement if, at the end of each description of plant, it were specified whether they were evergreen or deciduous shrubs, herbaceous plants, perennials, &c. &c.

A CONSTANT SUBSCRIBER.

Shafield, July 31st, 1834.

ON THE GENUS MUSA.—I should feel obliged to you, or any of your numerous correspondents, to inform me, through the medium of the *Cabinet*, what class and order the genera of *Musa* properly belongs to, as I find in the

the 5th edition of Donn's Catalogue that it is placed in the 23d class, *Polygonia*, and order 1, *Monœcia*; likewise in *Drummond's First Steps to Botany*; but in Loudon's Catalogue, *Hortus Britannica*, it is in the 5th class, *Pentaptria*, order 1, *Monogynia*, in the Linnæan system; and I shall take it as a favour if you, or any of your correspondents, will decide the question, as to which is the proper class and order, and which catalogue is the most to be relied on; as I am a young botanist, and want the best information about plants that I can get. An answer will be thankfully received.

VOLTAIRE.

SEEDS OF THE *ANCHUSA PANICULATA*, *LUPINUS ELEGANS*, &c.—I should be obliged if either you, or some of your correspondents, would inform me where I can procure the following seeds, all of which, with the exception of the four first, are mentioned in No. XII. of the *Floricultural Cabinet*:—*Anchusa paniculata*, *Lupinus elegans*, *Nolana grandiflora*, *Nolana tenella*, *Astragalus trachyceras*, *Astragalus reticulatus*, *Calendula Mexicana*, *Gentiana humilis*, *Gilia capitata alba*, *Gilia gracilis*, *Andiosace maciocarpa*, *Eutoca Franklini*, *Eutoca multiflora*, *Lobelia bicolor*, *Lotus arenarius*, *Lotus arabicus* and *conjugatus*.

D. G. H.

Oct. 2d, 1831.

ON TULIPS, *VERBENA MELINDRES*, *LUPINUS POLYPHILLIS*, &c.—I have recently become a subscriber to the *Floricultural Cabinet*, and am much pleased both with its plan and execution, as it is what I have long wished to see established, particularly with respect to its price, as this puts it within the reach of many a poor cottager who, like myself, cannot afford more expensive publications, however excellent they may be in their kind. But as knowledge and improvement, as well as pleasure and amusement, are great objects with me in all that I read, I beg leave for a spare corner in one of your pages for the following communications, which I humbly submit to the notice of some of your more able correspondents.—In my small bed of Tulips this year I have had some much better than I ever saw them before, and others much worse; this has been owing to the change in their colours. I noticed a many amongst them of the yellow and brown changed to a self-brown, and greatly degenerated. Some that were of a pure crimson (double ones,) I observed to be changed to crimson and white. Is there any method to be pursued that will prevent this change? If there is, I should feel greatly obliged to know it.—In what manner must the *Verbena melindres* be treated, so as to be preserved through the winter? I had several plants of it last year, which I potted and brought into my little cottage before the winter months commenced; but before spring they were dead. This could not be through the severity of the weather, because there was no frost within doors. A friend of mine also potted nearly a score, and brought them into the greenhouse; and I believe he had only one remaining at spring. This is a plant that I am extremely fond of, on account of the brilliancy of its flowers, but am totally ignorant of its nature and qualities; therefore a little information respecting it will be highly acceptable. Is it hardy, or tender? Does it require to be kept dry or moist? Will it stand a severe winter in the open ground, or must it be brought in and sheltered?—I have a very large plant of *Lupinus polyphillis* which has produced nearly 30 flowering stems, but it has changed its beautiful blue colour to a dark white, with a small tinge of blue; was I clever enough, I would have sent a drawing of it. Now, will this be called a new variety, and worth cultivating? If it is, I will raise a number of plants, as I have preserved a good quantity of seeds from it.

July 22d, 1831.

A POOR COTTAGER.

P.S. As I am now writing for information, can any of your correspondents inform me where the following desirable plants are to be obtained, and also the prices thereof:—*Lupinus leucophyllus*, *Pulsatilla vernalis*, *Dianthus Fischeri*, *Digitalis lanata*, *Dracophyllum rutans*, *Abronia mellifera*, *Hyoscyamus orientalis*, *Polygala panicifolia*, *Pentstemon ovatus*, *Oenothera pallida*, *Oenothera taraxifolia*.

ANSWERS.

ON STRIKING CUTTINGS OF BIGNONIA, &c.—“A Lover of Flowers” (page 115) should plant cuttings of the Bignonia either in sand or common earth, under a hand-glass, placed in heat, either in May or August. My plant is against a wall, due south, and never had the slightest covering.

AN ARDENT AMATEUR.

ON CACTUS SPECIOSISSIMUS.—In answer to “An Amateur” in Vol. I. p. 141, in the *Floricultural Cabinet*, I inform him that I have the Cactus speciosissimus flowering in my greenhouse every alternate year, without any additional heat; it is kept perfectly dry during the winter.

August 11th, 1834.

A SUBSCRIBER.

ON BALSAMS.—To the enquiries of your correspondent “C.” July 9th, respecting the cultivation of Balsams, I beg to reply that on the age of the seed I place my reliance for the success in flowering. Contrary to most other plants, balsam seed requires to be kept some years before it is sown; and I have now some very healthy plants with good double flowers, raised from seed which I gathered in 1829

F. M.

Southampton, August 11th.

ON A DWARF YELLOW FLOWERING PLANT.—One of your correspondents, some time ago, enquired for information respecting a dwarf yellow flowering plant, to agree with *Verbena melindres*, *Lobelia erinus*, &c. I would recommend to him *Gratiola aurea*, a hardy herbaceous plant, which is something like *Lobelia gracilis* in growth, and would answer every purpose he requires.

Aug, 16th, 1834.

S. A.

TO FLOWER MYRTLES AND HELIOTROPES.—In the month of April select any quantity of Myrtles you may wish to flower; take them to the potting-shed; with a pointed stick remove all the old surface mould as deep as possible without injuring the roots; add some fresh mould, half loam, half dung, mixed well together, to within one inch of the rim of the pot; clean out an empty pit or frame from all weeds and dirt; add an inch or two of sifted cinders over the bottom, beating it down firm and level with the back of a spade; set your plants in so as to be clear of each other; give them a good watering with a rose-pot, to settle the mould; shut up the lights close; every morning, when the weather is favourable, give plenty of air for one hour, by sliding the lights up and down, or by taking them off; keep the lights close the remainder of the day, so as to draw a good sun heat inside the frame; if the sun should be very bright and powerful shade with a mat for two or three hours in the middle of the day, but not longer; sprinkle them over head freely with water; and when they show their blossom buds, increase the quantity of air daily; so that by the time the flowers are ready to expand they may be able to stand the open air. By this treatment Myrtles from one year old and upwards may be flowered in abundance.

Great Bookham, Surrey, July 2d, 1834.

J. W. D.

ANSWER TO VIOLET.—In answer to VIOLET, I recommend *Annual Russian*, *German and French Stocks*; they look extremely well when growing in a long row, and being of all colours make an handsome appearance; they grow about eighteen inches high. *Argemone*, (annual kinds), three or four varieties, grows three to four feet high; seeds of the above kinds may be obtained of most nurserymen, and in sixpenny packets if desired. *Dodecatheon Meadia*, (perennial,) pink, eighteen inches high, 9d. each. *Phloxes*, (perennial,) all colours, two feet high, 9d. to 2s. each. *Pansies*, all colours, 9d. each, for the ends of the bed. *Commellina tuberosa*, two to three feet high, would look pretty towards the middle, the flowers being of so fine a blue; seeds may be obtained of Messrs. WARNER & Co., Cornhill, London, 6d. per packet, and roots at 6d. each. *Dahlias*, at stated distances, down the middle, all colours, all heights, all prices; half-a-dozen, at least, of the white kinds should be selected. *Campanula persicifolia*, double blue, eighteen inches high, 9d. to 1s. each. *Campanula pyramidalis*, two or three plants of it, three to six feet high, blue and white varieties, 1s. each. *Erodium hymenodes*, a plant or two, six

inches high, spreading, perennial, pink flowers. *Double Rockets*, white, purple, and yellow kinds, four or six plants, two feet high, 1s. each. *Tradescantia Virginica, congesta*, white, one foot high, 1s. each. *Gentianella*, blue, four to six inches high, two or three tufts, 1s. each. *Tigridia pavonia*, (Tiger Flower,) spotted, orange red with dark, a few patches of four or six roots in each, two feet high, 3s. per dozen roots. *Eschscholtzia californica*, two or three plants, two feet high, yellow, 9d. each. *Double Scarlet Lychnis*, two to three feet high, 1s. each. *Verbena Melindres*, scarlet, three inches high, spreading, 1s. each. *Lobelia fulgens*, crimson scarlet, two feet high, 9d. each. *Coreopsis lanceolata*, (Tick-seed Sunflower, yellow,) four feet high, 9d. each. *Rosa indica minor*, one or two plants, crimson, two feet high, 1s. each. And the following kinds of annuals:—*Media elegans*, yellow, four feet. *Sweet Peas, Malope trifida*, deep rose, two feet. *Lupines*, of sorts. *Prince's Feather*. Two or three *Enotheras*, (Evening Primrose.) *Lobelia crinoides*, six inches, blue. *Collinsia grandiflora*, nine inches high, blue. *Convolvulus minor*, three feet high, blue and white. *Convolvulus major*, rose, blue, and white varieties, three to six feet high, varying according to the richness of the soil. *Zinnia elegans*, purplish crimson, one foot high.—(See Vol. I. pages 43-45.)

AN ARDENT AMATEUR.

REPLY TO THE QUERY OF "A COUNTRYMAN."—The author of the *Domestic Gardener's Manual* regrets that he has so long overlooked this query addressed to him as "G. I. T.," per date July 9th, 1831, (No. XVIII, p. 188.) It is his desire to attend to every question which may be referred to him by any one, and at any time; but the fact is, his occupations are so multifarious and unintermitting, that he occasionally does not even see the several articles in the periodicals for some considerable time after they come to hand. In a recent paper addressed to the Editor, he observed that he was not a florist; and in respect to the *Ranunculus* in particular, he is not from observation enabled to write very minutely. The subject must, therefore, be considered generally. The leaves of all plants are provided with oscular pores—termed in botanical language *stomata*, (from the Greek *stoma*, a mouth.) These organs in tree leaves abound chiefly on the under surfaces, and are unquestionably transpiratory orifices;—in fact moisture, during hot sunshine, is frequently seen to be deposited on other leaves or substances that happen to be nearly in contact with, and below the under surface of a large leaf. In herbaceous plants, both surfaces are generally provided with *stomata*; but in these, the analogy of facts proves that the upper surfaces only are destined to receive water; for all, or nearly, present those surfaces to the falling rain. It may be doubted whether any good results can be traced from watering artificially over leaves; and though rain falls on plants and refreshes them, it is quite certain that the atmosphere is in a peculiar electric condition before rain can be either formed or fall. This condition no human being can induce; therefore, to water over leaves is always an artificial and unnatural operation. The under surfaces are peculiarly injured by waterings; and Mr. KNIGHT has proved that a melon crop was once ruined by injudicious syringing so applied, to wash away the *acarus*. It should seem that the *Ranunculus* affects a moist, dripping season; and if so, the watering by rain, (that is during a state of air prepared for the application,) did good, in as far as it was perfectly congenial to the habit of the plant. In dry seasons it has been observed that among a whole bed of the plants, there was scarcely a leaf on them that was not yellow and unhealthy. In such seasons, the water applied by the gardener could only increase the evil, by scorching the upper surfaces, and closing the pores of the lower, by the splashing and dirt which it created. Light also acts inimically on under surfaces; and the writer has now before him a healthy fig tree, whereon half-a-dozen leaves are stained deep brown, and become, as it were, burnt, by merely bending down a branch so as to expose those surfaces to the sun. Physiologically, then, G. I. T. thinks that water ought always to be applied to the ground only, unless disease or insects require its application to the leaves,—that the leaves of low growing hardy herbaceous plants ought never to be sprinkled; as whatever tends to leave water on them in bright weather, provides the means for the destruction of many pores of the cuticle by obstruction and burning;

and, therefore, if the application of water be indispensably required, it ought always to be given between the plants, so copiously as to reach the lateral fibres, and at an hour when it may be aided in its effects by the condensing dew.

REFERENCE TO PLATE.

Nemophila insignis. A very pretty flowering annual, growing from six inches to a foot high, requiring a situation and treatment similar to *Calandrinia*, (see *Cabinet*, page 204.) With such attention, and full sun upon it, the flowers make a very showy appearance; and by having two sowings of seeds, the plants may be had in bloom from June to October. A bed of it would look well. It may be obtained of the principal nurserymen. The plant belongs to the 5th class Pentandria, and 1st order Monogynia; natural order Hydrophyllæ. The name is derived from *nemos*, a grove, and *philæo*, to love; referring to its natural situation.

Leptosiphon androsæceus. A very neat flowering annual, and being about the same height as the *Nemophila*, and profuse in flowering, renders it a very desirable plant. If sown as directed for the *Calandrinia*, (see page 204,) it may be had in bloom, if shaded from scorching sun, from May to October. The plant belongs to the 5th class Pentandria, and 1st order Monogynia; natural order, Polemoniaceæ. Greek Valerian tribe of plants. The name is derived from *leptos*, slender, and *siphon*, a tube; referring to the slender tubular part of the flower.

Passiflora elegans. This very splendid flowering *Passiflora* was raised by JAMES COCKBURN, Esq., Guernsey, from seed sent from South America. Mr. COCKBURN states that it blooms in the greenhouse in Guernsey, and is increased freely by cuttings. It is a valuable acquisition to this beautiful tribe of plants, and more particularly so in succeeding well in the greenhouse. We have tried several of the South American species, by planting them in a border in the open air during summer, and find them succeed well, blooming profusely. At the end of autumn we take up the plants, repot them, and protect them in the greenhouse during winter. From the very particular description of the plant and flower in all their parts, obligingly sent us by Mr. COCKBURN, and having examined the particulars of all other hitherto published species, we find the present to be distinct, and have given it the specific name it so highly merits.

FLORICULTURAL CALENDAR FOR DECEMBER.

PLANT STOVE.—Roses, Honeysuckles, Jasmynes, Persian Lilacs, &c. required to bloom from January, should be brought in early in the present month. The plants should be placed at first in the coolest part of the house; never allow them to want water. Pots, or boxes containing bulbous-rooted flowering plants, as Hyacinths, Narcissuses, Persian Irises, Crocuses, &c. should occasionally be introduced, so as to have a succession of bloom. All stove plants will require occasional syringing over the tops, in order to wash off any accumulated dust from the foliage. Cactus plants that have been kept out of doors, or in the greenhouse, should occasionally be brought into the stove for flowering.

GREENHOUSE.—As much fire as will barely keep out frost will be necessary; and for the purpose of drying up damp arising from foggy nights, or from watering, all possible air in the day time should be admitted; but mind to keep the plants from damage by frost. Chrysanthemums will require a very free supply of air, and a good supply of water; by the end of the month many will be going out of bloom; such should be cut down, and if any kind is scarce, the stalks may be cut into short lengths, and be struck in heat; always cut the lower end of the cutting close under a joint. If greenhouse plants require watering or syringing over the tops, let it be done in the morning of a clear day, when air can be admitted; and towards evening a gentle fire-heat should be given.

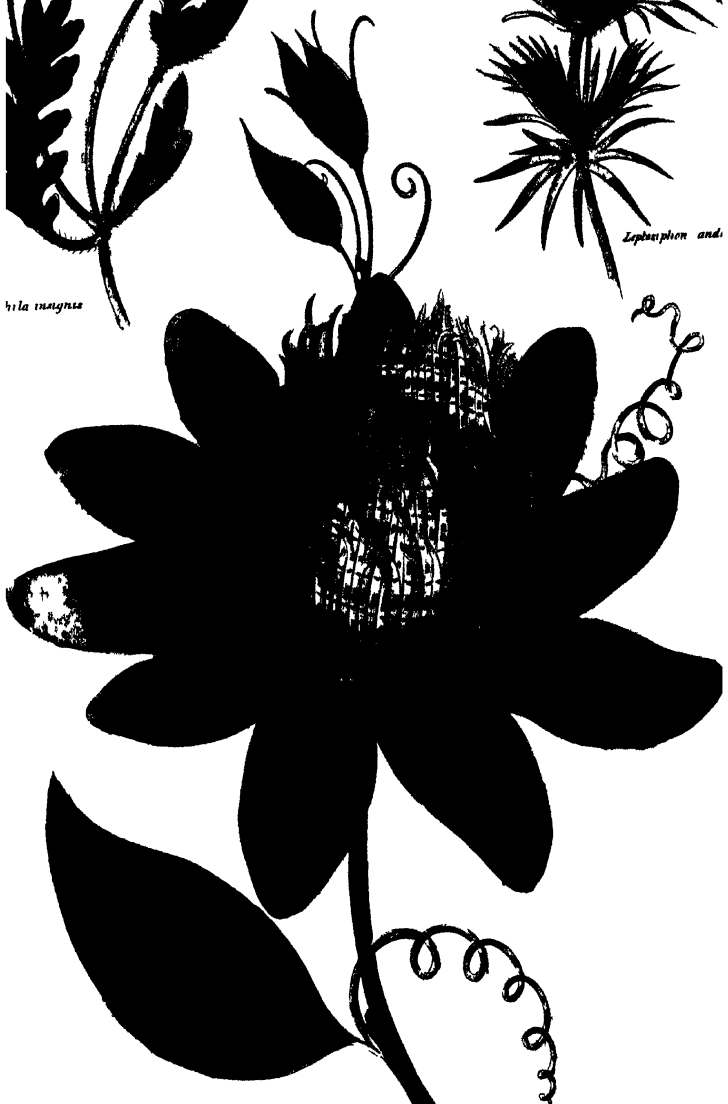
FLOWER GARDEN.—Be careful to protect beds of what are technically



Ipomoea



Lepanophora and.



Passiflora Elegans

called florist flowers, should severe weather occur. Calceolarias that were cut down and re-potted last month will require attention not to water too much, or they will damp off; keep them in a cool and airy part of the greenhouse or pit-house. Auriculas and Polyanthuses will require plenty of air in fine weather, and but little water, (see page 25.) The like attention will be required to Carnations, Pinks, &c. kept in pots. Dahlia roots should be looked over, to see if any are moulding, or likely to damage; let the roots be dry if they are to be laid in heaps. Newly planted shrubs should be well secured, so that they be not loosened by the wind. Tender evergreens newly planted would be benefitted by a little mulch of any kind being laid over the roots. During hard frosts, if additional soil be required for flower beds upon grass lawns, advantage should be taken to have it conveyed at that time, so that the turf be not injured by wheeling, leading, &c.

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