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THE
FLORAL MAGAZINE.
NEW SERIES.

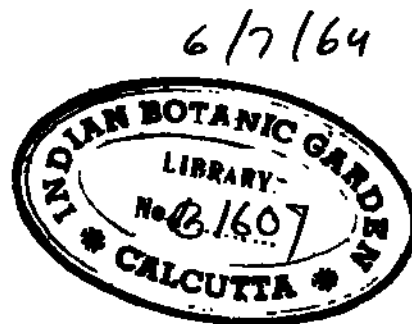
THE
FLORAL MAGAZINE

FIGURES AND DESCRIPTIONS
OF THE
CHOICEST NEW FLOWERS

FOR THE
Martini, Stobe, or Cmtgerbatorg.

BY
WOKTHINGTON G. SMITH, F.L.S., M.A.I.,
FELLOW OF THE ROYAL HORTICULTURAL SOCIETY OF IRELAND,
MEMBER OF THE SCIENTIFIC COMMITTEE OF THE ROYAL HORTICULTURAL SOCIETY.

NEW SERIES.



LONDON:
L. REEVE & CO., 5, HENRIETTA STREET, COVENT GARDEN, W.C.
1875.

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BERTOLONIA SUPERBISSIMA

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T Y D J E A .
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NEW JAPANESE CHRYSANTHEMUMS

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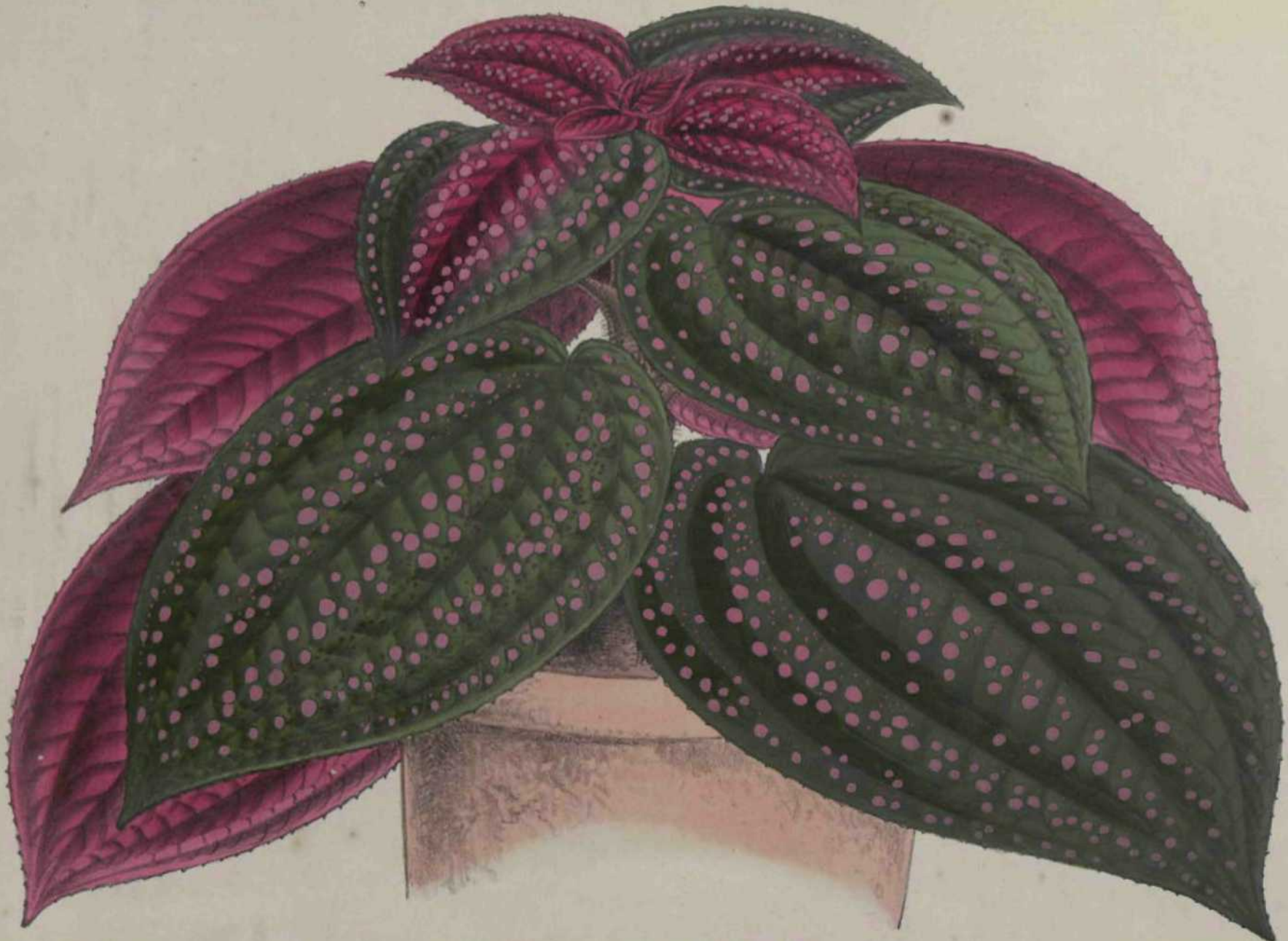
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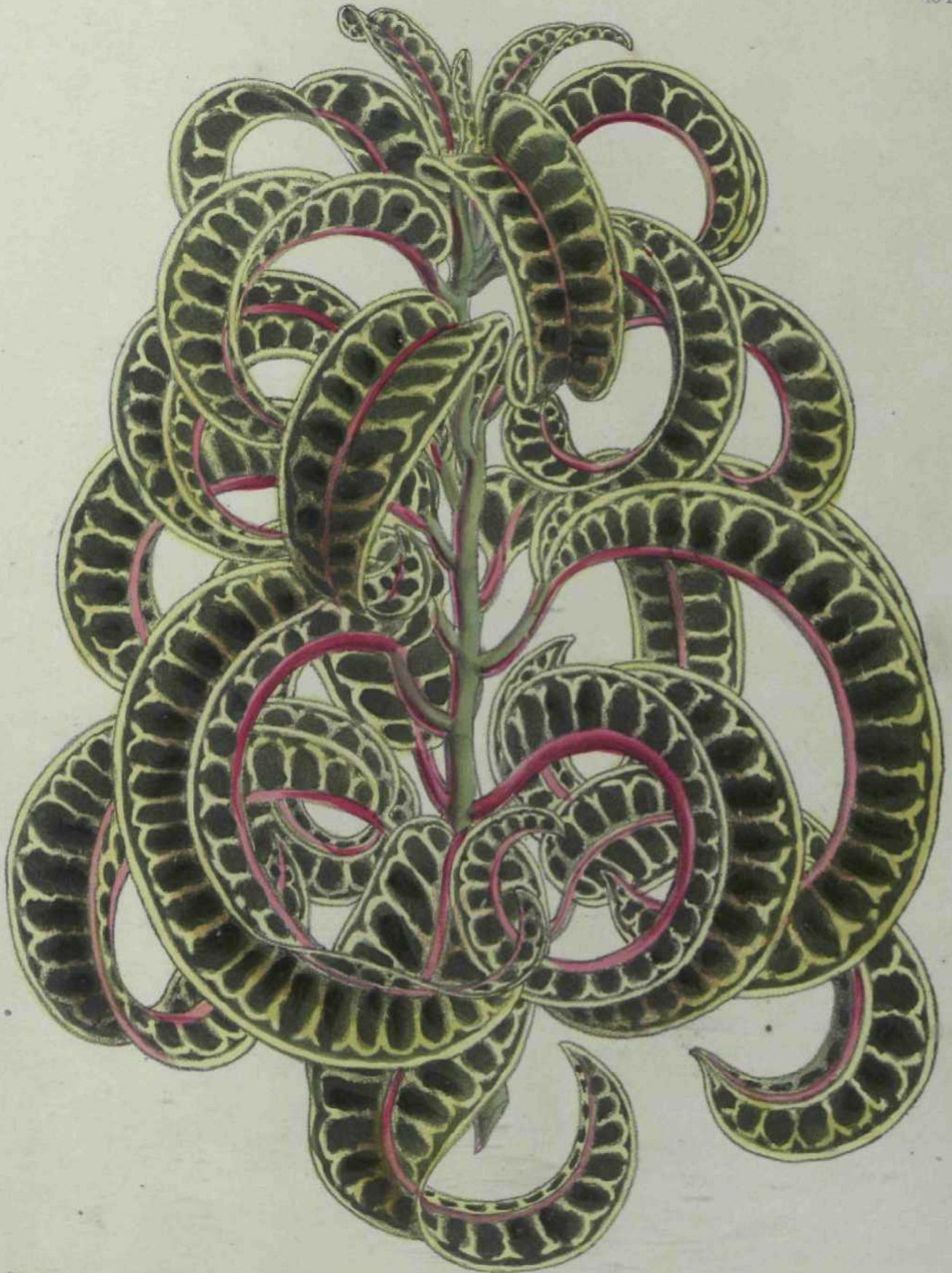
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- 4 Duchess of Edinburgh

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; Cox
& Refinement

2 MBS LfNuU

4 M^{rs} Crawlay

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V. Brooks, Day & Son, Imp.



PICOTEE S.

1 Fanny Helen 2 IT Gibbon S.

W.C. Smith, F.L.S. del et lith.

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CYPRIPEDIUM NEW HYBRID.

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NERINE JAPONICA

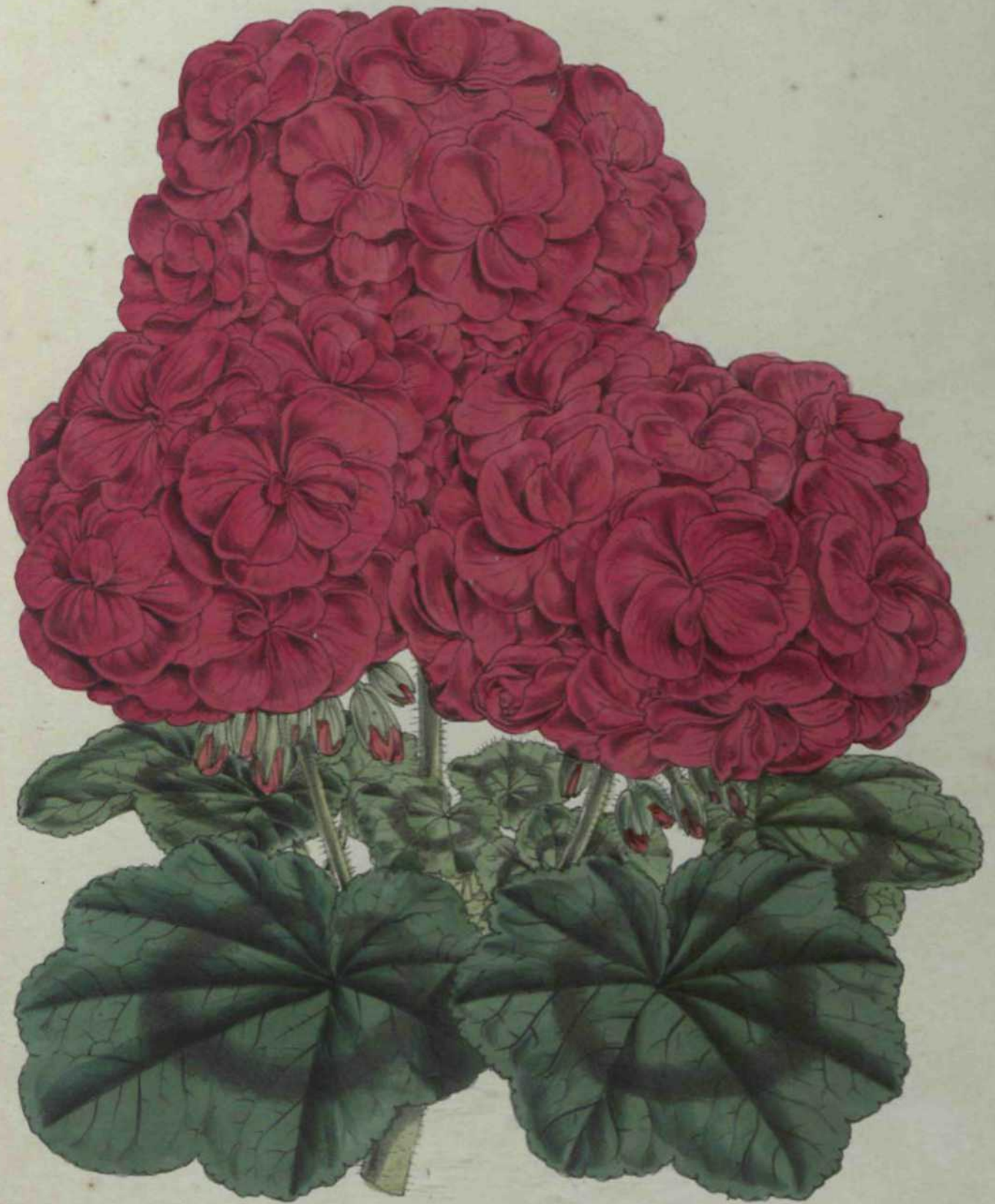
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PELARGONIUM **M** WONDERFUL

J. & C. Cochrane, Glasgow, Scot.

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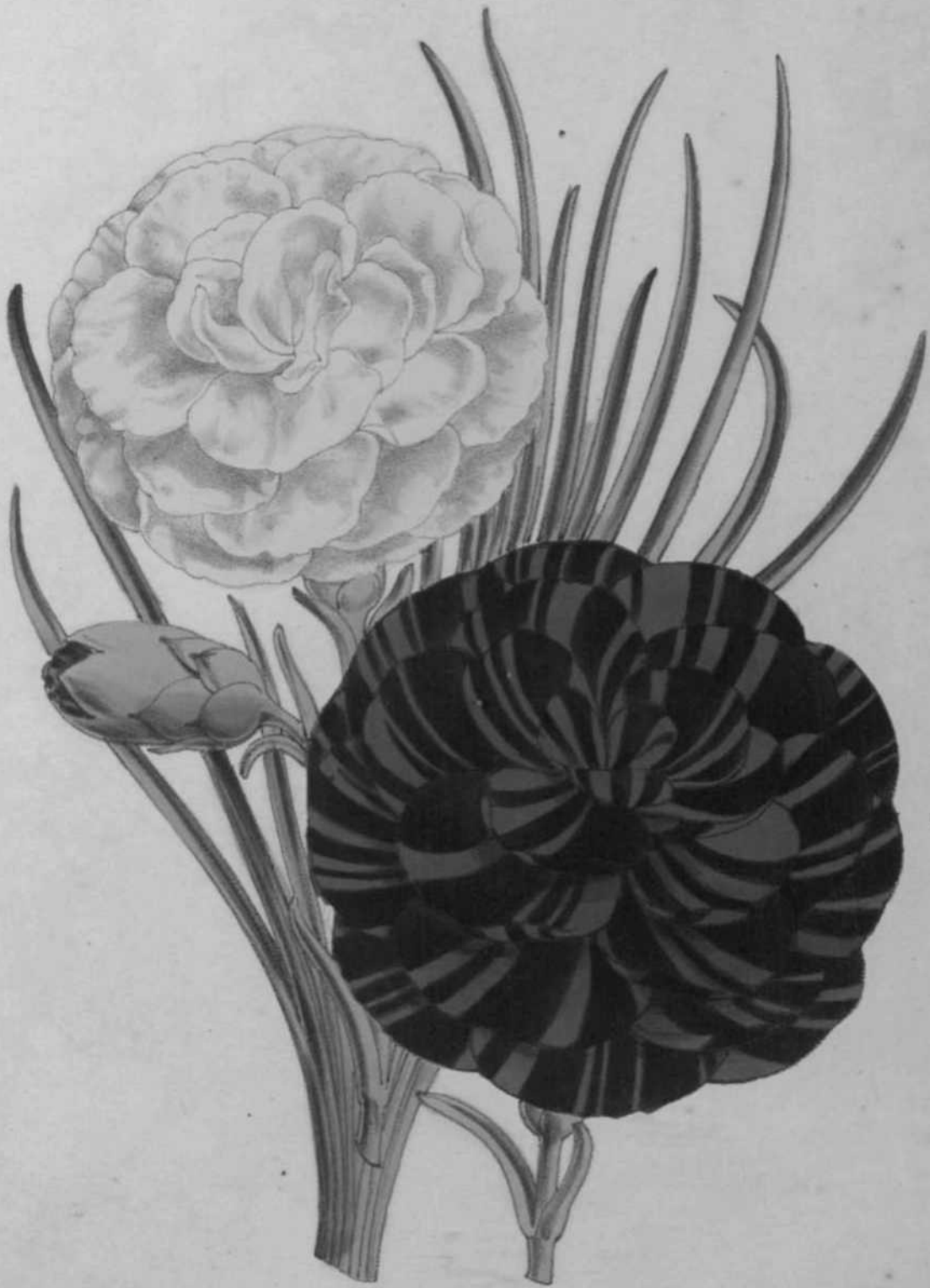
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ANGRÆCUM ELLISII

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NEW CARNATIONS.

1 King of Yellows.

2 Mephistopheles

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FLORAL MAGAZINE. NEW SERIES.

J. Smees & Co. 5, Henrietta St. Covent Garden.

TYD^AEA—"MADAME HEINE."

It is but seldom that we are able to illustrate this truly handsome genus of Gesneraceous plants, and perhaps never before has any new variety been in the market equal to this new-form, which has recently originated in France, and which is now in the possession of Mr. William Bull of Chelsea. *Tydeea Madame Heine* is a splendid variety, which produces fine large showy flowers with a clear carmine coloured tube; the lower lobes creamy white, heavily striped and marked with spots of intense purple-brown, shading off to purple-carmine, the upper lobes being bordered with amaranth. Like the *Bollea* figured on Plate 147, the members of the genus *Tydeea* naturally inhabit New Granada, and the various species are often referred to in our gardens under the old name of *Achimenes*; but we consider (at least from a floricultural point of view) that *Tydeea* is sufficiently distinct from *Achimenes* proper to warrant its always maintaining its generic name. A reference to Plates 11 and 540 of our old series (where three other varieties of *Tydaea* are given) will show our plant to be a decided novelty and improvement on former *Tydeas*, both in its peculiar ground colour and its intense purple-brown spottings. The original of our plant was flowering in full beauty at Mr. Bull's nursery at Chelsea in the month of November last; and this habit of winter-flowering, when most stove and greenhouse plants have long passed their best, forms one of the *Tydaea's* chief recommendations. Like the *Achimenes* itself, the *Tydeea* delights, when growing, in heat and moist warm air, and the plants should be grown in a moist close sto^Ae pit in a light compost composed of leaf-mould, sand, and peat. The *Tydeea* having a tuberous root-stock is well suited for table decoration.

NEW JAPANESE CHRYSANTHEMUMS.

Since the abandonment of the old "Versailles Nurseries" at Hammersmith, and the death of Mr. John Salter, we have seen no *Chrysanthemums* at the various flower shows displaying such an advance in cultural excellence and newness as would warrant us in figuring them in our Magazine. For several years past, however, it must be confessed (and that without the slightest disparagement to other most meritorious exhibitors of *Chrysanthemums*) that Messrs. Veitch and Sons, of Chelsea, to whom we are indebted for the originals of the two Plates now given, have taken a very foremost position. The Exhibition of these plants at South Kensington on November 11th last was one of the most perfect and representative ever seen in London; for at that display Messrs. Veitch and Sons, and several other exhibitors (notably Mr. Cutbush of Highgate), sent a complete collection of all the best known varieties in the highest state of culture, so that any one desiring to see an exhibition of all the most approved varieties of this handsome winter plant could there estimate their relative merits at a glance. There are few plants less symmetrical in outline than Japanese *Chrysanthemums*, yet these plants are esteemed in consideration of this very irregularity of form, which is often again combined with colour as peculiar as the outlines are erratic. Messrs. Veitch and Sons inform us that, fine as their plants were last year, they hope to get them still finer in future, as, owing to the weakness of their cuttings in the spring of 1874, their plants did not come up to the high standard they aim at. Both the fine plants now figured, viz.—1, *Gold Thread*, and 2, *Cossack*, were awarded a first-class certificate by the Royal Horticultural Society on November 11th last. Their habit and colour will be understood by reference to the Plate.

PLATE 147.

BOLLEA PATINI.

The remarkable and beautiful new plant which we now figure for the first time belongs to a new genus of Orchidaceae, recently established by Professor Heichenbach; and this species is named in honour of the discoverer, Mons. C. Patin, the young Belgian collector who found it in 1873 in the forests of New Granada. Mr. B. S. Williams, of Upper Holloway, holds the entire stock of this novelty, but the individual plant from which our coloured Plate was taken lately flowered in the choice collection of Gt. Herriott, Esq., Cholmeley Park, Highgate, to whose courtesy therefore we are indebted for the opportunity of figuring it. In the *Gardeners' Chronicle* for July 11th, 1874, will be found Professor Beichenbach's original description of *Bollea Lalindei* (which we hope soon to illustrate), and the subject of our present Plate, *B. Pafini*. The flowers of the latter are larger than the former and less bright in colour; the Professor, however, had not seen fresh flowers, but drew up his description from hand-coloured photographs, dry flowers, and a dried plant, so that our coloured figure now gives a truer idea of the original than can be gathered from Professor Reichenbach's description, drawn up as it was from somewhat insufficient materials.

PLATE 148.

H^AEMANTHUS ROUPEBJ.

This is one of the most truly beautiful plants of the group to which it belongs, forming one of a section of tuberous-rooted Amaryllidaceae. A cool or warm greenhouse is variously required for their culture. The present species is the most stately and attractive plant in the genus Hsemanthus. The growth is vigorous, rising from two to three feet in height, the leaves are sheathing at the base spotted or barred, expanding upwards to a rich self green, broadly oblong or sword-shaped, with an outline more or less undulate at the margin. The erect stout flower-scapes are subcylindrical, nearly flat on one side and prominently furrowed or grooved on the upper portion; they are also densely spotted with chocolate brown on the lower half. The flowers are borne in large densely-crowded, somewhat depressed hemispherical umbels of brilliant flame, or salmon-scarlet coloured blossoms, each umbel or cluster being from five to seven inches across, and bearing an immense number of closely-packed flowers. *J&y* the distinct character of its growth and bloom it produces an unique and splendid effect, either singly or in an exhibition group, for which it must be considered a very beautiful and attractive object. The origin of the fine plant here figured is somewhat uncertain; its name refers to Captain JSouper, who is supposed to have forwarded it with other plants to his father, the late Bev. Wm. Bouper of Wichhall, near Brighton, from the Cape of Good Hope, at the period of the first Caffir War. *II. insignis* figured in the *Botanical Magazine*, t. 4745, is altogether smaller, with a head of flowers less than 2½ inches in diameter, with much larger bracts, and the individual flowers quite different in shape. *II. puniceus*, *Bot Mag.* t. 1315, is much smaller still, and furnished with spotted bracts, the flower-scapes being only half the height of those of *H. Bouperi*. We have only to say, in conclusion, that the original plant from which our figure was taken, was exhibited at the Boyal Horticultural Society's Show, on May 16th last, where it attracted great attention; four of these great flowers were growing in one pot, each scape being fully a yard high, and perfectly leafless to the ground line; the grand leafy growth, though of course from the same tuber, being separate from the flower-scape.

MASDEVALLIA CHIMERA.

For the last year or eighteen months great uncertainty has existed as to the identity of this plant and that figured on the next plate—viz., *M. Nycterina*. The confusion was caused by M. Linden publishing a coloured figure of the latter plant in the *Illustration Horticole*, xx. PL 117, under the name of *M. Chimara*. As M. Linden also sold plants with the names transposed, it followed as a consequence that many plant merchants and private gentlemen who fancied they had *M. Chimara* in their collections had the next species figured on Plate 150. The true *M. Chimara* was first described by Professor Eichenbach in the *Gardeners' Chronicle* as far back as April 6th, 1872, p. 463; but so rare has it been in collections (if, indeed, it has been in cultivation at all in this country) that until the end of last year no one had seen the living plant in flower in any of our nurseries or private establishments. The honour of flowering it for the first time in our nurseries was reserved for Mr. Bull, of Chelsea, and to this gentleman we are therefore indebted for the opportunity of presenting our readers with the accompanying coloured figure, taken from his establishment in the King's Eoad on the 17th of December last. *M. Chimara* was discovered by M. Roezl in the western districts of South America, and the extraordinary habit and coloration of the plant can be well understood by our figure. In M. Roezl's original sketch however, as forwarded to Professor Beichenbach, the flowerstalks are represented with five flowers, so that under the good cultivation the plant is sure to receive under the hands of Mr. Bull and other plant merchants, we may expect *M. Chimara* soon to put on a far more imposing appearance than it does with us at present.

MASDEVALLIA NYCTERINA.

Attention, was first called to this truly extraordinary plant by Professor Eichenbach in the *Gardeners' Chronicle* for September 13th, 1873, p. 1288. He there refers to M. Linden's figure of *M. Nycterina* (erroneously named *M. Chimara*), and gives a botanical description of the plant here figured. Our drawing was taken from a specimen in Mr. Day's collection at Tottenham on the 18th of April, 1874, and represents one of the plants sold by M. Linden himself in error for *M. Chimara*. So that with the accompanying Plate and Plate 149 no further confusion need exist as to the two plants in question. *M. Nycterina* is not now uncommon in nurseries and private collections, and it has more than once appeared at our flower shows; that it is an inferior plant to the last there can be no question, but still from its extraordinary inflorescence it must always keep its place as one of the most curious of *Masdevallias*. It varies considerably in the size of its leaves and flowers, and in the length of its long sepaline tails, and was originally (like the last) introduced to our gardens by M. Linden from New Granada, and also, like the last, when under cultivation requires the treatment of a cool stove. When the first flower is produced the stem extends a new internode, which carries a new flower, so that each flower stem will produce four or five flowers, and the old stems from which the flowers have dropped are shown in our illustration. The bracts shown on Plate 149 are, however, of a different nature, and it seems an open question at present whether either of these two *Masdevallias* bear more than one open flower at the same time on the individual flower stems.

PLATE 151.

BERTOLONIA SUPERBISSIMA.

Sertolonia superbissima is one of the most charmingly beautiful of all variegated plants, its broad, lustrous, strongly-ribbed Melastomaceous leaves being superbly marked with bright rose colour in a series of bold spots and fine sprinklings arranged longitudinally down the leaves. It received a first-class certificate from the Royal Horticultural Society on June 4th, 1873, and a similar award from the Royal Botanic Society on June 19th, 1872. The *Melastomacea*, to which natural order our plant belongs, grow in tropical America; a few advance into North America, none have been found in Chili, whilst a few inhabit Asia and Africa. As the members of the genus *Bertolonia* are found wild in dense Brazilian forests, it is therefore almost needless to say that the plant here illustrated requires a stove temperature for its proper cultivation, though it is said to be somewhat impatient of damp. The genus *Sertolonia* contains many fine foliage plants, some of which have been illustrated in former numbers of this Magazine; the leaves are velvety, deeply ribbed, variously marked, and purple underneath. Mr. Bull informs us that ladies often refer to *B. superbissima* as the "Jewel Plant," and we must confess that we consider it thoroughly well deserves this popular name, for it far exceeds in beauty any other member of the genus known to us. The green of the leaves is suffused with a light but rich olive tint, and the innumerable carmine spots with which the foliage is thickly studded give it the appearance of being set with rubies, whilst the general habit of the plant is a model of compactness. We have only to say in conclusion that the entire stock of this, one of the most superbly beautiful of variegated plants, is in the hands of Mr. William Bull, of Chelsea; from one of whose plants our figure was taken.

PLATE 152.

ANTHERICUM VARIEGATUM.

This truly beautiful variegated plant, which we have now the pleasure to figure for the first time, was introduced from the Cape of Good Hope in 1873, and when exhibited at the Royal Horticultural Society, under the provisional name *A. Williamsii*, on November 11th last, was most deservedly awarded a first-class certificate. The stock is in the possession of Mr. B. S. Williams, of Upper Holloway, to whom we are indebted for the opportunity of figuring it; and we are informed by that gentleman that the subject of our Plate is quite hardy, and therefore invaluable as a decorative plant for the garden and dinner-table. It is of dwarf habit, never growing more than a foot or eighteen inches in height, and has handsomely variegated broad grass-like green foliage distinctly margined and striped with creamy white. It has been compared by many to *Pandanus Fèifcftii*, the well-known and splendidly variegated Screw Pine, from the South Sea Islands, which it resembles in a great measure, the variegation and habit being precisely the same. The genus *Anthericum*, bearing racemes or panicles of white flowers, belongs to the natural order *Liliaceae*, and the plants are peculiar to Central and Southern Europe, South Africa, and New Holland. The plant named St. Bruno's Lily is well-known, and this species when in bloom is one of the most charming of spring-flowering plants, either for pot culture or for a warm sheltered border; it has narrow glaucous foliage, and erect spikes of delicately scented pearly-white blossoms, which should be sheltered from the wind in planting out. One of the most curious species (not hardy) is the viviparous *Anthericum* (or *Cfthorophytum*) *comosum*; this plant, well known in nurseries, is well suited for cultivation in living rooms, but does best in a stove or greenhouse, being unsuited for planting out.

PLATE 153.

AMARYLLIS O'BRIENII.

Under this name Messrs. E. GL Henderson and Son, of St. John's Wood, desire this new and striking novelty in Amaryllids to be published. It is intermediate between *Amaryllis*—a name borrowed from the pastorals of Theocritus and Virgil—or *Hippeastrum pardinum* and *A. reticulatasriatifolia*, the Ivory-veined Amaryllis, partaking of the leaf features and free flowering winter blooming character of the former, with the very elegant coloured veining of the petals common to the latter. Its stately habit and union of colours, on white or faintest blush ground, so scarce in the group, will be certain to secure it a place wherever the higher class of winter-flowering plants are desired, either for the warm conservatory, or for drawing-room decoration. Although in previous volumes we have figured many varieties of Amaryllis, no other plant has the same characters with the one we now publish. The flowers in *Amaryllis O'Brienii* are unusually large and regular, and beautifully marbled with reticulated patterns. The blooms are profuse, no less than five being borne on the scape of the plant illustrated, and the foliage is unusually bold, broad, and strap-like. As is well known, hybrids are very freely produced in *Hippeastrum*, and Messrs. Henderson and Son, of St. John's Wood (to whom we are indebted for the opportunity of figuring this plant), may fairly be congratulated on their acquisition of such an elegant new variety. In Amaryllis and *Hippeastrum* the plants are increased by offsets from the bulbs, and the soil in which they are to be planted should be composed of equal portions of peat and turfy loam, with a sufficiency of sand, and good drainage.

PLATE 154.

CROTON VOLUTUM.

The plant here figured, together with *Croton majesticum* and *C. spirale*, both of which we have illustrated in former volumes, may well be considered as three of the most remarkable and distinct Crotons at present introduced to the public. *Croton volutum* is a very distinct and beautiful plant, possessing the singular character of having its leaves rolled up from the end in a volute inwards, after the manner of the volute seen in the Ionic capital, or in the incurving of a ram's horn. These leaves are six inches long, and an inch and a half or more in breadth, and beautifully coloured. The ground is a deep green, with a golden bar, a quarter of an inch wide, running down the centre, from which centre yellow veins diverge at about half-inch intervals, and meet near to, and so as to coalesce with, the golden margin, in which occur irregular^ scattered green spots. The markings are very regular, a little pink often appearing on the midrib; the curving of the leaf-blade is also perfectly constant, even in the smallest plants, and this causes the edges to be elevated so as to form a kind of channel. The bark of the young shoots is also beautifully variegated with yellow. *Croton volutum* will probably prove to be one of the most beautiful and effective among the many fine varieties which have come to us from the South Sea Islands. In colouring it possesses the bright green and golden hues of *C. maximum*, *Veitchii*, and *JFeismanni*, with a habit more curious than any other variety. Mr. Bull, of Chelsea, who introduced this plant, together with *C. majesticum* and *C. spirale*, and to whom our thanks are due for supplying us with materials for the coloured plate, was most deservedly awarded a first-class certificate for it, under the provisional name of *C. coraigerum*, by the Royal Horticultural Society.

NEW CHRYSANTHEMUMS.

The two Chry'santhemums, *Purple King* and *Duchess of Edinburgh*, here figured, were selected from the rich collection exhibited by Messrs. Veitch and Sons at the Exhibition of the Eoyal Horticultural Society last autumn. They both belong to the Japanese section, and are remarkable in a high degree both for beauty of form and rich coloration. No. 1, *Purple King*, is a model of compact and handsome habit, the petals being all elegantly and evenly recurved, whilst the colour is new in Chrysanthemums, being a pure and luminous purple of a shade between the richest magenta and mauve. This is confessedly a plant of the highest character, and equals the Dahlia in evenness of outline and deep rich colour. No. 2, *Duchess of Edinburgh*, is of a totally different aspect, and has a character quite new in this section of garden Chrysanthemums, in the distinct and well-marked central disc of tubular florets. The bloom of this plant is delicate rose-purple in colour, gradually passing into a harmonious primrose tint. In habit it is the reverse of the last, but it has a beauty peculiar to itself in its elegantly pendulous and irregular outer florets, combined with the more symmetrical purple and primrose florets of the centre. Now that Messrs. Veitch and Sons have taken up the cultivation of these plants with such energy and success great future advances may well be expected; it is therefore with feelings of deep regret that we see the announcement (as these lines are passing through the press), that the Chrysanthemum Show of the Eoyal Horticultural Society, advertised to be held in the Conservatory and Arcades on the 10th of November next, is abandoned. All horticulturists interested in the culture and improvements of the Chrysanthemum must therefore make a point of visiting the nurseries.

ACALYPHA MARGINATA.

This truly handsome plant has quite recently been introduced into England from Java by Mr. B. S. Williams, of Upper Holloway. *Acalypha* belongs to the large natural order *Euphorbiacea*, comes under the section *Eucalyphea?*, and is a close neighbour with the common *Mercurialis* of our hedges. To the *Euphorbiacea* belong many of our finely variegated and ornamental-leaved plants, as the *Crotons*, *Phyllanthus*, &c. The introduction of this novelty is a proof that the treasures of this natural order are at present by no means exhausted. Mr. Williams, who holds the entire stock of the plant, and to whose courtesy we are indebted for the opportunity of presenting a figure of it to our readers, informs us that it succeeds well in a compost of peat and loam, with a little sand, and that it is propagated by cuttings in the spring. When started, and placed in a stove temperature, it makes (as our plate well shows) a superbly ornamental object. Members of the genus *Acalypha* are found in all tropical and subtropical countries, being most abundant in tropical America. Dr. Seemann, in his "Flora Vitiensis," describes eleven species, and many varieties, and informs us that the natives of the Fiji Islands often plant about their houses the *Acalypha Wilkesiana* of our gardens as an embellishment object, together with *Dracana ferrea*, *Codiaum variegatum*, *Northopanax fruticosum*, &c.; and use the bark of another *Acalypha* as a remedy for rheumatism. *Acalypha marginata*, both as regards habit and rich variety of marginal colour, is a strongly individualized plant; the form of the leaf is very handsome, and an extra charm is given to its outline and colour by the elegant fringe of hairs with which it is clad, the long narrow bracts at its base, and the angle at which the petiole is joined to the stem.

HYBRID PERPETUAL ROSE—"SIR GARNET WOLSELEY."

This new seedling, Hybrid Perpetual Rose, was raised, and is now being sent out by Messrs. Cranston and Mayo's, of the King's A&R Nurseries, near Hereford. It was awarded a first-class certificate by the Royal Horticultural Society at the Grand National Rose Show July 1st, 1874; and it secured a similar award at the Oxford Rose Show on June 25th of the same year. As will be seen from our Plate, the individual flowers are very large, full, and perfectly formed, standing out bold and erect from the foliage; the habit is strong and vigorous, and the plants produce flowers at every shoot; the colour is the richest vermilion, shaded with bright carmine, and this tint is well retained throughout. We are informed by Messrs. Cranston and Mayo's that the new Rose, "Sir Garnet Wolseley," was a seedling raised from *Prince Camille de Rohan*. Another new Hybrid Perpetual Rose, of great merit, now being sent out by the same firm, is Cranston's "Crimson Bedder," a rose which is said to surpass every other variety for brilliancy of colour and continuous blooming. Its habit of growth is moderate, with short-jointed shoots, which produce a mass of flowers all over the bed from June to November. This plant, introduced as a bedding-rose only, is scarlet and crimson in colour, with clean glossy foliage, free from mildew. It may be well to mention here Cranston's climbing Perpetual Rose, sent out under the name of "Climbing Jules Margottin," a sport from "Jules Margottin," with flowers exactly similar to its parent; a free and vigorous climbing habit, not in a robust form, but branching as freely as an evergreen climbing rose. This latter is a great acquisition as a free-growing, perpetual climbing rose.

ODONTOGLOSSUM MAXILLARE.

This handsome Orchid was received from Roezl by Messrs. Veitch and Sons, of Chelsea, from Mexico in 1872; and the plant here figured, and which was flowered by Mr. Edwin G. Wigley, at Broadoaks, Bury, Lancashire, was, we are informed, purchased at one of Messrs. Veitch and Son's sales. *O. maxillare* was originally described by Dr. Lindley from a bloom obtained from Mr. C. B. Warner, in 1847, at which time its native country was not known. From its resemblance to certain other Odontoglossums, however (notably *O. Cervantesii*, which is now in all our good nursery catalogues), from Mexico, it was rightly presumed by the late Dr. Lindley to belong to the latter country. Indeed, the majority of Odontoglossums are now well known to principally inhabit the cool mountain regions of Mexico, Peru, New Grenada, and Venezuela. Our plant differs from most, if not all others of the same genus, in being powerfully fragrant of hawthorn; but *O. tigrinum*, an allied plant, has an odour equally powerful of violets (like *Oncidium cucullatum* and *Cypripedium Schlimi*), which odour is said to be made use of by the Mexicans under the name of Flor de Muertos. *O. angustatum integrum* is lilac scented. *O. cristatum* resembles the *Spicifera*. *O. Lindleyanum* has the odour of the he-goat, like our own *Orchis hircina*. *O. nevadense* has a scent resembling orange blossom. *O. pulchellum*, vanilla; whilst *O. triumphant* bears the odour of pansies. Many of these odours (as in our own native orchids) are intermittent, the scent being strongest during the morning or evening hours, as the case maybe. At times, too, the odour varies during the hours of day and night, being suggestive of one thing during the morning, and a totally different thing at night. The ground colour of *O. maxillare* is not white, but pale cream, the blots being intense brown on the petals and sepals, and bright orange on the lip.

PLATE 159.

SONERILA HENDERSONI.

Our Plate represents a charmingly variegated hothouse plant, now being sent out by Messrs. E. G. Henderson and Son, of the Wellington Nurseries, St. John's Wood. *Sonerila Hendersoni* is of dwarf and neatly compact habit, measuring on an average some six to eight inches in height, and about ten to twelve in diameter. It is in the style of the well known *S. margaritacea*, but in comparison with the lax thin growth of that species, the Messrs. Hendersons' form is in favourable contrast. The subject of our present Plate grows with a remarkably neat outline, is closely branched, and of uniformly healthy and vigorous growth. Its finely expanded ovate leaves are most elegantly studded over with silvery-white or pearly spots upon a rich dark olive-green ground, the under surface of the leaves being pale green in colour, marbled and veined with crimson. The abundant rosy-lilac flowers, with their three singular and elegant lemon-coloured and arrow-shaped anthers, are freely produced above the leaves on purplish-crimson pedicels, and produce a very lively and graceful effect. This truly beautiful plant proves under cultivation to be far easier in its management than any other known species of *Sonerila*, for it requires no artificial treatment either in soil or situation beyond that accorded to plants of a similar character. For neat habit, picturesque effect, and adaptation to the most limited collection of plants, either in house culture or for use as decorative groups in temporary drawing-room baskets or artistic flower-vases, it is unequalled by any other plant of miniature growth. Besides *S. Hendersoni* two other varieties of great beauty are now being distributed by Messrs. E. G. Henderson and Son—viz., *S. argentea* and *S. marmorata*. The first has a fine silvery surface—in fact, the foliage is almost one unbroken surface of silver. In conclusion, we may say that both these plants and the one we now illustrate were awarded a first-class certificate by the Royal Horticultural Society last summer.

PLATE 160.

ANTHURIUM PATINII.

This new species of Arithurium, named after M. C. Patin (Mr. Williams, collector), which is now being sent out by Mr. B. S. Williams, of Upper Holloway, is a strikingly handsome plant, bearing an abundance of snow-white blooms, with spathes three and a half inches long by one and a half broad, which are produced on very slender stems; the spadix is creamy-lemon in colour, made up of six-partite flowers; the leaves are lanceolate, and slightly tapering towards the point, the edges being beautifully undulated, and the sheathing leaf-stalks being furnished with white scarious wings. *A. Patinii* would seem to find its nearest ally in *A. floribundum* from which, however, it abundantly differs in all its parts; both plants, however, were discovered by Patin, in New Grenada, and the latter is at present by no means so abundant as one could wish, or its merits deserve. The plant from which our Plate was taken measured two feet in height and the same in diameter, and bore a profusion of snow-white spathes. It succeeds well in a compost of loam and leaf soil, and requires an abundant supply of water with a stove temperature. As regards its neighbour, *A. floribundum*, which may now be seen in great perfection in Mr. Williams's nurseries, at Upper Holloway, we may say that it is a handsome, compact growing plant, with leaves very much broader than those of *A. Patinii*, and ornamented with a central stripe of white. On account of its profuse blooming qualities it cannot fail to recommend itself to all lovers of flowers. In justice to both plants, it ought to be said that their spathes retain their snow-white purity of colour for a long time in full beauty.

PLATE 16J.

PYRUS MAULEI.

The truly handsome-flowered deciduous shrub, figured on Plate 161, was introduced from Japan by Messrs. Maule and Sons, of Bristol, and was described for the first time as a new species by Dr. Maxwell T. Masters in the *Gardeners' Chronicle* for June 13th, last year. Our figure now given of the flowering branch and spray of fruit, was taken from living specimens kindly furnished to us for illustration from the introducers; and the profuse flowering habit and brilliant coloration of both blossom and fruit, as shown in our figure, may well speak for themselves. Mr. Maule says, that it does best when grafted on the apple or thorn, and that it does not take on the pear. For shrubberies, woodland walks, and bushy places in gardens, *Pyrus Maulei*, in its particular style, is almost without a rival and for these positions it can hardly be too strongly recommended. The flowers, which are the chief beauty of the plant, are produced in profusion all through May till June; and as there is consequently a long succession of bloom, a considerable portion is pretty sure to set and mature the rich apricot-coloured fruit in autumn. The latter, when ripe and properly prepared, makes a conserve highly relished by many both for its rich perfume and agreeable taste. The flowers are of a most brilliant, yet by no means deep, orange-scarlet colour, of a tint so luminous as to make it almost impossible of reproduction in a book illustration.

PLATE 162.

PHALJSNOPSTS PORTEI.

We are indebted to Mr. William Denning, gardener to Lord Londesborough, for the following interesting particulars of *Phalamopsis Portei*; which species, says Mr. Denning, is without doubt one of the finest of the genus. It bears a long drooping and branching spike, which will continue in flower fully four months annually; strong plants will have from forty to sixty flowers expanded at the same time. The sepals and petals are oval in form, and in colour pure white, having an extremely pleasing transparency, which gives the white colour a life-like appearance; the lip is three-lobed, but the centre partition is much the larger, and is spathulate in shape, with two slender hair-like appendages at the point, otherwise the most prominent point of the lip is of quite regular outline; its colour is of a "bright rosy-red, tinted with orange, making a marked and very beautiful contrast to the white sepals and petals. The habit of the plant, and its foliage, is so nearly like *P. amabile* that it would be very **difficult** to distinguish it by leaves alone. Its roots are rounder than in *P. amabilis*, in which species they are flattish in shape. As far as I am able to learn, there were originally only two imported plants of *P. Portei* brought over to this country by Mr. Port, both of which fell into the hands of E. Warner, Esq., of Broomfield. Mr. Warner still retains one of them. The two plants are quite distinct; as indeed all Orchids appear to be if they are seedlings. Mr. Warner's variety has the sepals and petals of a rosy hue, whilst the lip would appear to be even of a deeper red; but the form is exactly the same as in the subject of the present engraving. It is rather singular that this *Phalamopsis* should have managed to survive so long in this country, as only two plants are known to have ever been imported; whilst thousands of *P. grandiflora*, and many hundreds of *P. amabilis*, have been imported, and have gradually died.

PLATE 163.

CYCLAMEN PERSICUM-GIGANTEUM.

The subject of our present illustration, recently sketched at Mr. B. S. Williams's Nursery at Upper Holloway, is by far the finest form that we have at present seen of the Persian Cyclamen, and will, no doubt, form the commencement of an almost new type of flower. Mr. Williams's plant has very broad, beautifully mottled leaves, of great substance, and borne on stout flower-stalks. It throws its flowers well above the foliage, each flower being from two to two and a half inches in depth; the broad petals being of great substance, pure white, with a fine, bold, violet-purple eye.

The Cyclamen has been introduced into this country many years, but it is only within the last few years that its superior qualities have been discovered as a decorative plant. Whether for cut flowers, used as a table plant, or for general decorative purposes, it is at present almost unrivalled.

The seed of the Cyclamen is ripe in July and August, and should be sown from September to December, in a temperature of $5Q_5$ in a light fibrous soil, with a little leaf mould and sharp sand. The pots should be well drained, and when the seedlings are fit to be pricked out, some ten or twelve should be planted in a forty-eight sized pot. When large enough, these plants should be again potted singly in sixty-sized pots, and repotted for the third time in stiffer soil—leaf-mould, sand, and well-decayed manure; *i.e.*, when the sixty-sized pots become full of roots. A continual, though slight artificial heat should be maintained in the houses in which Cyclamens are growing, and a free current of air should be allowed, which should be regulated as to amount according to the state of the weather. All stimulants, in the way of manure or guano-water, should be avoided, and nothing used except pure soft water; and while growing, during summer the foliage should be kept well syringed and clean. It only remains for us to add, that the whole stock of the unrivalled beauty now figured is in the hands of Mr. B. S. Williams, of the Victoria and Paradise Nurseries, Upper Holloway, and that it is now being sent out by him.

PLATE 164.

ODONTOGLOSSUM ROEZLII-ALBUM.

So little is at present known of *Odontoglossum Roezlii*, that doubts have not unreasonably been entertained as to whether the white-flowered plant we now figure is the typical form, or whether it normally possesses a larger inflorescence, with brilliant purple splashes and stripes on the flowers, as illustrated by us on Plate 90, of the present Series. The subject* of our present plate, which we think we are right in considering a white variety of *O. Roezlii*, has been selected for figuring, from the rich collection of Mr. William Bull, of Chelsea, whence the tinted variety also came; and he has several times exhibited the white-flowered form at our more recent Flower Shows, where it has been most deservedly admired for its extreme purity of colour, and great substance. Like the coloured variety, it is furnished with pale-green, linear-ligulate leaves, and oblong-compressed pseudo-bulbs.

Odontoglossum Roezlii-album is a strikingly beautiful free-flowering New Grenadan epiphyte, allied to *O. vexillarium* and *O. Phalanopsis*, and the peduncles support several large flowers, which, in the variety now figured, are snow-white, with a central touch of sulphur yellow. Though white-flowered Orchids are not generally held in such high estimation as the species which bear highly-coloured flowers, yet the former are simply invaluable in all good collections for the manner in which they light up and contrast with other blooms.

HYACINTH—"ETNA."

The season which has just passed was such a notoriously bad one for Hyacinths that at the spring hyacinth shows no novelty worth illustration appeared. At a later date, however, April 7th, Messrs. Veitch and Sons—who every year now take the highest awards—exhibited the subject of our present plate at the Royal Horticultural Society, and were awarded a first-class certificate for it the only Hyacinth of the season so certificated. Hyacinth *Etna* may be described as a fine semi-double variety, with broad smooth and flat petals, which are crimson in colour, obscurely striped with carmine, and deliciously fragrant with an odour something like lilac. The compost most suitable for growing Hyacinths to perfection is one-half decomposed friable turfy loam, and the remainder equal parts of well-rotted manure, leaf mould, and silver sand, two-thirds of the bulb being left above the soil. The season for planting is from September onwards; and, after planting, the pots should be placed out of doors, well watered, and the bulbs covered with old rotted tan or leaves to the depth of about six inches, in which material they should remain till the leaves make a good start. After this the plants should be removed to a cold house, or frame, as a preliminary to introducing them to a warm atmosphere, when they will flower well from December onwards. They do best when placed as near as possible to the glass, with plenty of ventilation, and rain or soft water should be given. If these conditions are complied with, good short, healthy, stiff leaves and a fine bloom will be the result. The double-flowered varieties are generally preferred, but we can see no reason why this should be: the constitution of the single and semi-double forms is more robust, and there is usually a larger number of flowers on the spikes of the single varieties.

PHALCENOPSIS LEUCORRHODA.

The plant figured was recently drawn, at the establishment of Mr. William Bull, of Chelsea, who imported it from the Eastern Archipelago. Mr. Bull, in writing to us of this plant, describes the flower as having the tendrils of the middle partition of the lip very thin and long, and quite like those of *P. amabilis*; the callus too like that of *P. amabilis*, but yellow; and yet the flower is easily recognised, the petals having a rosy hue, the lines of the lateral partitions of the lip being brownish, not purplish, there being much yellow over the whole lip, and numerous brownish dots on the lateral sepals inside. All the sepals are yellowish-green outside, while the whole shape of the flower is that of *P. Bchilleriana*. *Phalcnopsis leucorrhoda* is a new species, described for the first time by Professor Eichenbach, in the *Gardener's Chronicle* for March 6th last; who there says it may possibly be a hybrid between *P. Bchilleriana* and *P. amabilis*. It would appear that Mr. Low, as well as Mr. Bull, had the plant in flower at the same time; and the latter wrote to Professor Keichenbach stating, "that the plant which produced the bloom had leaves like *P. Schilleriana*, perhaps not quite so much white in the mottling, but still, before flowering, any one would have bought it for *P. Schilleriana*." In the *Gardener's Chronicle* for May 8th last, Professor Eichenbach, under the name of *Phalcnopsis casta*, describes still another Phalamopsis, alike in the possession of Mr. Bull and Mr. Low; and, singularly to say, the two specimens (one at Chelsea, and the other at Clapton) are the only two known at present to exist. This plant, says the Professor, is probably a natural mule, and quite unrivalled for its chaste beauty, bearing the splendid white of *P. amabilis*, with a little tint of blushing purple.

PLATE 167.

AMARYLLIS MENDELL

Amongst the many varieties of Amaryllis brought out during the last few years, and for which there is such aji ever-increasing admiration and demand, the subject of our present plate is decidedly one of the finest. *Amaryllis Mendeli* bears a profusion of flowers (the subject of our plant bore five) of immense size and substance, and of the richest possible crimson-scarlet colour. For decorative purposes the Amaryllis stands almost unrivalled on account of its fine bold and geometric form, often gorgeous and ornate coloration, and last, but not least, its very easy culture. The bulbs are during three or four months in the year in a dormant state, when they should be kept under the stages or in some other situation where the water can be kept from them; they should be brought out a few at a time, and as the bulbs begin to grow the amount of water should be gradually increased; by these means a good supply of blooms may be kept up for many months in the year. A mixture of loam, leaf-mould, and manure in about equal parts, with a good supply of sand, will grow Amaryllids well. Our figure was taken from a plant in the collection of Mr. B. S. Williams, of the Victoria and Paradise Nurseries, Upper Holloway, whose collection of these plants, we are assured, is unrivalled. Certainly *Mendeli* is in the strongest possible contrast with Mr. Williams's snow-white *A. virginialis* figured by us in our last volume. We understand that there are no less than ninety-four distinct and named varieties in the Upper Holloway establishment.

PLATE 168.

IRIS IBERIOA.

Last year, when Mr. H. E. Chitty, of Paterson, New Jersey, called upon us in England, we promised to figure for him his fine variety of *Iris Iberica*, as flowered at the Bellevue Nursery Company in America, and in now doing so we cannot do better than refer to Mr. Chitty's own remarks in our number for March last, and to state that our plate was taken from flowers produced by the American rhizomes sent over to this country last year to be bloomed for the *Floral Magazine*. *Iris Iberica* was introduced to English gardens a few years ago by Mr. T. S. Ware, of the Hale" Farm Nursery, Tottenham, and we can well remember the sensation his flowering plants produced at the meeting of the lioyal Horticultural Society at that time. During the last few years various nurserymen have exhibited it, and several varieties have been figured, but in our estimation no other form is so fine either in size or colour as the plants grown in America. *Iris Iberica* is a native of the Caucasian Mountains, and is found growing at an altitude of from six to seven thousand feet; it has proved perfectly hardy both in this country and America, where the tests, of hardiness are more severe*—for instance, on April 17th last the thermometer at the Bellevue Nursery registered twelve degrees below freezing point, and on the 13th April the snow lay on the ground a foot deep. *Iris Iberica* grows freely and well in a light sandy soil, and is suitable for almost any situation in a garden—indeed we have seen it flourishing and flowering in a very heavy soil; care should, however, be taken not to plant the rhizome too deeply or it will perish; just beneath the surface seems to be sufficient. In winter it should be kept comparatively dry.

HYBRID PERPETUAL ROSE—" DUCHESS OF EDINBURGH"
(H. BENNETT).

A first-class certificate was most deservedly awarded by the Royal Horticultural Society to Mr. H. Bennett, of the Manor Farm Nursery, Stapleford, near Wilton, Wilts, in April last year, for the handsome and fragrant new rose here figured. It is a seedling from *Marfuerite de St. Amand*, crossed with *Madame Bofisc/tild*, and surpasses both in every respect, being much more vigorous in growth, much fuller, and of better form than either of its parents. The wood is large, stiff, and erect; the foliage strong and ample, generally with seven leaflets; the flowers are very large, and most symmetrically formed; the petals being evenly arranged, and large and bold, without being coarse; the colour outside is a beautiful silvery white shaded with rose, gradually deepening to a bright pink centre. When seen at its best, says Mr. Bennett, no better model of a rose can be conceived; an opinion in which we entirely agree with the raiser. When we add, that this new rose is, unlike so many of our best light-coloured show roses in being devoid of scent, but that it possesses a delicious perfume equal to the old Cabbage Eose, and that it is of the hardiest constitution, an early and continuous bloomer, and a grand show rose that can be grown and shown by every one, it must be acknowledged that little more need be said in its favour. The Eev. S. Reynolds Hole, of Caunton Manor, writing of it says—" The perfume is something wonderful, even for a rose." We understand from Mr. Bennett that no less than eight thousand plants of new roses are sent out by him in the spring and summer from his nursery near Wilton, about which we shall have something more to say when illustrating another new Wiltshire Eose in a future Number. ^ ^ _____

BLANDFORDIA P'RINCEPS.

For the opportunity of figuring this beautiful new plant, our thanks are due to Mr. William Bull of the King's Eoad, Chelsea, who introduced it from New South Wales. *Blandfordia princeps* forms a most showy and handsome object for greenhouse or conservatory decoration, and succeeds well in a mixture of sandy loam and peat. This plant received a first-class certificate from the Eoyal Botanic Society on the 26th of May last, and it was one of the six new plants not in commerce that received the First Prize at the Eoyal Horticultural Society's Exhibition on June 2nd; it also received a first prize for a new plant in flower at the same Exhibition. *Blandfordia princeps* has a somewhat general resemblance to Messrs Henderson and Sons' hybrid *B.fiammea-ekgans*, figured by us in our last volume; but the two are quite different (as indeed must be the case, our present plant being a botanical species, and the former confessedly a garden hybrid). Mr. Bull's plant differs somewhat in colour, the flowers are a trifle larger, and the stamens and pistil are not displayed *> in *B.flammea-eteoans*; the foliage, too, of Mr. Bull's plant is much *mace* rigid and narrow than anything WP have seen in other varieties. Now that Lilies are becoming such general favourites, it is reasonable to suppose that other plants -belonging to the Liliacæ* will also receive more attention than heretofore. There are probably few other genera in this natural order containing handsomer species than the small genus *Blandfordia*; where the handsome pendulous flowers in all the known species are tinted with the richest shades of yellow, scarlet, or crimson colour.

PLATE 171.

CYPRIPEDIUM JAPONICUM.

Our thanks are due to the New Plant and Bulb Company, Lion Walk, Colchester, for sending us the first specimen of this hardy Orchid which bloomed in this country; and our coloured plate is an exact representation of the fragrant and beautiful plant kindly left with us for portraiture. A figure in black and white was published from the same individual plant, in the *Gardeners* Chronicle* for May 15th last, where we read that "this very singular species has, up till lately, only been known by the imperfect figure in Thunberg's *Icones Plant Jap.* Dec. i.; tab. 1; by the figure in Blume's work; and by a coloured figure in the 'Plore des Serres/ copied from a Japanese drawing. It is no wonder," says the writer, "that, on looking at the latter drawing, some may have considered it a somewhat imaginative production on the part of the Japanese artist." The New Plant and Bulb Company, writing of this beautiful and hardy terrestrial Orchid, say it is of very easy culture, and that they have tried it in various soils, but that which is found most suitable, in reference to pot culture, is a light sandy loam, giving the plant plenty of water when it commences growth, and keeping it rather dry during the winter. The collector writes, that he found a Bamboo wood full of it, and that the *Cypripedium* grows best in moist Bamboo groves. This led to the cultivation of the plant in pots, and the selection of a suitable cool spot in the Colchester grounds, where a border was prepared for this and other American *Cypripediums*. Here were placed several hundreds, and those in pots were put into the New Zealand Tree Fernery—a lofty structure, with plenty of shade, where the thermometer rarely exceeded 40° during the winter, and 60° during the spring and early summer months.

PLATE 172.

ABUTILON DARWINII

This highly ornamental plant is, say Messrs. Veitch and Sons—to whom we are indebted for the opportunity of figuring it—of continental origin, and was introduced to gardens by the famous house above mentioned in the spring of last year. *Abutilon Darwinii* is well distinguished from *A. striatum* by its large and truly handsome tricuspidate leaves and better shaped flowers. It is exceedingly floriferous, producing a continuous succession of flowers through the whole season, in winter as well as in summer, and frequently as many as five flowers are borne in one axil; it will therefore prove a valuable addition to our winter-flowering plants. Few plants are more easy of culture than *Abutilon Darwinii*. It should be grown in a mixture of two-thirds loam and one-third peat, and with the usual attention as regards air and water. The culture of the plant is, however, so simple, and its propagation so easy, that it seems really unnecessary to give any lengthened account of it; but the excellence of the plant is such that it will doubtless soon be in everybody's hands. It strikes very readily from cuttings, and begins to produce its axillary flowers in a very young state, so that flowering plants of it may be regulated to almost any size. The individual bell-shaped, pendulous flowers, as may be seen from our figure, are of considerable size, and possess great beauty, the petals being of a brilliant scarlet-orange colour, elegantly veined with deep carmine; and the foliage, highly ornamental as it is in outline, is quite in character with the flowers. All the *Abutilons* are more or less handsome in character, and they naturally inhabit the West Indies, Siberia, and Piedmont; and the flower of one species—viz., *A. esculentum*, is used as a vegetable in Brazil.

NEW FANCY PELARGONIUMS.

Mr. Turner, of the Eoyal Nurseries, Slough, has kindly supplied us with the materials for illustrating four of his best new varieties of Fancy Pelargoniums, the colours of the blooms and the first class character of the individual trusses will be best understood by a reference to our Plate, and those of our readers who were present at the Midland Counties Grand Horticultural Exhibition on 1st July last, will long remember Mr. Turner's magnificent collection, which took the two first prizes. The grand specimen plant named *Illuminator* -shown at this exhibition by Mr. E. Fleming, gardener to E. Houghton, Esq., Sandheys, Liverpool, will never be forgotten by florists. This specimen Fancy Pelargonium is engraved (as an entire plant) in the *Gardeners' Chronicle* for July 10th, where the dimensions are given as 16 feet in circumference, 5 feet 3 inches across the base, 2 feet 2 inches in depth, and 7 feet 2 inches measured over the crown. The plant was finely bloomed, and notwithstanding its long journey and gumless flowers it was staged in a very creditable condition. It was unanimously awarded a silver medal as a special prize, which mark of distinction it well merited. The finest collection of Pelargoniums, principally of the Zonal and nosegay type, seen for many years past, was that of South Kensington on 21st July last. Here the well-known plants of Dr. Denny, Mr. Pearson, Mr. George and others came to the fore, and indeed it is only reasonable that the genus Pelargonium should be highly esteemed when the habit and brilliant colours of the numerous species and varieties are considered. It is probable, should the New Pelargonium Society prove a success, that we shall eventually greatly improve both the greenhouse and bedding species of the genus Pelargonium, good as the plants now are.

ROSE—"GLAZENWOOD BEAUTY."

Without doubt the Rose we now figure will be differently estimated by different rosarians, but its great novelty in being a distinctly-striped rose will be denied by none. It is a Briar Rose (the thorns being numerous), and believed, says Mr. Woodthorpe, to be a variety from Japan. At present this Rose has never been publicly shown, and the bloom here figured was selected from a batch which was the first (and nearly the last) which flowered. Mr. Woodthorpe, who at present holds the stock, describes the plant as very free, blooming very early, semi-climbing in habit, and therefore very suitable as a pillar rose, and lovely when worked on tall briars, being of a weeping habit of growth. It is named *Glazemood Beauty*, after Mr. Woodthorpe's nursery, some fifty acres in extent, and not far from Witham, on the Great Eastern Railway. The soil here is naturally well suited for the cultivation of Roses, and *Rhododendrons* luxuriate in the loamy soil, there being some enormous specimens on the place planted by Mr. Curtis, the editor of the old series of the *Botanical Magazine*. The colour and striping, or flaking of the blooms of *Glazenwood Beauty* Rose will be best understood by reference to our figure. The ground tint is a lovely yellow in the style of *Gloire de Dijon*, and the stripes are carmine, reminding one of the coloration of some tulips. The buds are beautifully and boldly marked with crimson, and in the young state (before the petals are thrown back) they present a lovely and very novel appearance for a Rose. The foliage is not large, but very beautiful, all the younger leaves being edged or suffused with red. The odour is very delicate, after the style of tea-scented roses. The stock is in the hands of Mr. L. Woodthorpe, of Glazenwood Nursery, Bradwell, Braintree.

PELARGONIUM—"BEAUTY OF OXTON."

The whole stock of this new "Regal" Pelargonium now illustrated, is in the possession of Mr. William Bull, of Chelsea, and it will, we understand, be sent out by him for the first time during next month (September). A glance at our Plate will show this plant to be a first-class novelty, with flowers similar in form to Mr. Bull's well-known *Queen Victoria*, but of quite a different colour. The upper petals are of a very rich maroon colour, and darkly blotched; the under petals very dark crimson, shaded with maroon, and a light centre tinted with rose; all the petals are attractively and regularly margined with white, and beautifully fringed. The flowers are large and very full, the extra number of petals giving them the appearance of being semi-double. The name "Regal" is applied to the fine group of Pelargoniums, the flowers of which are distinguished by their large size and very rich and showy appearance. Though they are not really double, yet from the fulness of form, and the extra number of petals in the blossoms, they have the appearance of being so. A reference to Mr. Bull's new catalogue, or a visit to his establishment at Chelsea, is necessary to properly appreciate the large number of first-class novelties he has at the present time in the way of Pelargoniums of all varieties. Amongst others is a lovely New Doutye-flowered Ivy-leaved Pelargonium (which we hope shortly to illustrate), named *Konig Albert*. This beautiful variety of *JP. lateripes* has been raised by Herr Oscar Liebmann, of Dresden, from whom Mr. Bull has purchased the half-stock, with the exclusive right of sale in all countries except Germany and Austria. The flowers of this plant are double, of a bright violet-pink colour and excellent form.

OATTLEYA TRIANA[^] COLEMANII.

We are indebted to Mr. B. S. Williams, of the Victoria and Paradise Nurseries, Upper Holloway, for the opportunity of figuring this surpassingly beautiful variety of *Cattleya Triance*. We are informed by Mr. Williams that it was flowered by Mr. "Stocking, the gardener at Stoke Park, Slough, and it has been named after Mr. Coleman the proprietor. It is of very free growth, a profuse bloomer, and continues a long time in flower; the immense size and beautiful colouring of the limb and throat of the labellum rendering it an acquisition of the first excellence. In previous volumes we have figured other varieties of this perhaps the most beautiful of all the winter-flowering Cattleyas. *C. Triana* is notoriously variable both in form and colour, but it always makes a first-class plant, either for the greenhouse, the table, or for exhibition purposes. One well-known form has the petals and sepals snow-white, with only a faint sulphur-coloured blotch on the throat, whilst another has sepals and petals full rose colour, with the labellum intense velvety crimson. There is every intermediate shade of colour between these two extremes, and the plants vary to a similar extent in the breadth or narrowness and thickness or substance of the different parts of the bloom. *C. Triance* does well in an ordinary stove or intermediate house, and is usually grown in fresh, open, well-drained compost, consisting of fibrous peat, sphagnum, and coarse well washed sand. It requires an abundance of water during the summer and autumn, when it will generally flower in profusion (if grown in quantities) for two or three of the first months of the year, each bloom lasting some two or three weeks. *C. Triance* is often grown under the name of *C. Waracetoiczii*.

LIELIA JONGHEANA.

The subject of our illustration will commend itself to all lovers of Orchidaceous plants, from its being very distinct from any other species of the beautiful genus which comes so near the Cattleyas. The plant here figured is of dwarf habit (not exceeding eight to ten inches in height), and is very similar in aspect to *Cattleya bulbosa*; but it can readily be distinguished from that species by its olive-green pseudo-bulbs, which are without any of the stripes or markings which are always present in *C. bulbosa*. The flowers are also borne in a different manner, for in *Lcelia Jongheana* the blossom appears upon a natural-shaped pseudo-bulb, whereas in *C. bulbosa* the plant makes a sort of half stem, half bulb, whenever it flowers. *Lcelia Jongheana* flowers from the top of the young bulb, and is very lovely both in form and colour; the creasing at the base of the lip is especially conspicuous and beautiful. It would seem to have a more robust constitution than most of the dwarf species, as it grows very freely in small pots filled with sphagnum, and placed not too far from the glass, with a heat of about 60 deg. in winter and 75 deg. in summer; and it must not be kept too wet at any time. This plant was first described as a new species by Professor Eichenbach, in the *Gardeners' Chronicle* for March 30th, 1872, where a woodcut illustration of a single bloom is given. At that time it was sent to the Professor by M. Luddemann; but the merit of its introduction is due to M. de Jonghe, of Brussels, after whom the plant has received its specific name. It was discovered by the ill-fated traveller, poor Libon, who fell a victim to his zeal in the Brazils. "

POTHOS VIOLACEA.

This is the name by which the plant here illustrated is best known in gardens; it is also commonly known as *Anthurium violaceum*, whilst Messrs. Veitch and Sons, to whom we are indebted" for the opportunity of figuring it, describe it in their new Plant Catalogue under the name of *Anthurium margaretaceum*. The handsome-fronted plant here figured was exhibited by Messrs. Veitch and Sons, of Chelsea, before the Royal Horticultural Society, on April 10th last, and received a well-merited award from that body. *Pothos violacea* is an old stove plant, by no means so frequently grown as its great merits deserve: the plant figured is a pale-fruited variety, and a very small specimen; for in Messrs. Veitch's nurseries we observed plants this spring densely covered with fruit growing in great pans, and many times larger than the specimen here figured. As is common in many Aroids, the inflorescence of *Pothos violacea* is conspicuous; but the minute flowers of the spadix are quickly followed by brilliant violet-tinted fruits, exactly in the same way as the inconspicuous flowers of the *Arum maculatum* of our hedges, and bears crimson-scarlet berries in the autumn. *Pothos violacea* bears rather coriaceous, obovate lanceolate, slightly acuminate deep green leaves, which are furnished with a prominent midrib; these leaves are much paler in colour underneath. The chief ornament of the plant rests in its profuse production of beautiful drooping clusters of glossy purple berries, which are produced in greater abundance as the plant advances in age, the lower portion of the plant being commonly seen in full fruit whilst the upper part is still in flower, as shown in our Plate. As regards positively new species of Aroidece, Messrs. Veitch and Sons' establishment always contains such plants, and we have repeatedly referred to the Chelsea Aroids new to science and gardens in these pages.

NEW DOUBLE-FLOWERED IVY-LEAVED PELARGONIUM—"KÖNIG ALBERT."

We mentioned this valuable and handsome new plant in our last number, and now we have the pleasure of giving a coloured figure of it, taken at the nursery at Chelsea belonging to Mr. Bull, which latter gentleman has the exclusive right of the sale of the plant in this country. *Pelargonium lateripes* (*König Albert*) is an attractive and splendid novelty, recently raised by Herr Oscar Liebmann, of Dresden, from whom Mr. Bull purchased the half stock, with the exclusive right of disposing of it in the United Kingdom, France, Belgium, America, and all other countries, Germany and Austria excepted, the right of distributing it in these two countries remaining with Oscar Liebmann himself. The flowers of this beautiful *Pelargonium* are of a bright violet-pink colour, with deep carmine stripes down the veins of the upper petals. The shape is very good, and the form thoroughly double; it is, indeed, the first and only double variety known in the section to which it belongs; added to this, it is a profuse bloomer, with beautiful foliage, and a very compact and handsome habit. Ivy-leaved *Pelargoniums* are seen at their best when used as edging plants, as decorative window plants, or as grown in hanging baskets for conservatory decoration; the wax-like leaves being thick and succulent, they are as a consequence well suited for ribbon beds, window-sills, &c. This succulence makes them well able to resist drought and dust, and a good soil and abundant moisture can be dispensed with without inconvenience. It is a very easy matter to increase Ivy-leaved *Pelargoniums* by cuttings in a light sandy soil in the open air during August; they will then be well rooted before early winter, and make good plants for the following spring.

ANTHURIUM (SCHEEZEEIANUM) WILLIAMSII.

The subject here illustrated will undoubtedly form one of the greatest acquisitions introduced for many years past; it has precisely the same habit of growth and freshness of flowering of the now old *Anthurium Scherzerianum*, and each bloom remains from three to four months in perfection—a desideratum scarcely to be found in the blooms of any other plant. The spathe is pure ivory-white in colour, and the spadix is pale lemon-colour. The plant is of somewhat slow growth, and we have, therefore, not yet seen the blooms so large as in the magnificent plants of *A. Scherzerianum* as now commonly seen; but the inflorescences are quite equal to the latter as it was first known on introduction to England. *Anthurium Williamsii* should be grown on a light rich soil, consisting of rough fibrous peat and sphagnum, with a little charcoal. As the plant when growing requires a good supply of water, it should have plenty of drainage, and be potted in a rather light manner. *Anthurium Williamsii* will be distributed from the Victoria and Paradise Nurseries, Upper Holloway, by Mr. B. S. Williams (who holds the stock, and to whom we are indebted for the opportunity of making this drawing), in the first week of October next. The plant, as is well known, first attracted great attention in the early spring of last year, and it was figured and described for the first time in the *Gardeners' Chronicle* for April 18th, 1874. It was exhibited by Mr. Williams at the Royal Horticultural Society on April 1st of the same year, and we had previously to this time both seen it in flower and sketched it at the famous Upper Holloway establishment. Mr. Williams considers this plant to be the greatest novelty of the season, and likely to be an equal favourite with *A. Scherzerianum* itself.

FANCY PANSIES.

For the four new fancy Pansies here figured we are indebted to Messrs. Downie and Laird, of 17, Frederick Street, Edinburgh. We have before seen, and indeed figured, Pansies with blooms a trifle larger in size, but for beauty of form and purity and distinctness of colour it would be almost impossible to surpass the four varieties now figured. As regards the propagation of the Pansy we cannot do better than quote A. Kerfs remarks on this subject, from the *-Gardeners' Chronicle* of September 5th last, in reporting on the Violas and Pansies at the Boyal Winter Garden, Edinburgh:—" Propagation may be accomplished all the year round if the growths are sufficiently ripe and of proper consistency; but the best time is in August and September. They can be multiplied both from the extremities of the old shoots and young offsets arising from the stools. After dressing off the lower set of leaves, insert the cuttings in a mixture of light sandy compost in which half-rotten leaves abound. Place the boxes, or whatever is used, on the shady side of a wall or hedge until the cuttings are rooted. The protection of a few mats in severe wintry weather is all that is required, and such protection ought to be dispensed with when the weather becomes more moderate in its temperature. Plant in March into the beds. It is of the greatest importance to have this done before drought sets in. Nothing is more in their favour than to have them well established in their summer quarters early. An abundant supply of water at the roots given in the evenings succeeding hot sunny days will prove of the greatest benefit,- both in preserving vigour and sustaining a succession of bloom on the plants."

CYTISUS LABURNUM AUEEUM.

The highly ornamented foliage plant here figured was first brought under our notice at the meeting of the Royal Horticultural Society on August 4th last, where it most deservedly received a First-class Certificate. It was raised by Mr. Richard Smith, of Worcester, who holds the entire stock, and to whom *we* are indebted for the opportunity of figuring it. *C. laburnum aureum* is a sport from the common English Laburnum, and is similar to it in growth, but the leaves are of a pure rich golden-yellow colour, and it flowers very freely. This plant stands the sun well, and is a remarkable instance of the power of the scion over the stock; and it may be mentioned that when budded on the common Laburnum golden shoots are thrown out below the bud or scion, and even golden suckers not unfrequently spring from the root. Mr. Richard Smith's new Laburnum will form a valuable addition to the older yellow or golden-foliaged plants, as enumerated by Mr. William Paul, of Waltham Cross, viz.:—*Quercus Cerris variegata*; *Q. robur concordia*; *Fraxinus aucubsefolia*; *Castanea vesca variegata*; *Sambucus nigro-aurea variegata*; *Symphoricarpos vulg. fol. aureis*; *Spircea opulifolia lutea*; *Robinia Pseud. Acacia aurea*: and amongst evergreens—*Abies excelsa finedonensis*; *Cupressus thyoides variegata*; *Ilex Aquifolium aurea*; *Thuja aurea*; *Thuja elegantissima*; *Taxus baccata aurea*; *Euonymus japonica flavescens*; and *Retinospora pinifera aurea*. The same gentleman, in his lecture at the Horticultural Congress at Oxford, said that, besides the prevailing and ordinary green, there were five other colours, or tones of colour, with which to work—viz.: 1. Light green; 2. Dark green; 3. Reddish purple; 4. Yellow or golden; 5. White or silvery,—and their various combinations. " There were," says Mr. Paul, " no less than seventy-seven distinct trees or shrubs now in cultivation which came under one or other of these colour-qualifications."

NEW PICOTEES.

We here illustrate two very fine new forms of Picotee. They both possess a peculiar merit which entitles them to a place in the first rank of any collection. No. 1, *Fanny Helen* (*Marris*), is an excellent variety, with good broad, smooth, fine-shaped petals, of the purest white, heavily edged with bright rose. It is considered by Mr. Turner to be a perfectly distinct plant. No. 2, *Mrs. Gibbons* (*Gibbons*), is a noble flower for exhibition purposes. It is very large, with good pure white petals, of great substance and fine form, heavily edged with bright red. All lovers of this most charming flower, the Picotee, cannot but have remarked its wonderful improvement during the last few years. It has improved both in size and form, and in the great breadth and substance of the individual petals. In the best varieties the petals are now remarkable for their smoothness, beautiful clear white grounds, and even marking, which is perfectly clear from spot or bar. Many of the varieties are really superb, and cannot be easily surpassed, particularly those first-class varieties recently sent out by Mr. Turner, of Slough, to whom we are indebted for the two plants here illustrated. Picotees are generally propagated by layering. This operation should be carried out early in August, and then early in October the layers will be sufficiently rooted to be taken off. These rooted layers should be potted in large sixty-sized pots, a pair in a pot. By this time they require a gentle watering and a place in a cold frame, with the lights kept on for about ten days, and a little air given at the back. They should also be shaded from the sun, and after this time they will have drawn root, and may have the lights taken off on all favourable occasions.

ARTOCABPUS OAHNONIL

The deeply coloured and handsome plant here figured belongs to the "Bread-fruit" tribe, and was exhibited by Mr. Bull at the meeting of the Eoyal Horticultural Society held on the 18th of August last, where it attracted great attention. This remarkably ornamental plant, which is a native of the Society Islands, was first made known to me, says Mr. *Bull, by Mr. Walter Hill of Brisbane, and was afterwards sent to me in a living state by Mr. Henderson of Sydney. It is without exaggeration one of the finest coloured-leaved plants which it has ever been my good fortune to offer. It is a plant of free-growing habit, with a woody stem, which is hirsute in the young state. The leaves are very variable in form, alternate and petiolate, the petiole and hairy costa being of a bright red colour. The leaves, which measure at least 1 foot long and 7 inches wide, are of membranous texture, with a glossy upper surface, and of a rich, full, and bronzy-crimson hue, beautifully tinted with purple. The colouring is remarkably rich and constant, that of the under surface being of a bright vinous red.

The form of the leaves varies greatly: some are simple and cordate at the base, parallel-sided, with the apex irregularly lobate; some have the apex regularly three-lobed, with short entire lobes; some are deeply three-lobed, being divided nearly at the base, the segments themselves, of which the centre one is largest, being shallowly sinuate-lobed, and occasionally the secondary lobes are themselves sinuately toothed. This variety of form and the rich colouring of the polished surface render this one of the most effective coloured-leaved plants of recent introduction; and there is not the slightest tendency in the colouring to vary **or fade**, so that the effect produced is a permanent one.

HYBRID PERPETUAL ROSE—"HIPPOLYTE JAMAIN."

Great attention has of late been directed towards M. Francis Lacharmé's magnificent Hybrid Perpetual Rose, "Hippolyte Jamain," as grown by Mr. Henry Bennett, of the Manor Farm Nursery, near Wilton, Wilts, and exhibited by him at the meetings of the Royal Horticultural Society, where it most deservedly received a first-class certificate on the 17th of March last. "Hippolyte Jamain" is a splendid Rose of the Victor Verdier type, with very large full flowers of good centifolia form, carried boldly on stiff, short-jointed wood. The colour is a beautiful bright rose shaded with brilliant carmine, and the individual petals are of great substance, very smooth and evenly arranged, the outside petals being well reflexed and the centre thrown up to perfection. The Rose was originally raised by the Prince of Rose-raisers, M. Francis Lacharmé, and is doubtlessly well worthy to rank with the other first-class favourites of his production, such as Charles Lefebvre, Victor Verdier, Alfred Colombe, Louis Van Hontte, Xavier Olibo, and others of our best Roses. We have recently had our attention called to some beautifully dried specimens of the Roses above mentioned, where the form (but not the delicious scent) has been well preserved. We understand that these Roses, which should not be too fully blown, are gathered on dry, sunny afternoons and at once plunged in a mixture of sulphuric acid or oil of vitriol and water, half-a-pint of the former to nine and a half pints of the latter. The cut Roses are then well shaken, so that any superabundance of the mixture may be cast off, and they are then suspended from strings in a well-ventilated shed and dried. As the mixture is poisonous and speedily burns holes in one's clothes, care must be taken not to let it approach the dress.

LOBELIA CJERULEA ALBO-MARMORATA FLORE-PLENX).

The attractive and beautiful little plant here figured we recently noted at the establishment of Mr. Wm. Bull, of Chelsea, who kindly furnished us with materials for the plate here given. This double-flowered variegated Lobelia is, as will be seen on reference to our figure, a very distinct and effective variety. "It is," says Mr. Bull, "of free growth, producing most profusely its beautiful double flowers, which are of a lovely cerulean blue colour, attractively marbled and spotted with white." It will, therefore, doubtlessly at once take its place with the many other varieties of Lobelia now so extensively used for bedding purposes. Year after year new varieties of this plant, of more or less value for the garden, are brought out," and in our Plate 80 we were the first to figure the then new double-flowered blue Lobelia of Messrs. -Dixon and Co., which has well held its place in the garden ever since its introduction two years ago. Messrs. Dixon's plant and the new one we now figure are both remarkable as improvements in form and habit over the older varieties of our gardens. Good strains of the plant now before us, from their dwarf growth, dense habit, and especially from the extreme beauty of their coloration, ranging as it does from deep blue to pure white, are simply invaluable when treated as border or bedding plants, or for window or table decoration. Some of the white varieties are said to be more or less ineffective and otherwise failures in the garden, but the blue forms are of the first importance in every sense, for there is no scarcity of white-blossomed plants of good habit, but a good blue is such a rare colour amongst flowers that all the varieties with shades of blue in them will always be held in high estimation.

CTPEIPEDIXTM HYBRIDTJM.

The exceedingly handsome hybrid *Cypripedium* figured on Plate 187 comes from the famous house of Veitch and Sons, of Chelsea, which house has for many years been noted for the production of marvellous hybrid Orchids. *Cypripedium* hybridum was raised by Mr. Seden, of the above firm, and is a cross between *C. barbatum* fertilised with the pollen of *C. Stonei*. In habit the plant is intermediate between the two parents; *lera* compact and taller than *C. barbatum*, it still has more of the spreading habit and the bolder foliage of *C. Stonei*. In the colour of the leaves it also partially reproduces the peculiarities of both parents: the blotches of the leaves of *C. barbatum* are faintly represented on the richer glossy green ground that characterises *C. Stonei*; the leaves are longer and stouter than those of *C. barbatum*, but shorter and broader than those of *C. Stonei*. It is now more than twenty years ago, and at a time when very little was known of the fertilisation of Orchids, that Mr. Dominy, of the firm of Veitch and Sons, first turned his attention (at Exeter) to the possibility of hybridising Orchids, and two of his best known hybrids, viz., *Cattleya Exoniensis* and *Cattleya Veitchii*, are still amongst the very handsomest of all our cultivated Orchidaceae. These results were obtained at a time when Mr. Darwin's investigations and results were still unpublished. The minute seeds of most Orchids are very slow to germinate, and from seven to ten years have at times to elapse before the bloom of the seedling plant appears. In these hybrids (and the plant now before us is a good example of the fact) it generally happens that traces of both parents are clearly visible in the progeny.

NERINE JAPONICA.

The lovely bulbous plant here figured was kindly sent to us for illustration by the New Plant and Bulb Company, Lion Walk, Colchester. It is new, quite hardy, and till now has never been figured. Its newness is vouched for by Mr. Baker, of Kew, who has decided upon its being a good new species, evidently allied to *N. flexuosa* and *N. humilis*. It is, therefore, different from any form of the Guernsey Lily (*N. sarmiensis*), with which it was at first suspected to belong. As for its hardiness, this is vouched for by the New Plant and Bulb Company, who have it in their possession, and who have had it out of doors for two years past. Bulbs were presented to Kew twelve months ago. *Nerine* forms a small genus of ornamental Amaryllidaceous bulbous plants, principally coming from South Africa; but our plant grows naturally in sandy places by the waysides near Yokohama, in Japan, flowering in October, and sending up its leaves in early spring. The New Plant and Bulb Company have sent for our inspection a native drawing of this species, and the trusses of bloom on Japanese plants are about six inches in diameter. The flowers (as seen in our plate) are of a fine full crimson colour. *N. Japonica* is likely to prove a valuable addition to our garden flowers. As ordinarily grown, the bulbs of the Guernsey Lily are commonly cast aside after once flowering, but with good cultivation these Amaryllids may be not only made to flower year after year, but to produce a good crop of offsets. When the plants have once bloomed they should not be starved in the manner usually practised, but replanted in a cold frame, near the glass, with a temperature of about 40 deg.

CATTLEYA PAUSTA.

Cattleya Fausta is another of those curious and beautiful hybrid Orchids for which the house of Veitch and Sons has been so many years famous. Few hybrids, or indeed species, can exceed* the plant here figured in beauty of outline and colour. It was originally described by Professor Eeichenbach in the *Gardeners' Chronicle* for March 1, 1873, where the Professor exclaims :—

"Another of these curious Orchid hybrids! It has neat flowers of a very pretty lilac colour, the lip is white, with a large yellow disk. In one variety (var. *radicans*) there are numerous dark purplish veins and streaks over the anterior part. The plant itself is just intermediate between *Cattleya Loddigesii* as the female or seed parent, and *C. exoniensis* as the male or pollen parent. It is the more valuable as it flowers till the end of November, when Orchid flowers begin to be scarce. It was raised at the Royal Exotic Nursery of Messrs. Veitch."

PELARGONIUM WONDERFUL.

The very fine new variety of Pelargonium here figured has recently been awarded a first-class certificate by the Royal Horticultural Society. It is remarkable for the persistency with which it retains its petals; the profuse flowers are of great substance and semi-double, borne on unusually large trusses of good form. The colour is of the most intensely bright orange scarlet, and Mr. George Smith, of Tollington Nursery, Hornsey Rise, the raiser, who holds the stock, considers it to be the finest scarlet Pelargonium in the market either for bedding or market purposes. Pelargonium "Wonderful" is a sport from "Vesuvius" and it retains the fine habit, freedom of growth, and abundance of bloom of this variety. Mr. George Smith gives it as his opinion that "Wonderful" will ultimately displace all other known varieties.

As every purchaser will be anxious to increase the stock of P. Wonderful when once obtained, we would advise all who receive young plants next spring to shift them into a pot one size larger. Let the compost be one-third leaf mould or well-decomposed manure, and two-thirds rich loam, with a little sand. If convenient, place them for a short time on a little bottom heat, not too much exposed to the sun, in order to promote rapid growth. This treatment should continue for a fortnight, giving plenty of air the latter part of the time; the plants will then make fine growth, and be ready for transplanting into the position that has been allotted to them, and they will at once have a splendid effect. To increase the stock for next season, take cuttings early in September, place about ten in a six-inch pot filled with the same compost as before mentioned, then place the pot in a greenhouse, and keep the plants moderately watered. They will be well rooted in a month. Let them now have plenty of air and have the advantage of the sun as much as possible, remove any decayed leaves, and then keep the plants moderately dry. In the months of October and November the damp often destroys the foliage; therefore avoid watering over the plants as much as possible during this season.

Early in February the stock will be in fine condition to separate. Pot them then into three-inch pots, and keep in a warm greenhouse. Early in May they will be beautifully in bloom; then give plenty of water and air. The plants should not stand too close together, and, by the end of May they will be handsome plants, in fine condition to plant out.

ANGK-^CUM ELLI8II.

The figure of the rare Orchid heré given was last year taken from a plant growing in the rich collection of Mr. Day, of Tottenham. The Tottenham specimen possesses considerable interest as being one of the three original plants brought from Madagascar by the late Bev. W. Ellis, the missionary naturalist. On Mr. Ellis's collection at Hoddesden being broken up, Mr. Salt, of Manchester/ bought one plant; Mr. Day another ; and the third had previously died. A. Ellisii is now to be seen in a fewfuirseries and private collections, but it is still a very rare plant, and the specimen at Tottenham is far larger and more robust in all its parts than any specimen we have seen elsewhere. The size of our plate will only admit of a very small portion of the plant being represented, but in the *Gardeners' Chronicle* for February 27, 1875, may hp seen a portrait of the entire plant, with its great strap-like leaves, äerial roots, and gracefully-drooping flower-stem. Mr. B. S. Williams, of Upper Holloway, in writing of this plant says:—" It is undoubtedly one of the finest species of the genus in cultivation. The leaves are arranged in a distichous manner, and about ten inches in length by upwards of two inches in breadth; dark green on the upper side, paler below, and unequally bilobed at the apex. Flower spikes some two feet long, arching, bearing from eighteen to twenty-four flowers, pure white, and very fragrant; sepals and petals reflexed; spur of the lip six inches long and light cinnamon in colour. The profile of the flower is an exact resemblance of a cockatoo. It ^requires the temperature of the East Indian House." The above description, however, applies only to the small variety of our nurseries. The flowers, which change to a brown colour where touched or bruised, have an odour of old sherry, and the long spur is full of nectar, which tastes like the fruit of *Solanum dulcamara*—sweet at first, but with a bitter after-taste. The name *Angraecum* is a Latinised form of a Malayan word signifying epiphyte, and every species in the genus is in some way remarkable. Most of the known species bear small flowers, but some others, as *A. sesquipedale* and *A. eburnium*, are the grandest ornaments of our stoves, blooming in the winter and lasting in flower for a long time. Most species of *Angrsecum* come from Madagascar, the islands of Bourbon and Mauritius, and the south-eastern portions of the continent of Africa.

NEW CARNATIONS.—1. KING OP YELLOWS. 2. MEPHISTOPHELES.

The two subjects of our present plate are very different in aspect from each other, but all Carnations, Picotees, and Cloves are florists' varieties of one botanical species, viz., *Dianthus caryophyllus*—the aromatic-scented double-flowered, whole-coloured varieties being known as Cloves. Mr. Charles Turner, of Slough, to whom we are indebted for the specimens figured, considers the first plant to be the finest of the pure yellow selfs, whilst the fine intense coloration of the last variety speaks for itself. There are now so many first-rate varieties of Carnations, Pinks, &c, in cultivation that the selection from the florists' catalogues is really a most difficult matter, so that the list we publish elsewhere in the present number will, we hope, be of some service to amateurs and others who desire to grow these beautiful plants. Carnations should be layered in July in good soil composed of two-thirds loam, one-third well-decayed and finely-sifted manure or leaf-mould, with about one-sixth of sand. At the time of layering all weakly or decayed stems must be removed.

THE FLORAL MAGAZINE.

NEW SERIES.]

JANUARY, 1875.

[No. ST.

FLOWER SHOW.

VERY few plants were exhibited at the rooms of the Royal Horticultural Society on December 2nd last, but amongst the novelties we noticed a fine flowering specimen of *Odontoglossum maxillare*, powerfully fragrant like Hawthorn, sent from Broadoaks, Bury, by E. G. Wrigley, Esq. This beautiful plant, which was awarded a first-class certificate in September last when exhibited by the Rev. J. B. Norman, Edgware, we intend to figure shortly. Messrs. E. G. Henderson & Sons were accorded a vote of thanks for a good display of Tree Carnations, in considerable variety. This firm also exhibited their *Dracaena Duffii*, a plant of great merit with broad bronzy leaves, here and there striped with crimson. Messrs. Standish & Co. forwarded a group of Poinsettias, with the coloured bracts in a high state of development; and Mr. Smith, of Ealing, sent a large collection of Cyclamens in great variety of colour and robust health, some of the plants having (instead of five) some eight or ten reflexed petals.

THE PELARGONIUM SOCIETY.

THE following prizes have been offered by the Pelargonium Society (to which we have before referred in these pages), and will be competed for at South Kensington on July 21st, 1875:—Class 1. Twelve distinct varieties of Zonal Pelargoniums, "florists' class" in pots of 6 inches in diameter (open), First Prize, £8; Second, £5. Class 2. Twelve distinct varieties of Zonal Pelargoniums, "decorative class," in pots of 8 inches in diameter (open), First Prize, £8; Second, £5. Class 3. Thirty distinct varieties of Zonal Pelargoniums, "irrespective of class," in pots not exceeding 6 inches in diameter (open), First Prize, £6; Second, £4. The varieties to be shown in the above classes are to be of the flowering section—not those with variegated leaves. Class 1, designated "florists' class" is intended to include only those varieties which have finely shaped flowers, according to the florists' model. Class 2 is intended for profuse-flowering, showy varieties, otherwise known as Hybrid Nosegays. Class 4 Six ornamental Cape Pelargoniums, dissimilar (open), First Prize, £5; Second, £3. Class 5. Best Hybrid Pelargonium, of distinct character (open), First Prize, £2; Second, £1. Class 6. Twenty-four Pelargoniums, cut blooms, single trusses, dissimilar (open), First Prize, £5; Second, £1. Class 7. Twelve Pelargoniums, cut blooms,

single trusses, dissimilar (amateurs), First Prize, £2; Second, £1. The judges may, in their discretion, and subject to the approval of the Committee, award a prize to any exhibit worthy of particular notice, which may not be provided for in the schedule. They may also withhold any of the above prizes if the exhibit be not of sufficient merit.

Conditions of Competition.—It is imperative that every variety exhibited shall have conspicuously appended to it its own name, together with that of the raiser, such names to be either printed or written distinctly on a card. The "Chiswick standard" to be adopted in regulating the size of the pots—that is, "8-inch pots" measure 8 inches across and 8 inches deep inside, at a point 1 inch below the top edge; 6-inch pots, in like manner, measure 6 inches deep and 6 inches wide inside, at an inch below the edge.

THE LATE MRS. HOOKER.

ALL readers of the *Moral Magazine* will share the deep regret we feel in recording the sad misfortune which has fallen upon the Director of the Royal Gardens, Kew, in the terribly sudden death of Mrs. Hooker, which took place at Kew on the 13th of November last. Mrs. Hooker was a daughter of the late Professor Henslow, and her many scholarly accomplishments rendered her a valuable and willing assistant to Dr. Hooker in his many scientific works. One of Mrs. Hooker's last works was a translation of *Le Maout and Decaisne's "Scientific Botany"* a very large and most difficult piece of work, thoroughly well done. In the translation of this work, which includes all known Natural Orders of Flowering Plants, Ferns, Mosses, Lichens, Algae, and Fungi, and abounds with exact scientific terms, the difficulty of a positively correct translation must often have been excessive.

TILLANDSIA MUSAICA.

GUSTAVUS WALLIS, the discoverer of this handsomely-marked stove plant, sends some interesting particulars of its inflorescence and fruit (at present said to be unknown in a cultivated state in this country) to the *Gardener's Chronicle* for Nov. 21st, last. He there states that he discovered this plant in 1867, and sent it to Mr. Linden in 1868. Wallis saw it again in 1873, bearing many fruits, at an elevation of 3000 feet, in a dense wood next to Teorama, at a small distance from Ocaia in the Magdalena terri-

tory. Wallis considers this **jilant**, not to be the epiphyte described in our nurserymen's catalogues; for he says it is only *at time** found upon trees, and *very often* upon the naked soil. The inflorescence stands upon stalks from 1\ to 2 feet, high, the broad **younger** bracts snowy, the more mature ones scarlet, and the **flowers** white. Wallis also mentions here two other species, one now in the possession of the **Mesas**. Yeitch, and the other a *ne plus ultra* of the highest effect, not yet **introduaed** alive to Europe, growing naturally 5000 feet above the level of the sea, and surpassing both the **specie*** above mentioned in texture, beautiful colour and high **growth**. A collection of fine plants of Tillandsia **Mnsaica** may now be seen in Mr. Bull's collection at Chelsea.

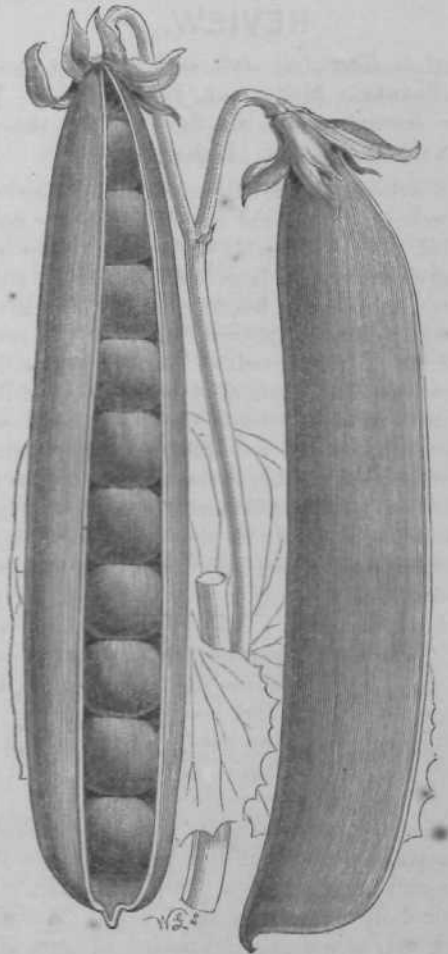
PLATYCERIUM WALLICHII.

WE are glad to be able to record that this handsome member of the very **remarkable** genus of "Stag's Horn Ferns," known under the name of **Platycerium**, is at last to be seen in a living state in this **country**. Mr. B. S. Williams, of Upper Holloway, has a collection of healthy living plants, with fertile fronds, belonging to the **above-mentioned** species, growing in great luxuriance in one of his new plant houses.

BUTTON'S SPRING- CATALOGUE FOR 1875.

THESE can be no doubt that this handsome book of 127 pages is one of the best got up and most useful issues ever sent out by the famous Reading firm. The typography, illustrations, and general arrangement of the book are alike most commendable. Many of the woodcuts are in themselves works of art, and in this respect they contrast strongly with the common, coarse, and aged cuts which are too often forced to do service in seedsmen's lists. The book before us abounds in all sorts of useful information about new seeds, vegetables, farm roots, and other matters, and when it is remembered that all these subjects are illustrated with artistic engravings of high finish, coloured plates, and an elaborate calendar of operations, it will be seen that the book is almost **indispensable** for those who have flower and **kitchen gardens** and farms. One of the most striking plates in the book is a double one, printed in colours, of three new peas, the larger group of the three representing a distinct new pea, **appropriately** named "Giunt Emerald Marrow." The illustration represents an uncommonly large, vigorous, and **apparently** extremely prolific pea of great size and beauty, and, judging from what the introducers say, backed up as it is by the strong recommendation from the Queen's gardener at Balmoral, the Archbishop of Canterbury's gardener at

Addington, and several of our best known gardeners and horticulturists both in Great Britain and elsewhere, this pea must be considered a really first-class acquisition for the table. The illustration we here print of a couple of pods of this novelty engraved direct from nature, will



speak for itself. The book is furnished with a good common-sense index and is a model of what a thoroughly good catalogue should be.

The elegant and well-known "Little Book,"¹ issued by Messrs. J. C. Wheeler and Son, of Gloucester, is at last numbered with things of the first. The increase of trade and the desirability of getting a large page equal to the proper display of good coloured plates made the "Little Book" altogether too small. The Messrs. Wheeler are now issuing a series* of **Illustrated Trade Catalogues** larger in the page than either of the well-known lists of Messrs. Sutton, or Messrs. Carter and Co., and nearly equal in size to the large page sent out by the Messrs. Henderson, of St. John's Wood.

THE FLOKAL MAGAZINE.

NEW SERIES.]

FEBRUARY, 1876.

[No. 38.]

REVIEW.

Supplement to Harvesting Jnis and Trap-door Spiders.

By J. TRAHEKNB MOGGBIDGB, F.L.S., F.Z.S. With specific descriptions of the Spiders. By the Bev. O. PIOKAED-CAMBBIDGB. L. Beeve & Co.

WITH this welcome addition to a valuable and interesting work we receive also the sad intelligence of the decease of its gifted and indefatigable author, a loss which will be felt and deplored by a large circle of friends, and by naturalists generally, for few men in so short a life and with so small a stock of physical strength have accomplished so much and so well as Mr. Moggridge. His "Contributions to the Flora of Mentone" was a valuable addition to Botanical Science, displaying acuteness of observation with a sound and discriminating judgment, and investing what are too commonly regarded as mere weeds with an interest unknown to those who regard flowers as something only to please the eye. His next work, of which the volume before us is a continuation, carries us into quite a new and fertile field of research, and graphically describes a series of observations on the habits and dwellings of harvesting ants and trap-door spiders. In this the qualities which distinguished Mr. Moggridge as a naturalist are brought still more prominently into view, while the novelty of the subject and the character of the information conveyed, invest it with an interest little short of romance. The first part of the volume before us details the results of further observations on ants' nests in various localities, and of a series of experiments made with a view to discover the cause of the non-germination of seeds in ants' nests. The result however, is only of a negative character, showing that it does not proceed from any exhalation or exudation from the ante themselves. The second and by far the larger part of the work is devoted to trap-door spiders. In this, besides much additional information respecting spiders and their nests previously described, we have descriptions of three new types of trap-door nest, and eight new species of spider. As might be surmised, trap-door spiders are not confined to this part of the world. Our author received specimens from California, and gives us the biography of one which, at the bottom of its nest, survived the journey from that far distant land, and was for some months kept as a guest at Richmond. As a specimen of the entertainment as well as instruction afforded by this little book, we give the following extract:—

When at Hyères on the 11th of May, 1873, the evening being very warm and a bright moon shining, I went at 8.30 P.M. with my father and sister to see what the spiders would be doing on a hedge bank where we had previously marked five cork and eight wafer nests. The moonlight did not fall upon this spot, but I was provided with a lantern, and by its light the nests at first appeared to be tightly closed, but we soon perceived first one and then another with the door slightly raised, ready to close on the smallest alarm, whether from the footfall or from the flickering of the lamp. When the light of the lantern was steady it did not appear to frighten the spiders in the least, even when brought to within a few inches of the door, and this enabled me to watch them very closely. On either side of the raised door of one of the wafer nests I could see the feet of the spider projecting, and just at that moment I caught sight of a beetle close at hand, feeding on the topmost spray of some small plant below. Using every precaution, I contrived to gather the spray without shaking off the beetle, and gradually pushed it nearer and nearer to the nest. When it almost touched the lip of the nest the door flew open, and the spider snatched at the beetle and dragged it down below.

For a few seconds the door remained tightly closed, and then, to our great surprise, was suddenly opened again, and the beetle was cast alive and unharmed out of the nest. I immediately secured the insect, which proved to be the common *Ghrysomela Banksii*.

I cannot doubt that this beetle was distasteful in some way to the spider, for it was neither so large nor so powerful as many beetles the remains of which I have found in the spider's nests, and, besides, it did not escape from the nest, but it was distinctly rejected by its captor.

This little episode was scarcely ended when I espied a wood-louse (*Oniscus*) walking down the bank, not far from another of these wafer nests. By a little guidance I managed so to turn its course that this unsuspecting crustacean went straight to the very point I wished, and made as if it would walk over the spider's door; but no sooner was it well within reach than, quick as thought, the spider clutched it and dragged it in. No rejection followed on this capture, and though I could not actually witness the conclusion of this adventure, I do not doubt that it ended in a tragedy and a supper.

This part is illustrated by eight plates from the author's own hand, and is followed by Mr. O. Pickard-Cambridge's specific descriptions. We do not know a book more calculated to encourage young persons, tourists, and residents at home and abroad to an intelligent observation of nature than this. With such untrodden paths beneath our feet, no one need despair of being able to contribute something new and interesting to our stock of knowledge. It should be borne in mind that the entire edifice of natural science—vast as it is, yet far from complete—has been built up, and assumes its present symmetrical form, by the due arrangement under master-builders at home of the isolated facts collected

from all quarters. Whoever can contribute a new fact adds a brick to the building, and renders material aid towards its completion.—F.L.S.

TRADE CATALOGUES.

WE have received a batch of Trade Catalogues, from which we select one or two for special notice.

Carter's "Vade-Mecum" for 1875. This is a large, well-known and well got-up catalogue of vegetable, farm, and flower seeds, interspersed with a great deal of reliable horticultural and botanical information. The issue for the present year, though containing particulars of several new and valuable vegetables and flowers, appears to us to be more hastily got up than usual, and the coloured plates (specially the new beans and cucumbers) not up to the mark. The wood-cuts are nearly all familiar to our readers; some are good, but others (as the Lily of the Valley, p. 81) could hardly have been taken from nature at all. The cultural directions are confessedly sound and good, and the descriptions as exact as possible; in fact, the latter are sometimes too full, as no one cares anything about the Linnaean orders now, to which a page of explanation is given, as well as a column in every page on which the flowers are described. The natural orders are more useful, but the cuts should be made to agree with the descriptions; for instance, the Liliaceae have parallel veins to their leaves, whereas in No. 1630 (Lily of the Valley) the leaves are shown as "netted." As examples of hasty production, we may call attention to the fact that the cut of *Convolvulus mauritanicus* (p. 49), which is a gracefully pendulous basket-plant, is inserted upside-down, with the stems all growing sky-wards, instead of in an earthly direction. Fig. 092, on p. 70, is also upside-down; but these are minor defects in an otherwise thoroughly good book.

"Descriptive Catalogue of Flower, Vegetable, and Agricultural Seeds." B. S. Williams, Upper Holloway. This is an octavo catalogue of ninety-six pages, with a few good illustrations on wood, duplicates of which (with one or two exceptions) we have not seen elsewhere; the descriptions and cultural directions are brief and to the point. This catalogue is valuable from its conciseness, and notwithstanding its brevity, contains all the first-class new flower and kitchen garden acquisitions.

"Descriptive Catalogue of Garden Seeds/" Charles Sharpe and Co., Sleaford. This handsome quarto includes plants for the flower and kitchen garden. It is well and fully illustrated with engravings, mostly original, well printed, and furnished with a good index. The cultural directions are also well written, in a fresh and readable form, and Messrs. Sharpe wisely print the uses of some of their salad and other herbs, for it is not every one who knows the use of the now almost innumerable

plants at times used in salads, soups, stuffings, teas, and pickles. This is one of the best catalogues issued.

"Descriptive Catalogue, Bellevue Nursery Company/" Peterson, New Jersey. Henry E. Chitty superintendent, 1875. This is a large-sized octavo catalogue of garden, field, and flower seeds, which reaches us from America: it is well printed, and contains a few good illustrations, together with cultural and descriptive matter of good quality. It shows what our American neighbours are doing with stove, greenhouse, and hardy plants; for besides several of their own novelties, this nursery has in its stock all the best and newest European horticultural acquisitions. Mr. Chitty will be remembered as the introducer of the new *Coleus* ^{cr} *Duchess of Edinburgh*³ figured by us in our last volume.

We should like to see a real advance made in some of our English nursery catalogues, especially in those which treat of new, rare, and beautiful plants. Year after year we notice with regret that the first house in this country (if not in the world) issues a catalogue with neither title-page nor index, the catalogue opening at once with an illustration. Other plant merchants give first prominence to long lists of patrons, as if additional lustre could be given to a grand new orchid because "Prince Salm Salm" bought one and could not keep it alive, or a new fern were more graceful because one was purchased by the "Hon. Miss Struggles/" who soon killed it. In describing new plants, why so much "new and choice/" "choice and popular," "select and useful/" &c. &c.? Plant-buyers know well enough that if they go to a first-rate house they will only be served with first-rate and useful plants. The illustrations to catalogues, again, are often very bad, and do no sort of justice to the originals, in fact, they are often quite burlesques on the plants they pretend to represent, and are frequently much too big for the page, so that the edges of the pictures are shaved off by the binder. Some nursery lists are furnished with no index, whilst others give such a voluminous one that if you look for pelargoniums, azaleas, or other plants in it, you will be referred to half a dozen or more pages in diverse parts of the book. This has the effect of so confusing the ideas, that the probability is the person who intended to use the list and become a purchaser, shuts it up in perplexity, and leaves the selection of plants to mere chance. Large sums of money are spent every year in the production of those Trade Lists, and if the money could be better directed (as it certainly could) in the production of well printed, well illustrated, well written and presentable books, these works would have a permanent interest and value, and be preserved in the library instead of being at once pitched into the waste-paper basket—a fate which we well know finishes the career of too many of these works now. W. G. S.

THE GLOBAL MAGAZINE.

NEW SERIES.]

MARCH, 1875.

[No. 39.

FLOWER SHOWS.

AT the meeting of the Royal Horticultural Society, held on January 20th last, Messrs. Veitch and Sons were awarded a first-class certificate for a new hybrid Pitcher Plant, with the pitchers oblong in shape, and spotted and barred with red, the parents being *Nepenthes Safflesiana*, and an unnamed species with spotted pitchers; an unrivalled collection of Cyclamens came from the same firm. At the same meeting Mr. William Bull, of Chelsea, sent a magnificent group of Cycadaceous Plants, including *Zamia*, *Dion*, *Encephalartos*, and *Macrozamia*, and an extremely elegant plant, named *Zamia Roezlii*, with two to four dark glossy leaflets on long, slender, cylindrical, slightly spinous stipes. The young foliage of the latter is of a rich olive-green colour, and the plant is so elegant and ornamental that it is likely to ultimately become a great favourite for dinner-table decoration. Mr. Wells contributed a good collection of Orchids and Foliage Plants. And Messrs. E. O. Henderson and Son sent a group of seedling *Hippeastrums*. We are able to give a portrait of one of this firm's fine seedlings with the present number.

At a meeting of the same Society, held on Feb. 17, Messrs. Veitch and Sons again sent a fine collection of Cyclamens, and were awarded a first-class certificate for *AbiitUon Larwini*, a plant with orange-scarlet flowers, and said to be an improvement on *A. pictum*. The same firm received a second-class certificate for *Odontoghimim JFarscewiczii*, a pale-flowered species, and after the style of the white variety of *O. Roedii*

NEW FERNS.

THE forthcoming season will probably see the advent of several new Ferns of great beauty. Messrs. Veitch and Sons have no less than four new and rare species of *Adiantum*, and a new species of *Platynerium*, three feet in width, and some four or five feet long; whilst Mr. Williams, of Upper Holloway, is sending out his new *Adiantum gracilinum*, together with *Polystichum lepidocaulon*, *Platynerium Wallichii*, and a new and interesting viviparous variety of *Scolopendrium vulgare*, of great interest.

NEW DRACJENA.

A'FIXE new and undescribed species of *Dracaena*, says the *Gardeners' Chronicle*, is now flowering in the Palm-

house at Kew, and will doubtless shortly be published. This specimen is about twelve feet high, a single stem, supporting a fine crown of leaves, from among which spring several axillary panicles. The leaves are more than a yard long, linear-lanceolate, and spread with a gentle curve, showing on the under side an ornamental pale yellow **quill-like** midrib. The panicles are erect, with spicate branches, either single or in twos or threes, from the same point, bearing small flowers in dense fascicles. They are pale yellow, and have a peculiar, but not agreeable smell. It is most likely an African species. A plant sent by Mr. G. Mann, in 1862, is apparently the same. The nearest relative is *D. fragrans*, native of Guinea and Sierra Leone, of which a fine specimen near at hand is coming into flower. Of this the panicles are all terminal, with few branches and reddish heads of flower-buds. The leaves are about two feet in length, and are without a coloured midrib. It may be worth remark, that *D. latifolia* is frequently cultivated for *D. fragrans*.

CATTLEYA GIGAS.

A LONG letter, from which we make some extracts, has recently been published in the *Gardener's Chronicle*, from Mr. Gustavus Wallis, the original discoverer of *Cattleya gigas*, a plant we illustrated on the last plate of our Volume for 1874. "Having not only been the discoverer/' says Mr. Wallis, « of this most wonderful Orchid, but also having sent it three times to Mr. Linden, and to Messrs. Veitch, of Chelsea, I am enabled to say something about it; and I think it only fair that my services as to its discovery should be known:—

"When travelling, in the year 1868, from Medellin to Frontino (in Columbia, South America) I had the great pleasure to meet with *Cattleya gigas* just when most desirous of discovering a novelty. I confess I had become tired of observing that a long series of forms, hitherto met with, proved to be mere varieties of one type, as *C. quadricolor*, *C. triana*, and *C. choccensis*, when I discovered this brilliant *Cattleya*, just after having most fortunately met with *Odontoglossum vexillarium*. I found also a fine yellow-blooming *Cattleya*, probably a variety of *C. Dowiana*, not to mention hundreds of other valuable plants, gathered on that and other trips to the same place. Frontino since that time has become famous as a rich Orchid producing field. Mr. Chesterton went there subsequently, especially charged with the mission of acquiring a great lot of

Odontoglossum vexillarium; and in the year 1871, M. Roezl, on account of M. Linden, arrived there, in order to bring home large quantities of both Orchids, and many other plants. In the year 1872, another supply from my hands reached Brussels; and finally, in the year 1873, for a third time I directed my steps to Frontino. It was then for a stay of about eight months, during which I undertook many rambles in all directions.

"Another traveller, M. Patin, exploring at the same time the State of Antioquia (to which Frontino belongs), availed himself of my discoveries; consequently, Frontino has become, through me, a true cornucopia of Orchid seekers. The place of the true *Cattleya gigas* is in the immediate vicinity of the little town of Frontino, where it grows in thick forests, and also in the tops of high trees. The elevation above the sea is about four thousand feet; and the best-flowered plants were found in a shady situation, of course in a rather temperate climate. I believe your temperature statements are too high, and I should propose 65° to 70° in the night, and 70° to 80° in the daytime, as being more convenient. The rainy season, properly speaking, is not distinguished in that part of the Cordilleras. Certainly, you will be astonished to learn that I observed twice during my last stay at Frontino a hailstorm, the hailstones being nearly as large as a hazel-nut; but I don't mean by this observation that it is a severe climate.

"The extremely long blooming of *C. gigas* deserves to be mentioned here. I enjoyed the sight of the fine flowers during a period of three weeks. A sketch of a full-flowering spike was sent to Professor Reichenbach, which gives an idea of its great beauty. To draw a conclusion from the differently-situated localities, as well as the differences of elevation which *C. gigas* is growing in, I should be inclined to suppose that there are some three or four varieties in the large stocks existing in the stoves of Brussels and Chelsea.

"I was often told, while in Frontino, of a black-flowered *Cattleya*, as occurring on a certain place thereabouts, and which was visited by me. If there can be any reliance placed on this statement, we might suppose it to be a dark violet-painted—an *atropurpurea* form."

IRIS IBERICA IN AMERICA.

IRIS IBERICA, as grown and flowered by us, differs considerably from the coloured plates that we have access to; and as we grow it, no coloured representation has yet done it justice. The flowers come much larger, and the colour richer and more distinct. It appears to be perfectly hardy in our climate. In the spring of 1873 we planted a large bed in the open ground, putting in very small pieces. During the season, they grew very rapidly, many of them making towards fall plants a

foot in diameter, some of which produced in the following May as many as from fifteen to twenty flowers each. Some of the flowers, after the drooping petals were raised to the horizontal, measured five and a half inches in diameter. We have now a large bed in the open air of this plant, and as the mercury this winter has been more times below Zero than we have ever known before, its hardiness will be thoroughly tested.

H. E. CHITTY, *Bellevue Nursery*.

Paterson, New Jersey, Feb. 8, 1875.

TRADE CATALOGUES.

"MINIATURE Spring Catalogue and Garden Guide." Sutton and Sons, Reading.—This is an elegant little curiosity, measuring only three and a half inches by four and three quarters, reduced from the larger issue by photography and Daltastype. Every letter and every illustration of the larger edition is here perfectly reproduced in miniature, so that the great potatoes, onions, peas, beans, &c, of the ordinary issue, appear as dwarfs instead of giants. It would have been well to have altered the printed scales of the five onions, on page 42, for it there says, the '* New Queen' onion is represented of the natural size; if so, it is but little more than half an inch through, and the 'New Giant Rocca' is but an inch and three-eighths. Our great seed merchants are now very obliging in sending order lists, &c. (sometimes stamped), and take great pains to save all trouble on the part of the reader and purchaser. We suggest, therefore, to Messrs. Sutton and Son the advisability of issuing this beautiful little work in pocket-book fashion, with a lens enclosed, so that middle-aged readers may peruse its contents with ease and pleasure.

J. C. Wheeler and Son's "Little Book, or Short, Select Seed List." Gloucester, 1875.—This is a handsome list of seeds, large in size, and furnished with an illuminated cover (semi-medieval in character), in gold and colour. Bacon tells us that "there is no beauty but hath strangeness in its proportions;" and Messrs. Wheeler have verified this adage by introducing a large and strange initial "S" in the left-hand bottom corner of the cover. On this are two pastoral figures—a golden-haired "shepherdess," classical and beautiful, receiving a strawberry from a rustic in elegant clothes, but with a grotesque face terrible to look upon. The book contains two richly-coloured plates of flowers, printed in colours at Brussels, and sixty-seven pages of well-executed illustrations and descriptions. Being well and clearly printed on good paper, with good gossipping, original descriptions, in which Messrs. Wheeler are ever and anon taking their readers into their confidence, this Catalogue cannot fail to be received with pleasure wherever it is sent.

THE FLOEAL MAGAZINE.

NEW SERIES.]

APRIL, 1875.

[No. 40.

EXHIBITIONS.

AT the meeting of the Royal Horticultural Society, held on March 3rd last, Mr. C. Green, of Reigate, exhibited a beautiful specimen of *Masdevallia metanopus*, a plant much in the style of the better known *M. polysticta*, but somewhat smaller in growth, and less spotted in its flowers. Mr. C. May, gardener to J. S. Bockett, Esq., of Stamford Hill, sent a well-flowered specimen of *Cashgynne conferia*; and a finely-flowered growth of *Lendrobium nobile*, on which were thirty-two blossoms (produced in nearly every case three in a spray), from Mr. Stephens, gardener to G. Simpson, Esq., Wray Park, Reigate. The Meeting and show of March 27th was more important than might have been expected, as the Hyacinth Show had been virtually abandoned by the Royal Horticultural Society. At the last moment, however, it was reinstated, under somewhat unfavourable conditions, which prevented anything like the grand display we have seen on some former occasions; added to this, it is a notoriously bad year for hyacinths. The Hyacinth Show was held in the Western Arcade, and a silver medal was awarded to Messrs. Veitch and Sons, for their collection, which included other plants besides hyacinths. A silver medal was also awarded to Mr. John Wills, of Sussex Place, South Kensington, and the Melbourne Nursery, Anerley, for an extensive collection of stove and other plants. The same award was made to Mr. B. S. Williams, of Upper Holloway, for a collection of plants; and to Mr. William Paul, of Waltham Cross, for a magnificent collection of Camellias in pots. A good number of the old Hyacinths were well represented, with a few new ones; but no really first-rate novelties were exhibited; and none were certificated. A first-class certificate was awarded to Mr. H. Bennett, of Stapleford, Salisbury, for a new hybrid perpetual Rose, named *flppolyte Jamain*—bright rose in colour, with a fine dark crimson centre; a handsome and compact flower, with good bold foliage. Mr. Bennett, of Hatfield, sent a fruiting spike of *Hedychium Gardnerianum*, which was greatly admired for its brilliant orange and crimson coloration. An unrivalled specimen of *Cattleya amethystoglossa*, with seventeen flowers on one spike, was sent by Mr. W. Wilson, gardener to W. Adams, Esq., of Chace Park, Enfield; and a poorly-grown specimen of the handsome and curious *Tulipa Greigii*, with spotted foliage, was forwarded by the New Plant and Bulb Company, Colchester.

LIFILIA JONGHEANA.

THIS magnificent plant, with flowers nearly as large as *Cattleya Mossia*, is now blooming in the collection of Lord Londesborough, at Norbiton. It was originally introduced to our gardens by M. de Jonghe, of Brussels, the celebrated fruit grower; it was discovered by his traveller, Libon, who fell a victim to his zeal in the Brazils, more than twenty years ago.

VRIESIA REGINA.

UNDER this name a most magnificent plant, which by far eclipses any *Vriesia* we have seen in English stoves, has been figured and described in the number of the *Gardeners' Chronicle* for Feb. 20th last. We gather from the description that the plant in question flowered for the first time in Europe in the Emperor of Austria's private garden at Vienna, last summer, and that the director of the garden furnished the photograph from which the figure was taken. The plant, it seems, has also been known as *Tillandsia regina*, *Vriesia gigantea*, and *V. Glaziouana*. The leaves, says the *Gardeners' Chronicle*, are about four feet in length, and seven inches broad, the flower-stalk, which develops with great rapidity, attains a height of seven feet. The flowers are arranged in two-ranked curved spikes, disposed in a branched panicle, and spring from the axils of rose-coloured bracts. The flowers are white, and have a strong perfume of jasmine. The plant is a native of Rio Janeiro, where, according to M. Glaziou, it grows in the clefts of the rocks, flowering from October to December.

RARE SPECIES OF PHAL33NOPSIS.

Ma. Low, of Clapton, Mr. Bull, of Chelsea, and we believe Messrs. Yeitch and Sons, and others, have now in flower a highly curious new plant, under the name of *P. leucorrhoda*, which Professor Reichenbach considers to be a hybrid between *P. amabilis* and *P. Schilleriana*; the flowers, which are rather larger than the flowers of an average *P. Schilleriana*, are borne in many-flowered inflorescences; the chief colour of the flowers is white, the unusually long petals being washed in the middle with rose. This plant, says the Professor, has a remarkable analogy with *Odontoglossum Warscewiczii*. It is as inferior to a good *P. Schilleriana* as any *Odontoglossum*

previously seen is inferior to a good 0. *Vexillarium*; and yet both have their high value, founded on their being exceedingly rare. When exhibited in the rooms of the Royal Horticultural Society, where two forms were shown, no award was made. Mr. Bull states, that he imported his plants from the Eastern Archipelago, under the name of *P. intermedia*. It is somewhat curious that at the present time the true *P. intermedia* (which is the same with *P. Portei*), from the Philippines, is now in magnificent condition in the collection of Lord Londesborough, at Norbiton, Surrey. This is perhaps the most magnificent plant of the genus, for certainly as seen at Norbiton, it is impossible to conceive of anything finer. The general colour of the flowers is white, with a full, rosy-purple lip, the flowers being produced in spikes several feet in length. New plants are produced from side shoots.

TRADE CATALOGUES.

"CATALOGUE of Gladioli/¹ Kelway and Son, Langport.—A catalogue of twenty-four octavo pages, invaluable to all growers of the Gladiolus. Messrs. Kelway and Son inform us that they raise no less than two hundred thousand new seedlings every year, and that their eighteen new varieties sent out for the first time this year, are far in advance of any hitherto in commerce. Many of the names are very curious—names having a Latin or Greek sound, but no meaning, and some almost unpronounceable.

"Descriptive Catalogue of Selected Roses.—" Cranston and Mayo's, King's Acre, near Hereford.—This is an excellent Rose Catalogue, which not only gives a list of all Roses worth growing in this country, but includes a brief description of each group of Roses, which is alike readable and really valuable; for instance, under "Hybrid Perpetual Roses," Messrs. Cranston and Mayo's say:—

"The first Roses called Hybrid Perpetual were obtained by crossing the Hybrid China and Hybrid Bourbon with the China, Bourbon, and Tea-scented varieties; by this means perpetual blooming Roses were obtained, which were named by the French growers 'Hy brides Remontantes/ The Rose has perhaps undergone greater improvements within the last ten or fifteen years than it ever previously obtained, and this improvement may be attributed in a great measure to the introduction of the class now under consideration having opened a field for hybridizing and raising seedlings to almost an endless extent. A better foundation to work upon there could not possibly have been, for certainly they are the most desirable of all Roses. In Ibis section we have varieties suitable to any soil, climate, or situation, and also adapted to a variety of purposes. Perhaps the greatest evil which has attended the fertility of these varieties, has been the

introduction of so many worthless sorts, a circumstance alike perplexing to the amateur and irksome to the cultivator. Nearly all the Hybrid Perpetuals, except those described as dwarfs, make good standards; but it would be well in every instance, when making selections, to bear in mind that the vigorous, free, and robust make the finest standards; the moderate the best half and dwarf standards; and the dwarf growers, dwarfs or dwarf standards only. When they can be so arranged, this should be strictly attended to. Nearly all are suitable for growing as dwarfs, and are admirably adapted for grouping in masses. Nearly all the vigorous growers make handsome Pillar Roses; for this purpose they are best budded upon the Manetti Stock; they will in one season make plants from five to six feet in height, and bloom abundantly; they must, however, in all instances be planted deep, so that the part where the plant was budded is below the surface. Most of the varieties recommended for bedding or grouping do admirably on the Manetti Stock; the same directions as to planting must, however, be attended to in every instance, when they will be found to supersede others grown upon the Briar, or upon their own roots. The vigorous, free, and moderate growers require moderately close pruning; the dwarf growing kinds should be pruned closely."

"The Manetti Stock, upon which very many Roses are now worked, is become universally esteemed. For such kinds as are suitable to it (and these only should be worked) it is unsurpassed as a Stock for Dwarf Roses. Many sorts which upon the Briar are almost inactive, when worked upon this stock appear to gain new life and vigour, and retain a robust and healthy growth quite remarkable. It is suitable for nearly all the Summer Roses, Damask Perpetuals, Perpetual Moss, the greater part of the Hybrid Perpetuals, and a few of the Bourbons. It is not, however, adapted for all the Tea-scented, China, or Noisette sections, excepting for pot culture, for which purpose it is the best of all stocks. For all the hardy Pillar Roses it is unequalled: many sorts grown upon it will attain the height of six or seven feet in one season. It must, however, in all cases be worked close to the ground, and in transplanting, it is most important that the plant is set deep, and in no instance should the union of the bud with the stock be above ground. Let it, therefore, be always planted so that the collar of the bud is beneath the soil. This, let it be observed, applies only to plants worked on this particular stock; such treatment with Roses upon the Briar would be fatal."

It will be seen from the above, that not only is the history of each Rose under notice given in the above book, but good cultural directions are included, which must prove useful to all growers of the "Queen of Flowers,"

THE FLOEAL MAGAZINE.

NEW SERIES.]

MAY AND JUNE, 1875.

[Nos. 41 & 42.

FLOWER SHOWS.

AT the meeting of the Royal Horticultural Society, held on April 7, a first-class certificate was awarded to Messrs. Veitch and Sons for *Drosera spathulata*, a small and very elegant species having the habit of growth of certain small *Sempervivums*; for *Croton Disraeli*, a most curious form, resembling in habit the Bird's-nest Fern (*Asplenium nidus*). This plant (with two other varieties equally deserving of a first-class certificate) was received from Mr. A. H. C. Macaffee, of Sydney. *C. Disraeli* has been pronounced the greatest novelty that the genus has yet produced, but it is quite possible that it may ere long have to give place to some even greater novelty. A first-class certificate was also awarded to the same firm for a fine new semi-double crimson hyacinth named *Etna*, which we figure in our present number. Mr. William Bull received a similar award for *Crinum brachynema*, an Indian species with drooping white sweet-scented flowers, produced on a scape about three feet high; for *Dracana insignis*, a dwarf compact wiry, habited plant, with leaves of a rich metallic purple colour, and for *D. Candida*, a plant of identically similar habit with the above, but with the older leaves furnished with a creamy-white margin, and the young ones almost entirely creamy-white. For their excellent habit both these plants are decided acquisitions for the table. A first-class certificate was awarded to Mr. B. S. Williams for *Geonoma gracilis* and for *Marlinesia erosa*, two remarkably handsome Palms. Botanical commendations were voted to Messrs. Veitch and Sons for a magnificent plant (covered with fruit) of *Anthurium violaceum* and for *DrosopAyUum lusitanicum*. Cultural commendations were awarded to Mr. J. Staples, gardener to Mrs. Candy, Chipstead Place, Sevenoaks, for a specimen of *Dendrobium densiflorum*, with twenty-eight fine spikes of flowers all in a perfectly fresh condition, and to Mr. F. Moore, gardener to W. C. Pickersgill, Esq., Blendon Hall, Bexley, for a specimen of *Dendrobium nolile* three feet through, and remarkably well flowered. Messrs. Veitch and Sons exhibited a new and remarkably handsome Aroid, under the provisional name of *Spathiphyllnm Wallisii*. The committee made no award for this, simply because they were uncertain of the precise name of the plant, but there are no two opinions held about the plant itself by all persons who have seen it. The same firm sent a pretty blue-flowered plant, named *Exacnm zeylanicum*—a member of the *Genti-*

anacea—*znH* three other *Crotqns* not mentioned above—viz., *C. tortile*, *C. Lord Cairns*, and *C. appendiculatum*; we propose to return to these plants very shortly and illustrate one or more, but undoubtedly the two first plants, of a high order, *C. tortile* being after the manner of *C. spirale*, but much more robust, and *C. Lord Cairns* after the style of *C. Disraeli*, but of a totally different colour. Amongst the miscellaneous plants, Mr. Bull sent a specimen of the white flowering variety of *Odontoglossum Roezlii*, illustrated by us in our last number, and Mr. Dean a fine collection of bedding primroses and polyanthus.

April 21.—First-class certificates were awarded to Messrs. Veitch and Sons for *Dracana hybrida*, a handsome broad-leaved variety, the old leaves of which are dull green, margined with crimson of various shades, and the younger or crown leaves greenish white on the upper side, and pale rose beneath; to Mr. H. Bennett, of the Manor Farm Nursery, Stapleford, Salisbury, for hybrid perpetual rose, *Captain Christy*, a large full flower, with pale pink outer petals and flesh pink centre. This rose has something of the colour and habit of the *Duchess of Edinburgh*, but it has a somewhat different colour and a different and far less powerful perfume. To Mr. R. Dean, of Baling, for his new double-quilled white Daisy *White Globe*, which produces large and perfectly quilled flowers, and is a welcome companion to the double-quilled red form. Mr. Bennett also sent a magnificent collection of cut roses, including the two above-mentioned plants, together with *Uippolyte Jamaïn*; Mr. William Paul also forwarded two new hybrid perpetual roses for exhibition—viz., *Villaret de Joyeuse* and *Amelia Hosle*. Messrs. Veitch and Sons sent a notable collection of Orchids and other plants, including *Masdevallia Veitchii*, *Phalanopsis grandijlora* with seven very fine flowers; several varieties of *Odontoglossuui Alexandra*, *Dendrobinm Bensonna*, *Phalamopsis Mddemanniana*, and its variety *ochracea*, in which the petals and sepals are shaded with a soft yellow colour; *Odontoglossum pranitens* and *Saccolabinm ampullaceam* with eight spikes. Mr. Bull sent a fine specimen of *Tillandsia musaica* just showing its spike of rich yellow and red flower* and *Angnloa Turneri*. Mr. Kinghom, of Sheen Nursery, Richmond, sent a beautiful plant of his now well known *Fuchsia procumbens* covered with flowers, but at present we have heard nothing of the promised hybrids which were to be produced by the influence of this pretty and novel plant on other mem-

bers of the genus Fuchsia. The thanks of the floral Committee were awarded to Mr. B. P. Barr, Tooting, for a large and very complete collection of cut blooms of Narcissi, well illustrating many of the critical species and varieties of this handsome and now favourite genus of hardy plants, and the same award of thanks was given to Mr. Stevens, gardener to the Duke of Sutherland, Trentham, for a large specimen, with about three dozen spikes of flowers, of the variety of *Ccslogyue cristata*, known as *Lemoniana*, which has longer and narrower bulbs, longer leaves, and come3 into flower from three weeks to a month later than the typical form.

BOYAL HORTICULTURAL, May 12. — A first-class certificate was awarded to Mr. William Paul, of Waltham Cross, for a very fine new hybrid perpetual rose, *Star of Waltham*, and to M. Louis Van Houtte, for *Bertonia Van Houttei*, 2k very handsome plant, something in the style of Mr. Bull's *B. siiperbissima*, recently illustrated by us. A beautiful crftnson Masdevallia, small, but evidently a profuse bloomer (*M. amabilis*), was shown by Mr. Gray, gardener to H, Smithers, Esq., Laurie Park, Sydenham; and *Senecio macroglossus*, a remarkable evergreen greenhouse climber from South Africa, by Mr. Charles Green, Holmesdale Boad, Beigate. This hitter is a remarkable plant, with a yellow eight-rayed inflorescence and leaves closely simulating the common ivy. Although this was called the Pot Bose Show, the roses, except Mr. Paul's blooms above alluded to, were of little account; the Azaleas were also poor, but Messrs. Dobson and Sons sent an excellent collection of their unrivalled Calceolarias, as illustrated by us in our last volume. Messrs. Bobinson and Sons, of Tooting, Mr. Parker, of the same place, and Mr. Richard Dean, of Baling, respectively exhibited fine groups of hardy perennials, the latter gentleman showing a magnificent pan of *Pinguicula grandiflora* in the finest possible condition. Dr. Hooker and Mr. Bfcntham agree in considering this plant a mere variety of the common *P. vulgaris* of our bogs, an opinion in which Mr. Babington however does not seem to agree; and any one who knows the latter plant well, would hardly consider it possible that Mr. Dean's plant, with its flowers an inch and a quarter across, and its long spurs, could be one of the varieties of *P. vulgaris*. It was very interesting to observe the profuse subterranean offshoots thrown out by Mr. Dean's plants. Messrs. Veitch and Sons, of Chelsea, exhibited a specimen of the same species, but smaller. Mr. B. S. Williams was awarded a second-class certificate for a very fine Azalea (*Flambeau*) of great substance and splendid crimson-scarlet colour.

CULTIVATION OP PHALiENOPSIS POBTEI.

Phalanopsis Portei (sometimes known as *P. intermedia*) is a plant which roots very readily, and attaches itself very firmly to the teak baskets which I believe the late Mr. James Veitch was the originator of. When one basket is covered with roots just insert it into another of larger size—in a very short time the young growing points will be attracted and will ramify all over it. There should be nothing used except a little charcoal or cork to keep the baskets firm. This latter point must be attended to, as no Orchid will root to anything which is constantly shifting about at every watering. *P. Portei* will not take so much water as is usually given to Phatanopsids, if the roots are buried in a heap of stale moss, peat, &c, they quickly perish if they get wet. It, like its congeners, requires the hottest house, and to be shaded from the direct sunshine.—W. DENNING, *Norbiton*.

DISA GBANDIFLOBA.

FEW plants are more difficult to cultivate than *Disa grandijlora*, and no gardener has been so successful in blooming this obstinate plant as Mr. Denning, gardener to Lord Londesborough. We recently had an opportunity of seeing one of these fine plants in full beauty in one of Lord Londesborough's houses at Norbiton. The plant carried no less than twenty-seven magnificent blooms, and measured exactly three feet six inches in height* In writing to the *Gardeners' Chronicle* on the cultivation of this plant, on April 3rd last, Mr. Denning says, " One of the reasons, perhaps the main reason, why this most beautiful Orchid is not cultivated wherever a Chinese Primrose or a Fuchsia is grown, is because it will only succeed under a special treatment, and either that treatment must be afforded by the natural conditions of the structure in which it is placed, or it must be*procured by daily attention. It is a plant which will not forgive neglect. The soil most suitable for the Disa is a good sound peat, such as would do for Heather, but not so fibry as the peat usually used for Orchids, to which should be added a good quantity of good clear sharp river-sand—silver-sand is not coarse enough—and some dry horse-droppings, which should be well mixed together, taking care not to break the peat up too fine. Select a broad pan in preference to a pot, and well and carefully drain by placing the crocks in such manner that they will not readily choke; if the drainage is thrown in in the careless slipshod manner so usual now-a-days failure may be expected. Cover the crocks with a little sphagnum moss and fill the pan to the rim with the above compost, on which place the

plant, keeping it well raised up so that no water may lodge about the stems. The best time to pot these plants is about the beginning of November, after the shoots have nicely risen to the surface. After potting, place in a cool, moist, but airy house or pit, not in too much sunshine, and syringe overhead six or seven times daily; it is better to syringe than to water—in fact, the *Disa* should never be watered with a pot during this stage, but be kept continually wet in the foliage by syringing; the soil by this means will be kept sufficiently wet without any additional watering. When the flower-buds are nearly ready for expanding the syringe should be laid aside and the water-pot called into use, commencing again with the syringe as soon as the young shoots make their appearance after the blossoming period is over.*

ADIANTUM SEEMANNI.

THE true *Adiantum Seemanni* may now be seen in fine condition in Messrs. Veitch and Sons Nursery at Chelsea. It is not only an exceedingly handsome and compact plant (with some of the pinna) four inches long and two and a half inches broad), but it is a very interesting fern on account of the singular error made by Dr. Seemann in sending home from Central America a *secotul* species of *Adiantum* (really *A. Wihoni*) under the impression that it was the true *A. Seemannii* itself, so named by Sir William Hooker in honour of Dr. Seemann, the discoverer. Messrs. Veitch and Sons' plant was found in Central America by their collector Zahn, and has been exhibited under the provisional name of *A. Zahnii*, but on a careful examination of the plant by Mr. Moore, a gentleman who has probably a better acquaintance with ferns than any one else in this country, he has discovered that Messrs. Veitch and Sons' *A. Zahnii* is really the true *A. Seemannii* of Sir William Hooker, and the plants for some time in the possession of Mr. Bull, previously supposed to be

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his Messrs. Veitch's plant are m--- feet long, with a slender, shining, black stipe, a thread-like petiole an inch long, each stipe supporting from four to eight of the magnificent pinn* above-mentioned. The plant has £ awarded a certificate by the Botanic Society.

NEW ANTHURIUMS.

MBSSES. VEITCH & SONS have in one of their new plant houses three magnificent new Anthuriums, m* foliage of an immense size; two of these plant have been already described by Dr. Master as new s p ^ n the *Gardener* Chronicle* for April 3rd last. Thenrst, I

A. cuspidatum, has bright green leaves one foot seven inches long and one foot broad. The plant was found by Wallis in Columbia. The second is *A. Wallisii*, is from the same place, and was discovered by the same collector; in this the cordate elongate, oblong deep green leaves are no less than two feet two inches long and ten inches broad; in both these plants the inflorescence is small in comparison with the rest of the plant. The third plant pushes its inflorescence right above the gigantic deeply cordate leaves, which in this instance are even larger than those of either of the others, being no less than two feet two inches long and one foot two inches broad.

STENOSPERMATIUM WALLISII.

UNDER the above name Dr. Masters has recently *described*. (*Gardeners' Chronicle*, May 1st, 1875) the magnificent new Aroid, exhibited by Messrs. Veitch and Sons at the Royal Horticultural Society, under the provisional name of *Stenospermatium Wallisii*. The plant was introduced from Columbia by Wallis, and is, says Dr. Masters, "one of the most beautiful and remarkable stove Aroids known." It is fully illustrated in the number of the *Gardeners' Chronicle* above quoted; and the plant is said to be new alike to science and to gardens, forming a new member of a genus which includes only three or four species, natives of Peru, Columbia, and the Amazon district. Judging from the profuse aerial roots, the plant is probably a climber, but its most striking character resides in its large ivory-white drooping spathes; these snowy spathes hang over in the most elegant manner, displaying within, a large yellow and handsome pendulous spadix. The leaves are thick, and of a deep green colour, not unlike those of the common India-rubber plant, so that, considered as a decorative plant of the first class, few other Aroids can approach this fine species. When the spathe is fully opened, it is studded with small transparent indentations, caused by the pressure of the flowers when in the bud state, and the spathe is, moreover, tinged with a vinous tint where touched by the pendulous spadix."

CYPRIPEDIUM JAPONICUM.

THIS great novelty from Japan has recently flowered for the first time in this country, in one of the fern-houses of the New Plant and Bulb Company, Colchester, and the first bloom was kindly sent on to us for portraiture. As we shall shortly give a coloured figure of this extremely curious, beautiful, and hardy plant, we shall defer a full description till we give the figure; in the meanwhile we may as well say that the plant

is fragrant, and gives out a pleasant odour, not junlike hawthorn, or almond—a fact which seems to have been previously overlooked.

MESSRS. JACKMAN'S CLEMATIS EXHIBITION.—This important exhibition opened for a month on the 1st May last, in the Royal Botanic Society's Glass Corridor (leading to the large Conservatory), in the grounds at Regent's Park. The exhibition has proved in every way a great success, and it is said that there were no less than twenty thousand blooms open at one and the same time—an effect of colour that can hardly be imagined. Certainly nothing could surpass the gorgeousness of the display as we saw it when in its full beauty. Amongst these fine plants there is at present no true crimson or blue, the nearest tints at present approaching these colours being a full rose, with a dash of purple and 'a mauve suffused with azure; some of the tints of white and flesh resemble the hues found on the inside of some shells, in porcelain, &c, and are very fine; from these lighter shades the colours range through various rich purples to intense Turkey red. Some of the blooms are unusually large, one we measured being seven and three quarters inches in diameter, with perianth segments exactly three inches across. Certain blooms are fragrant, whilst others are scentless, or only possess a peculiar aroma common to the Clematis. Here and there Messrs. Jackman had introduced a number of variegated Hollies and choice Conifers with good effect. As we shall shortly figure one of the best of the Woking novelties, kindly given to us for illustration by Messrs. Jackman and Sons, we shall advert in detail to some of the more important new varieties when we give the plate.

MR. WILLIAM PAUL'S ROSE SHOW has recently been held at Regent's Park, in the Great Rhododendron Tent of the Royal Botanic Society. Here the prevailing purple colours of Messrs. Jackman's Clematis plants were quite absent, and gave way to the well-known crimson and carmine and white tints of the rose: these tints ranged from pure white, through pink, to the most intense maroon-scarlet, and left nothing to be desired, either in point of colour, form, foliage, or delicious fragrance. As is well known, every rose that is worth growing is grown by Mr. Wm. Paul, and shown at his annual displays either at Regent's Park, South Kensington, or the Crystal Palace. Together with the roses, Mr. Paul exhibited a selection of his choice trees, noted for their variegated foliage and pictorial habit.

REVIEW.

The Narcissus: Its History and Culture, fyc, by E. W. BURBIDGE; to which is added a Scientific Review of the Entire Genus, by J. G. BAKER, F.L.S. Lovell Reeve and Co., 5, Henrietta Street, Covent Garden.

THIS useful and well illustrated new book, which we understand to be the first of a proposed series of works treating of kindred subjects, confines itself exclusively to the genus *Narcissus*. It gives the History of Cultivated Daffodils, the poetry, propagation and culture of the *Narcissus*, its diseases and parasitic insects, a full description of all the known species and varieties, with their time of flowering, together with a select descriptive list of authors, works of reference and illustrated periodicals containing information and figures of the species. One portion of the work is a Review of the Genus *Narcissus*, by Mr. J. G. Baker, of Kew, reprinted by permission from the *Gardeners' Chronicle* of 1869, where it originally appeared, and revised and brought up to the present date by Mr. Baker himself. To us the work appeals thoroughly trustworthy and well done, and one likely to be of extreme value to all who are interested in the members of this favourite genus of plants, for it must be confessed that even at the present time considerable confusion exists as to the right names of the species and varieties now in cultivation. The forty-eight coloured plates with which this volume is embellished will prove very useful in the determination of any of these doubtful varieties. That Mr. Burbidge was quite equal to the task he set himself both as author and artist, the work itself conclusively proves, and he has done quite right in availing himself of reliable information and assistance wherever he could get it. Before this book was published it was most difficult to get correct knowledge of the species, for to do so one had to search through no end of diverse volumes, to say nothing of correcting a large amount of synonymy. Now that Mr. Burbidge has brought all the information together in one book, and combined it with his own knowledge and large experience of the plants in a state of cultivation, no real difficulties ought to be experienced in future in the determination of any species or variety of *Narcissus*. In his list of illustrated periodicals where the *Narcissus* has been illustrated, we observe that by an oversight he omits the *Floral Magazine*, where several varieties have been figured. The plates have in nearly every instance been drawn from nature, and lithographed by Mr. Burbidge himself, and it only remains for us to say that they are evidently very truthful and appear to be uncommonly well done. We wish some competent person would take up and illustrate some of the difficult genera of Orchids in the same excellent way as Mr. Burbidge has described and illustrated the genus *Narcissus*.

W. G. S.

THE FLOEAL MAGAZINE.

NEW SERIES.]

JULY, 1875.

[No. 43.

FLOWER SHOWS.

ROYAL HORTICULTURAL SOCIETY — *June 2nd.*—GREAT SUMMER SHOW.—A first-class certificate was awarded to Messrs. Cripps and Son, of Tunbridge Wells, for *Clematis Lord Nevill*. The sepals of this plant possess remarkable substance, and are mauve-lilac in colour, with a purple bar. A second-class certificate was given to the same firm for *Clematis Lady Alice Nevill*, a scented rosy-lilac flower, with mauve bar and good form. A second-class certificate was awarded to the extremely elegant *Lilium Hansonii* (*L. avenaceum* and *L. maculatum*), exhibited by Mr. G. F. Wilson, of Heatherbank, near Weybridge. The same gentleman also exhibited blooms of *L. Thunbergianum splendens*, of fine rich orange colour and large size. A first-class certificate was given to Mr. Bull for *Oncidiuin curtum*, a distinct and pretty species, with broadish bronzy petals and sepals, and a broad smooth yellow lip. A similar award was made to Mr. B. S. Williams, of Upper Holloway, for *Polystichum lepidocaulon*, a handsome Fern, some time since illustrated in the *Gardeners' Chronicle*, and now figured in Mr. Williams's newly-issued catalogue. A second-class certificate was voted to Mr. Bull for *Pelargonium Prince of Wales*, a useful decorative variety, with rich vermilion-red petals, having frilled edges and pale eye. From Messrs. Veitch and Sous came *Cypripedium selligerum*, a hybrid between *C. laevigatum* and *C. barmatum*, a plant partaking in a modified degree of the character of both parents, which parents were exhibited together with the hybrid.

For twelve new plants, exclusive of Orchids, Mr. Bull took the first position with a magnificent group, which included excellent specimens of—1. *Aralia Veitchii*; 2. *Croton majesticum*; 3. *Anthurium crystallinum*; 4. *Kentia Moorei*; 5. *Dracaena Hendersonii*; 6. *Phyllotaenium Lindeni*; 7. - *Croton Imperiale*; 8. *Pritchardia grandis*; 9. *Dracaena Goldieana*; 10. *Pheocnemis Leuzeana*; 11. *Dracaena Baptistii*; and 12. *Croton spirale*. Several of the above-named plants have been for the first time fully illustrated in recent numbers of the *Floral Magazine* and the *Gardeners' Chronicle*. This fine group of twelve new plants was considered to be the best and most notable collection of twelve first-rate novelties ever staged. Mr. B. S. Williams, of Upper Holloway, this time took a second position with—1. *Alsophila australis*, var. *Williamsii*; 2. *Cyathea Burkei*; 3. *Zamia Lindeni*; 4. *Dracaena amabilis*; 5. *D. Shepherdii*; 6. *D. Fraseri*;

7. *Croton majesticum*; 8. *Metroxylon filiare*; and other plants of less immediate interest. Mr. Bull was first for a new Orchid, in flower and not in commerce with *Odontoglossum Roezlii album*, a plant recently figured by us in the *Floral Magazine*; first with *Blandfordia princeps*, figured by us in the present Number, for one new plant in flower, and first for six new plants, exclusive of Orchids, which included—2. *Pritchardia grandis*; 2. *Dracaena Goldieana*; 3. *Lomaria dobroydenensis*; 4. *Croton picturatum*; 5. *Dracaena canescens*; and 6. *Blandfordia princeps*. The first prize for new Crotons also fell to Mr. Bull's share in—1. *Croton majesticum*; 2. *C. spirale*; 3. *C. undulatum*; 4. *C. volutum*; 5. *C. Weismanni*; 6. *C. Youngii*. A gold medal was awarded to Mr. John Wills for perhaps the largest and most tastefully arranged group of miscellaneous plants ever staged, and a silver medal to the same gentleman for a magnificent group of *Dracaenas*; to Mr. B. S. Williams for a beautiful group of stove and greenhouse plants, and to Mr. John Laing for a large and attractive group of foliage and flowering plants.

The general exhibition was remarkable for its fine foliage plants; magnificent specimens of which were sent by Mr. Bull, Mr. Wills, Mr. Croucher, and Mr. J. W. Wimssett. In the Davis competition, the first prize was awarded to Mr. Batty, gardener to 11. Thornton, Esq., Sydenham Hill. Hardy Ferns were remarkably well shown by Messrs. Ivery and Son, and Mr. 11. Parker, the former firm taking the first position. There was only one group of six Lilies, and these plants came from Mr. Bull, who took the first prize. Several of the species exhibited have been already figured in the *Floral Magazine*. In herbaceous plants Mr. Parker was to the fore, the second prize going to Mr. R. Dean, of Ealing. Altogether, this summer show was one of the highest interest, although it was held in the dreary arcades on both sides of the Conservatory. Mr. Bull's liberal prizes, offered for the best specimens of the New Plants introduced by him during the last three years, brought together a grand collection of well-grown and handsome novelties, which were exhibited side by side with the cups offered in competition. The first prize, amongst nurserymen, in the class for twelve new plants, sent out since the commencement of 1872—the competition being confined to those who had never won one of these prizes before—went to Mr. H. Wright, Lee, Kent; Mr. W. E. Dixon, Norwood Nursery, Beverley, being second; and Mr. Cypher,

Queen's Road, Cheltenham, third. Mr. Wright's group was composed of finely-grown examples of *Dieffenbachia nobilis*, *Dracaena Baptistii*, *D. Shepherdii*, *D. splendens*, *D. imperialis*, and *D. Fraseri*, *Alocasia illustris*, *Oymnogramma decomposita*, *Plectocoma Andersoni*, *Croton majesticum*, *Dsemonorops palembanicus*, and *Maranta Makoyana*. In the corresponding class for amateurs, the first prize was well won by Mr. G. Legg, gardener to S. Ralli, Esq., Thornton Road, Clapham Park, who had a fine specimen of *Dipladenia Brearleyana* nicely flowered, large plants of *Dieffenbachia nobilis*, *Dracaena Shepherdii* and *D. Baptistii*, *Pheocnemia Leuzeana*, *Aralia Guilfoylei*, *Alpinia vittata*, *Croton volutum*, *C. spirale*, *C. majesticum*, &c. Mr. J. Coomber, gardener to Lieut.-Colonel Wilkinson, Fitzroy Park, Highgate, was second, with a capital lot of plants; and Mr. E. Pilgrim, Fern Lawn, Pitville Crescent, Cheltenham, was third. In the class devoted to amateurs without any restrictions as to previous competitions, the premier award was easily won by Mr. Croucher, gardener to J. T. Peacock, Esq., who had noble specimens of *Daemonorops periantha*, *Guiljelma utilis*, *Daemonorops palembanicus*, and *Dracasna metallica*; also nice specimens of *Aralia Guilfoylei*, *Maranta Makoyana*, *Macrozamia elegantissima*, *Dracsena ornata*, *Nidularium spectabile*, and *Kentia Canterburyana*. Mr. G. Legg was again a prize-winner in this class, taking second honours, with Mr. E. Pilgrim third. In the corresponding class for nurserymen, the competition lay between Messrs. J. and R. Thynne, Great Western Nursery, Glasgow, and Mr. Wimsett, the prizes being awarded in the order named. *Macrozamia plumosa*, *M. spiralis eburnea*, *Dsemonorops palembanicus*, *Encephalartos villosus ampliatus*, and *Dracaena Shepherdii*, were very finely shown in Messrs. Thynne's group. Mr. Wimsett had the largest mass of *Maranta Makoyana* we have ever seen; while many of the plants named above were neatly done here.

June 16.—At this Exhibition, first-class certificates were awarded to Messrs. James Yeitch and Sons for *Adiantum Hendersoni*, a most elegant Fern, with a peculiar habit; for *Begonia Emperor*, one of the finest and largest *Begonias* we have ever seen, with luminous vermilion blooms; to Thomas Laxton, Esq., of Stamford, for a double blush-white Zonal *Pelargonium*, named Wilfrid; and to Messrs. Cripps and Sons, for *Clematis Grand Duchess*, a large white flower, delicately suffused with pink. Cut flowers, of a gigantic size, of *Crinum amabile*, came from Mr. Ross, gardener to C. Eyre, Esq.; and from the Society's garden at Chiswick came a collection of well-flowered plants of *Scutellaria Mocciniana*. Mr. Laxton also sent a fine creamy-yellow Tea Rose, named Lady Isabel Cecil, a plant of great promise, and a Hybrid Perpetual, named Vivid—an excellent dark flower, after the style of Charles Lefebvre.

CATALOGUES RECEIVED.

"B. S. Williams's Catalogue of New Plants for 1875/' contains the descriptions of many novelties of first-rate interest, and a good number of large wood engravings, three or four being reproductions in black and white of the plants recently illustrated in these pages. The principal new and rare plants belong to Ferns, Aroids, Orchids, Palms, Crotons, *Dracaenas*, and other well-known ornaments of our stoves and greenhouses; whilst *Pelargoniums*, *Fuchsias*, *Primulas*, &c. are well represented by new and improved strains and varieties. This is a good and very useful book, and thoroughly well printed.

"New Roses/'—Trade Lists for 1875. Henry Bennett, Manor Farm Nursery, near Wilton,* Wilts.—These lists of New Roses contain a few pages only, and appertain to the recent rose novelties. As Mr. Bennett has taken so many honours of late for Roses, these sheets are of considerable interest to rose growers.

"Fruit Trees, Roses, Ornamental Trees, and Evergreen Shrubs, 1874-5/' J. C. Wheeler and Son, Gloucester.—This is equally good with the other well-known catalogues issued by the above famous Gloucester house. It is well printed, the information is comprehensive, yet condensed, and the book abounds with useful gossiping hints.

"Japanese Lilies, Orchids, Plants, Seeds,*&c." The New Plant and Bulb Company, Colchester.—This is a valuable catalogue, principally appertaining to Lilies, but it includes other bulbous plants, and a few Orchids, Ferns, &c. and a considerable number of rarities. This work opens with a Biblical quotation.

"New Greenhouse and Herbaceous Plants, Roses, Fruit Trees, &c." Lewis S. Woodthorpe, Munro Nurseries, Sible Hedingham, Essex.—A select and very useful catalogue of good plants, fruit-trees, and kitchen-garden seeds.

"Stove, Conservatory, and Bedding Plants/' E. G. Henderson & Son, Wellington Road, St. John's Wood.—The comprehensive and excellent catalogues issued by this firm are too well known to require any detailed comment from us. The present issue announces "Fern Seeds for sale—instructions for sowing sent with the seed." This is somewhat of a novelty to us, and reminds one of the "pollen" which is now and then advertised for sale. The present issue has several illustrations of varied but generally good quality: we are glad to see the old cut of *Aponogeton* at last knocked on the head; the cuts of *Calceolaria* and *Cyclamen* (especially the latter), on page 95, ought speedily to follow, for the most inexperienced cultivator could produce far better and more shapely blooms.

THE FLORAL MAGAZINE.

NEW SERIES.]

AUGUST, 1875.

[No. 44.]

ROYAL HORTICULTURAL SOCIETY.

ON Friday, July 23, at Marlborough House, his Royal Highness the Prince of Wales presided over the meeting of her Majesty's Commissioners for the Exhibition of 1851 when it was decided to accept the following proposals as the basis of an arrangement:—1. That the Society should raise its annual income from subscriptions to 10,000?., an amount that would provide adequately for the promotion of the science and the encouragement of the practice of horticulture, and for the efficient maintenance of the Gardens. 2. That the Commissioners should waive the imminent forfeiture of the lease for non-payment of rent for a sufficient period to give the Society an opportunity of re-establishing itself. These terms, says the *Journal of Horticulture*, are alike fair and equitable to both parties, the Royal Horticultural Society being now placed in such a position as will enable it in future to pursue its course untrammelled with conditions which formerly impeded its freedom of action. Dr. Hogg is the new Secretary of the Society, and this selection augurs well for the future well-being of this the foremost and most renowned of all similar societies in this country. Referring to the great and successful exhibition held at South Kensington on the 21st July last, our contemporary observes, that action has at last been taken, and to a profitable purpose, of which this the most recent exhibition of the Society was the first fruits. Reference must be made to the weekly horticultural papers for a full description of the unparalleled show of plants displayed at South Kensington on July 21st, and we will confine ourselves here to a brief notice of some of the most notable plants. Mr. Bull was awarded a first-class certificate for *Dracaena triumphans*, a very distinct variety, with narrow dark bronzy leaves; and for two new Palms, *Kentia Moorei* and *Martinezia nobilis*; Mr. Fleming, gardener to R. Houghton, Esq., Sandbeys, Liverpool, received the same award for *Adiantum concinnum* var. *Flemingii*, with finely divided arching fronds; a first-class certificate was awarded to Messrs. Ivery and Son, Dorking, for *Polystichum angulare* var. *grandidens pumilum*; to Mr. G. Smith, Tollington Nursery, for *Pelargonium Wonderful*, a sport from *Vesuvius*, semi-double, and of a bright scarlet colour, remarkable for the lasting qualities of its flowers, and quite the finest thing in its way yet introduced; to Mr. Green, Holmesdale Road, Reigate,

for *Aloe Greenii*, a shining mottled-green species, with recurved spiny leaves; and to Messrs. J. and C. Lee, for *Juniperus virginiana Triomph d' Angers*, a pretty silvery variegated Fern. In the great tent Messrs. Veitch and Sons exhibited an immense collection of plants of the highest beauty and interest; the collection was backed by Tree Ferns and Palms, and in the foreground were Orchids, Crotons, Lilies, Pitcher-plants, 'Gloxinias and Begonias, the colours in the plants coming under the two last being marvellous for brilliancy and purity. Mr. Bull also exhibited a truly magnificent collection of plants, principally rare or quite new, including Tree Ferns, Palms, Crotons and *Dracaenas* in great variety. The other principal exhibitors were Mr. B. S. Williams, Mr. Wills, Mr. Turner, Messrs. Osborn and Son, Messrs. E. J. Henderson and Son, Messrs. W. Rollisson and Sons, and many others too numerous to mention.

PINGUICULA GRANDIFLORA.

IN a previous number we referred to the magnificent group of plants belonging to this species, as exhibited by Mr. Dean at a recent meeting of the Royal Horticultural Society. Referring to the culture of this charming Butterwort in the *Gardeners' Chronicle* for July 10th last, where a figure of the whole large group is given as exhibited, Mr. Dean remarks that this species is grown by him under such simple modes of cultivation as to render it a matter for wonder how it is that so very pretty and interesting a plant should not be more frequently met with. That it is not common is evidenced by the fact that comparatively few gardeners have ever seen it, and although a British plant, it is even more rare than are thousands of exotics. The observations made and published both by Mr. Darwin and Dr. Hooker on the insectivorous properties of the *Pinguicula*, have of late aided in drawing attention to the Butterworts, but its beauty gives it a special interest to horticulturists. Perchance the simple and unaffected floral beauties the plant develops may induce many to cultivate it as an object of floral interest, and eventually it may be found in every good collection of hardy plants. My stock of this Butterwort came to me from Northumberland, and was the gift of a thorough enthusiast in hardy plants, who sent me with it one or two simple notes as to its cultivation. I hear from Mr. Smith, Mr. L. Clark, and

others, that this variety is much finer than any other they have seen. Whether the Irish Butterwort is larger than the English kind I cannot say, but I incline to the belief that cultivation has something to do with it, and the fine blooms I have produced result as much from its mode of growth as from any other cause. I have it now in a 16-size pot, growing in good ordinary pot soil, such as I should use for any other hardy plant, but having a considerable addition of white sand in it. I think pans about four inches in depth would suit it better, as the plant does not require depth of soil so much as plenty of moisture and room to expand its side-shoots, which are thrown out in abundance in the autumn. In the winter it can be safely housed on a shelf in any cool place, say in an ordinary greenhouse, where it should be kept sufficiently moist to keep it alive without causing the plants to damp off. The month of March will be a good time to pull the plants to pieces and plant them out in pans of fresh soil, just fixing them to the surface, and from that time forth sprinkling freely with water twice a day. When once growth takes place the plants soon establish themselves, and blooms appear about the middle of April. The length of time the plants remain in flower depends upon the strength of the crowns, as if three or four blooms are sent up the blooming period may extend to six weeks. Where so desired, it may be grown entirely in any cool shady place in the open air if kept well watered. My own plants are now put out of doors in a shady place, and being kept liberally watered, will develop into a perfect mass of growth ere the winter again comes. Because the Butterwort is termed a "bog plant" it is doubtless the practice to grow it in poor hungry peat; this is a mistake, for, whether it prefers a diet of insects or not, at least it likes its soil to be both rich and moist.

CROSSING CARNATIONS AND PICOTEEES.

AT this season of the year, says the *Gardeners' Chronicle*, when the Carnation and Picotee are rapidly developing their flowers, the following remarks on crossing the Carnation and Picotee, with a view of obtaining improved varieties, may be acceptable as showing the mode adopted by that well-known raiser, Mr. E. S. Dodwell, formerly of Derby. Crossing to assist fertilization is but a simple operation. The grower has merely to collect the pollen from one flower and apply it delicately, with a light touch, to the stigma of the flower intended to bear seeds. The pollen, which has the appearance of small round balls of whitish-grey powder, will be found upon the stamens springing from around the ovary, or germ, of the seed-vessels in the interior of the flower, and may be generally found in a mature flower protruding from amongst the centre petals. Should it not be so

disclosed, it may be lying in the interstices between those petals, and a slight shifting of their natural arrangement will suffice to bring it into view. When detected, the pollen may either be collected upon the point of a very fine camel's hair pencil, or the stamen, with the anther upon it, may be removed with a fine pair of forceps, and the farina may thus be brought into gentle contact with the stigma, commencing at the points and passing downward over the fine hairy appendage with which it is provided. The stigma consists of two bold curved horns, which rise almost invariably in a mature flower above and immediately between the centre petals. Much stress is generally laid upon the necessity for covering the flower operated upon with muslin, or of taking other means of preventing the access of bees, flies, and other insects. Where the flower must be left unwatched this may be advisable, otherwise it is of no consequence whatever, as the result will assuredly confirm the success or non-success of the operation. If impregnation has resulted, the flower will collapse within from twenty-four to thirty-hours (earlier in a flower past maturity, and later in one barely arrived at puberty), otherwise not. It is, however, of great importance to remove the stamens from the flowers intended to bear seed, as otherwise impregnation may naturally ensue where a cross had been intended or assumed, and the result of course will mislead. The time most suitable for performing this operation is from 10 A.M. to 4 P.M. on a bright sunny day; if cloudy and dull, impregnation rarely follows, the pollen at such a time being heavy and adhesive in its character, and it has not the light dusty powderiness requisite for fertilization. In all cases the crosses should be between flowers of the same class—that is, scarlet bizarre with scarlet bizarre, purple Picotee with purple Picotee; even when this rule is most sedulously observed, the sportiveness of these flowers is wonderful. In dull seasons the pollen will frequently refuse to ripen in the open air. In such cases the flower from which the pollen is desired may be plucked and placed in water in a greenhouse or the window of a sitting-room with a southern exposure. There it will speedily become fit for the use of the operator, and thus enable him to obtain seed in a season otherwise barren.

"New, Beautiful, and Rare Plants." William Bull, King's Road, Chelsea.—For many years Mr. Bull's plant catalogues have taken a very foremost place amongst works of this class. Indeed, without Mr. Bull's book no horticulturist or botanist can become properly acquainted with all the best new plants of the day. This retail list contains two hundred pages of descriptions (with many illustrations) of new, rare, and beautiful plants of the greatest botanical and floricultural interest.

THE FLORAL MAGAZINE.

NEW SERIES.]

SEPTEMBER, 1875.

[No. 45.]

FLOWER SHOWS.

AT the meeting of the Royal Horticultural Society, held on August 4th last, Messrs. Yeitch and Sons were awarded a First-class Certificate for *Adiantum princeps*, a remarkably handsome, strong-growing maiden-hair Fern. It is described and figured in the *Gardener's Chronicle* for August 14th last, where Mr. Moore, in describing it as a new species, says it is one of the finest of the many beautiful species of maiden-hair which adorn our plant stoves. It was introduced by the Messrs. Yeitch and Sons from New Grenada, and was first exhibited in the splendid group of novelties which was staged by them on the occasion of the horticultural demonstration in the Royal Horticultural Society's Garden on July 21st. The plant was brought before the Floral Committee at the following meeting (August 4th), and then was crowned with its well-merited First-class Certificate.

Not only does this Fern possess a degree of boldness of character, on account of the size of the fronds and the pinnules, but the plants are also remarkably graceful, from their fulness of development and the arching or pendent position they assume. Messrs. Yeitch's specimen plant must be at least from five to six feet across. For so large a plant both the black glossy stripes and the rachides are comparatively slender, while the stalks of the pinnules are remarkably so; and this, no doubt, is mainly conducive to the pendent habit, which is one of the features of the plant. The fronds are broadest at the base; in our example they have a stripe of about a foot, and a lamina of two feet in length, the lower pinnae being about a foot in length, with the lower pinnule on the posterior side bipinnate, so that the frond itself becomes quadripinnate. The pinnules are large, the upper corner obliquely overlying the rachis; the basal margin is entire and slightly obovate, the inner side, or that towards the rachis, being also entire; while the somewhat rounded anterior margin and truncate apex are cut into broadish shallow lobes, and are generally fertile throughout, but where sterile are minutely serrulate. The terminal pinnule is larger than the rest, sharply obovate at the base, and spreading out into a fan-shaped figure, that at the top of the frond being fully 1½ inch across. The sori are about 1 inch long, sometimes considerably more, reniformly curved, with an entire indusium.

The affinity of this remarkable novelty is with *A. tenerum*, in which it is probable other distinct forms lie buried; indeed, Hooker's variety of that species, collected by Seemann in Veraguas, appears to be the same plant as that now under notice. Whether this be so or not, *A. princeps* is abundantly distinct from *A. tenerum*, and in consequence of the fronds assuming a charmingly pendent character it is altogether a much finer ornamental plant. The drooping habit, and the large quadrate lateral and flabellate terminal pinnules, together with the elongate sori, forming obovate depressions and projecting horns at the ends of the lobes, and the slender pedicels of uniform length, furnish well-marked distinctions. It will make one of the finest of all exhibition Ferns.

Messrs. Yeitch and Sons were also awarded a First-class Certificate at the same flower show for *Draosena Taylori*, a hybrid between *D. magnifolia* and *D. Mooreana*, with apparently a very free-growing habit; its leaves are very large and broad, somewhat bluntly rounded at their points, and of a dull bronzy colour, the leafstalks being rich crimson. A similar award was made to the same firm for *Asplenium ferrulaeum*, a very finely cut form, much resembling fennel, and coming from Columbia; for *Platynerium Willinekii*, referred to by us in a former Number; for *Dracaena elegantissima*, one of the narrow, almost straight-leaved forms, of pleasing colour, but distinct from the *D. elegantissima* previously shown by Mr. Bull; and for *Rhododendron Prince Leopold*, a lovely new hybrid, with rich yellowish-buff flowers, suffused with orange-carmine—a novelty we hope shortly to figure.—Mr. Bull was awarded a First-class Certificate for *Cibotium Menziesii*, a distinct species, with thick glossy fronds and bluntly rounded pinnae, glaucous beneath; and for *Dracaena Sex*, a bold, handsome variety, with leaves of a bronzy-reddish crimson hue and reddish-crimson leafstalks. Mr. B. S. Williams, of Upper Holloway, was also awarded a First-class Certificate for *Alsophila australis*, var. *Williamsii*, and for *Woodwardia radiosa*, var. *oristata*—a very distinct crested form, of rare interest. A similar award was made to Messrs. Froebel and Co., Newmunster, Zurich; for *Begonia Froebeli*, a tuberous rooted species, from Ecuador, with intense crimson-scarlet flowers, of good form, but not so showy as several of the newer varieties previously shown here; it was described in the *Gardener's Chronicle* by Prof. DeCandolle, at p. 553, vol. i.,

1874. A First-class Certificate was awarded to Mr. Smith, nursery man, Worcester, for *Cytisus Laburnum aureuni*, a pure, rich, golden-leaved form, which originated as a sport from the common English Laburnum. Unlike most golden-leaved plants, it flowers freely; Bid, as a remarkable instance of the power of the scion over the stock, it may be mentioned that, when budded on the common Laburnum, golden shoots are thrown out below the bud or scion, and even golden suckers not unfrequently spring from the root. It stands the sun well, and must be regarded as a valuable pictorial tree. We intend to illustrate this brilliant novelty at an early period. A First-class Certificate was awarded to *Streptocarpus Greenii*, a hybrid between *S. Saundersii* and *S. Kexi*, partaking of the character of the first named in foliage and of the latter in flowers, which are, however, produced more freely, and are of a pale-bluish lilac colour, with a purple throat; a very pretty acquisition.

FEJESIA LEICHTLINIANA.

This is a beautiful and sweetly scented bulbous plant, native of the Cape of Good Hope, with a fibrous-coated bulb, crowded linear-lanceolate glabrous leaves, sheathing at the base, and a central, somewhat angular spathe, bearing a one-sided curved spike. The flowers are funnel-shaped, white when they first open, buff-coloured subsequently. The full description is given by Klatt, the monographer of the Iridete, in the *Garten flora*.

" It is (says the New Plant and Bulb Company, Colchester, to whom we are indebted for the opportunity of giving this illustration) of very easy culture, potted in a mixture of two-thirds peat and one-third loam, with plenty of coarse sand. Our plants in pots were potted in October, and stood out of doors, with the protection of a hand-light, till the end of November. They were then removed to a coal house, where they have been flowering most profusely in the month of April. The flowers, which are of great substance, live on their first opening quite white, the two lower petals marked with orange streaks. After a few days they assume a primrose tint, and the orange markings become deeper in colour. They emit a very grateful perfume, which pervades the whole house—in the opinion of some like that of the Primrose and Auricula, but to our minds most like that of the tea rose. OUT plant, which was exhibited at the Royal Botanic Society's show on Wednesday (May 8th), and obtained a Botanical Certificate of Merit, was composed of three

bulbs. These bulbs had twelve spikes of bloom, four on each. "We have others which were planted in the open air during the late winter, which just appeared above the ground at the beginning of May, and from which we gathered blooms in June."



FEJESIA LEICHTLINIANA,
NATURAL SIZE.

THE FLORAL MAGAZINE.

NEW SERIES.]

OCTOBER, 1875.

[No. 46.

EXHIBITIONS.

AT the meeting of the Royal Horticultural Society, held on Sept. 1st last, first-class certificates were awarded to Mr. J. Croucher, gardener to J. T. Peacock, Esq., Sudbury House, Hammersmith, for *Fourcroya variegata*, banded with gold up the margin of the leaves—a very distinct plant; and for *Begonia metallica*, with greenish-bronzy, shining hairy leaves and rosy pink flowers—also a very distinct plant, but whether it is a species or hybrid it is difficult to say; anyway, says the *Gardeners' Chronicle*, it will turn out a charming acquisition. To Mr. Eckford, gardener to Lord Radnor, Coleshill, for *Verbena*, Lady Anne Spiers, a fine large flesh, with a faint purplish ring round the eye. To Mr. Keynes, Salisbury, for Dahlias; John Downie, very dark crimson, almost black, a full, well-built flower; Maggie Fairbairn, rosy pink; Charles Leicester, dark blood-red; and Lord of the Isles, canary-yellow; all very good. To Mr. Turner, Slough, for Rose—the Red J. B. M. Camm—a seedling of his own, a full and well-built flower, with the strong and delicious perfume of the old Cabbage Rose; also for Bouquet Dahlia, Triumph, dark reddish crimson and of excellent form. To Mr. Gk Rawlings, Romford, for Dahlia, John Bennett^ of a lemon ground-colour, with the petals edged with cinnamon-red, and a full level centre; and J. C. Quennell, primrose yeUow. The new Dahlias do not exhibit any marked advance upon existing kinds; their improvement seems to have come to a standstill, and flowers are staged as new which are not one whit better than popular sorts of years ago. As to the Gladioli, Mr. Berkeley remarked that he did not consider them so good as last year; but the Dahlias, he thought, would be better later in the season. _____ ^ ^ _ _

THE WATER GARDEN.

IF there is one branch of gardening more neglected than another, says F. W. B. in the *Gardener*, it would seem to be that which relates to the culture of aquatic plants, both hardy and tender. It is not possible, or even desirable, to grow the *Victoria Lily* in every garden; but there are smaller and scarcely less beautiful water-lilies, which only require a tank a few feet square in which to cultivate them very successfully; and in the majority of oases the extra expense of a

shallow slate tank is amply compensated by the minimum amount of attention which the smaller aquatic plants require when once planted, compared with ordinary decorative plants in pots. Many of the most beautiful and interesting of all exotic water-vegetation may be grown in an ordinary plant stove during the summer months, and their introduction would do much to break that everlasting monotony and sameness of material one generally finds in such structures. A slate tank, about four feet square and one foot or fourteen inches deep, is amply sufficient for one of the smaller Nymphseas; and a few smaller plants, as *Pistia stratiotes* or *Limncharis Humboldtii*, only require an inch or two of space round the sides. A series of these shallow tanks might occupy one side of a plant stove during the spring and summer months, and thus, at a slight expense, afford the means of growing a very interesting collection of aquatic plants. These tanks are of a very portable size, and are readily emptied and removed in the autumn, when the plants have died down or are at rest, in which condition one tank is often sufficient to keep the tubers of such plants as Nymphroas, which should never be dried off.

Most aquatics grow well in a compost of fibrous loam and manure, and they may either be planted in pots or shallow wicker baskets (which for the larger kinds are better) plunged beneath the surface.

Aquatics are now kept in stock by most of the principal nurserymen, so that they are readily obtainable. Now that it is the fashion to plant out our conservatories on the natural style, it is advisable to make provision for aquatic or sub-aquatic vegetation. Even if it is a cool or unheated structure, our common white Water Lily and the American Nymphsea *odorata*, together with the fragrant and perfectly hardy *Aponogeton distachyon*, may be introduced with success; but if the water is heated by a circular coil of piping the selection of plants may be increased by planting the lovely and free-flowering blue and rosy NymphsBa Papyrus, and the beautiful umbrella-leaved *Nelumbium* or Sacred Bean should always find a place. Even where no regular aquatic pond or tank is provided by the architect in heated conservatories or plant-houses, the *Nelumbium Papyrus* and other distinct and effective sub-aquatics may be grown with every success by plunging tubs or barrels down through the middle in the beds or

border, so as to afford the necessary means of supplying them with a requisite amount of moisture. I have seen this plan adopted in several cases, and most interesting and surprising effects may be obtained in heated houses by these or similar means.

Out-door tanks, streams, ponds, or basins may be rendered doubly attractive by the addition of white Water Lilies, *Aponogeton*, and *Biohardia sethiopica*; while their moist, spongy margins may be judiciously planted with *Agapanthus umbellatus*, *Arundo donax*, or the hardier *Arundinarias* and *Bamboos*. Even the humblest window-garden need not be less ornamental or pleasing on account of the absence of aquatics when such a lovely plant as the Hawthorn-scented *Aponogeton* may be grown and bloomed all through the autumn and winter in an inverted bell glass or ordinary parlour aquarium. There are many of our commonest decorative plants which double or treble their vigour when grown as aquatics; and this is especially the case with the *Cyprus alternifolius*, *G. laxis*, and the white-spathed Lily of the Nile (*Biohardia*). The golden-flowered *Limnocharis Humboldtii* blooms freely every summer in the open air, planted in a shallow tank in the *Jardin des Plantes*, and succeeds perfectly in a sunny greenhouse in this country. The fresh green water-fern, *Ceratopteris thalictroides*, also grows well in a pot plunged in a pan full of water.

Apart altogether, however, from the beauty and interest of aquatic vegetation in our plant-houses, the introduction of water-tanks influences the climate of such structures to a wonderful extent by keeping them constantly in a state of genial humidity; indeed, the introduction of water-vegetation in the manner above suggested is indirectly a saving of labour in other ways, and is certainly worth more general adoption. Between the two extremes of a gigantic and expensive aquarium for the great *Victoria Lily* and the modest inverted bell-glass, there are hundreds of intermediate means of growing aquatic plants which deserve the attention of all amateurs and gardeners.

The following list of aquatic plants may be useful to some in making selections:—*Nymphaea pygmaea*, white; *N. carulea*, blue; *N. alba*, white; *N. odorata*, white; *N. rosea*, bright rose; *N. rubra*, rosy crimson; *Pistia stratiotes*, or Water Lettuce, bright green tufted foliage; *Vallisneria spiralis*, bright green leaves and curious spiral foliage, flowering stems; *Nelumbium speciosum*, or Sacred Bean of the East, bright rosy flowers and large peltate borne on long stalks, which give them the appearance of so many umbrellas; *Cyperus alternifolius*, Umbrella Sedge of Madagascar; *Ceratopteris thalic-*

troides, Aquatic or Water Fern; *Limnocharis Humboldtii*, yellow; *Thalia dealbata*, fine glaucous foliage; *Aponogeton distachyon*, white; and *Biohardia sethiopica*, white Trumpet Lily, perfectly hardy if plunged one foot or ten inches below the surface, so as to guard against frost.

CAENATIONS AND PICOTEES.

THE following excellent notes on the cultivation of these plants is extracted from an old treatise on the Cultivation of the Carnation and Picotee. Take, says the anonymous author, any convenient quantity of turf, three or four inches thick, from an upland pasture, which is the least difficult to procure when such a field happens to be under the operation of the plough; lay it together in a square flat top, heap for two or three months with an equal quantity in bulk of rotten stable dung regularly mixed with it, and after that time let it be cut down in thin slices, well chipped with a spade, frequently turned over, and in due time exposed as much as possible to sweeten by the frost, but in open weather always left on a ridge to throw off superfluous wet, till it has become a regular heap of mould of near twelve months' standing, or until both dung and turf are sufficiently decomposed as to readily run and rub through your inch riddle. If you find it too light and sandy, there must be a sufficient quantity of sal marl, or, in the absence of that, some stiffish loam, mixed and well incorporated with it, to make it altogether rather of an adhesive quality. This will suit almost every kind of florists' flowers and herbaceous plants.

PICOTEES.

IN the proper cultivation of Picotees, writes Mr. Turner of Slough, great attention is necessary at all times so that the plants may not get too dry. They should be kept moderately moist, and under these circumstances young plants will get well established before the winter. Early in March, if favourable weather, they may be planted out or repotted into their blooming-pots. The soil most suitable for Picotees is three parts good turfy loam and one part good rotten manure with a little coarse sand. After they are potted they should be placed in an open place, kept properly watered, and clear from attacks of green fly. When the pods begin to burst they should be placed in a cool greenhouse, and, if shaded from the sun with abundance of air, they will flower in a much finer way, and last for a much longer time, than if exposed to the vicissitudes of the weather.

THE FLORAL MAGAZINE."

NEW SERIES.]

NOVEMBER, 1875,

[No. 47.]

EXHIBITIONS.

AT the Flower Show held at the Rooms of the Royal Horticultural Society on October 6th last, Messrs. Veitch and Sons were awarded a first-class certificate for a very distinct new Palm named *Brahea filamentosa*. Mr. Croucher, gardener to J. T. Peacock, Esq., Sudbury House, Hammersmith, received a similar award for a new and strikingly distinct Agave, named *Agave Victoria* Reginra, and the committee recommended the plant to the Council for the award of a gold medal. Mr. Noble, of Sunningdale Nursery, Bagshot, exhibited and received a first-class certificate for a magnificent plant of *Gynerium argenteum pumilum*; and Mr. Turner, of Slough, received a similar award for a bouquet Dahlia named "Dove," an exceedingly well-formed flower, creamy-white, tipped with rose and pink. Mr. George Smith, of Tollington Nursery, Hornsey Rise, sent specimens of his fine semi-double scarlet *Pelargonium* named "Wonderful," which must, says the *Gardener's Chronicle*, become a grand market plant, from its excellent habit and the persistency with which its petals adhere together. Mr. Bull sent a remarkable group of new plants,*in which the specimens were large, well-grown, and most beautifully coloured, the subjects being *Dracaena Fraseri*, *Mooreana*, *Baptistii*, and *amabilis*; *Croton majesticum imperialis*, *Weismanni*, *spiralis*, and *volutum*, with several *Gyoads*, *Aralias*, *Palms*, &c.: a silver medal was awarded. From Mr. B. S. Williams came an excellent collection of choice plants, including a flowering specimen of *Miltonia Moreliana*, figured by us in Plate 143; *Onoidium tigrinum*, with five spikes; *Reedia glauoescens*; *Adiantum gracillimum*; the white *Pancretium speciosuin*; *Cypripedium Harrisianum*; *Dracaenas*; *Palms*, &c. Besides the new Palm above-mentioned, Messrs. Veitch and Sons sent a second new Palm in *Areoa Dicksonii*; the same firm also exhibited *Renanthera cocoinea*, with a beautiful four-branched spike of flowers, *Masdevallia amabilis*, and *Exacum zeylanicum*. Mr. Wills forwarded for exhibition a truly gorgeous collection of *Gelosias*, remarkable for their magnificent colours in shades of yellow, scarlet, and crimson; and Mr. Peacock, of Hammersmith, sent *Ficus Gooperi* in fruit, a very interesting and pretty plant. Mr. Green, of Holmesdale Road, Reigate, again showed the curious and beautiful hybrid *Streptocarpus*, named *S. Greenii*. At the same exhibition there was also

an instructive collection of Cones, and a few specimens of Fungi.

ROSE—"GLAZENWOOD BEAUTY."

As we foresaw when we figured this extraordinary yellow Rose, with stripes of crimson, in Plate 174, "Glazenwood Beauty" is attracting an extraordinary amount of attention. In the last part of the *Flore des Serres* the plate is reproduced in fac-simile, with some remarks from the editor, M. Louis van Hontte, who there says he "cannot resist borrowing the figure of this extraordinary Rose, with its unusual colours bordering on the fabulous."

The horticultural press of this country has also kept the Rose in view, and Mr. Henry Curtis, of the Devon Rosary, Torquay, in the *Journal of Horticulture* for Oct. 21st, writes in the following terms of "Glazenwood Beauty":—

"A few years ago we looked upon the list of forthcoming new Roses with much greater interest than at the present day, for so many new varieties are annually poured into the market, which prove mere costly rubbish, that we have had a cooling down. Had Mr. Smith's illustration of 'Beauty of Glazenwood' in the FLORAL MAGAZINE appeared in those old times, it would have created a tremendous sensation, and, cautious as we are grown, this real novelty cannot fail to awaken much interest throughout the Rose world. A Rose of golden-yellow, striped and flaked with scarlet or vermilion, sounds like a dream or a fairy tale. It is, nevertheless, a reality, attested by Mr. Smith's brilliant plate, in which Mr. Woodthorpe considers full justice is not done to the richness of colouring of the Rose itself.

"When I was in Essex, in July, I had the pleasure of seeing fine healthy trees of this remarkable Rose, but I was a little too late for the flowers. Some blooms had just been sent to Mr. Smith for making his illustration, which may have been seen already by some of your readers. I am glad to testify to the very vigorous growth and hardy character of this Rose. The heads of standards of it consist of long graceful shoots from four to six feet in length, which were last winter perfectly uninjured even to the tips, though quite unprotected.

"* Beauty of Glazenwood' is a summer blooming variety, and will make a beautiful climber or an equally fine standard, flowering as it does from every eye on its long pendulous shoots. Mr. Woodthorpe describes it as strikingly lovely in the bud state. It is like, Madame Falcot in its yellow ground, while the vermilion flakes on the petals resemble 'the coloration of a Tulip,' and it has also a delicate fragrance. It will certainly prove an important and

charming addition to our already rich array of Hoses, and be most valuable in hybridisation, on account of its peculiar colouring and distinctness."

In the *Garden* the same writer speaks in precisely the same terms.

HYBRID ORCHIDS.

Now that we give a figure of Messrs. Yeitch and Sons' recently-raised new hybrid *Cypripedium*, we take this opportunity of enumerating some other of the more remarkable Orchid-hybrids of our gardens, as—1. *Phajus irroratus*, a hybrid between *P. grandifolius* and *Calanthe vestita*. 2. *Cattleya hybrida maculata*, between *C. guttata* and *C. intermedia*. 3. *Calanthe Dominii*, between *G. masuca* and *C. furcata*. 4. *Calanthe Veitchii*, between *Lomatodes rosea* and *Calanthe vestita*. 5. *Cattleya Brabantie*, between *C. Loddigesii* and *C. Aclandise*. 6. *Cypripedium vexillarium*, between *C. barbatum* and *C. Fairrieanum*. 7. *Cypripedium Dominii*, between *C. Pearcei* and *C. caudatum*. 8. *Cattleya Manglesii*, between *C. Mosfeioe* and *C. Loddigesii*. 9. *Cypripedium Harrisianum*, between *C. barbatum* and *C. villosum*. 10. *Cattleya quinque-color*, between *C. Aclandice* and *C. Forbesii*. II. *Cattleya (Loelia) Pilcheri-alba*, between *C. erispa* and *C. Perrinii*. 12. *Cattleya Dominiana alba*, between *C. maxima* and *C. amethystina*. 13. *Anactochilus Dominii*, between *Goodyera discolor* and *Ansectochilus xanthophyllus*. 14. *Goodyera Veitchii*, between *Goodyera discolor* and *Anactochilus Veitchii*. 15. *Cattleya Devoniensis*, between *C. erispa* and *C. guttata*. 16. *Cattleya hybrida*, between *C. granulosa* and *C. Harrisonice*. 17. *Cattleya Dominiana*, between *C. maxima* and *C. amethystina*. 18. *Cattleya Exoniensis*, between *C. Mossise (Syon House vars.)* and *Lcelia purpurata*. 19. *Cattleya Sidniana*, between *C. (Lalia) erispa* and *C. granulosa*. 20. *Acrides hybridum*, between *A. affine* and *A. Fieldingii*. 21. *Dendrobrium Dominii*, between *D. nobile* and *D. moniliforme*. 22. *Cypripedium Ashburtoni*, between *C. barbatum* and *C. insigne*. 23. *Cypripedium Sedeni*, between *C. longifolium* and *C. Schlimmii*. 24. *Cattleya Fausta*, between *C. Exoniensis* and *C. Loddigesii*.

REVIEW.

Elementary Lessons in Botanical Geology. By J. G. BAKER, F.L.S. L. Reeve and Co.

THIS excellent little manual certainly supplies an acknowledged desideratum in horticultural, if not in botanical science. It seems like a truism to say that a knowledge of the physical conditions under which a plant grows is necessary for its successful cultivation; yet so great and so general is the ignorance on this point among gardeners, that to many the statement

will not appear superfluous; and even where the ignorance is felt and acknowledged, the information desired is inaccessible. Not many years ago large quantities of Orchids were introduced into this country and lost, for a time at least, to horticulture for want of a knowledge of the simple fact that, though found in a tropical latitude, they grew at an altitude which gave them a temperate climate. As soon as this simple ray of light entered the minds of growers and led to a corresponding change of treatment, universal success followed universal failure. But plant-life is affected by many other circumstances besides heat. Light, moisture, prevailing winds, the proximity of sea or land, the degree of change in the seasons, geological formation, all exercise their influence upon vegetable growth. To draw attention to these, and to lead to their study and to an intelligent application of the knowledge thus acquired, is the object of this little book. The first three chapters treat respectively of heat as affected by latitude, sea or land influences, altitude. The next four describe the botanical characteristics of the zones of heat as intertropical, subtropical, temperate, and arctic-alpine. The eighth shows the manner in which heat influences the distribution of plants. The two following chapters describe the distribution of atmospheric moisture and the botanical characteristics of zones of moisture. The eleventh treats of the influence of man on the distribution of plants; and the twelfth describes the influence exercised by the physical conditions of past times on plant geography. Some very curious and interesting tables are given, and lists of plants illustrative of the principles laid down. The book is written in a clear and simple style, well adapted for the class for whom it is intended, and we strongly recommend it to all engaged or interested in plant-culture. Followed up by a study of the physical characteristics of the various countries of the world, it will add greatly to the interest of what is too often a dreary and monotonous occupation. We would not overlook the educational influence which such a study is calculated to exercise upon a class generally too much excluded from other intellectual resources.—F. L. S.

CATALOGUES RECEIVED.

WILLIAM BULL, Chelsea.—Retail List of New Beautiful and Rare Plants. No. 110.
DICK, RADCLIFFE, AND CO.—Catalogue of Bulbs, &c.
CARTER AND CO.—Catalogue of Fresh-imported Dutch Flower Roots, Plants, Roses, &c.
BUTTON AND CO.—Autumn Catalogue of Bulbous Flower Roots, Plants, Seeds, &c. This catalogue, we observe, is distinguished by very clear and precise directions for culture and management, which will be found very useful, especially by amateurs.
HOOPER AND CO.—Catalogue of Autumn Bulbs.

THE FLORAL MAGAZINE.

NEW SERIES.]

DECEMBER, 1875.

[No. 48.

EXHIBITIONS.

AT the meeting of the Royal Horticultural Society held at South Kensington on November 13th last, Mr. John Wills was awarded a gold medal for a magnificent collection—three dozen in number—of new hybrid *Dracaenas*. For a species of *Cattleya*, under the name of *G. Minas*, Mr. Denning, gardener to Lord Londesborough, was awarded a first-class certificate; this is a strikingly handsome and very distinct plant, with good habit and a bloom of pale magenta, furnished with a sulphur-tinted throat. Mr. Croucher, gardener to J. T. Peacock, Esq., received a similar award for *Echeveria paohyphytoides*, a very distinct upright-growing plant with oblong leaves. A first-class certificate was also given to Mr. R Dean for *Echeveria rotundifolia*, a seedling from *E. glauco-metallica* crossed with *E. secundamajor*, a flat-growing form with a metallic green hue. From Messrs. Yeitch and Sons came a collection of the hybrid plants for which their house is now famous, including hybrid *Rhododendra*, *Nepenthes*, and *Orchids*, for which a gold medal was most deservedly awarded. Messrs. Wm. Paul and Son sent a large collection of branches from berry-bearing and coloured-leaved trees and shrubs. On this and the following day the great *Chrysanthemum* Show was held in the Conservatory, an exhibition to which we shall refer more in detail when we figure some of the best blooms exhibited.

AGAVE VICTORIA REGIN-SJ.

UNDER the above name Mr. Thomas Moore has recently described for the first time a remarkably handsome new species of *Agave*. The description and illustration appear in the *Gardener's Chronicle* for October 16th last, and the name was given by the express permission of her Majesty the Queen. Mr. Moore thus describes this new plant:—" *Agave Victoria*) *Regince*, sp.n. Stemless; leaves thick, very rigid, deep green, above fifty in a rosulate tuft, straight, short (six inches long), triquetrous, gibbose at the base, tapered to an acutely carinate point, which, as well as the spineless margin, is white and pulverulent, so that when pressed together in the

undeveloped condition the edges leave white lines or ridges on the surface of the adjoining leaves; surface canaliculate; from the apex of the leaf is produced a curved, terminal, dark-coloured spine, three-fourths of an inch long, and a few small subsidiary ones on either side. Inflorescence unknown." Mr. Moore further says:—" This remarkably distinct species of *Agave* was first seen in public at the International Exhibition held in Cologne in September last, and was alluded to by us in our report of that meeting as * a most charming new *Agave*, shown by M. L. de Smet, of Ghent, and having more the aspect of a *Leuchtenbergia* than of an *Agave*. The entire stock of the plant, which was very limited, has been secured for his unique collection by J. T. Peacock, Esq., of Sudbury House, Hammersmith, by whom the largest plant, which measures about sixteen inches across, was exhibited at the October meeting of the Floral Committee. On this occasion it received the unanimous award of a first-class certificate, and was recommended to be especially marked by the decoration of a gold medal. Probably the specimen exhibited was not fully grown, but still the plant does not appear to be one of large size. Its deep green, sombre leaves are somewhat dorsally compressed, the surface being canaliculate, about six to eight inches long and one and a half inch wide near the gibbose base, from which they narrow upwards towards the acutely carinate point, and terminate in a stiff, stout, blackish-brown spine. The leaves are margined by a narrow band of four lines wide of white, consisting of a pulverulent matter, which marks the surface of the adjoining leaves when they lie in contact in the undeveloped state. It is certainly one of the most distinct *Agaves* in cultivation, and as regards the peculiar type of beauty exhibited by this tribe of plants it must be regarded as a gem of the first water. The plant belongs to the group with spicate inflorescence, its affinity being with *A. filifera*."

After this publication M. Carrière, in the *Revue Horticole* claimed precedence for a so-called prior name—viz., *A. Consideranti*—for this novelty. Mr. Peacock, the purchaser of the plants, however, has written about the matter in the following terms:—" The plant was shown as a new unnamed species at Cologne, and I subsequently bought of the exhibitor on that occasion, M. L. de Smet, what purported to be the whole of the existing stock of this plant. It was purchased without any reservation

as to the name, though in a letter received a short time afterwards M. de Smet incidentally mentioned that he should like it named after the gentleman who collected it. Believing it to be, as represented, a new plant, and having purchased, as I supposed, the whole of the existing plants, without any obligation as to naming it, I adopted in perfect good faith, the name of *&. Victoria Begins*, which was published in the *Gardeners' Chronicle*, and this name having been used by permission of the Queen, it is impossible for me to withdraw it. I am the more confirmed in this course as the name I have adopted has certainly the priority of publication in the *Gardeners' Chronicle*, having appeared therein with a figure and description on October 16th last, whereas the name of *A. Consideranti* has not, I believe, even yet been published in the botanical sense, though M. Carrière proposes to publish it in the next number of his work. It is to be regretted, for M. Considérant's sake, that this mishap should have occurred; but it is not my fault. I have throughout acted with perfect good faith, and what is past cannot now be recalled."

In the *Revue EortieoU* for Nov. 16th the subject is reverted to, and a somewhat detailed history of this fine new Agave is given. The plant, it seems, is a native of Texas, being found near Monterey. The first specimen was introduced by M. Considérant in 1872, and was exhibited at the general exhibition held by the Horticultural Society of France in that year. A silver medal of the first class was then awarded to it, and a general description of the plant was given by M. Duchartre in the journal of that society. The original plant died in the course of the winter, and it was not until 1874 that *hi.* Considérant was enabled to procure twelve other plants of the same species, which were deposited in the Jardin des Plantes. In August last M. de Smet bought seven of these twelve plants for 350 francs; another was sold to M. Guedeney; one other was presented to the Jardin des Plantes; the remainder are or were in the possession of M. Considérant. It is dear, theft, the plant was known so far back as 1872, and there can be no doubt that it was intended to give the provisional name of *A. Consideranti* to it. The fact remains, however, that no such name has been published. The question therefore turns on the point whether the description of the plant given by M. Duchartre is a description sufficient, in the absence of any name—for none is attached to it—to convey the rights of priority. The description in question is a general one for horticultural purposes only, and is not such as a professed botanist would make use of in describing a new plant in technical terms. Moreover, the description is

unaccompanied by P name, so that Mr. Moore's name—given at the suggestion of Mr. Peacock—and description must take precedence. Had the plant really been named by M. Duchartre, all botanists and horticulturists would have been ready to accept and endorse it; but this not being the case, the name given by Mr. Moore, our eminent British botanist—*AGAVE VICTORIJB REGINJB*—must and will stand.

LILIUM PACKMANNI.

Ma. ANTHONY WATERER has recently flowered a new hybrid Lily under the above name, which is considered to be the finest and most beautiful of all the Lilies which have yet appeared in our gardens. The bloom is equal in size to the largest specimens of *Lilium auratum*; but the tints are far more beautiful, for it partakes more of the colour of *L. speciosum*, which is one of its parents and *L. auratum* the other. The blooms are truly magnificent, after the style of a blossom of the genuine high-coloured type of *L. speciosum* increased in size, so that the segments straightened out measure nearly fourteen inches across, the petalous ones being four inches broad, and give to this grand flower the colouring and rich spotting of the plant just referred to—white suffused with rich rosy crimson, and having deep crimson spots freely distributed over the coloured portion—and some idea may be formed of this splendid Lily. To these noble proportions and this charming colouring, it may be added that the scent is delightful, more approaching the sweetness of *L. speciosum*. A more magnificent lily has indeed seldom or never been seen, and Mr. Packman, the President of the Massachusetts Horticultural Society and the raiser of the hybrid, may well be proud of the addition he has made to our gardens. *Lilium speciosum* (*lancifolium*) was the female parent, and, according to Mr. Packman's report, impregnation took place readily. Fifty young bulbs were planted in the open ground in the spring of 1869. The genus *Lilium* is certainly remarkable in the tenacity with which it preserves the characteristics of the female parent and resists the influence of the male. Mr. Packman was the first person to flower *L. auratum* in America. A large page illustration is given of this truly magnificent plant, from the pencil of Mr. W. H. Fitch, in the *Gardeners' Chronicle* for Oct. 16th last, where the plant is described as "without doubt one of the grandest flowering plants which has ever been introduced to our gardens, and appears to be quite as hardy and as easily grown as its parents, *auratum* and *speciosum*."