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The Botanic Garden; Consisting of

AllSpecies Supposed

OF HARDY

ORNAMENTAL FLOWERING

PLANTS,

CULTIVATED IN GREAT BRITAIN

WITH

Their Description, History, Culture

AND

OTHER INTERESTING INFORMATION.

BY

B. MAUND, F.L.S.

LONDON

SIMPKIN AND MARSHALL, STATIONERS HALL COURT,

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THE BOTANIC GARDEN;

CONSISTING OF HIGHLY FINISHED REPRESENTATIONS OF HARDY ORNAMENTAL FLOWERING PLANTS, CULTIVATED IN GREAT BRITAIN;

WITH THEIR NAMES, CLASSES, ORDERS, HISTORY, QUALITIES, CULTURE, AND PHYSIOLOGICAL OBSERVATIONS.

BY B. MAUND, F. L. S.

VOL. XII.

"Not a tree,
A plant, a leaf, a blossom, but contains
A folio volume. We may read and read,
And read again, and still find something new,
Something to please and something to instruct."

Hurdis.

London;
PUBLISHED BY GROOMBRIDGE AND SONS, PATERNOSTER ROW.
FROM Adam downwards, in the stream of time, have the utility and pleasures of gardening occupied the attention of mankind; and both the science and art which it combines, have been progressive, unless interfered with by the downfall of nations. In our own day this rapidity of progression has surpassed that of every age of which we have any record; aided by means which peculiarly characterize the present age—Exhibitions of garden produce, and periodical literature. We have, gladly, in our own periodical, as far as our own feeble powers admit, endeavoured to assist this advancement. Its sphere of information has been extended, and addition after addition has been made, to compass all that seemed important to the cultivator of a garden. Thus, year after year, it is earnestly hoped, its value has increased.
It is now seen and felt that profit, in a garden, is not incompatible with pleasure — that Fruits are not incompatible with Flowers; and these we combine for the benefit of our readers. Fruit trees, it has been shown by Mr. Errington, and those who have followed his practice, can be maintained in productiveness whilst their dimensions may be limited at the discretion of the cultivator, to render them subservient, whatever their situation, to the purposes of ornament.

Again, cheap protective structures have hitherto been little considered, although capable, under proper management, of affording a vast amount of profitable enjoyment, especially to the amateur cultivator. Many flowers, fruits, and vegetables, may be brought beneficially within the influence of inexpensive protection, as it is intended hereafter to show.

Other subjects of importance it is intended to bring under consideration; especially the value of artificial manures, and their applicability to gardening purposes.
PETUNIA PHŒNICEA.
PURPLE-FLOWERED PETUNIA.

<table>
<thead>
<tr>
<th>Class.</th>
<th>Order.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PENTANDRIA.</td>
<td>MONOGYNIA.</td>
</tr>
</tbody>
</table>

Natural Order.
SOLANACEÆ.

<table>
<thead>
<tr>
<th>Garden Height.</th>
<th>Flowers in Duration.</th>
<th>Cultivated in.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2½ feet.</td>
<td>June to Nov.</td>
<td>1844.</td>
</tr>
</tbody>
</table>

No. 1057.

The Brazilian name of the Petunia nyctaginiflora, is petum or petun, hence, a name derived therefrom was adopted by Jussieu.

The word, Petunia, is now so well established by common use, amongst us, that it is preferable to employ it, to the discontinuance of Nierembergia, which in reality has prior claim. Under No. 416, we figured the original Petunia phœnica, a flower of brilliant purple; still, in the estimation of the florist, it has become less attractive than some of the newly-raised varieties. Such has been the number of these handsome seedlings, possessing, as they do, much to recommend them, in their variable markings and shadings, that we here figure one from amongst them, which may show the power that is in the hands of the ingenious propagator, if he will but assiduously employ it. Every living being, whether of the animal or vegetable kingdom, appears to possess capability of improvement, if man but direct his attention to its favourable development.

Entire beds of these novelties are exceedingly showy, where space admits of such arrangement.
CEANO'THUS PAL'LIDUS.
PALE-FLOWERED RED WOOD.

Class. PENTANDRIA. Order. MONOGYNIA.

Natural Order. RHAHNAEEA.


The Greeks possessed a plant which they called keanothos, a spiny shrub; but their description of it has not enabled modern botanists to identify it. Names, as we have before stated, are sometimes borrowed from the ancients, in preference to inventing new ones, although they cannot be applied to the identical subjects which originally bore them.

"This plant," says Dr. Lindley, "occurs in the gardens under the name of Ceanothus ovatus and thyrsiflorus, from both of which it is certainly distinct. It approaches more nearly to the lovely Ceanothus azureus, but its leaves are green not hoary beneath, and the flowers are smaller as well as much paler. If it were possible that such a thing would happen, this might be suspected to be a cross between Ceanothus azureus and Americanus."

This shrub proves to be much hardier than Ceanothus azureus; and, planted in a dry sandy peat, we have seen it bear our winters and become a large bush. It produces abundance of its modest blue flowers, ornamental to the shrubbery for three or four months. May be easily struck from cuttings of the young wood.
CRATÆGUS OXYCANTHA.
Var. aurea.

GOLDEN-FRUITED HAWTHORN.

Class.
ICOSANDRIA.

Order.
DI-PENTAGYNIA.

Natural Order.
ROSACEÆ.

<table>
<thead>
<tr>
<th>Seedling Variety</th>
<th>Height</th>
<th>Flowers in</th>
<th>Habit</th>
<th>Cultivated in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 feet</td>
<td>May, June</td>
<td>Shrub</td>
<td>1796</td>
</tr>
</tbody>
</table>

No. 1059.

The word, Crataegus, is founded on the Greek kratos, signifying strength; and has been used in allusion to the hard wood of the Hawthorn.

This variety of the common Hawthorn is called aurea, or golden-fruit; its berries, in lieu of being red, like its more common congener, are of golden yellow. On this account it is desirable in the shrubbery, as a novelty, independently of being very ornamental. It is not commonly met with in cultivation; and as it generally bears an abundance of berries, which continue on the trees all the winter, no respectable shrubbery should be without this golden-fruit variety.

An observant person cannot have omitted to notice, that all such shrubs and trees, as are raised from seeds, produce an offspring varying in many particulars. In none is this more marked than in the Hawthorn, which so often bounds our roads on the right and on the left; filling it, in spring, with a powerful fragrance; and in autumn, adorning it with diversified masses of golden foliage, and berries of coral. The first opening buds of the Hawthorn, in spring, show us a pleasing variety. All
being seedling plants, they expand their leaves at different times, and assume thereby various tints of green. In unpruned trees or bushes, where their natural character is truly developed, the branches of some are loose and spreading; others round and compact; some have an upright growth, and others give grace of outline by their pendulous habit. In the autumn, too, their diversity is rendered still more attractive. Their leaves change their hue at different times, some pertinaciously hold fast their wonted green, whilst others relinquish it early, for a change of yellow. Their variable forms, and numerous tints of fruit and foliage, adorn the autumn in some parts of England, with a charm afforded by no other shrub or tree.

Oaks—monarchs of the forest, make, on the contemplative mind, a different impression. They, however, like the Hawthorn, raised from seeds, resist, with variable power, the chilling breath of winter. Some, of delicate constitution, early betray the jaundiced tinge; others, matured and vigorous, nobly defy the northern blast, till this destroyer, invigorated by draughts from the Arctic Ocean, returns like an assassin, in the night, and stains the monarch's robe; which, disdaining to wear, he flings at his feet, and challenges the freezing foe.

The cultivation of this shrub demands so little attention, that it scarcely need be noticed. It is found in almost every soil and situation. We would mention that peculiar varieties, like the golden-fruitied, are increased only by grafting, which is effected on stocks of the common sorts.
Ilex aquifolium.

Middle-painted-leaved Holly.

Class.
Pentandria.

Order.
Tetragynia.

Natural Order.
Aquifoliales.

<table>
<thead>
<tr>
<th>Garden Variety.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Cultivated in</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1060</td>
<td>10 feet.</td>
<td>Apr., June.</td>
<td>Shrub.</td>
<td>1796</td>
</tr>
</tbody>
</table>

The 979th plant of this work is Ilex balearica, a fine shrub, resembling the common Holly, but of more free growth, and larger foliage. To the description of this plant we may refer for the derivation of the name. Holme, is an old and rather common name for the Holly; as may be supposed from its name being still attached to land and houses, as Homesdale, Holmescroft, &c. where its meaning has long been forgotten.

Too little use is now made of Hollies in all our ornamental plantations, for they are, in fact, the jewels of the shrubbery; none so brilliant, none so glittering, as the Holly; and that, not for a season only; but in winter as in summer, in one age as in another, for it lives for centuries. Pliny mentions one, at Rome, 800 years old. If variety be coveted, it is freely given in the peculiarities of the spiny green leaves, in numerous variegations, and in differences of fruit. More attention appears to have been paid to these varieties, a century ago, than at present; for Miller enumerates many; some of which glory in names full of the gallantry of the age, as Phyllis, Painted Lady, Milkmaid, &c.
As some guide to persons collecting different sorts, we will enumerate a few of the most distinct. These are, the Laurel-leaved—small leaves, without prickles. Thick margin-leaved—broad leaves, without prickles, with a thickened margin. Ciliated-leaved—with very fine prickles on the edges. Serrated-leaved, or saw-edged. Hedgehog, or very prickly. The Spineless. White-margin-leaved. White-spotted-leaved. Gold-edged. Gold-spotted. Silver-blotched Hedgehog. Gold-blotched Hedgehog. White-fruited. Yellow-fruited; and of common variegations, of different markings, twenty varieties may be had in any extensive nursery.

However unlike our common Holly the present plant may appear, it is but a seedling from it. Thus, as we have previously mentioned, may a glance be caught of the infinite variations which even human culture may produce; the immutable originals being spread over the earth by a beneficent Creator.

As regards the cultivation of the Holly, no shrub can be more inviting. The only care required, is in transplanting; and this, if done but with common attention, is sure to be successful. It has been recommended by some, that Holly be removed at Midsummer; by others, in April. With due precaution it may be removed at any time, but when there is the choice of time, and a desire to avoid subsequent labour, transplant in November. The soil is of some importance. It should be light and dry. This may always be obtained by shallow planting, and by mixing sand with the broken earth.
**DELPHINIUM CHINESE.**

Var. flore-pleno.

DOUBLE-FLOWERED CHINA LARKSPUR.

*Class.*

POLYANDRIA.

*Order.*

TRIGYNIA.

*Natural Order.*

RANUNCULACEÆ.

<table>
<thead>
<tr>
<th>Garden Variety</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Originated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 feet</td>
<td>June, Sep.</td>
<td>Perennial</td>
<td>in 1846</td>
</tr>
</tbody>
</table>

No. 1061.

Under No. 1028, in the volume just completed, we have given, at some length, an explanation of the name, Delphinium; with a specimen of Gerard's mode of treating the subject.

The single-flowered variety of Delphinium Chinense has been cultivated as an annual, it is, however, perennial; but as seedlings can be easily raised it is advisable to reproduce them every other year; not alone for the luxuriance of the plants, but also for the chances of obtaining fine new varieties, which vary with white, red, and blue flowers; and sometimes, but this is a rather rare occurrence, with double flowers.

For the specimen from which our drawing was made, we are indebted to the kindness of John Willmore, Esq., of Oldford, near Birmingham, in whose garden it was raised, and where are always to be found a collection of valuable rarities.

To cultivate this Larkspur successfully it must be divided in spring, just at the period of its appearance above ground; and the separate plants, after such division, should be transferred to a deep bed of rich light soil.
CAC'TUS ACKERMAN'NI-SPECIOSIS'SIMUS.
HYBRID SHOWY CACTUS.

Class.
ICOSANDRIA.

Order.
MONOGYNIA.

Natural Order.
CACTACEÆ.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1062.</td>
<td>3 feet.</td>
<td></td>
<td>Perennial.</td>
<td>1841.</td>
</tr>
</tbody>
</table>

Cactus is a name of Theophrastus, whose Greek kaktos was, it is believed, our Cardoon; their prickly character seems to be the only resemblance. The petioles, or leaf-stalks, of the Cardoon, were then, as now in some places, esteemed a delicate vegetable.

The genus, Cactus, was formerly made to comprehend a multitude of various plants, which are now divided into several genera. We retain the original name, chiefly from the difficulty which hybrid plants present to the determination as to which of the newly-constituted genera they belong. The very plant which we now figure is intermediate between Cereus and Epiphyllum; and so mingled in nature have been many productions of this class, that distinction has been annihilated. Our specimen was obligingly supplied from the splendid collection of Sir Philip Egerton, of Oulton Park, having been raised by that excellent cultivator, Mr. Errington, whose exhibitions in this class, at the London Horticultural Society’s Meetings, have gained for him several medals and certificates of merit. The species employed at Oulton, Mr.
Errington informs us, are speciosissimus, speciosus, Ackermanni, flagelliformis, truncatus, regalis, and others. Various intermingled generations have been, year after year, produced from these, so that the identity of the parents have been lost in the offspring. The chief characters displayed in the very handsome purple-marginated one now figured, are speciosissimus and Ackermanni.

From the luxuriant growth of some of the specimens at Oulton, we were desirous of laying before our readers Mr. Errington's usual mode of management. This he communicated with the promptitude and candour characteristic of knowledge. "I am not," he says, "aware that my mode of cultivating the Cacti possesses any peculiarity. In potting, I use soils of a very porous character—chiefly composed of chopped turf, in a half-decayed state; rough lumps of peat, coarse bone waste, and charcoal. The pots are effectually drained, and the plants highly excited by heat and liquid manures whilst making their growth. Afterwards, they are gradually cooled down, and towards the middle of August have, in general, been set out of doors, in a light and hot situation. Here they are allowed scarcely any water, the consequence of which is, that by the time they are to be housed, they are somewhat shrivelled and yellowish. In the house they are kept as near the light as possible, and receive only as much water, during winter, as will keep them alive; in the month of February their water is somewhat increased, and whilst their blossom buds are swelling, liquid manure is again administered."
BERBERIS DULCIS.

SWEET-FRUITED BARBERRY.

Class. HEXANDRIA.  Order. MONOGYNIA.

Natural Order. BERBERACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magellan.</td>
<td>8 feet.</td>
<td>April.</td>
<td>Shrub.</td>
<td>in 1830.</td>
</tr>
</tbody>
</table>

No. 1063.

The derivation of the word, Berberis, has been recently explained, under No. 1030. In addition thereto, we may state that the Greek, berbari, a shell, is quoted by some writers as the origin of Berberis, because the leaves of several species shine like a shell.

Many of our readers will remember Captain King's expedition to the Straits of Magellan. To this expedition we owe the present Barberry, it having been discovered by Mr. Anderson, its botanical collector. The first growing plant of it with which we met, and from which we derived our own, a few years ago, was in the Birmingham Horticultural Society's garden. This is now a lofty bush, twelve feet high; and when in flower, with every branch begemmed with gold, its beauty may be readily imagined. Its fruit is said to be delicious, but of this our feathered assistants never have allowed us an opportunity of judging.

This very showy shrub is thoroughly hardy, flourishes in a light sandy soil, and may be increased by layers, which will take two years in becoming well rooted.
DIONÆA MUSCIPULA.

VENUS'S FLYTRAP.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
DROSERACEÆ.

<table>
<thead>
<tr>
<th>Native of Carolina</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 foot</td>
<td>July, Aug.</td>
<td>Perennial</td>
<td>in 1768</td>
</tr>
</tbody>
</table>

Dionæa, a name of Venus, chosen, it may be supposed, from a desire to mark this curious plant by a distinguished, rather than an appropriate, name.

Dionæa muscipula was first received in a living state, into the Royal Kew Gardens, in 1768, from the swamps of North Carolina. No plant, perhaps, ever excited a more intense interest, on its first introduction, than did this curious fly-trap. John Ellis, a merchant, of London, and an indefatigable naturalist, wrote a pamphlet on it; and being a constant correspondent of Linneus, first communicated a drawing and description of the plant to that celebrated botanist. No expressions of ours can be so convincing or interesting as those of Linneus himself, on acknowledging this communication, after having laid it before the Royal Academy of Sciences of Upsal. He says, "I yesterday received your welcome letter, accompanying the description, character, and figure, of that most rare and singular plant, the Dionæa, than which, certainly, nothing more interesting was ever seen. I laid this communication before our Royal Academy of Sciences to-day, nor was it
received without high admiration and astonishment. For my own part, though I have seen and examined no small number of plants, I must confess I never met with so wonderful a phenomenon."

Thus wrote Linneus—the second Adam, to whom had been sent, from all quarters of the globe, nature's choicest riches, to name and to systemize. Never was creative design more evident than in this plant. The expanded leaf—an open trap, charged with an attracting fluid, waits for its victim; the moment its little interior glands are touched by an insect, it closes on the intruder, nor looses it again till all resistance ceases. Experiments indicate that the plant is benefited by decomposing animal matter thus obtained. Our plate will explain this singular apparatus of nature.

The growing plant from which our drawing was made was under the care of Mr. Cameron, Curator of the Birmingham Horticultural Society's garden, and whose successful mode of treatment he has obligingly enabled us to describe. He says that the safest method of cultivating it is to pot it in chopped sphagnum, fine peat, and silver sand; covering the surface with sphagnum only. Then place the pot within a larger one, filling up the vacant space also with sphagnum. Water it over head, and place a small bell-glass over the inner pot, and plunge them in the shaded part of a cold frame, and then place a second glass over the whole; the sphagnum will retain moisture for several weeks or months, and prevent the necessity of repeated waterings, which are so often injurious, even to marsh plants.
No. 1065.

The Greek word, kuklos, signifying a circle, is generally admitted to have been the foundation of the word Cyclamen. Some writers consider that allusion was hereby intended to be made to the round tuberous roots and leaves; others, that the coiled peduncles or fruit-stalks would have been the part alluded to. There can be no doubt, however, but that all these circumstances were recognised, as uniting to render the name appropriate.

Who is there amongst us that does not feel some pleasure kindled within him on passing the cottage window filled with growing flowers—a mark of happiness within—a gratification inexpensive and innocent, which the most apathetic and uncultivated nature could scarcely pass unheeded. It may be feared that the beautiful Cyclamen Persicum is rarely seen amongst cottagers, on account of its management happening to vary in some degree from that of the generality of plants, yet it is not a single effort or idea more difficult of culture; indeed it is less so, when understood, than the commonest of plants, inasmuch as in a state of rest, it becomes a rigid temperance member.
Temperance prolongs life; and this maxim may as truthfully be applied to our Cyclamen as to prudent men; for the very plant, from which our flowers were gathered for drawing, is nearly, if not exceeding, forty years old. We, ourselves, have seen its beauty, periodically, for more than thirty years, and it is now in vigorous health and flower, a foot in diameter, betraying not a symptom of age or debility. The lady to whom it belonged, (for she is now no more,) kept it in the same pot for many years. After flowering she gradually decreased its usual supply of water till it became quite dry; it was then laid aside and unseen, till the beginning of winter, when it was again taken into the sitting room, and supplied sparingly with water, till in flower. When in full beauty, dispensing its grateful fragrance, a more free supply of water was given it, and continued till its time of rest again returned; and thus it ran its course of years and sweetness.

This variety of Cyclamen Persicum—the pink-eyed, is the handsomest; but the clear white, which is an accidental variety, is the most rare, and is likely to continue so, on account of its seedlings resuming their original colour. Some with flowers wholly pink have been raised from seed; and it is equally variable in regard to fragrance, some plants being highly perfumed, whilst others are completely inodorous.

Equal parts of loam, leaf-mould, and silver sand, form an admirable compost for the Cyclamen. Some cultivators prefer plunging the pot with its inactive tuber, into a dry border, during summer, to letting the roots become wholly dry.
CEANO'THUS AZU'REUS.
BLUE-FLOWERED CEANOTHUS.

Class
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHAMNACEÆ.

Native of
Mexico.

Height.
10 feet.

Flowers in
August.

Habit.
Shrub.

Introduced
in 1818.

No. 1066.

The derivation of Ceanothus was given but a short time ago, under No. 1058.

When treating of Ceanothus pallidus we alluded to the present species, azureus, so that it became desirable that we should publish it. Subsequently we had the pleasure to receive a flowering plant of it through the never-failing liberality of a zealous cultivator of choice plants—Miss Balguy, of Hazlebrow, near Derby. Its individual blossoms are small and unimportant, but their abundance produces a most pleasing effect—an azure cloud, rather than glittering stars.

Although it has never been esteemed a hardy shrub, yet in sheltered situations, trained against a wall, it has endured our severest winters. It is probable that success is more dependent on the soil than the situation—not that it be rich or of any peculiar ingredients, but dry and porous. Cuttings of the half-ripe wood will strike root in silver sand, with a little bottom heat; but those to whom it is inconvenient thus to strike cuttings, may obtain increase very readily by layering its slender low branches.
POTENTILLA FLORIBUNDA.
BUNDLE-FLOWEREDE CINQUEFOIL.

Class. ICOSANDRIA. Order. POLYGYNIA. Natural Order. ROSEAE.


No. 1067.

The herbalists of former ages usually established names for plants according to what they conceived to be their positive qualities; the word Potentilla, however, has been formed as the diminutive of potentia, signifying that it possesses little power.

By Nestler, in his Monograph of Potentilla, this plant is inserted as a variety only of fruticosa. His opinion has not been generally accepted; and indeed, these plants, when grown together, independently of scientific comparison, exhibit a more strongly marked distinction than many species whose difference has never been doubted.

To those who plant in masses, the Potentilla floribunda offers itself as a suitable subject for their purpose. Its dwarf habit, abundance of blossoms, and long continued gaiety, make it exceedingly desirable; and, excepting in winter, the common observer would never recognise it as a shrub.

Potentilla floribunda will flourish in any common garden soil; and being well furnished with fibrous roots, may be transplanted at any time, from September to April. It may be increased to any extent, by layering, or it may be struck from cuttings.
HAWORTH'IA ATTENUA'TA.
ATTENUATED-PEARL HAWORTHIA.

<table>
<thead>
<tr>
<th>Class</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEXANDRIA</td>
<td>MONOGYNIA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Natural Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>LILIACEÆ</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Native of C.G.Hope</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 foot.</td>
<td>August.</td>
<td>Perennial.</td>
<td>in 1790.</td>
<td></td>
</tr>
</tbody>
</table>

No. 1068.

Haworthia is a genus established by M. Duval, the name being given in honour of Adrian Hardy Haworth, Esq., a zealous naturalist and kind-hearted man. He died in 1833, much regretted by all who had the pleasure of his acquaintance. Haworthia is by some botanists esteemed only as a sub-genus of Aloe. The great extent of the latter may, however, justify the division.

Very many of these succulents, as they are usually called, are admirably suited for window plants; not alone for the ease with which they can be cultivated, but for the variety of their grotesque forms. Many of them are genuine oddities—very puzzling, if inquiry be made regarding the occasion or utility of their shapes; and, perhaps, useful in suppressing the pride of human knowledge.

Haworthia attenuata, has rasp-like leaves, which vary in their degree of roughness according to their luxuriance of growth. It tolerates almost any amount of negligence in regard to watering. It should be potted in a mixture of loam and old lime rubbish, and be kept in a hall or sitting room window.
CALEN'DULA CHrysanthemifo'lia.
CHrysanthemum-Leaved MARIGOLD.

*Class.*
SYNGENESIA.

*Order.*
NECESSARIA.

*Natural Order.*
COMPOSITÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
</table>

No. 1069.

The Latin word calendæ, signifying the first day of every month, is believed to be the origin of the name Calendula, a word that is intended as an allusion to the constant flowering of the species to which it was first applied.

This Calendula has usually been cultivated as a greenhouse plant; but, with its roots confined in a pot, it has seldom been seen flowering in that profuse, and luxuriant manner, which are its characteristics in the open ground. Its flowers are large, of a fine pale orange colour, and they continue long without fading. It well deserves that which it will require, which is, to be taken into an inhabited room during winter.

The plants may be taken up from the borders in autumn, put into pots, and placed in their winter quarters; where a little water should be given them occasionally. If young plants are required from cuttings, they should be struck in the spring, in a hotbed. In May, the plants may be again turned out of their pots, into the open ground, where the soil should be made light and rich, and they will flower luxuriantly.
GARDO'QUIA BETONICOI'DES.

BETONY-LIKE GARDOQUIA.

Class.  Order.
DIDYNAMIA.  GYMNOSPERMIA.

Natural Order.
LAMIACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico.</td>
<td>4 feet.</td>
<td>Aug. to Sep.</td>
<td>Perennial.</td>
<td>in 1838.</td>
</tr>
</tbody>
</table>

No. 1070.

Gardoquia was chosen as the name of a genus of plants in honour of Gardoqui, a patron of botany, and a member of the ministry of Charles IV of Spain.

This species was raised from Mexican seeds by the Messrs. Lowe, nurserymen of Clapton, and was at first regarded only as a greenhouse plant; it proves however, highly ornamental in the borders, will bear exposure, during a mild winter; and in the severest, requires but protection from frost, in a cold frame. Notwithstanding this, it is a desirable plant for those who wish to give it greenhouse culture, for it is sweet-scented, and handsomer than is indicated by our engraving, the artist having copied a very inferior specimen.

This species of Gardoquia, when properly managed, becomes robust, and increases freely, so as to admit of ample increase by division of its roots. If wintered in a frame, it should be repotted in March, and continue in the frame, and be duly watered, till the latter end of April, when it may be turned into the open soil, without disturbing its roots, and it will soon become luxuriant.
We have said that Gardoquia is sweet-scented; this is a characteristic of the Order to which it belongs. All labiate plants, that is, those with two-lipped flowers, have, in their leaves, numerous little reservoirs of fragrant oil, which is, in some plants, a valuable stimulant, particularly in Mint. Spearmint water, and Peppermint water, are dependent on it for their aromatic, carminative, and stimulant, qualities. The latter is a well-known vehicle for carrying disagreeable medicines, disguising their taste, and allaying their irritability.

In many of these labiate plants is also found a substance resembling camphor. Dr. Lindley, in his "Vegetable Kingdom," says, "Sage, Lavender, Savory, and Hyssop, and Monarda punctata, have been found to yield it, but the plant which is reputed to furnish the most, is Rosemary (Rosmarinus officinalis). This plant has a great reputation otherwise; a strong decoction of the foliage is employed to allay the heat of the skin in erysipelas; it has been employed as a cephalic medicine, relieving headache, and exciting the mind to vigorous action. It is also remarkable for its undoubted power of encouraging the growth of hair, and curing baldness; it is in fact what causes the green colour of the best pomatums used for that purpose; an infusion of it prevents the hair from uncurling in damp weather; it is, moreover, one of the plants employed in the manufacture of Hungary water, the French Vinaigre aux quatre voleurs, and Eau de Cologne. The admired flavour of Narbonne honey is ascribed to the bees feeding on the flowers of this plant."
PENTSTEMON CRASSIFO'LIUS.
THICK-LEAVED PENTSTEMON.

Class. DIDYNAMIA. Order. ANGIOSPERMIA.

Natural Order. SCROPHULARIACEÆ.

<table>
<thead>
<tr>
<th>Native of N. America</th>
<th>Height. 1 foot.</th>
<th>Flowers in June.</th>
<th>Duration Perennial.</th>
<th>Introduced in 1836.</th>
</tr>
</thead>
</table>

No. 1071.

The name of this genus has been deduced from the two Greek words PENTE, signifying five; and stemon, a stamen. The Linnean class of this plant—Didynamia, has, in reality, but four stamens, but in Pentstemon the rudiment of the fifth occurs, which the name adopted is intended to indicate. An approach towards the succeeding class—pentandria, is shown by this circumstance; as also by its calyx and corolla, which are five-lobed.

This plant was discovered by Douglas, on the north-west coast of North America. It is a perfectly hardy, dwarf, shrubby, plant, of compact habit; which, flowering early and profusely, is a most desirable border ornament.

Nature points out its mode of management. The branches have a tendency to curve down to the soil, and when they touch it, roots will be emitted. This propensity should be encouraged, by neatly pegging down the branches, and spreading over them a little rich light soil, which will induce a luxuriance; and not only this, but whenever it is desired, the little bush, thus formed, may be divided, and will yield abundant increase.
JABORO'SA INTEGRIFO'ELIA.
ENTIRE-LEAVED JABOROSA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
SOLANACEÆ.

<table>
<thead>
<tr>
<th>Native of B. Ayres</th>
<th>Height</th>
<th>Flowers in Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 foot</td>
<td>July &amp; Aug.</td>
<td>in 1834</td>
</tr>
</tbody>
</table>

No. 1072.

The Arabic word, Jaborose, was applied to the Mandrake, and from the affinity of the present genus with the Mandrake, Jussieu, gave it the name of its ally.

This plant is a novelty in our gardens, and being stemless—it's leaves and flowers springing immediately from the roots, it may suitably fill up a sheltered corner, at the foot of a wall, where other tenants occupy the space above it. We are not informed of the particular part of Buenos Ayres of which this plant is a native, it may, however, be perfectly hardy, although originating under the thirty-fifth degree of latitude, for in estimating the constitution of plants, it must never be forgotten, that elevation, as well as latitude, must be taken into the calculation. Even within the tropics, where, on the lower levels of the earth, the scorching heat of the sun, in some parts of the year, renders all, or nearly so, a barren waste, mountains frequently present themselves, and by their elevation render habitable, a portion of the globe that would otherwise be nearly desolate, and unprofitable. Such is the beautiful economy of na-
ture, however blind man may be to its arrangements. The traveller may proceed under the same parallel of latitude, that is, at the same distance from the sun's apparent course, whilst, ascending mountains, he may escape as it were, from the torrid summer—parching up all below, to genial spring, with continual verdure; and so proceed through all the gradations of temperature and of vegetation, till he reaches perpetual snow—everlasting winter, the void where no plant meets his eye—no animal relieves the awful, the perpetual silence of the dreary expanse.

One peculiarity of these intertropical mountain-made seasons is worthy of remark. They are ever the same. Here the vicissitudes of the seasons are wanting. The upper regions are always cold, the mountain plains always temperate, whilst the lower plains are always hot. Malte Brun has well said, "The summer, the spring, and the winter, are here seated on three separate thrones, which they never quit; and are constantly surrounded by the attributes of their power."

The Jaborosa integrifolia has succeeded admirably at the foot of a wall, in the front of a greenhouse; having been planted in 1845, it spread and increased in 1846, extending its underground stems and producing abundance of foliage and flowers. It delights in a sandy compost, which gives it encouragement to extend its roots; and if kept in a pot, it should have sufficient space to admit of free growth. Like the majority of plants, in pots, it will be benefited by the addition of a portion of sandy peat to its compost.
Narcissus capex
Lycium arium
Galega orientalis
Satureja Fortunei
NARCIS'SUS CA’PAX.
CAPACIOUS NARCISSUS.

Class.
HEXANDRIA.

Order.
MONOGYNY.

Natural Order.
AMARYLLIDACEÆ.

<table>
<thead>
<tr>
<th>Native of France</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Cultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>6 inches</td>
<td>April</td>
<td>Perennial</td>
<td>in 1596</td>
</tr>
</tbody>
</table>

No. 1073.

The name, Narcissus, is derived from the Greek, and signifies stupor.

This showy species of Narcissus is a very old inhabitant of British gardens; common in some districts, whilst unknown in others. Our own acquaintance with it we owe to the kind attentions of the Rev. H. C. Carleton, of Arrow, Warwickshire; whose vicarage garden is known as a model of nice keeping, and refined taste. Here the Narcissus capax has long been a favourite; and, as in its double state we could not determine its species, we referred it to the Rev. Mr. Bree, by whom it had been distributed. Amongst other information from Mr. Bree, for which we are greatly indebted to him, we have the following reply to our enquiries respecting this Narcissus.

"The plant you inquire about can, I think, be no other than the Queltia capax of Haworth, (see his paper in the Philosophical Magazine for June, 1830) and the Assaracus capax, var. plenus, of his Monograph of the Genus Narcissus. I well remember having given it to him, years ago, and he remarked to me that he had lost sight of it for
many years, and was glad to renew his acquaintance with an old friend. He thus speaks of it, in the former quoted paper: 'I have not seen this plant in a single state, but possess a beautiful double-flowering variety of it, from my friend the Rev. W. T. Bree, of Allesley; which is both well figured and well described in Parkinson's famous 'Paradisus Terrestris,' t. 107, 6, 4; and, until the present season, was one of the missing or lost hardy bulbous beauties of that faithful writer, and of the parterres of our forefathers two hundred years ago.' Parkinson's quaint description of the flower is very characteristic; but his figure, though intelligible enough, hardly represents the flower sufficiently regular or star-like. I was always at a loss (like yourself,)" says Mr. Bree, "to know what family of the Narcissi to refer this plant to, never having seen it in a single state. The double variety has been familiar to me from my earliest boyhood, having been originally given to my father by Mr. Saville, of Lichfield, a great lover and cultivator of flowers, and who contrived to pick up, from all parts of the country, whatever was most worthy of cultivation."

Parkinson describes it as "consisting of six rows of leaves, every row growing smaller than the other unto the middle; and so set and placed, that every leaf of the flower doth stand directly almost in all, one upon or before another unto the middle, where the leaves are smallest, the outermost being the greatest, which maketh the flower seem the more beautiful."

This Narcissus requires no peculiar treatment.
LYCIIUM AFRUM. 
_Var. spinosum._
SPINY AFRICAN BOX-THORN.

_Class._
PENTANDRIA

_Order._
MONOGYNIA.

_Natural Order._
SOLANACE.E.

<table>
<thead>
<tr>
<th>Native of C.G. Hope</th>
<th>Height</th>
<th>Flowers in</th>
<th>Habit</th>
<th>Cultivated in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 feet</td>
<td>June, July</td>
<td>Shrub</td>
<td>1712</td>
</tr>
</tbody>
</table>

No. 1074.

This plant is supposed to have been named from Lycia, a part of Asia. The Greek word, Lykion, was used by Dioscorides as the name of a thorny shrub.

It is probable that this plant is sometimes propagated from seeds; and, consequently, varieties occur of very different character. Cultivation, it is certain, has considerable influence on its general growth and appearance; but it is considered by some cultivators as impossible that it can be productive of the difference which we are told permanently exists amongst the plants of this species. Some continue to grow bushy, compact, and almost spineless; whilst others seem to consist of a collection of straggling thorns; hence we call this the spiny variety.

The chief aim in the cultivation of this plant should be to ripen the wood thoroughly, by giving it a summer temperature as long as is convenient. At the same time luxuriant succulent shoots should be shortened or cut out. It should be potted in a mixture of peat and loam, if kept for window protection; or be planted against a warm wall.
GALÉ'GA ORIENTAL'IS.
ORIENTAL GOAT’S RUE.

*Class.* MONADELPHIA.  
*Order.* DECANDRIA.

*Natural Order.* LEGUMINOSÆ.

<table>
<thead>
<tr>
<th>Native of Levant.</th>
<th>Height.</th>
<th>Flowers</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levant.</td>
<td>3 to 4 feet.</td>
<td>June, July.</td>
<td>Perennial.</td>
<td>in 1801.</td>
</tr>
</tbody>
</table>

No. 1075.

The original Galega of the ancient Greeks was, it is probable, a fodder plant, and received its name on account of its properties; *gala*, signifying milk, being the admitted root of Galega.

This is by far a less common plant than Galega officinalis, and although not more showy, is the most ornamental. Both species, from their height, and the mass of herbage which well established plants of them produce, are very suitable for affording a back ground to more delicate subjects.

When flower borders, as is frequently the case, are formed against the boundary of a garden, it is highly desirable that the wall or fence should not be prominently distinguishable, but that it be concealed by such tall plants as our present Galega; or, which is still better, by evergreen shrubs, judiciously varied. The objections raised, by some fanciful gardeners, against the mixture of shrubs with herbaceous plants, are quite ridiculous, considering the advantages that, in some situations, these combinations afford.

Galega orientalis grows freely, and increases rapidly, in any good garden soil.
STATICE FORTUNI.
MR. FORTUNE'S SEA LAVENDER.

Class.  Order.
PENTANDRIA.  PENTAGYNIA.

Natural Order.  PLUMBAGINACEÆ.

Native of Height.  Flowers  Duration.  Introduced

No. 1076.

Statice, from statizo, to stop, from the astringent properties of the plant.

This is one of the many plants collected by Mr. Fortune, in China, and which promises to be a desirable acquisition to our gardens. A yellow Statice is a novelty which has not been expected; and it cannot be doubted but hundreds of other rarities will, ultimately, be drawn from these vast territories, from which Europeans have so long, and so perseveringly, been shut out. Mr. Fortune, was sent to China, by the London Horticultural Society, in the spring of 1843, and returned in 1846; having been absent somewhat more than three years, gathering a rich harvest of interesting subjects, never before introduced to Europe.

The Statice Fortuni is supposed to be quite hardy, but having been so lately introduced, this has not been proved to a certainty. In loam and peat, it flowers very freely, and may be increased from cuttings of the side shoots, which spring from the crown of the plant. Perhaps, like some other species of Statice, it can be also propagated from cuttings of the roots.
BERBERIS FASICULARIS.
BUNDLED BARBERRY.

Class. HEXANDRIA.
Order. MONOGYNIA.

Natural Order. BERBERACEAE.

<table>
<thead>
<tr>
<th>Native of California.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>10 feet</td>
<td>April, May</td>
<td>Shrub.</td>
<td>in 1819</td>
</tr>
</tbody>
</table>

No. 1077.

Berberis is a very ancient name, and is believed to have had no other meaning than as applied generally to a wild berry.

The Berberis fascicularis was first raised in England from seeds, sent home by the well-known Spanish botanist, Lagasca. It is a desirable hardy evergreen shrub; and, as it may be increased with facility, would be quite suitable for planting as an under-shrub on an extensive scale. We have before said that the Barberries have been unduly neglected; since, by the adoption of them in pleasure grounds, a lively effect from their evergreen foliage, as well as considerable gaiety from their flowers, would be abundantly produced.

As some authors continue to use the generic name Mahonia for a section of the Barberries, we will borrow an extract from the Botanical Magazine, given under the species now described. "By the advice of our friend Mr. Robert Brown, we have not adopted Nuttall's name of Mahonia, because there does not seem to be any constant generic characters by which the pinnate-leaved Barberries can be separated from the simple-leaved. Indeed
the simple leaf in the common Barberry, and all the other species belonging to the same section, being articulated with the petiole, proves, according to this excellent physiologist, a naturally compound nature, just as the leaf of the Jasmine, which is more usually compound, becomes in several species simple; but still shows its compound nature by its articulation with the petiole; there is therefore no more reason on this account to separate the pinnated-leaved Barberries from the simple-leaved, than there is to divide the Jasmimes with simple, from those with compound leaves. Nuttall and De Candolle have erroneously adduced the want of glands at the base of the petioles as a distinguishing character, as Mr. Brown finds that these exist in all the known species, though varying in size, and sometimes, as in our plant, nearly concealed by the breadth of the flat filament. The only other character of importance in the attempt to establish Mahonia as a distinct genus, is the teeth on the filaments, which Mr. Brown finds are present in three of the pinnated-leaved species; but entirely wanting in two." The impropriety of the division of these plants, on account of some of them having simple, whilst others have compound leaves, is acknowledged by all, or nearly all, English botanists.

In cultivation this, and nearly every other of the Barberries, may be managed with very little attention; many of them, indeed, luxuriate, and multiply so freely by offsets, that they not only live without care, but may be rapidly increased simply by division of their roots.
CYTISUS ALBUS.

White Cytisus

*Class.* MONADELPHIA.  
*Order.* DECANDRIA.

*Natural Order.* LEGUMINOSAE.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers in</th>
<th>Habit</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portugal</td>
<td>8 feet</td>
<td>May</td>
<td>Shrub</td>
<td>in 1818</td>
</tr>
</tbody>
</table>

No. 1078.

Pliny speaks much of the Cytisus, which was, as he says, discovered and known in Cythnus, and thence brought to all the cities of Greece. From the place of its discovery it received its name.

The above observations do not apply to our present Cytisus, which is a native of Portugal, but to a somewhat similar plant.

The common variety of this showy shrub, is known as the Portugal Broom; and its elegant twiggy growth, and profuse production of flowers, make it a constant favourite. This new variety, prettily tinged with pink, is yet but little known, and is doubtless, a seedling from the former. A close examination of the seedlings, which spring spontaneously about plants of the Portugal Broom, will show that their flowers frequently vary; although in a manner imperceptible to the common observer, yet to the botanist they show an indication of change, by the standard, near its base, being sometimes striped with pale green, at others with purple.

As it requires no attention, this shrub should have a place in every garden and shrubbery.
SCUTELLARIA EL'EGANS.

ELEGANT SCULLCAP.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LAMIACEE.

<table>
<thead>
<tr>
<th>Native of N.Holland?</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced in 1842?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1079.</td>
<td>3 feet</td>
<td>August</td>
<td>Perennial</td>
<td></td>
</tr>
</tbody>
</table>

The little dish-like portion of the calyx of this genus, which separates for effecting the dispersion of the seeds, should be examined by those to whom it is not familiar. To this appendage the generic name refers, and it is one of those modifications of the beautiful provisions of nature, for the protection and dissemination of the seeds, which does not occur in an exactly similar manner in any other genus with which we are acquainted. Equally curious means for protecting the seed, and preserving the species of vegetables are, however, evident enough in a multitude of instances. How, it may be asked, can we shut our eyes to these examples of omniscient power?

"Are there not here a thousand things
To lift the thoughts to Heaven,
If sanctified imaginings
Be to those musings given?"

Scutellaria elegans is a handsome showy plant, for the mingled parterre, or for distinct beds; and it also forms a suitable subject for window culture. Or, if made a garden ornament for summer, it should be taken in for protection during winter.
CERASUS MAHALEB.

PERFUMED CHERRY.

Class.

ICOSANDRIA.

Order.

DI-PENTAGYNIA.

Natural Order.

DRUACEÆ.

<table>
<thead>
<tr>
<th>Native of Mahaleb.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 feet</td>
<td>April, May.</td>
<td>Tree.</td>
<td>in 1714.</td>
</tr>
</tbody>
</table>

No. 1080.

Cerasus, in ancient geography, is a town in Pontus Cappadocius, on the southern coast of the Euxine sea. The country about Cerasus, Tournefort mentions as being hilly, and abounding with forests, in which Cherry-trees grow naturally; whence it was that the Romans, after their conquests in Asia, under Lucullus, obtained this fruit, and gave it the name of Cerasus.

The Mahaleb Cherry, as a fruit, is unimportant to us; but the tree, from the use to which it has of late been applied, is likely to be exceedingly useful. Fruit growers are already duly appreciating the value of the improved dwarfing system, as applied to Apples and Pears. Mr. Rivers, of Sawbridgeworth, is now carrying out the same principle with other fruits; and it has been proved that what the Paradise Stock, and Quince, are to the Apple and Pear, our present subject—the Perfumed Cherry, is to the cultivated Cherry. Mr. Rivers, in his catalogue of fruits, observes that "Cherries may be made interesting garden trees, by growing them as dwarf bushes, grafted on the Cerasus Mahaleb or Perfumed Cherry. This stock has
been used in France many years for dwarf Cherries for gardens; it bears root pruning better than the common Cherry stock; and if the shoots of the plant are shortened in June or July, it soon forms a compact round bush." We now have such trees, between two and three feet high, bearing fruit.

Independently of its utility for the above mentioned purpose, which we have been desirous of making more generally known, it forms an ornamental shrub or tree for pleasure grounds; and both its fruit and wood have long been, and now are, used on the continent. A description of its use is quaintly enough described by Gerard, who says “The fruit, or rather the kernell thereof, is as hard as a beade of Corall, somewhat round, and of a shining blacke colour; which the cunning French Perfumers do bore thorow, making thereof bracelets, chaines, and such like trifling toyes, which they send into England, smeared ouer with some odde sweet compound or other, and they are here sold vnto our curious Ladies and Gentlewomen for rare and strange Pomanders, for great summes of money.”

The wood possesses an agreeable fragrance, is very hard, and of a reddish tint, and is frequently used on the continent for cabinet work, indiscriminately with that of the Bird Cherry — Cerasus padus, No. 496. On the continent too, at least in France, where more science is applied to the manufacture of perfumes than in England, both the wood and the leaves of the Cerasus Mahaleb are used for the purpose, and from them an agreeable fragrant distilled water is prepared.
**Clematis Viticella.**

**Vine-Bower.**

<table>
<thead>
<tr>
<th>Class.</th>
<th>POLYANDRIA.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order.</td>
<td>POLYGYNIA.</td>
</tr>
</tbody>
</table>

**Natural Order.**

**Ranunculaceae.**

<table>
<thead>
<tr>
<th>Native of Spain.</th>
<th>Height.</th>
<th>Flowers</th>
<th>Duration.</th>
<th>Cultivated in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>20 feet</td>
<td>June to Sep.</td>
<td>Perennial</td>
<td>1596</td>
</tr>
</tbody>
</table>

No. 1081.

The Greek *klema*, a twig, is the admitted origin of the word Clematis. Its application is evident from the twiggy branches of all the genus.

Under No. 863 we published the double variety of the Clematis viticella, a flower of very distinct appearance from the present single-flowering species; and also of somewhat different habit, having a greater tendency to seek support; and it may be said, scramble about. The plant here figured, we have now (June,) growing quite upright, twelve feet high, although having been cut down to within a few inches of the ground; it is against a wall, merely having the support of a string passed across it at intervals. It flowers abundantly, by the production of shoots, from the axils of the leaves; but when trained perpendicularly against a wall, or on a pole, these axillary shoots are not produced very near to the bottom. If this be desired, some of the main stems should be cut off at different heights, in May, and the object will be effected.

Clematis viticella requires no peculiar treatment, excepting that it should be cut back very freely in February, and attentively trained whilst in growth.
NICOTIA'NA CERINTHOI'DES.

HONEYWORT-LIKE TOBACCO.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
SOLANACEÆ.

<table>
<thead>
<tr>
<th>Native of New Zealand</th>
<th>Height</th>
<th>Flowers in Duration</th>
<th>Introduced in 1821</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 feet</td>
<td>August</td>
<td></td>
</tr>
</tbody>
</table>

No. 1082.

Seeds of the Tobacco plant were sent in the sixteenth century from Florida to Lisbon, whence they were introduced to France, by a French ambassador named Nicot; hence Nicotiana. The name, Tobacco, with some modifications, prevails in almost all European countries, and is believed to have been borrowed from Tobago, a West Indian island, whence the plant is indigenous; it is, however, asserted by Professor Rafinisque, of Philadelphia, that Tobacco is the name of a pipe, in the Hayti language, and that from this source we received it.

The greater part of the species of Nicotiana are natives of South America, and possess more or less of the narcotic qualities of that article of commerce which is so well known amongst us. Different countries adopt the cultivation of different species, which, in some degree, accounts for the various qualities known in commerce. The Americans cultivate the Nicotiana tabacum; the Persians, Nicotiana Persica; the Syrians, Nicotiana rustica; and the species repanda is said to be that from which the finest Havannah cigars are manufac-
tured. Several others are known to be grown for use amongst various tribes of Indians, some of whom, by the bye, have arrived at a refinement in the use of this luxury, which must put to the blush the admirers of mere leaf-smoke. These Indians,—inhabitants of the banks of the Missouri, as related by Pursh, prepare, "for their own smoking," a delicate species of Tobacco, not from leaves, but from the flowers of the species they cultivate. Thus we see that the time has to arrive, when smoking Englishmen shall possess the refined taste of their "Tall Indian" brethren.

From the smoker of Tobacco it should not be concealed, that the essential oil of Tobacco, like that from its kindred plants, Henbane and Deadly Nightshade, is a virulent poison; and which, in smoking, is inhaled and swallowed, and is frequently productive of paralysis. Its frequent use, like that of Opium, renders the system less susceptible of its active qualities; this, however, is but the evidence of disordered functions,—of natural sensitiveness destroyed; an effect which, like the effects of other poisons, can only be advantageous where rendered necessary by disease.

The Nicotiana cerinthoides was brought to this country from New Zealand; it forms a handsome plant, but its flowers are smaller than those of some American species. Its seeds may be sown in spring, in a hotbed, and the seedlings transplanted in May, into the borders. It also admits of being treated as a biennial; and if sown early in September, and the young plants protected, they will be finer than those from spring-sown seeds.
CIMICIF'UGA PALMA'TA.

Palmated Bugwort.

Class.
POLYANDRIA

Order.
PENTAGYNIA.

Natural Order.
RANUNCULACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. America</td>
<td>4 feet</td>
<td>June, Aug.</td>
<td>Perennial</td>
<td>in 1812.</td>
</tr>
</tbody>
</table>

No. 1083.

The derivation of the name, Cimicifuga, is founded on the virtues, or supposed virtues, of one of its species. It is compounded of the two Greek words CIMEX, a bug; and FUGO, to drive away.

This North American herbaceous plant is very rarely met with, either in nurseries or in private collections. Its flowers, although not possessing gaiety, are somewhat singular, and their variable character has been referred to, as evidence against the value of the Linnean system of arrangement. It is true that this plant, instead of being placed in the order pentagynia, may have occupied any other order in the class pentandria, since it will be found with various numbers of styles, from one to twelve. It would seem, that the styles and stamens are so placed, in contiguity, that like other beings of a very different order of creation, they are somewhat inconstant to their respective positions.

This plant may be grown in a pot, where it will have the character given in our plate; or in a dry border, where it will branch out, and be much larger. It grows freely in any rich and rather sandy earth.
RHODODENDRON GLENNYA'NUM.

MR. GLENNY'S RHODODENDRON.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHODORACEÆ.

<table>
<thead>
<tr>
<th>Hybrid Origin.</th>
<th>Height.</th>
<th>Flowers in May.</th>
<th>Habit. Shrub.</th>
<th>Cultivated in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 feet.</td>
<td></td>
<td></td>
<td>1840.</td>
</tr>
</tbody>
</table>

No. 1084.

The derivation of Rhododendron, has been given at No. 967. To hybrid plants, we have usually applied a specific name, compounded of those borne by the parents; the present handsome variety is, however, known as Mr. Glenny's, and it would not be either just or courteous towards that gentleman, to deprive him of the honour of being associated with so exceedingly handsome a subject.

The multitude of Rhododendrons that have been propagated of late years, between different species, including Azalias, have destroyed the novelty but not the beauty of these splendid hybrids. The honour of first directing attention to their propagation, belongs to the late Earl of Caernarvon, whose talented brother in the same walk of science, the Hon. and Rev. William Herbert, we regret to state, has ceased to enlighten the world on hybrid bulbs, a subject of which he possessed a more profound knowledge than any botanist, that ever existed.

The very handsome plant which we have now figured is quite hardy, and grows luxuriantly in loam and decayed leaves. It contrasts finely with the dark hybrids obtained from Arboreum.
MAGNO'LIA PURPU'REA.

PURPLE MAGNOLIA.

Class. POLYANDRIA.

Order. POLYGYNIA.

Natural Order. MAGNOLIACEÆ.

<table>
<thead>
<tr>
<th>Native of Japan.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>10 feet</td>
<td>June</td>
<td>Perennial</td>
<td>in 1790.</td>
</tr>
</tbody>
</table>

No. 1085.

The name, Magnolia, was adopted in honour of Pierre Magnol, the author of Botanicum Monspeliense, and prefect of the Montpelier botanic garden.

Most of the species of Magnolia are large deciduous trees; purpurea, however, grows but as a bush, of somewhat straggling habit, deciduous in the open air with us, but evergreen in the milder climate of its native country, Japan. In China also it is said to be indigenous, but this is not certain, although it is there frequently met with in cultivation. Independently of the distinct species which have been brought to this country from their native habitats, several varieties of this, and other species, are in cultivation. Some of these are aboriginal varieties; others have been propagated from seed on the continent, and some in this country. Of Magnolia purpurea there is one variety which should be mentioned. It is sometimes noticed as a distinct species, under the name of Gracilis, but it has no specific character to entitle it to such distinction; its most prominent difference, exists in its habit of growth, which with us, as a shrub, is much more upright, and pyramidal, than purpurea;
whilst in Japan it becomes a tree. Another variety of purpurea, of dwarf habit, called hybrida, in the nurseries, has been lately raised, and noticed with commendation, but with its merits and peculiarities we are unacquainted.

Magnolia purpurea has been recommended by some persons as best suited for planting separately, that it may the better become clothed with foliage and flowers, but its habit is too straggling for such purpose; it should rather be mixed with evergreens of humble growth, over which, at the same time as it receives their protection below, it may hold out, to the passer-by, its handsome fragrant flowers, like porcelain censers of incense.

Magnolias, from the spontaneous variation which has arisen amongst their several species, and from their difference of character also, seem to be well suited for hybridisation, and promise curious results to any careful propagator. Grandiflora would, of course, be taken as one of the parents in such experiments; and if its brilliant foliage could not be made more brilliant, it may undergo some curious variations.

The chief care required in the cultivation of this and most other Magnolias is, first to select a sheltered situation, and then to render the earth light and dry. Light loam mixed with peat, would form the best compost for them, still they are found growing well in other descriptions of soils. Young plants may be readily propagated by layering their lower branches, or they may be raised from cuttings of the young wood. As its seeds ripen in our gardens, these also offer facilities for increase.
ILLI'CIUM RELIGIO'SUM.
SACRED ANISEED TREE.

Class. POLYANDRIA
Order. POLYGYNIA.

Natural Order. MAGNOLIACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers in</th>
<th>Habit</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>3 feet</td>
<td>March</td>
<td>Shrub</td>
<td>in 1840?</td>
</tr>
</tbody>
</table>

No. 1086.

Illicium is a name formed from the Latin word illicio, to allure, and applied to this genus of plants, as indicative of their attractive aromatic fragrance. The English name, Aniseed Tree, is somewhat anomalous, inasmuch as the affinity of this tree with Aniseed, is confined to its spicy aroma.

It has long been known, that one of the Illiciums was held sacred by the Japanese, but an error seems to have occurred respecting the species, for it would appear that the sacred Aniseed Tree has never, till lately, been introduced to Europe. To Dr. Siebold, the Japanese traveller, Europeans are now indebted for this acquisition, he having introduced it to Holland, and subsequently it was sent by Mr. Makoy, of Liege, to the Botanic Gardens at Kew.

Thunberg, in his Flora Japonica, published many years ago, mentions the uses made of this tree by the Japanese, which have been related, over and over again, in various botanical works, and the tree has, consequently, excited more than common interest. He states that the Japanese place bundles and garlands of the Aniseed Tree in their temples, before their idols; and on the tombs of
their friends; and the bark they use in their religious worship, as incense to their idols. The public police of Japan is known to be excellent; each town having a chief magistrate, and each street a commissary, elected by the inhabitants, to guard property and tranquillity. Added to this, two inhabitants alternately, patrol the streets by night, to prevent fire. In aid of this apparently well-arranged government, the Aniseed Tree seems to be allotted a rather singular part. Thunberg mentions that its bark, being finely powdered, is put into a graduated tube, to form an instrument for the measurement of time, through the night; the powder is made to burn slowly, and regularly, and to sparkle at certain spaces in the instrument, which indicates the time for the watchmen to sound the public bells. This account, be it remembered, was written about seventy years ago; whether the practice still prevails we have no information.

For the opportunity of figuring this interesting plant, we are indebted to the obliging attentions of the Messrs. Pope of Handsworth, Staffordshire; who obtained it, directly or indirectly, from M. Makoy, of Liege. It has usually been kept in the greenhouse, but is sufficiently hardy to bear our climate, unless it be in very severe frost, when it should have the protection of a mat. It will be the most advantageously grown against a wall, for this itself not only affords some protection, but it also furnishes facilities for applying other means of defence, which are so often required, against the severities which exotic plants have to encounter in our gardens.
HELLE'BORUS ATROPURPU'REUS.

DARK PURPLE HELLEBORE.

Class. POLYANDRIA

Order. POLYGYNIA.

Natural Order. RANUNCULACEÆ.

| Native of N. Europe | Height. 6 inches. | Flowers in April. | Duration Perennial. | Introduced in 1844.
|---------------------|-------------------|-------------------|---------------------|---------------------|

No. 1087.

The generic name, Helleborus, is compounded of two Greek words, helæin, to cause death; and bora, food; hereby indicating its poisonous effects when taken into the stomach.

Notwithstanding the great beauty of many of the flowers belonging to the Natural Order Ranunculaceæ, the whole should be regarded as possessing deleterious qualities. Dr. Lindley, in his Vegetable Kingdom, says "Acridity, causticity, and poison, are the general characters of this suspicious Order, which, however, contains species in which those qualities are so little developed, as to be innoxious. The caustic principle is, according to Krapfen, of a very singular nature, it is so volatile that, in most cases, simple drying, infusion in water, or boiling, are sufficient to dissipate it." Our present plant belongs to, perhaps, the most active genus, but its own qualities are unknown in this country.

This is an early-flowering plant, suitable for the borders, that may, from its dwarf habit, be planted near their edges, to succeed Hepaticas, Scillas, and Crocuses, which constitute the first brilliant flush of spring.
FUN'KIA UNDULATA.

Var. Variegata.

VARIEGATED UNDULATE FUNKIA.

Class. HEXANDRIA.

Order. MONOGYNIA.

Natural Order. HEMEROCALLIDACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan.</td>
<td>18 inches</td>
<td>August.</td>
<td>Perennial</td>
<td>in 1834.</td>
</tr>
</tbody>
</table>

No. 1088.

This genus was named after Henry Christian Funck, who has published a collection of dried plants, chiefly Mosses, of some of which he was the discoverer.

A few cultivators of flowers have, of late, indulged the novel fancy of collecting together all the variegated herbaceous plants and shrubs that are to be met with, and a goodly collection it must be confessed they make. This reminds us of Jacob’s ring-streaked and speckled and spotted flocks and herds; and possibly, such a collection, like Jacob’s peeled rods, may influence the beauty of a future generation of those domestic animals, whose taste for gardening often leads them amongst our flowers.

To collectors of this class of plants, the Funkia now figured, will be a gem, both for its beauty and singularity; and for their further information we should not omit to mention the variegated variety of Funkia lanceæfolia, another plant of nearly equal pretensions with the present.

This species is rather delicate, and should have a little protection during winter. It is very suitable for pot culture.
CYCLAMEN REPANDUM.

REPAND CYCLAMEN.

Class. PENTANDRIA.
Order. MONOGYNIA.

Natural Order. PRIMULACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece.</td>
<td>4 inches.</td>
<td>April, May.</td>
<td>Perennial.</td>
<td>in 1816.</td>
</tr>
</tbody>
</table>

No. 1089.

Cyclamen is founded on the Greek word kuklos, a circle. See No. 1063.

Cyclamens, for reasons we know not, seem to meet with but little attention. It is true, they are not well suited for careless exposure, in severe winters; although hederæfolium, is a native of Britain, and some other species are equally as hardy, or more so. Few plants are more beautiful, and few there are that better repay attentive culture. Increase, too, may be obtained, to any reasonable extent, from seeds; still Cyclamens are not increased in any degree worth naming. Cultivators overlook the fact, that the seed should be sown as soon as ripe; it never should be thoroughly dried; the plant itself asks, as plainly as plant can ask, for immediate sowing. The circling downwards of its peduncles, with the seed vessels, after flowering, to convey the seeds to the soil, should be our lesson. Here nature suffers not the seeds to dry, by suspension in the atmosphere; but, by independent locomotion, the plant nestles up its brood, and, even previously to the maturity of its offspring, conveys them in her bosom to the earth.
VIOLA BIFLORA.
TWO-FLOWERED VIOLET.

Class.
PENTANDRIA:  

Order.
MONOGYNIA.

Natural Order.
VIOLACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe.</td>
<td>1 inches.</td>
<td>April, May.</td>
<td>Perennial.</td>
<td>in 1752.</td>
</tr>
</tbody>
</table>

No. 1090.

Viola, a word derived from the Latin, but founded on the Greek, is enveloped in much uncertainty, as respects its origin. The ancient fabulists, have mingled together, too ingeniously, the subjects connected with it, to admit of analysis by moderns.

So much interest has, of late years, been taken in the cultivation of Pansies, and in propagating new varieties, from seed, that the possession of a kindred plant may be thought desirable by many of their admirers. Cultivated as an Alpine, the Viola biflora is a pretty plant; or it may be kept in a dry, shady, border; but we have introduced it to notice more particularly from its relation to the Pansy, in the hope that it may prove useful in the production of new characters by hybridisation with that species. Its size would not constitute an objection to this; its upright habit of growth would be advantageous; and its colour, and red central markings, may be productive of changes in the offspring, of which experience alone can give us information. It should be remembered, that the plant yielding the seed, usually guides the size of hybrid offspring.
PHILADELPHUS LAXUS.

LOOSE-GROWING PHILADELPHUS.

Class.

ICOSANDRIA.

Order.

MONOGYNIA.

Natural Order.

PHILADELPHACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers in</th>
<th>Habit</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. America</td>
<td>4 feet</td>
<td>June</td>
<td>Shrub</td>
<td>in 1830</td>
</tr>
</tbody>
</table>

No. 1091.

The ancient Greeks used the name Philadelphus for a tree which cannot now be identified; therefore it was taken up by Bauhin for this genus. The name Syringa has long been used as a common appellation for the Philadelphus coronarius, a shrub known to almost every body, being very hardy, and producing abundance of fragrant flowers; it has, consequently, been heretofore given to the other species of Philadelphus, but with equal impropriety, inasmuch as being the systematic name of the Lilac, it should be confined thereto.

The Philadelphus laxus produces a larger and more handsome flower than the common species coronarius, previously alluded to; but its flowers are not fragrant, nor are they produced in so great abundance. The shrub, from the weakness of its branches, has a tendency rather to spread laterally than grow in height, which in planting, should be remembered, and sufficient space be given it. The usual method of increase is by layering, for which the habit of the plant is favourable. As its leaf buds burst early in spring, it should have a sheltered situation, as a protection against late frosts.
ASTER HYSSOPIFOLIUS.

HYSSOP-LEAVED STARWORT.

Class.
SYNGENESIA.

Order.
SUPERFLUA.

Native Order.
COMPOSITE.

| Native of N. America | Height. 18 inches | Flowers in Sep., Oct. | Duration Perennial | Introduced in 1683 |

No. 1092.

Aster is a word, unaltered, from the Greek, signifying star; the application of which, to all the flowers of this extensive genus, is sufficiently evident.

The plant now figured is one of the Asters which will efficiently assist in producing autumnal gaiety, without becoming intrusive, a recommendation that several of its taller brethren cannot claim. To present some species of Aster to a friend, would be too mischievous for a joke; for if once established, the labour of their expulsion can only be estimated by those who have encountered their migrations — their determination to occupy somewhere or other, against the will of their landlord. No Irish cotter could more resolutely resist the law of ejectment.

This Aster is known in the nurseries as hyssopifolius, but we doubt its identity with that species of Linneus. Like some others of the genus, it increases freely, but should be transplanted into fresh soil every second year.

Increased acquaintance with the vegetable world does but add to the amazement of the botanist. So fertile is the earth in these composite or star-like
plants, that their number now known amounts to about 9,500; the total estimate of all discovered plants being 95,000. We naturally ask, wherefore this profusion? Wherefore this variety—this beauty? Let Mrs. Howitt answer—

God might have bade the earth bring forth
Enough for great and small,
The oak-tree and the cedar-tree,
Without a flower at all.

He might have made enough, enough,
For every want of ours;
For luxury, medicine, and toil,
And yet have made no flowers.

The ore within the mountain-mine
Requireth none to grow,
Nor doth it need the lotus flower
To make the river flow.

Then wherefore, wherefore were they made,
All dyed with rainbow light;
And fashion'd with supremest grace,
Uprising day and night;

Springing in valleys green and low,
And on the mountains high,
And in the silent wilderness,
Where no man passes by?

Our outward life requires them not—
Then wherefore had they birth?
To minister delight to man,
To beautify the earth;

To comfort man—to whisper hope
Whene'er his faith is dim;
For whoso careth for the flowers,
Will much more care for him!
CUPHEA MINIATA.

VERMILLION CUPHEA.

Class.
DODECANDRIA.

Order.
MONOGYNIA.

Natural Order.
LYTHRACEÆ.

<table>
<thead>
<tr>
<th>Native of South America?</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18 inches</td>
<td>June, July</td>
<td>Perennial</td>
<td>in 1845</td>
</tr>
</tbody>
</table>

No. 1093.

The crooked capsule of this genus seems to have attracted the attention of Jacquin, who established the genus, as the most prominent character on which he could seize for a significant appellation. The Greek word *cuphos*, signifying a curve, is the root of its generic name.

This genus is extensive, although but few species have been introduced to our country, for cultivation, indeed their petals are usually so small, and in some instances none at all, that they would constitute very insignificant ornaments in the flower garden. In fact we cannot speak of the Cuphea miniata in terms of high praise, in regard to its showy character. It is rather a curious, then a gay, plant, although its little flowers are really brilliant. The purple of one part, and the vermilion of the other, form a rather novel combination of colour. It both grows and flowers very freely in the borders, during summer; in winter, however, it must have protection from frosts; therefore, sometime in October, the plants should be carefully taken up, and potted for that purpose. It may be readily struck from cuttings, not only in spring, but at any time of its growth.
The genus Colletia was named by Commerson, in honour of his friend Collet, a French botanical author.

This plant is the Colletia polycantha, of Willdenow, and is found in a wide range of country in Chile and Brazil, as well as Peru. Its leaves are very inconspicuous, its awl-shaped spines and pale campanulate flowers, constitute its most prominent characters. It has in some degree the aspect of a Furze bush, and its perpetual green colour is one of its recommendations. The London Horticultural Society were, we believe, the first to test the powers of this plant in withstanding frost, previously to which it had long been cultivated as a greenhouse shrub. Trained to a wall, in a dry situation, it has, in several gardens, borne severe winters, but we have not seen it planted in the open borders or shrubbery. We are informed, however, that in a dry, sandy, soil, and sheltered situation, it has grown for several years, without protection.

There are two circumstances in the economy of this genus of plants, which naturally force themselves on our notice. These are, their armature, or
spines; and the absence of leaves in some of the species. Generally speaking, we say that leaves are necessary for the elaboration of the sap, to render it suitable food for the flowers, and the fruit; and it is very true, that where leaves are furnished to plants, those leaves are necessary to the healthy development both of the tree and its produce: but leaves we see, exquisitely organized as they are, can be dispensed with; and yet the plant can produce its flowers in beauty; and its seeds it can nourish to maturity, for the continuance of its species. There are other appendages too, important, doubtless, to the plants which bear them; but all plants require them not; thorns, bristles, glands, scales, and such like forms of clothing are common on some, whilst others are as exempt from them as polished marble; and who amongst us has satisfied the "why and because" of their existence, or their absence. Who has yet told us why the kindred fruits—the Peach and Nectarine, have coats of a texture so completely different. No attention of ours can change either the one or the other.

Spines too, offer to our contemplation as wide a field for speculation. In some instances they are eradicated by cultivation, as in the Pear; hence they are said to be starved branches; but other spinous plants there are, which no cultivator has ever rendered spineless. How little we know! as Pope justly intimates—

"All Nature is but Art, unknown to thee;
All Chance, Direction which thou canst not see;
All Discord, Harmony not understood;
All partial Evil, universal Good."
HYPOXIS CANADEN'SIS.

CANADIAN HYPOXIS.

Class. HEXANDRIA.  Order. MONOGYNY.

Natural Order. AMARYLLIDACEÆ.

<table>
<thead>
<tr>
<th>Native of N.America</th>
<th>Height. 6 inches.</th>
<th>Flowers in June.</th>
<th>Duration. Perennial.</th>
<th>Introduced in 1838?</th>
</tr>
</thead>
</table>

No. 1093.

The name, Hypoxis, is derived from the Greek hypo, beneath; oxys, sharp; and appropriately alludes to the shape of the capsule of this plant; the lower part of its capsule, or seed vessel, being tapered to a point.

The Hypoxis now published is nearly allied to another Canadian species, which is figured at No. 302 of this work. Most of those formerly imported were natives of Africa, and consequently tender; and the North American species have not proved completely hardy, but form excellent frame plants, which still may be flowered in the borders. It is somewhat important to the advantageous display of low plants like the present, which may rank in the flower garden with Crocuses, Scillas, &c., that they occupy a separate compartment, or be planted near to the fronts of the mixed flower borders or mounds.

Although the Hypoxis Canadensis is esteemed as quite hardy, still, if only a single plant of it be possessed, it will be prudent to give it slight winter protection. The pot containing it may be conveniently sunk in the open ground, for flowering.
LYCH'NIS ALPI'NA.

ALPINE LYCHNIS.

Class. DECANDRIA. Order. PENTAGNYIA.

Natural Order. SILENACEÆ.

<table>
<thead>
<tr>
<th>Native of Scotland.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Inhabits Mountains.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 inches.</td>
<td>May, June.</td>
<td>Perennial.</td>
<td></td>
</tr>
</tbody>
</table>

No. 1096.

The name Lychnis, it is said, by old botanists, was founded on the Greek lychnos, signifying a lamp, and was used as the name of a plant from which the ancients made lamp wicks. The same verbal derivation has been adopted by other botanists, who have thought the name alluded to the resemblance of the inflated semi-transparent calyx of a Lychnis, to a lamp or lantern.

This pretty alpine plant has been found in no part of Great Britain, excepting Scotland. Mr. Babington, mentions it as growing on mountains of Glen Isla, Forfarshire, at 3,200 feet above the level of the sea. Mr. G. Don, also has given it a habitat near the summits of the Clova mountains, Angusshire; where scenes prevail to which Burns may have applied his words:

"Wildly here without control,
Nature reigns and rules the whole."

Lychnis alpina is quite hardy, and grows freely, planted in loam and peat, on artificial rock-work. Here it will flower, and produce seeds, as on its native mountains; and from its seeds increase may be readily obtained.
PÆONIA MOUTAN. Papaveracea.

POPPY-FLOWERED MOUTAN PEONY.

Class. POLYANDRIA. Order. DIGYNIA.

Natural Order. RANUNCULACEÆ.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China.</td>
<td>3 feet.</td>
<td>April, June.</td>
<td>Shrub.</td>
<td></td>
</tr>
</tbody>
</table>

No. 1097.

The ancient poets make Pæon a physician of merit, and of value—

"A wise physician, skilled our wounds to heal,
Is more than armies to the public weal."  Iliad 11, 637.

Thus says Homer, and he makes Pæon, to cure Pluto of a wound, inflicted by Hercules, by using the plant that afterwards was called Pæonia.

At No. 241 will be found a semi-double variety of this plant, in which the central colouring is softened and diffused over two thirds of each petal, instead of being concentrated into a strongly coloured rayed blotch, at the base of each, as in the present flower. Historical notice there gave place to the description of an important mode of propagating these plants, and to which we would again call attention.

Of the Moutan or Tree Pæony, there are several varieties in cultivation, their flowers varying in colour from a deep rose to white; some being single, others double in different degrees; part of them having been brought from China, and others having since been raised from seeds in this country. For the first Moutan Pæony, England is indebted to the
botanical enthusiasm of Sir Joseph Banks; who having heard of their beauty, employed a gentleman attached to the East India Company's service, at Canton, to obtain and send roots of them to England; and the first of these treasures arrived in 1789. Others were subsequently obtained through the same channel, and the few individuals of that day, who were imbued with floricultural zeal, looked on their flowers with admiration; and with expectations further stimulated by the accounts received from the missionaries, and traders to China, who told of rare varieties, with blue flowers and with yellow ones, of corresponding size and splendour. These expectations have never yet been realized; a yellow Paeony, however, has been sent from the Crimea, to the Horticultural Society, but it is an herbaceous species, and now valued, on the continent, at twenty-five guineas the plant.

The most marked distinction between the Mou-tan and all other Paeonies is, that its stems are shrubby; they endure our winters, gradually enlarging from year to year, till they become, when in flower, as individual lawn plants, truly magnificent. Mention is made in Loudon's Arboretum, (1838) of a plant at Sir Abraham Hume's, at Wormleybury, that having been planted thirty years, was seven feet high, forming a bush of fourteen feet in diameter. "It stands the winter, in general, very well, but if the flower buds swell too early in February, it becomes advisable to cover the plant slightly with a mat. In the year 1835, this plant perfected 320 flowers, and has been known to bear three times that number."
TULIPA PER'SICA.

PERSIAN TULIP.

Class. HEXANDRIA.  Order. MONOGYNIA.

Natural Order. LILIACEÆ.

<table>
<thead>
<tr>
<th>Native of Persia</th>
<th>Height</th>
<th>Flowers in</th>
<th>Habit</th>
<th>Bulb</th>
<th>Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persia.</td>
<td>1 foot.</td>
<td>May, June.</td>
<td></td>
<td></td>
<td>Uncertain.</td>
</tr>
</tbody>
</table>

No. 1098.

The Persian name Tulipan, seems to have been applied indiscriminately, in that country, to a turban and a tulip, but we are not told which claims the priority of its use. The common Tulip of our gardens—the Tulipa Gesneriana, a native of Persia, brought its vernacular name with it, and this it has been permitted to retain.

The species of Tulip which we now publish, was received from the Birmingham Horticultural Society's Garden, under the name here adopted. We have no precise information respecting its history, nor does the plant appear to be much known. It may have been imported, as several species were, a few years ago, by the Apothecaries' Company, as Colchicum bulbs, for medicinal purposes. Sweet mentions that the true Tulipa Oculus Solis, or Sun's-eye Tulip, was so imported, and also the species Bonarota and Strangulata. Every one knows that medicine owes much to botany; and botany, on the other hand, has been not a little aided by medicine.

Tulipa Persica is perfectly hardy, and occasionally makes offsets, which should be separated.
CAMPANULA SIBIRICA.
SIBERIAN BELL-FLOWER.

Class.  Order.
PENTANDRIA.  MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18 inches.</td>
<td></td>
<td>Biennial.</td>
<td></td>
</tr>
</tbody>
</table>

No. 1099.

Campana, a bell, it will be remembered, is the word on which Campanula is founded.

This showy Campanula, so common as it is found in Siberia, may, doubtless, be naturalized in our own country. It is biennial, and although we have never observed it spring from self-sown seeds, it is quite certain that it will do so, and may perpetuate its species on hedge banks, and similar places, as successfully as its ally, the Campanula patula.

This Campanula, like some others of its near relations, does not always flower in the first year after propagation, it must, notwithstanding this, be considered strictly a biennial; for after flowering, it never survives to flower a second time. So it is with many perennial plants of tender habit; they bear any common degree of temperature before flowering, but subsequently, unless divided, or reproduced from cuttings or offsets, they are liable to be lost. This should be borne in mind, by those who have the care of valuable half-hardy exotics.

Seeds should be sown in spring, and plants may remain for flowering where raised, or be transplanted in autumn.
SILE'NE SCHAF'TA.

SCHAFTA CATCHFLY.

Class. DECANTRIA.

Order. MONOGYNIA.

Natural Order. CARYOPHYLLACEÆ.

<table>
<thead>
<tr>
<th>Native of Russia</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>6 inches</td>
<td>July, Aug.</td>
<td>Perennial</td>
<td>in 1845</td>
</tr>
</tbody>
</table>

No. 1100.

The viscid fluid found on some species of Silene has obtained for the genus its systematic name, from the Greek sialon, saliva. The specific appellation Schafta, adopted by S. G. Gmelin, a Russian botanist, is unexplained: its spelling requires correction beneath the annexed engraving.

This is one of the prettiest novelties that has lately been added to our hardy flower borders. It is a delightfully gay plant, for rockwork, spreading like the previously figured Saponaria ocymoides.

Where entire beds of very low plants are adopted, this would form one of the most desirable for their decoration—bright and continuous, flower touching flower; and standing as gold against lead, in comparison with the most brilliant of the tapestry ever wrought by the Gobelins.

Mention is first made of it at Dorpat, in the west of Russia; whence it was transmitted to the Imperial Gardens, at St. Petersburg; and from this establishment to the Horticultural Society of London. Thus it is, now a-days, that the riches of the earth are equally dispensed to all her children. It may be raised from seeds or cuttings.
CAMEL'LIA RETICULATA.

RETRACTED CAMELLIA.

Class. MONADELPHIA. Order. POLYANDRIA.

Natural Order. TERNSTROMIACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>6 feet.</td>
<td>April, June</td>
<td>Shrub.</td>
<td>in 1824.</td>
</tr>
</tbody>
</table>

No. 1101.

The name Camellia, was adopted in honour of Camellus, a Moravian Jesuit. He wrote a History of the plants of the Isle of Luzon, which forms a part of the Historia Plantarum of the deservedly celebrated John Ray.

There is scarcely a shrub which ornaments our gardens that has received the same anxious attention as cultivators have bestowed on the Camellia: and truly may it be said, none that more amply deserves such distinction. We freely confess that no collection of plants, brought together into one view,—no exhibition, although comprising the beauties of a hundred gardens, ever did, or will, equal, in its simple grandeur, a house of Camellias in full bloom. We do not allude to a nursery collection upon stages, in a thousand pots, forming an embankment like the silks in a mercer's window. No; the true splendour of the Camellia can only be seen in the garden erections of our nobility; where, their roots, liberated from pot imprisonment, give their branches a commensurate freedom, and these, luxuriating at the height of ten or fifteen feet, spread out their brilliant glossy foliage, as a
back ground for hundreds, perhaps thousands, of symmetrical white and rosy wax-like flowers.

It is not, however, with Camellias under these circumstances, that we have to deal, but planted in sheltered spots, and against walls in the open garden. It is here that we desire to see them more generally cultivated. Their foliage, at all times, is glittering and beautiful; and, with due precaution, in all moderately favoured parts of our island, their flowers also will reward the cultivator’s care. The plant we drew from grew in the open ground, in the Birmingham Botanic Garden; a site by no means favourable, as respects climate. At the Earl of Shannon’s Castle, Martyr, county of Cork, there are many Camellias which have grown beautifully in full exposure, for twenty years, and are from twelve to fifteen feet high, and upwards of twenty feet in circumference; and here they flower abundantly from bottom to top, every year. In the Isle of Arran, too, the double white has flowered regularly for several years. Near London they flower against a north wall; and in various parts of the country also, they succeed admirably.

It is chiefly desirable that we mention the treatment to be observed to secure success. In the open garden this shrub should not be trained to a wall, but be sheltered by one; and a west or even northern aspect, has been found most suitable. The soil should be sandy turfy loam, and peat, two feet deep, on six or nine inches of broken bricks, to secure good drainage. The ground should be mulched, and the plants sheltered in winter for the first three or four years of their growth.
EPIME'DIUM COL'CHICUM.

YELLOW BARREN-WORT.

Class.  
TETRANDRIA.  

Order.  
MONOGYNIA.

Natural Order.  
BERBERIDACEAE.

<table>
<thead>
<tr>
<th>Native of Japan?</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 foot</td>
<td>April</td>
<td>Perennial</td>
<td>in 1846</td>
</tr>
</tbody>
</table>

No. 1102.

The name, Epimedium, which distinguishes this genus, was in use amongst the ancient Greeks, but is of uncertain derivation. As regards the specific name, Colchicum, there does not appear to be any satisfactory reason for its connection with this species, unless it be taken from Colchis, as the name of its native country.

This plant was received into Great Britain from the continent, and at present, its history as far as we have been able to ascertain, is imperfect. Its name, as now adopted, appears in the catalogue of plants issued in 1846, by L. Jacob Makoy, of Liege, from whom the plant was, we believe, procured. Two other Epimediums were obtained from the same person, which were portions of a very rich collection introduced from Japan, by Dr. Siebold, to the Botanic Garden at the university of Ghent, and it is probable that the present species is from the same source. It is an exceedingly curious plant, and is the most showy of these new acquisitions. It is desirable for cultivation amongst alpine plants, with which of course it would share a slight winter protection.
SYMPHIANDRA PENDULA.
PENDULOUS SYMPHIANDRA.

Class.  Order.
PENTANDRIA.  MONOGYNIA.

Natural Order.  CAMANULACEÆ.

<table>
<thead>
<tr>
<th>Native of Caucasus</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 foot</td>
<td></td>
<td>Aug., Sept.</td>
<td>Biennial</td>
<td>in 1823</td>
</tr>
</tbody>
</table>

No. 1103.

Sympbiandra, the generic name of the plant under consideration, was adopted by Alphonse Decandolle from two Greek words, symphyo, to combine; and aner, a male; with the evident intention of pointing out by it the peculiarity of the species contained in this genus, their anthers being combined into a tube. The inconvenient extent of Campanula, as constituted by Linneus, has induced modern authors to seek the means of dividing it, which may not be deemed unnecessary meddling, when it is considered that it would have included upwards of three hundred plants.

Sympbiandra pendula was discovered on Mount Caucasus, and published in the Flora Taurica-Caucasica of Marschall de Bieberstein. It was subsequently introduced to the Botanic Gardens of the North of Europe; thence its seeds were sent to the Apothecaries' Garden, Chelsea; and thence, through our nurseries, to private collections.

Although a hardy plant, it should not be left as a sheep on the mountains, to "shift for itself;" it is not locomotive, therefore the young offsets should be removed, annually, to fresh pasturage.
LUPI'NUS ORNATUS.
Var. Maximus.
LARGEST ORNAMENTAL LUPINE.

Class. MONADELPHIA.  
Order. DECANDRIA.  

Natural Order. FABACEÆ.

<table>
<thead>
<tr>
<th>Native of Columbia</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
</table>

No. 1104.

Lupinus is said to have been originally used for the name of a plant that over-run and destroyed other herbage, as a wolf (lupus) does other animals.

The smaller variety of this Lupine was published under No. 438, where it was noticed as one of those for which England is indebted to the London Horticultural Society, and their collector, the indefatigable Douglas; he having discovered it in the vicinity of the river Columbia. No man ever did so much towards beautifying our gardens with hardy plants as Douglas; and, to give an idea of his success, and also of the floral riches that America yet can send us, we will here mention the species of Lupine only which he collected and sent home.—viz., Leucophyllus, Tristis, Plunmosus, Lucidus, Ornatus, Grandifolius, Flexuosus, Albifrons; Arbustus, Rivularis, Lepidus, Polyphyllus, Nanus, Littoralis, Succulentus, Bicolor, Densiflorus, Micranthus, Sabinanus, Aridus, Luxiflorus, Sulphureus, Leptophyllus, Hirsutissimus.

This large and dark flowered variety of ornatus appears to have permanency of character, and is a most desirable and quite hardy plant.
ANEMONE JAPONICA.

JAPANESE ANEMONE.

Class.
POLYANDRIA.

Order.
POLYGYNIA.

Natural Order.
RANUNCULACEÆ.

<table>
<thead>
<tr>
<th>Native of China.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced in</th>
</tr>
</thead>
<tbody>
<tr>
<td>China.</td>
<td>2 feet.</td>
<td>Autumn.</td>
<td>Perennial.</td>
<td>1844.</td>
</tr>
</tbody>
</table>

No. 1105.

All botanists agree that the word Anemone is derived from the Greek anemos, wind; but it is not quite so evident why the name was applied to this genus. Gerard quotes Pliny, and says, "the flower doth never open itself but when the wind doth blow." This, to us, however, appears somewhat apocryphal.

The Japan Anemone, of which we now give an engraving, was imported from China, by the London Horticultural Society, having been discovered there by their Collector, Mr. Fortune. It does not, however, appear that he found it wild in China, but planted among the graves of the Chinese, in the neighbourhood of Shanghai.

In Fortune's Wanderings in China, we find the following allusion to this subject, in which he mentions his discovery of the Anemone Japonica.

"The flowers which the Chinese plant on or among the tombs are simple and beautiful in their kind. No expensive Camellias, Moutans, or other of the finer ornaments of the garden are chosen for this purpose. Sometimes the conical mound of earth—when the grave is of this kind—is crowned
with a large plant of fine, tall, waving grass. At Ningpo wild Roses are planted, which soon spread themselves over the grave, and, when their flowers expand, in spring, cover it with a sheet of pure white. At Shanghae a pretty bulbous plant, a species of Lycoris, covers the graves in autumn with masses of brilliant purple. When I first discovered the Anemone Japonica, it was in full flower amongst the graves of the natives, which are round the ramparts of Shanghae; it blooms in November, when other flowers have gone by, and is a most appropriate ornament to the last resting-places of the dead."

As Mr. Fortune did not discover it growing wild, it may not be a native of China, but may have been introduced from Japan, and this is the more probable from Shanghae being the Japanese port of China. Dr. Siebold, found it in damp woods, and by the side of rivulets, on mountains in Japan, in which country it is much cultivated for its beauty.

It is one of the most desirable plants amongst Mr. Fortune's Chinese treasures; and the more especially so, as it seems to be quite hardy. It may, or may not endure our severest frosts; we, however, saw it flowering in the borders of the Handsworth nursery, in October, where it had been planted in the preceding year. In the greenhouse its flowering stems are said to have grown two feet high; in the open ground they were not half that height. Until its capacity to bear severe frosts has been tested, it will be prudent to keep a plant in a pot of peat and loam, to have slight winter protection.
SALVIA PRUNELLOIDES.

PRUNELLA-LIKE SAGE.

Class.
Decandria.

Order.
Monogynia.

Natural Order.
Lamiaceæ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>18 inches</td>
<td>September</td>
<td>Perennial</td>
<td>in 1840</td>
</tr>
</tbody>
</table>

No. 1106.

The Latin words, salvo, to save; and salvire, to heal, have been set forth as the foundation of the word Salvia. Its medicinal virtues, doubtless, attracted the herbalists of former ages, and to them it owes its title.

This, as far as we are able to ascertain, is an unfigured plant. It was, we believe, first cultivated in the Durdham Down Nursery, near Bristol; the small tubers of which its roots are composed, having been brought from Mexico, where it had been found by several travellers, in different localities, particularly on the burning mountain Jorullo. It is attractive for its bright blue flowers, and will, from its low growth, be a suitable plant for bedding out in masses.

It may be successfully cultivated in any light rich soil, in the open borders; or, it may be planted on rock-work, where, being less exposed to moisture, it will be less liable to injury whilst in a dormant state. It may, also, be kept in pots, in a cold frame, during winter, and in such case, should be planted in a mixture of loam and peat, and be turned into the open ground in May.
BKODLE'A CONGESTA.
CROWDED BRODIEA.

Class. TRIANDRIA.                      Order. MONOGYNIA.

Natural Order. LILIACEÆ.

<table>
<thead>
<tr>
<th>Native of Georgia</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 foot</td>
<td>June, July</td>
<td>Bulbous</td>
<td>in 1806</td>
</tr>
</tbody>
</table>

No. 1107.

The name Brodiaea was first adopted by the late president of the Linnean Society, Sir James Edward Smith, in honour of James Brodie, Esq., of Brodie House, in Scotland; a gentleman of scientific attainments, who paid much attention to the Cryptogamia of his own country.

This is an exceedingly pretty, free-flowering, hardy, bulbous, plant, introduced to this country some years ago, but probably lost from our gardens till re-introduced by our recent American collectors. The species Grandiflora and Congesta, will be found recorded in the tenth volume of the Linnean Transactions, but we are not aware of any figure having hitherto been published of the present species.

The Brodiaea congesta should be planted in light friable peat; for although it may succeed moderately well in loamy soil, in this it will not increase so freely as in any species of light vegetable earth. Offsets from its bulbs may be taken in spring, for increase, and they will succeed in the borders; or treated as alpine plants, being potted in a mixture of sand and peat.
ANDROM'EDA ARBO'REA.

SORREL TREE.

Class. 
DECANDRIA.

Order. 
MONOGYNIA.

Natural Order. 
ERICACEÆ.

<table>
<thead>
<tr>
<th>Native of N. America</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
</table>

No. 1108.

The fable from which Linneus took the name Andromeda, has been noticed in the former pages of this work. It probably originated with Apollodorus, the ancient Greek fabulist, who lived a century and a half before the Christian era, but has subsequently been woven into the works of other classic authors, and somewhat enlarged. Andromeda, it will be recollected, was the daughter of Cepheus, king of Æthiopia, who was exposed by her father on a rock, to be devoured by a sea monster, but was rescued and married by Perseus.

Nuttall adopted the name, Lyonia, for this and some other Andromedas, in honour of John Lyon, a Scotchman; who resided, for several years, in America; and in 1806, and subsequently, brought to London large collections of American trees and shrubs, some species of which had never previously been introduced to this country.

Both the names of this plant—the established one, Andromeda, and the partially-adopted one, Lyonia, afford associations of interest. The former will remind the scholar of an interesting classic fable, and the latter brings to mind a man of en-
terprise and usefulness to our own country. It is not alone for the intrinsic value of a plant, that it enters deeply into our esteem, but it is oftentimes the associations with which it is connected, that gives it a place in our affections. How frequently have we heard an allusion to a certain tree, or shrub, or flower, having been the favourite of some distant or departed friend, which has rendered it an object of more than common regard to the possessor; and who amongst us is there, that has really taken an interest in his garden, that cannot turn to some one or other of his favourite plants, which, like an old or confidential friend, can excite pleasureable reminiscences connected with his warmest affections!

The Andromeda arborea is found, according to the best authorities, growing wild from Pennsylvania to Florida, in the valleys of the Alleghany Mountains, where it forms a handsome tree of the height of fifty feet. In England it has never, perhaps, exceeded twenty feet high, and of such specimens of growth very few occur. If, however, it grow but half that height in our shrubberies, it cannot, when bearing its thickly-set panicles of flowers, fail of being looked on with pleasure. Its leaves, we are told, are sought by the hunters in the mountains, to alleviate thirst, possessing as they do, a grateful acidity; whence the tree has been called the Sorrel Tree.

Andromeda arborea should be planted in peat, and have a warm and sheltered situation. It is of slow growth, and is usually propagated by layers, but sometimes from American seeds.
Cuphea strigillosa.  
Campanula elatinus.  
Peonia edulis.  
Crataegus oxyacantha.
CU'PHEA STRIGILLO'SA.

COARSE-HAIRED CU'PHEA.

Class.
DODECANDRIA.

Order.
MONOGYNIA.

Natural Order.
LYTHRACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>15 inches</td>
<td>June, Nov.</td>
<td>Perennial</td>
<td>in 1844</td>
</tr>
</tbody>
</table>

No. 1109.

For the derivation of Cuphea, see No. 1093.

The gaiety of this plant has far exceeded the expectations of its early possessors, for since it has been grown in the open ground, during summer, instead of being nursed under glass, its beauty and singularity, have been more fully developed. Dr. Lindley, in allusion to the peculiarity of its flowers, says, "It is one of those curious productions in which it would seem as if the work of Nature had stopped before it was finished; for instead of six petals, the customary number in Cuphea, it has invariably only two, and they are stuck on one side only of the calyx, giving the gay orange and scarlet flowers a singular appearance. These flowers look, moreover, much like those of a Tropæolum, such as tricolorum, formed on the stem of a Lopezia; an odd similarity, which may be recommended to the attention of the ingenious author of the Vestiges of the Natural History of Creation." Bot. Reg. v.xxxii.

Cuttings of the Cuphea strigillosa should be struck, after Midsummer, to receive protection during winter; and they may be planted in the borders early in May.
CAMPAN'ULA ELA'TINES.

ELATINE BELL-FLOWER.

Class. 
PENTANDRIA. 

Order. 
MONOGYNIA. 

Natural Order. 
CAMPANULACEÆ. 

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Europe</td>
<td>8 inches</td>
<td>July, Aug.</td>
<td>Perennial</td>
<td>in 1823</td>
</tr>
</tbody>
</table>

No. 1110.

The meaning of the generic name Campanula, will be remembered by most of our readers. See No. 963.

Nearly all the flowers of the genus Campanula are very characteristic of the name they bear, but some, like the present species, refuse to be classed by common appearances, it is then left for science to discover the relationship. The species Garganica, see No. 587, is a plant of more recent discovery than Elatines and very nearly related to it; it is also a native of the southern part of the European continent.

The Campanula elatines is mentioned by Allioni as growing at the foot of the Alps, in the country of the Vaudois, or Waldenses, as they are more generally called. Here is a historical association worthy of remembrance; the Campanula elatines being a native of a secluded district, inhabited by a small band of religionists, which has been supposed to have dated its origin from the days of the Apostles.

This plant is very suitable for cultivation amongst other alpines; but if planted out, it should be on dry rockwork.
PAEONIA EDULIS.

EATABLE PAEONY.

Class.
POLYANDRIA.

Order.
DIGYNIA.

Natural Order.
Ranunculaceæ.

<table>
<thead>
<tr>
<th>Native of China.</th>
<th>Height.</th>
<th>Flowers in Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>2 feet</td>
<td>May, June. Perennial.</td>
<td>in 1822</td>
</tr>
</tbody>
</table>

No. 1111.

The meaning of the classic name, Paonia, is given under No. 1097.

Paonia edulis is very frequently called albidiflora, the former name is, however, preferable; since it intimates the fact of its being eatable, whilst the latter intimates the falsity that its flowers are always white. A Paony was published by Mr. Paxton, under the same name as our present one, which must have been altogether an error, it being described as a Moutan, or Tree Paony, which has no connexion with Edulis.

We have, on several occasions, invited attention to the numerous species and varieties of the Paony, which are distributed over our private gardens and nurseries, but never met with together in a single collection. They are deserving of the best attention of florists, and the more especially as they offer facilities for the propagation of new varieties, by cross-bearing, amongst the individuals of single species; as well as by the hybridization of distinct species, all of which have much splendour of character. As an example of the varieties of one species — that under consideration, we will concisely
mention a few which are in cultivation; some of which have been raised from seeds in British gardens, and others imported.

1, Vestalis, with purplish foliage, and white flowers of eight petals.

2, Candida, with dark-green foliage, and flesh-coloured flowers also of eight petals.

3, Tartarica, with purplish foliage; flesh-coloured flowers, having from nine to fourteen petals.

4, Sibirica, with pale-green foliage, and completely white flowers.

5, Rubescens, with narrow purplish foliage, and reddish flowers of eight petals.

6, Uniflora, with narrow purplish foliage, and white flowers of eight petals.

7, Whitleji, with foliage somewhat wrinkled, and double flowers, having blush petals outside, and pale straw-coloured ones within.

8, Humei, with dark-green wrinkled foliage, and very double red flowers.

9, Fragrans, with wrinkled narrow pale-green foliage, and double rose-coloured flowers.

10, Pottsii, with narrow dark foliage, and dark crimson semi-double rather small flowers.

11, Reevesii, (that now published) with dark foliage, and very double rose-coloured flowers, shaped nearly as an anemone.

This explanation will give our readers a tolerably clear view of the variation that has arisen among the seedlings of a single species.

It should be known that most of the double-flowering Paeonies will produce seed, if fertilized by pollen from single ones.
CRATÆ'GUS OXYCAN'THA.

Oliveriana.

OLIVER'S HAWTHORN.

Class.
ICOSANDRIA.

Order.
DI-PENTAGYNA.

Natural Order.
ROSACEÆ.

<table>
<thead>
<tr>
<th>Native of Asia Minor</th>
<th>Height.</th>
<th>Flowers in May, June</th>
<th>Habit. Tree</th>
<th>Introduced in 1820</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 feet</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No. 1112.

For the meaning of Cratægus see No. 1059.

Oliver’s Hawthorn has, by some authors, been described as a species, distinct from our common one—the Cratægus oxycantha; it is however, but one amongst its numerous varieties, although its downy foliage and black fruit, would seem to remove it from a close relationship to that species. It is not the black-fruitcd plant of our own woods, having been raised from seeds, imported, it is said, from Asia Minor.

From our own Hawthorn we have, however, a goodly number of named varieties, some of which we will mention, for the benefit of cultivators. viz. —The oak-leaved, wing-leaved, cut-leaved, purple-leaved, variegated-leaved; rose-flowered, double-white, and double-red; golden-fruitèd, orange-fruitèd, white-fruitèd; pendulous-branched, zigzag, upright, and others. These alone would form a moderate collection; they would too, exhibit somewhat of the exuberance of Nature, when assiduously brought forth by human agency. It should not be supposed that the Hawthorn, in this particular, forms an exception to other trees or shrubs
of similar character; the difference will be seen rather to emanate from the facilities afforded the Hawthorn, which have not been given to many others, to exhibit the variable forms under which, through their seedlings, they can appear. The Hawthorn derives its advantage from the millions of seedlings produced for our hedges.

Every one well knows that propagation by cuttings, offsets, grafts, buds, and such like, is but an extension of the very plant from which these portions are taken, and that it is from seeds alone that variation can be obtained. Such divided parts, it is true, become new individuals, but, it may be said, without new blood in their veins. Placed under favourable circumstances for growth, they live and flourish; but it still is with the inheritance of all the natural diseases and tendencies of the parent from which they were divided. With a plant raised from seed it is not so. The Divine Author of all these beautiful works has here bestowed on us a modicum of his own creative power, and also intellect to guide our use of it. Just as if he had said "Behold I have given you every herb bearing seed, which is upon the face of the earth, and every tree, in the which is the fruit of a tree, yielding seed, sow them, and I will give them increase, and advance them." We do so, and become instruments in his hand, to improve that of which he has given us the originals. Still the Creator of life reserves to himself the discretion of giving golden fruit to this plant, and rubies to that, or snowy flowers to one, and rosy flowers to another. His power is ever before us.
TROPÆOLUM LOBBIA'NUM.

MR. LOBB'S INDIAN CRESS.

Class. OCTANDRIA. 
Order. MONOGYNIA.

Natural Order. TROPÆOLACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia</td>
<td>6 feet</td>
<td>Autumn.</td>
<td>Perennial</td>
<td>in 1843</td>
</tr>
</tbody>
</table>

No. 1113.

Linneus's fanciful, but elegant name, as Sir J. E. Smith calls it, is not quite so applicable to the modern discoveries in the genus Tropæolum as it was to that well-known species on which he founded it — the Tropæolum majus, or Nasturtium, as it is usually called. The word is derived from the Greek TROPAION, a war-like trophy—the leaves representing shields, and the flowers helmets.

This novelty was discovered in Columbia, by Mr. Lobb, the botanical collector of the Messrs. Veitch and Son, nurserymen of Exeter. It has been erroneously called an annual; although it may be cultivated as such for the open garden, where the brilliant orange-red colour of its flowers, can but attract admiration. Its herbaceous twining stems will require the support of trellis-work, to exhibit it advantageously; indeed, it could scarcely be more suitably cultivated than in a pot, having a wire trellis of any shape, most pleasing to the fancy of the cultivator; it may then have a place as a window plant, for which it is very suitable, as well as for the open garden. It may be readily propagated from cuttings.

279.
SCÆ'VOLA MICROCARPA.

SMALL-FRUITED SCÆVOLA.

Class.  
PENTANDRIA.  

Order.  
MONOGYNIA.  

Natural Order.  
GOODENIACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. S. Wales</td>
<td>18 inches</td>
<td>Summer.</td>
<td>Perennial</td>
<td>in 1793</td>
</tr>
</tbody>
</table>

No. 1114.

Scævola, from the Latin scæva, the left hand, was adopted as the name of this genus, from its corolla being not only five-parted, but also that the divisions incline more to one side than the other, and resemble the left hand.

By an account given some years ago, in the Botanical Magazine, of the introduction to this country, of the Scævola microcarpa, the botanist is taught the value of even a spadeful of foreign earth. A collection of the natural productions of Botany-Bay, having been brought to England by Captain Tench, and amongst them specimens of earth, it was suggested by the late Mr. Curtis, that this earth may possibly contain the seeds of plants unknown to this country; and by the careful exposure of it in a greenhouse, the expectation was realized, by the growth out of it of no less than fourteen species, most of them new to English botanists.

This is an ornamental summer plant for the borders, after having had the winter shelter of a cold frame, or dwelling-house protection, where it should be kept rather dry. It may be increased by cuttings, or by division of its roots.
CER'CIS SILIQUASTRUM.
JUDAS TREE.

Class. DECANDRIA.

Order. MONOGYNIA.

Natural Order. FABACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Europe</td>
<td>20 feet</td>
<td>May, June</td>
<td>Tree.</td>
<td>in 1596.</td>
</tr>
</tbody>
</table>

No. 1115.

The name Cercis, from kerkis, a shuttlecock, was adopted by Linneus for this genus, not because it was peculiarly applicable, but that it had been employed by the ancient Greeks, as the name of a leguminous plant, and he was always inclined to the adoption of ancient established names.

This ornamental tree, or rather shrub, as it is usually seen in Britain, received particular attention from the old herbalists of our own country, as well as the European continent. This chiefly arose from the tradition that it was the tree on which Judas, in the frenzy of remorse, hanged himself, after the betrayal of our Saviour. Whether true or fabulous, all the early botanists availed themselves of the belief, and, in their wood-cuts, represented Judas suspended from its branches.

How happens it that this very hardy and beautiful shrub is so rarely met with? It deserves a conspicuous place on a wall; where, if kept closely pruned of breast-wood, the old stems, from root to the top, become covered with flowers, in May and June, rivalling the Wistaria Sinensis. Here too, it would produce abundance of seeds.
Cal'la palustris.

Marsh Calla.

<table>
<thead>
<tr>
<th>Class.</th>
<th>Order.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptandria</td>
<td>Monogynia</td>
</tr>
</tbody>
</table>

Natural Order.
Orontiaceæ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. America</td>
<td>1 foot</td>
<td>July, Aug.</td>
<td>Perennial</td>
<td>in 1768</td>
</tr>
</tbody>
</table>

No. 1116.

Calla is derived from the Greek kallos, beauty.

The Calla palustris was named by Linneus, and it may be presumed, the great naturalist himself, must have been somewhat puzzled in assigning it a position in his artificial system. He placed it in the class Gynandria, and order Polygynia; some of his successors removed it to Polyandria, Polygynia; Schreber placed it in Monœcia Monandria, and more recently, Willdenow, in the species Planitarum, assigned it a resting place in Heptandria, Monogynia, although, little to the satisfaction of Linnean botanists. It was known to the old writers, and is described by Gerard and Parkinson, as a Dracunculus.

Aquatic plants, have hitherto been somewhat neglected, even in the best gardens, for excepting the Water Lily, (Nymphaæ alba) scarcely any are seen, unless it be those that Nature herself hath planted. The care they require is even less than that demanded by land plants, needing only to have their roots surrounded by a little clay, and then to be deposited in the pond they are permanently to inhabit. The bright green foliage of the Calla
palustris produces a lively effect, especially when its white spathe and spadix assist in modestly bedecking the water's bosom.

This plant, as well as being a native of North America, is abundant in some parts of the north of Lapland; and Linneus, in his Tour in Lapland and Norway, mentions it as being, in the latter country, called Missne; and that the inhabitants there make of it Missen bread. He thus describes its preparation. "The roots are taken up in spring, before the leaves come forth, and, after being extremely well washed, are dried, either in the sun or in the house. The fibrous parts are then taken away, and the remainder dried in an oven. Afterwards it is bruised in a hollow vessel or tub; the dried roots are chopped in this vessel, with a kind of spade, like cabbage for making sour kale, (sour crout) till they become as small as peas or oatmeal, when they acquire a pleasant sweetish smell; after which they are ground. The meal is boiled slowly in water, being continually kept stirring, till it grows as thick as flummery. In this state it is left standing in the pot for three or four days and nights. It is mixed for use either with the meal made of fir bark, or with some other kind of flour, not being usually to be had in sufficient quantity by itself; for the plant is, in many places, very scarce, though here, in such abundance, that cart loads of it are collected at a time. This kind of flummery, being mixed with flour, as I have just mentioned, is baked into bread, which proves as tough as rye-bread, but is perfectly sweet and white. It is, really when new, extremely well-flavoured."
ALONSO'A INCISIFOLIA.

CUT-LEAVED ALONSOA.

Class. DIDYNAMIA. Order. ANGIOSPERMIA.

Natural Order. SCROFULARIACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>2 feet</td>
<td>May to Oct.</td>
<td>Perennial</td>
<td>in 1795</td>
</tr>
</tbody>
</table>

No. 1117.

Alonsoa is a name adopted by the Spanish botanists, Ruiz and Pavon, in honour of one of their countrymen named Alonso. This plant was long known as Celsia urticæfolia, having been published as such by Curtis.

This was formerly esteemed one amongst the most valuable of greenhouse plants, and deservedly so, till it took its place in the borders, and thereby lost "caste." Although a perennial plant, it proves to be the most valuable when cultivated as an annual, either for the mingled parterre, or for entire compartments; where, in a mass, its brilliant vermilion colour produces a striking effect.

If it be desired to have the Alonsoa incisifolia to flower early, seeds require to be sown on a hotbed, in the latter part of February; and when the young plants are an inch high, they should be potted, singly, in small pots, and have protection till the latter end of April; when they should, gradually, be inured to exposure, previously to being planted in the open ground. For later-flowering plants, seeds may be sown in the borders, in March; and autumn sowings will sometimes succeed.
PRUNEL'LA WEBBIA'NA.
WEBB'S SELF-HEAL.

Natural Order. Lamiaceae.

<table>
<thead>
<tr>
<th>Country</th>
<th>Height</th>
<th>Flowers</th>
<th>Duration</th>
<th>Cultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncertain</td>
<td>1 foot</td>
<td>Aug., Sep.</td>
<td>Perennial</td>
<td>in 1844</td>
</tr>
</tbody>
</table>

No. 1118.

It rarely happens that any botanical name is found to have had its origin from the German language. The Greeks and Latins led the way in science, and to them chiefly, not only the Germans, but the people of most other countries, stand indebted for their scientific nomenclature. The word Prunella, is however said, by Gerard, to have been deduced from the German Brunellen, a name adopted from the virtue of the plant in curing a disease of the throat, called die Bruen. Some authors conceive the name to have been founded on pruno, a burn, from its efficacy in the healing of burns.

This is a showy plant, of dwarf growth, flowering abundantly nearly all the summer. We have no information of the introduction of this plant to England, but it is supposed to have been sent home by Mr. P. B. Webb, an ardent botanist, who has travelled extensively in Europe and Asia, and hence the application of the specific name.

This species we find to be quite hardy; and it admits of ready increase by parting the roots; or it may be raised from seeds.
SYMPHYTUM ASPERRIMUM.

ROUGHEST COMFREY.

Class. PENTANDRIA.

Order. MONOGYNIA.

Natural Order. BORAGINACEAE.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasus.</td>
<td>6 feet.</td>
<td>May to Sep.</td>
<td>Perennial.</td>
<td>in 1799.</td>
</tr>
</tbody>
</table>

No. 1119.

The name Symphytum, is compounded of two Greek words, symphyo, to unite, and phyton, a plant; in allusion to the healing qualities which the ancients attributed to their Symphytum.

This plant is a native of that fertile district of botanical riches, Caucasus, which comprises the loftiest range of mountains in the north of Asia, extending nearly four hundred miles, from the Euxine to the Caspian, a great portion of which has been annexed to the Russian Empire. The celebrated Russian naturalist, Bieberstein, was long in these regions, and explored them successfully. To him is the botanical world indebted for a knowledge of the Symphytum asperrimum, which has proved the handsomest and most robust of the whole genus, growing as it does, to the height of six feet, or even taller, when cultivated under very favourable circumstances. It has been recommended as an agricultural plant, but with what degree of propriety we have no information.

If the fleshy roots of this hardy plant, which run deeply into the earth, be cut in pieces, in the spring, and planted, they will then give abundant increase.
**SAXIFRAGA OPPOSITIFOLIA.**

**OPPOSITE-LEAVED SAXIFRAGE.**

<table>
<thead>
<tr>
<th>Class</th>
<th>DECANDRIA</th>
<th>Order</th>
<th>DIGYNIA</th>
</tr>
</thead>
</table>

**Natural Order.**

**SAXIFRAGACEÆ.**

<table>
<thead>
<tr>
<th>Native of Britain</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Inhabits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>2 inches</td>
<td>Mar., April</td>
<td>Perennial</td>
<td>Alpine rocks</td>
</tr>
</tbody>
</table>

No. 1120.

The meaning of the name of this little "stone-breaking" plant, will be found under No. 1000.

Great Britain possesses no prettier plant of its class than Saxifraga oppositifolia. The common variety of it, with lilac flowers, published at No. 127, is not uncommon in some of the alpine districts of Scotland, and a few localities have been assigned it in Wales; especially Snowdon, on one part of which it is said to be plentiful. In the north of Europe and America, it has been found; also in Newfoundland, Labrador, and near to the summit of the Rocky Mountains; in Lapland, Spitzbergen, Switzerland, and the Pyrenees. The white variety, however, which we have desired to make known, is a plant rarely met with, even in the best collections; and whence it was originally derived, is not recorded. We are indebted for the specimen from which our drawing was made, to the Messrs. Pope, of Handsworth, who assiduously collect novelties of this class.

No one who has attempted the cultivation of Alpine Plants, to which class the Saxifraga oppositifolia legitimately belongs, will have failed to
observe that success is very doubtful, unless they be kept together on the north side of artificial rockwork; or in pots, to have a due portion of protection. Planted in the open borders, these low subjects, if destroyed by no other means, will undergo gradual destruction by being overgrown.

The majority of what are called Alpine Plants, grow on mountains, in the enjoyment of a thin, pure, atmosphere, where the rays of the sun, in the summer, are much tempered by the altitude, and where, in winter, a fleecy covering of snow protects the plant, just as the fleecy covering of another material, here protects the cultivator. There are no means by which, in this country, these plants can be cultivated with the same amount of satisfaction as in pots. Were we to aim at accommodating a collection of Alpine Plants in the best possible manner, we should nearly adopt the plan recommended by Mr. Rivers, in the tenth volume of Loudon's Gardeners' Magazine. They should be raised on a stand two feet high, and two feet wide, of any length required, the ends pointing east and west; on the south side of which should stand a substantial hornbeam hedge, or a wall. Here the pots could be plunged in sand, to prevent the too rapid transition from wet to dry in summer; and in winter a covering of glass or mats could be applied, as may be most convenient to the means or taste of the cultivator. An additional precaution we have seen practised with advantage; which is neatly filling up the interstices between the plants, on the tops of the pots, with moss. The effect is pleasing as well as protective.
**RO'SA IN'DICA.**

Variety Ophiree

**CHINA ROSE.**

*Class.*

ICOSANDRIA.

*Order.*

POLYGYNIA.

**Natural Order.**

ROSACEÆ.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1121.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The origin of the word Rosa, will be remembered by most of our readers. Regarding the florists' name, Ophirée, given by its continental sponsors to distinguish this newly-introduced variety, we offer no opinion. Under this name we received it from Mr. Rivers's collection of French novelties.

It is one of the most singularly tinted Roses we have met with; in its mingled pink and yellow, the former colour has been left on its outer petals, its central portion assumes a deep buff; whilst a salmon-like tint is allotted to some of the interjacent parts. It is one of those oddities that old Rose-lovers never dreamt of possessing. The habit of the plant evidently betrays its descent from some of the climbers, although it would be difficult to connect it with any one in particular. Its flowers are moderately well filled, and it will, doubtless, be prized for the production of them through the latter part of the summer. Our plant continued flowering even till frost destroyed the opening buds in November; and against a wall its flowers may, in most seasons, be protected and kept in perfection till Christmas, or even longer.

281.
**Epimedium Musschianum.**

**Mussch’s Barren-wort.**

**Class.**
TETRANDRIA.

**Order.**
MONOGYNIA.

**Natural Order.**
BERBERIDACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>8 inches</td>
<td>April, May</td>
<td>Perennial</td>
<td>in 1837</td>
</tr>
</tbody>
</table>

No. 1122.

The derivation of the name, Epimedium, is enveloped in much obscurity; some writers have, however, suggested that it is deduced from the Greek, epi, upon, and media, the native country of the plant. Musschianum was adopted as a specific name by Morren, in compliment, it may be supposed, to some continental botanist.

Dr. Von Siebold, to whom Europe is so much indebted for his researches in Japan, introduced this plant amongst many others, to France, whence it was obtained by the nurserymen of England. It is not a plant possessing gaiety, or much show; but, as well as for its neat and rather elegant growth, the botanist will regard it with some interest, from its connexion with a shrub to which, at first sight, it would appear to possess no alliance, we mean the Barberry. This humble plant, fitted as it is for sheltered rock-work, or pot culture, must not be taken as a sample of the Flora of Japan, many of the flowers of which are of splendid character, especially the Liliaceæ, of Siebold’s collections.

As well as having benefited his country by these introductions, Dr. Von Siebold has assisted in the
enlightenment of Europeans, in regard to that plant which, of all others, possesses a greater share in the affections of a greater number of human beings on the face of the earth, than any other single plant, with which a kind Providence has blessed us. Every one will recognize Tea as the almost universal panacea for some or other of the wants of human nature. It seems probable that even the eastern side of Asia alone can supply a tea-drinking population of three hundred millions of souls; independently of other parts of the globe.

It has been asserted, by writer after writer, that the black and green Teas are the produce of distinct species of the Tea-tree, and to this circumstance their difference of quality has been attributed. Mr. Reeves, an Englishman, and tea-taster to the East India Company, at Canton, gave his authority to the opinion; but it seems probable that his taste was a better assistant to commerce, than his eye to science, for Dr. Siebold, with other botanists, has determined that in Japan, the same plant produces both the black and green Teas, and Fortune has corroborated the fact in China. For green Tea the leaves are gathered, and immediately submitted to the drying process, on large iron pans, and to rolling between the hands, to twist them as required. For black Tea the leaves, after gathering, are exposed in sieves, over boiling water, and infused by the hot steam, by which they are deprived of some of their astringent principles, and then dried as for green Tea. An error, connected as it is with an article so perpetually before us, it is worth while to correct.
AGER'ATUM MEXICA'NUM.

MEXICAN AGERATUM.

Class. SYNGENESIA. Order. ÆQUALIS.

Natural Order. ASTERACEÆ.

<table>
<thead>
<tr>
<th>Native of Mexico.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 feet</td>
<td>July, Aug.</td>
<td>Perennial</td>
<td>in 1822</td>
</tr>
</tbody>
</table>

No. 1123.

The name Ageratum is compounded from the Greek privative a, and geras, old age; signifying 'never old.' It has been suggested that this name was intended for some evergreen, to indicate its continuous youth and freshness; the old herbalists however, believe that the plant to which the Greeks applied the name, was some composite flower, perhaps an Achillea, which would have influenced Linneus in employing it.

Although this plant was introduced so early as the year 1822, still it has been but partially cultivated, until adopted for bedding out, as gardeners technically call the use of a plant, when used to fill beds without the mixture of others. Single plants, in the mingled parterre, are less pleasing than when seen in a mass, filling entire beds, for which purpose it is suitable, producing a multitude of flowers, which continue in beauty till gathered by the shrivelling hand of an autumnal frost.

Seedling plants require to be raised in a hotbed or greenhouse, and when large enough, should be potted singly, that they may be turned out at the end of May, a foot asunder.
CONVOLVULUS BRYONIÆFO'LIUS.

BRIONY-LEAVED BINDWEED.

Class.  
PENTANDRIA.

Order.  
MONOGYNIA.

Natural Order.  
CONVOLVULACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
</table>

No. 1124.

This genus is well characterized by its name, from convolvo, to entwine; not, however, that every species is a twiner, but that by far the greater portion are so. In a genus of plants, comprising about two hundred, a character merely of habit cannot be expected to be completely constant amongst the whole.

Although this plant is an old inhabitant of our gardens, it is becoming better known from the introduction of foreign seeds, from which it has lately been raised; indeed, the facility of communication with our colonies, and other parts of the globe, is giving to botanists abundance of enjoyment, not that the most nervous collector has occasion to fear that during the next thousand years, either amateur or professional botanists will so search every nook and corner of the earth, as to leave nothing new for their successors to rejoice over.

The Briony-leaved Convolvulus, when its root has become strong, produces abundance of flowers, which have a gay effect, and in no situation more so than when twining amongst ornamental stones or sculpture. It should have a light soil.
Origanum dictamnus

Dianthus Balbisii

Cerasus vulgaris

Gaucyraedes pulchellus
ORIG'ANUM DICTAM'NUS.

DITTANY OF CRETE.

Class.  
DIDYNAMIA.

Order.  
GYMNOSPERMIA.

Natural Order.  
LAMIACEÆ.

Native of Candia.  | Height.  | Flowers in | Duration.  | Introduced  

No. 1125.

Origanum is one amongst the most ancient of Botanical names, having been used by the Greeks, long before the Christian era. It is formed of the two Greek words oros and ganos, signifying a mountain and joy; and was used in allusion to the usual place of growth of the plant, and its agreeable fragrance.

This is one amongst the most easily cultivated of old-fashioned window plants; it is, too, a very ornamental one. Besides this, it will bear exposure through a mild winter, and during summer makes a pretty rock plant or low border ornament. Cultivated in the house, it assumes a woolly and altogether a whiter aspect than when grown in the open air, as was the plant from which our drawing was made. It is also suitable for bedding out, as it continues to flower till prevented by frost.

By the name of Dittany of Crete, this plant has, for two thousand years, been known as a medicinal herb. Culpepper, in his London Dispensatory, two centuries ago, has a relation of its virtues, which, by the bye, is little but a repetition of a portion of the opinions of those who lived before him. He
says "It's an admirable remedy against wounds and
gun-shots, wounds made with poisoned weapons,
it draws out splinters, broken bones, &c. The dose
from half a dram to a dram. They say the goats
and deers in Crete, being wounded with arrows,
eat this herb, which makes the arrows fall out of
themselves; and from thence came the tale in Vir-
gil, about Æneas." (book 12). It has not been con-
tinued in our modern Dispensatories, but Dr. Lindley notices it in his Flora Medica, as an aro-
matic and tonic, under the name Amaracus dictam-
nus, that now adopted by continental botanists.
Turner, in his "Homish apothecarye or homely
physick booke, for all the grefes and diseases of
the bodye," published in 1568, hands down to us
a relation of all the merits attributed to the plant
by the ancients, whereby we have a clear view of
the continuance of those extravagant notions set
forth by the early Eastern writers. A little know-
ledge, ripened in a warm imagination, into the
most ridiculous speculations, and then dissemi-
nated with the influence given by popular philoso-
phers, became the adopted opinions of the early
Greeks, and indeed, of the ancient Romans also;
—opinions which seem never to have been shaken,
till the invention of printing began to reflect the
light of science and truth from mind to mind; not
losing radiance by its transmission, but collecting
fresh rays in its progress, down to the present time.
At what point this advancement of knowledge will
cease to operate, no one is permitted to foreknow,
nor can the ultimate perfection of human intellect
be conceived.
CER'ASUS VULGA'RIS.
COMMON DOUBLE CHERRY.

Class.
ICOSANDRIA.

Order.
MONOGYNIA

Natural Order.
DREPACÆÆ.

<table>
<thead>
<tr>
<th>Seedling variety.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Cultivated in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 feet</td>
<td>May, June</td>
<td>Tree.</td>
<td>1796</td>
</tr>
</tbody>
</table>

No. 1126.

Cerasus, the name of an ancient town of Pontus, in Asia, whence the cultivated Cherry was taken to Italy, by the Roman General, Lucullus, about half a century before the birth of our Saviour.

Authors have differed in opinion regarding the origin of our garden Cherries; some conceiving that we have two original species—the small wild black Cherry, and the sour red one; it scarcely, however, admits of a doubt, that both have had the same origin, and that they are specifically identical. The double blossoming Cherry, which we now publish, is not likely to determine the question, nor can it be confidently stated from which of the varieties before mentioned, it had its origin. Its beauty is of rather short duration; but during its continuance in flower, a more elegant or striking shrubbery nosegay can scarcely be conceived. All the anthers of the common variety are, in this, changed into petals, and the pistillum into small green leaves; hence are formed, miniature roses, of the most delicate and perfect character. It is propagated by grafting on common Cherry stocks, and will grow in any soil.
Dianthrus Balbisii.

Balbis's Pink.

Class.  Decandria.

Order.  Digynia.

Natural Order.  Caryophyllaceae.

Native of Genoa.  Height.  Flowers Duration. Introduced

No. 1127.

Dianthus, or Jove's Flower, from Dios, Anthos, of the Greeks. Balbis, a botanist of Turin.

A tribe of Pinks now present themselves, which produce their flowers in close clusters, as in the case of Dianthus Balbisii, that are attracting more than ordinary notice, and certainly meriting increased attention; the depth of colouring in some, and the variegation in others, makes them exceedingly ornamental. The wild Pink of our castle walls may, too, remind us of the suitableness of almost all the numerous species of Pinks for growth in such situations, or a similar one—rock-work; where many plants, which require to be somewhat exalted from the damp of the common borders, will flourish luxuriantly, and endure our winters; which, under usual treatment in the common soil, would be destroyed.

Dianthus Balbisii is not unfrequently raised from foreign seeds; or it may be readily propagated from cuttings, taken about Midsummer, and planted in a sandy border, under a hand-glass. To establish any of the pink tribe on walls, the seed should be sown in the crevices, in autumn.
GANYMEDES PULCHELLUS.

PRETTY GANYMEDES.

Class. HEXANDRIA.  
Order. MONOGYNIA.

Natural Order. AMARYLLIDACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Cultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain.</td>
<td>1 foot.</td>
<td>Mar., April</td>
<td>Perennial.</td>
<td>before 1810.</td>
</tr>
</tbody>
</table>

No. 1128.

The present generic name, which has been adopted by modern authors, is a classical one of the late Mr. Haworth, an enthusiastic cultivator of bulbs and succulent plants, and a man of highly poetic mind. By the fabulists of old, Ganymedes was represented as the cup-bearer of the gods, in place of Hebe; hence the appropriateness of the name to this group of plants, as all of them bear large cups. Mr. Haworth separated this genus from Narcissus, from its reflexed perianthium; three stamens being inserted in the mouth of the tube, and three far down; and its ovarium having two septums, with four rows of seeds in each cell, others having but two rows of seeds in each cell. We mention this to explain, in some degree, the characters on which a division of the genus Narcissus was adopted.

This is a plant of delicate appearance, and worthy of cultivation by all who admire the old family of Narcissus; and there is scarcely one of more value, for the embellishment of our gardens in the spring, nor any requiring less care at our hands. It may be sufficiently increased by offsets.
PYRUS PRUNIFOLIA.
PLUM-LEAVED SIBERIAN CRAB.

Class.  Icosandria.

Order.  Di-Pentagynia

Natural Order.  Pomaceae.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30 feet.</td>
<td>May.</td>
<td>Tree.</td>
<td></td>
</tr>
</tbody>
</table>

No. 1129.

Some difference of opinion has arisen respecting the origin of the word Pyrus. The most satisfactory is that of De Theis, who says that from the Celtic peren, originated the Anglo-Saxon pere, the French poire, the English pear, and the systematic name pyrus.

There are occasionally to be met with in English gardens two very distinct and different trees, each of which is called a Siberian Crab-tree. Their fruit, too, is equally distinct; the one, Pyrus prunifolia, with a persistent calyx, as in our present plate; the other, Pyrus baccata, with a longer stalk, its calyx obliterated, leaving the fruit much resembling a Cherry. In London's Arboretum another is mentioned, called Bigg's Everlasting Crab, which was raised in the Cambridge Botanic Garden, in 1814, from seed received from Siberia, possessing a character intermediate between the two preceding sorts. It is said to have pendulous branches, and to be a most abundant bearer.

All may be propagated by grafting them on stocks of the common English Crab; and their hardy nature fits them for any situation.

283.
NORDMAN'NIA CORDIFOLIA.

HEART-LEAVED NORDMANNIA.

<table>
<thead>
<tr>
<th>Class</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>TETRANDRIA</td>
<td>MONOGYNIA</td>
</tr>
</tbody>
</table>

Natural Order.

THYMELACEÆ.

<table>
<thead>
<tr>
<th>Native of China.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>10 inches</td>
<td>March.</td>
<td>Perennial</td>
<td>in 1846.</td>
</tr>
</tbody>
</table>

No. 1130.

A plant of recent introduction to this country, having been first published by Fischer and Meyer, and named, we presume, in compliment to one of their friends.

This pretty plant is a native of China, and its curious twisted petals, standing out, at almost right angles, from its conical cluster of stamens, reminds us of some of the whimsical architectural ornaments indulged in by the inhabitants of its own country. We cannot, however, accuse the Chinese of intentionally founding their taste on too strict an adherence to the beauties displayed in natural productions. They love extravagant embellishment; but, to do them justice, it should be observed, that there is no difficulty in referring the general features of their splendid pagodas to the fir tribe. Some varieties of the Spruce Fir, the Larch, and others, it may readily be supposed, had originally an influence on their architectural taste.

The Nordmannia cordifolia, for which we are indebted to the Messrs. Pope, of Handsworth, is considered by them as a good forcing plant; and hardy enough for culture in a dry sheltered border.
CALLIPRO'RA LU'TEA. Var. Major.
LARGE YELLOW-FLOWERED CALLIPRO'RA.

Class. HEXANDRIA.
Order. MONOGYNIA.

Natural Order. LILIACEÆ.

<table>
<thead>
<tr>
<th>Native of California</th>
<th>Height</th>
<th>Flowers in</th>
<th>Habit</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>18 inches</td>
<td>July, Aug.</td>
<td>Bulb.</td>
<td>in 1831</td>
</tr>
</tbody>
</table>

No. 1131.

The name of this genus is founded on the Greek kallipros, signifying pretty-face; hence it may be called Yellow Pretty-face.

Hardy bulbs, even if but conspicuous varieties of one species, like the present plant, are always acceptable to the lovers of the open flower garden. There is no class of plants that requires, at the hand of the cultivator, less of his labour, for the amount of beauty they give in return; and when, on the stage of gaiety, they have performed their respective parts, they make their exit; and are no more seen, till again summoned forth by the sun in the succeeding year. He then sends forth his rays to pierce the earth, and, in the words of Isaiah, may be supposed to call—"Awake and sing, ye that dwell in the dust;" and again the stage of beauty is peopled for the gratification of all, and for the instruction likewise, of those who choose to read the book of Nature; for, as Austen, whom we have elsewhere quoted, says,—"Not only rational and irrational, but even inanimate creatures, have a voice, and speak loudly to men, and it is our duty to learn their language, and hearken to them. The
ancients were skilled in this kind of learning, in teaching by similitudes, and one of them observes, that God sent us the Book of Nature before he sent us the Book of the Scriptures."

The plant now published has appeared in some gardens as Calliprora speciosa, from its size, and the depth of its colour. It is desirable that this error should be corrected, it being doubtless, but a seedling variety of the original Calliprora lutea. This latter bulb was discovered by Douglas, in California; and when we reflect on the number of fine plants that he collected, how many thousands of beautiful subjects, may we not reasonably suppose, are still left behind! Even close to his very footsteps may have existed, unseen, plants of as great splendour as any he discovered. Everybody knows the beautiful Lupines that now so generally ornament our gardens; of these, no less than seventeen species he found on his first visit to the shores of the Columbia; and although considerable exertions have lately been made for the discovery of new plants, these are, in comparison with the extent of country unexplored, literally of no moment. North America alone being eight millions of square miles in content, thousands—perhaps hundreds of thousands of miles exist, on which no human foot has trod, which, notwithstanding, are embellished with innumerable plants, unknown to man.

The cultivation of this bulb is simple; it only requires to be planted in a friable sandy peat; and shade seems to favour its flowering. Although it has been fully exposed in England, we would protect a single plant.
AR' BUTUS SPECIO'SA.
SHOWY STRAWBERRY TREE.

Class. DECANDRIA.
Order. MONOGYNIA.

Natural Order. ERICACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in Hab.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico.</td>
<td>4 feet.</td>
<td>June. Shrub.</td>
<td>in 1837.</td>
</tr>
</tbody>
</table>

No. 1132.

Whether the name Arbutus was deduced from the Celtic AR BOISE, a rough bush; or the Latin ARBOS, tree, is now unknown. The ancient Greeks had no such name; they were acquainted with our Strawberry Tree; but this they called Comaros.

The Arbutus speciosa was introduced to our gardens through the London Horticultural Society; seeds having been imported from Mexico, and plants first propagated in the Society's garden.

The abundance of flowers produced by this Arbutus makes it exceedingly desirable; its handsome evergreen foliage also,—very distinct from the common Arbutus, will assist in giving variety to our winter-brightening shrubs. The height which it will attain in this country cannot, with certainty, be stated; that which we have quoted being the greatest we have seen.

We are not sure that this species is as hardy as the common Arbutus unedo, inasmuch as we have not seen it exposed to severe frosts. It may be propagated from cuttings; but strong plants may be more readily obtained by grafting it on the common species.
GLADIOLUS GANDAVENSIS.

GHENT CORNFLAG.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
IRIDACEÆ.

<table>
<thead>
<tr>
<th>Hybrid Origin</th>
<th>Height</th>
<th>Flowers in Habit</th>
<th>Cultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 feet</td>
<td>August</td>
<td>in 1843</td>
</tr>
</tbody>
</table>

No. 1133.

The name, Gladiolus, is founded on the Latin gladius, a sword; from the shape of its leaves. The subject now figured, probably, received its trivial name, Gandavensis, from Van Houtte, nurseryman of Ghent, who first made it known; not that it originated with him, for we owe its origin to the gardener of the Duc d’Aremberg, at Enghien.

One of the largest, and the most splendid Gladiolus, with which we are acquainted; it excels the Gladiolus Natalensis, No. 536; indeed, it is by hybridisation, as one means, and by the diligent employment of all those powers which are placed at our command by Him who created every plant in its present beauty, that we promote the advancement originally ordained. The wild plant, the untamed animal, the human mind, are all progressive, capable of—intended for—advancement in their respective ranks of creation.

For the specimen from which our drawing was made, we are obliged to the kind attentions of J. Willmore, Esq. of Oldford, who possesses a splendid collection of the new varieties of Gladioli. To his energetic gardener, Mr. J. Cole, we are also
indebted for assistance in their classification, and we may, ere long, state his mode of culture.

The showy hybrid kinds of Gladiolus may be divided into four sections, based on the following distinct species, viz. Cardinalis, Blandus, Floribundus, and Natalensis, to which they have respectively more or less affinity.

The hybrid kinds of Cardinalis are known by the spike of flowers being recurved, the flowers scarlet, in various shades, and with few exceptions they have a delicate white feathering in the lower petals. Among some of the most beautiful are Imperialis, Prince Albert, Queen Bess, Christianus, Gem, and Insignis.

The Blandus hybrids vary from the above, in their flowers being white, rose, or pink, with variously coloured markings in their lower petals. Amongst the best of this division are Virgin Queen, La Princesse, Princeps, Pudibundus, Splendens, and Loddigesii.

From Floribundus comparatively few hybrids have been obtained; they are distinguished by their flower spikes being erect, inclined to branch, and thickly set with flowers; more or less resembling the parent in colour. Albicans, Roseus, Ramosus, and Pyramidalis, rank amongst the finest.

The hybrids of Natalensis are also few in number; they are, however, highly desirable, in consequence of their having proved nearly hardy; they are distinguishable by their resemblance to the parent, in point of growth and general resemblance. The most desirable varieties are Gandavensis orange, Gandavensis dark, and Bidwelliana.
PRU'NUS SPINO'SA.  
Var. Pleno.

THE SLOE THORN.

Class.  
ICOSANDRIA.

Order.  
MONOGYNIA.

Natural Order.  
ROSACEÆ.

<table>
<thead>
<tr>
<th>Native of Europe</th>
<th>Height</th>
<th>Flowers in March</th>
<th>Habit</th>
<th>Inhabits Hedges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>20 feet</td>
<td>March</td>
<td>Shrub</td>
<td>Hedges</td>
</tr>
</tbody>
</table>

No. 1134.

The word Prunus, it is believed, is derived from the Asiatic prounnos, the name of the wild plum.

Here we have a shrub of much beauty; wild and spinous, yet flowering in splendor; every blossom being a miniature rose of snowy whiteness; a barren thorn it may be said, yet own brother to the Green Gage Plum as well as the Sloe. Cultivation has produced the change, as it has made the philosopher out of the savage. It has been well observed by Loudon, in his Arboretum, in allusion to hybrid and other cultivated plants, that "It must not be forgotten that almost all the cultivated plants, of most value to man, have been produced by some kind of artificial process. Experiments of this kind, therefore, ought never to be discouraged. What cultivation has done, we know, but what it may yet accomplish, is concealed in the womb of time."

This double-flowering form of Prunus is by no means common in cultivation, although so hardy and showy. It is but a variety of the single-flowered Sloe Thorn, which is so frequently met with in hedges and copses, not alone in England, but
nearly all over Europe, and in some parts of Africa and Asia. America does not claim it as her own, but has imported it; and in that country it is used as in England, in fences. For this purpose it would, at first sight, be thought superior to the hawthorn, but it is not so. Instead of the parent plant raising a young and useful family of shoots at home, to strengthen the hedge, as its own powers decline, it sends out a progeny of wanderers, that encroach on the adjacent land, in all directions. Duhamel remarks that, in France, it was observed that lands adjoining forests were invaded by the sloe thorn, and, if not eradicated, it protected the seeds of timber trees, threatening, that, at no great distance of time, the whole would be covered with forests.

The wood of the sloe tree is exceedingly hard and tough; and a wound from its thorns was thought, by Withering, to be more difficult to heal than one from the spines of the common hawthorn. Its fruit has been used for several purposes—some not the most honest, for it is said to enter largely into the manufacture of inferior port wines; just as the leaves have into "Chinese" tea. A small proportion of the fruit has been advantageously used in some kinds of British wines, especially that from the Elder-berry, to give it a brisker flavour and slight astringency.

The double variety of the Sloe Thorn is most ornamental when trained to a single stem, with a spreading head; and thus grown, has a character of its own, well suited to the embellishment of woodland districts.
COR'NUS MAS'CULA.

CORNELIAN CHERRY.

**Class.**
TETRANDRIA.

**Order.**
MONOGYNIA.

*Natural Order.*
CORNACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Cultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe.</td>
<td>15 feet</td>
<td>March.</td>
<td>Tree.</td>
<td>in 1568.</td>
</tr>
</tbody>
</table>

No. 1135.

Cornus is derived from cornu, horn, from the extreme hardness of the wood of the Cornus, or Dogwood. The name mas or mascula, may be traced in connection with this plant for about two thousand years, indicating the presence of stamens only in its flowers.

The Cornelian Cherry is of slow growth, forming a small tree, which so early as February or March, puts forth its umbels of yellow flowers, even before its leaves have burst their hybernaculum. In this state, in a bright spring day, when the yellow Crocus, equally unclothed, comes to meet it, they give a pleasing promise of the charms of summer. The leaf, in the engraving, it should be observed, was drawn subsequent to the appearance of the flowers. The character of barrenness attributed to this tree is applicable only whilst it is young; when old, it bears an eatable astringent fruit, from which it has received the name Cornelian Cherry, or Cornel tree. Its red fruit continues long to ornament the shrubbery.

The tree may be propagated by any of the common modes, and prospers in calcareous soils.
JASIO'NE MONTA'NA.
MOUNTAIN SHEEP’S SCABIOUS.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

<table>
<thead>
<tr>
<th>Native of Britain.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Inhabits Pastures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>1 foot</td>
<td>June</td>
<td>Annual</td>
<td></td>
</tr>
</tbody>
</table>

No. 1136.

The name of this genus has descended to us from the Greeks, but is of uncertain derivation. There is scarcely any foundation for supposing it to have come from ion, a violet.

This is an annual plant of little pretension, but in the mass, when well grown, produces considerable effect, hence it becomes suitable for entire beds.

Most of the Campanulaceae are furnished with hairy styles, the hairs being arranged in exact relation to the position of the anthers, so that they are supplied with the means of readily collecting the pollen. In the Jasione this evidence of design is still more interestingly displayed. The florets of the disk have fertile stamens, but barren club-shaped pistils. On the contrary, the florets of the circumference have fertile pistils, but barren stamens, hence the barren pistils, in their gradual extension between the fertile anthers, collect the pollen, and transmit it to the fertile ones, which from their position, would not otherwise receive it. How could the purpose be more beautifully accomplished!

Jasione Montana is propagated as other hardy annuals.
Trollius humilis.
Silene speciosa.
Colchicum variegatum.
Spiraea prunifolia.
COL'CHICUM VARIEGATUM.
CHECKERED-FLOWERED MEADOW SAFFRON.

Class. HEXANDRIA. Order. TRIGYNYA.

Natural Order. MELANTHACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece.</td>
<td>4 inches</td>
<td>September.</td>
<td>Bull.</td>
<td>in 1629.</td>
</tr>
</tbody>
</table>

No. 1137.

The word Colchicum is founded on Colchis, the name of a country in Asia.

Of the qualities of Colchicum variegatum we have no evidence; but those of the Colchicum autumnale, a plant which abounds in meadows, in various parts of England, are so powerful and poisonous, that it may be well to put on record the dangerous character of its leaves to cattle; and the more especially so from its having been stated that cattle never eat it. Generally speaking this is true, but two instances have come to our knowledge of cows having eaten it and died, on first being turned out to grass in May, when its leaves are quite young, and the cattle, after the dry hay and straw of winter, not fastidious in regard to their green food. If its leaves were pulled up on their first appearance, for two or three years, there can be little doubt but it would be destroyed.

Colchicum variegatum is an exceedingly pretty border plant, with the same habit as the wild Meadow Saffron, above alluded to, producing its flowers in autumn, and its leaves in spring; and it is nearly as hardy as that species.

285.
SPIRÆ'A PRUNIFO'LIA.

Double-Flowering Japan Spiræa.

Class. Icosandria.

Order. Di-Pentagynia.

Natural Order. Rosaceæ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>China.</td>
<td>6 feet.</td>
<td>May, June.</td>
<td>Shrub.</td>
<td>in 1847.</td>
</tr>
</tbody>
</table>

No. 1138.

It is questionable whether the Greeks adopted this name from the cord-like branches of their plant, or from its wreaths or cords of flowers. See No. 1045.

For one of the prettiest flowering shrubs to which we have for a long time been introduced, we are indebted to the obliging attentions of the Messrs. Pope, of Handsworth; who, constant to their usual practice, seize the earliest opportunity of obtaining every novelty that is worthy of a place in the gardens of their customers. The blessings of peace have given us the wide world to wander over. Africa, the Indies, and the far-spread continent of America, from the torrid to the frigid zones, are continually pouring in their riches upon us, so that before the pleasurable excitement from one accession has ceased, another lays claim to attention. The productions of the warmer parts of the world have extended the number of plants for our hot-houses, in an extraordinary degree; but, still, it must be confessed, that a charm attends the open garden, which never can be realized in the conservatory, the greenhouse, or stove. We would not
depreciate the delight of nursing the tender inhabitants of a foreign clime—of bestowing a shelter to those plants that would die in the storm; but who can do otherwise than look, with the liveliest interest, on such as will brave the blasts of adversity, that encounter the harshness of winter, and smile again in the spring. Let us take a lesson from such as

"Expand in the tempest, and bloom in the breeze,  
An emblem of sweet independence are these;  
And the soul who beholds them unhurt in the strife,  
Shall learn to contend with the troubles of life;  
And when the cold wind of adversity's felt,  
And the shafts of affliction are ruthlessly dealt,  
His spirit, unbroken, shall rise to the last,  
And his virtues shall open and bloom in the blast."

The double-flowering Spiræa prunifolia was introduced to this country by M. Louis Van Houtte, nurseryman, of Ghent; who, according to his published list of subscribers, sold a hundred and fifty plants, in 1847, at a guinea each; the first medal for the best novelty having been awarded for it, at exhibitions of flowers in Paris and other places in France. The original stock was purchased of Dr. Siebold, its importer from Japan, who met with it in cultivation, in the gardens of the Japanese. It is not believed to be a native of Japan, but of the north of China, or of Corea; and, as regards its hardiness, it is said to have borne exposure at Ghent, with Fahrenheit's thermometer at zero. It may, without doubt, be propagated by cuttings or layering, but of this, it is fair to state, we have at present had no experience.
TROLLIUS HUMILIS.

DWARF GLOBE FLOWER.


Natural Order. Ranunculaceæ.

<table>
<thead>
<tr>
<th>Native of Austria.</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 inches</td>
<td>May, June</td>
<td>Perennial</td>
<td>in 1800</td>
</tr>
</tbody>
</table>

No. 1139.

The name of the plant now to be considered, has been founded on a German word, signifying round or globular; a character that is prominent in the species Europæus, which is a native alike of England and Germany.

Trollius humilis, to the eye of the commonest observer, is at once discovered to be unlike the species Europæus, just referred to; but when described in words, it possesses no well-defined character by which it can be distinguished. This plant is much smaller than Europæus, and its flower wants that globe-like form which so prominently distinguishes its congener; but these differences constitute no distinctive botanical character, consequently Decandolle, the eminent French botanist, has esteemed Trollius humilis as a variety only of Trollius Europæus.

Few plants more amply repay good culture than does the present one. Growing wild, on its native plains in Austria, it seldom rises but a few inches in height; but under generous treatment, in a cultivated border, it will attain a foot, and increase more freely for division.
SILENE SPECIOSA.

SHOWY CATCHFLY.

Class.
DECANDRIA.

Order.
TRIGYNYA.

Natural Order.
silenaceæ.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 foot</td>
<td></td>
<td></td>
<td>Annual</td>
<td></td>
</tr>
</tbody>
</table>

No. 1140.

Silene is from the Greek, sialon, saliva; in allusion to the exudation that prevails on the stems of most of the species.

The spontaneous exudation from trees and small plants, is little seen in this country, but in hot climates it is otherwise. The manna of commerce is perhaps the most marked instance of vegetable exudation which is known; but notwithstanding this medicinal substance is afforded spontaneously, from several species of large trees, the greatest portion of it is obtained by making incisions in their bark, and thus facilitating the escape of its juices. Several sorts of wax, gums, and resins, are exudations from trees; and it is perhaps not generally known that our own Ash-tree, when grown in a warm climate, produces manna.

Our artist having made the annexed figure, as that of Silene speciosa, from plants handed to him as the produce of seeds so named, its identification was inadvertently omitted till the engraving was completed; it is evidently but a variety of Viscaria oculata. In charity we may hope these misnomers partake more of ignorance than design.
HEMEROCAL' LIS RUTI' LA.

BRIGHT DAY LILY.

**Class.**
HEXANDRIA.

**Order.**
MONOGYNIA.

**Natural Order.**
LILIACEÆ.

<table>
<thead>
<tr>
<th>Native of China?</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced in 1844?</th>
</tr>
</thead>
<tbody>
<tr>
<td>China?</td>
<td>2 feet.</td>
<td>June.</td>
<td>Perennial</td>
<td></td>
</tr>
</tbody>
</table>

No. 1141.

The generic name, Hemerocallis, is derived from the Greek *hæmera*, day; and *kallos*, beauty; implying that this flower is the beauty of a day only, which is correctly applicable to some of the species.

The Funkia ovata, which has been published under No. 596, was formerly included in this genus, and called Hemerocallis cærulea; in most gardens, the error has, however, been generally corrected.

One of the plants of importance, most closely allied to Hemerocallis, may be noticed, as unlikely to have come under the observation of the majority of our readers; we allude to the Phormium tenax, or New Zealand Flax, a plant of magnificent outline, in some degree resembling the Yucca gloriosa, and bearing the usual winters of the mild portion of England. From its leaves a fibre is prepared, which has proved to be stronger than Baltic hemp, and more valuable for the cordage of shipping.

The handsome Hemerocallis rutila, now figured, has flowers of deeper colour than the better-known Day-lily (Hemerocallis flava); they also assume a more erect position. It is a showy and desirable plant for the borders.
SILE'NE SAXIF'RAGA.

SAXIFRAGE CATCHFLY.

<table>
<thead>
<tr>
<th>Class.</th>
<th>Order.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECANDRIA.</td>
<td>TRIGYNYIA.</td>
</tr>
</tbody>
</table>

**Natural Order.**
SILENACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>France.</td>
<td>9 inches.</td>
<td>June.</td>
<td>Perennial.</td>
<td>in 1640.</td>
</tr>
</tbody>
</table>

No. 1142.

Silene, see No. 1140. Saxifraga is retained as a specific name to this plant on account of its having, by old botanists, been arranged with Saxifragas.

This is a small but pretty plant, that has been re-imported from the continent, and attracted the notice of cultivators of alpine plants. Although not in reality an inhabitant of alpine districts, it succeeds admirably under the treatment usually bestowed on that class of plants, that is, pot culture; and it is no insignificant amount of pleasure that arises to the cultivator, when he witnesses these nurslings thrive under his immediate care. Each, in its respective portable habitation, becomes, as it were, companionable; its increased necessities give it a constant claim on our attention, which adds to the interest we take in its welfare.

It is, we believe, an accepted truth, that the child intrusted to a foster-mother can never be so closely bound up in the affections of its natural parent, as if, from its birth, that parent had supplied its every infant want; and that, through the stages of its earliest dawn of reason, each had been bound to each in the same vibrating cords of sensation;
so with plants, it surely is, that for their owner to partake of the real enjoyment to be gathered from them, they should be propagated,—we had almost said created, nursed, their wants administered to, and their drooping heads revived from the crystal fountain’s refreshing cordial, by his own hand; they then become to him as the smiling children of an indulgent parent, and afford the gratification intended by Him who gave them for our pleasure.

The collections of small plants, cultivated in pots, and usually called alpine plants, contain very many which, like the Silene saxifraga, are in reality not alpine, but the inhabitants of marshy places, damp rocks, or shady woods, which cannot bear constant exposure to our summer sun, in a dry parterre. The minute fibrous roots of many of these are few in number, or running near the surface of the ground, are unable to absorb sufficient moisture to supply the demand of the leaves, whilst evaporation of their fluids is rapid, from exposure to heat. The really alpine plant, too, requires that other peculiarities of its economy be attended to; for, although the inhabitant of a rigorous climate, it has, in its native spot, the protection of a snowy covering in winter, which shields it from all sudden alternations of temperature, till its brief alpine summer bursts on it abruptly, and forces it on rapidly to luxuriance and maturity. These plants require protection from the alternating of our frosty nights and sunny days. An equalization of the temperature and humidity of the atmosphere about his plants, should be the aim of the cultivator of alpine subjects.
CERASUS CHAMÆCERASUS.

GROUND CHERRY TREE.

Class.
ICOSANDRIA

Order.
MONOGYNIA.

Natural Order.
DRUPACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Habit.</th>
<th>Cultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>6 feet</td>
<td>May</td>
<td>Shrub.</td>
<td>in 1579</td>
</tr>
</tbody>
</table>

No. 1143.

Cerasus, an ancient Asiatic town, near to which Cherry Trees are indigenous. See No. 1080.

Independently of the Cerasus vulgaris, or common Cherry, several distinct species bear an edible fruit; which with due cultivation, through a series of generations of these trees, may, it is probable, be productive of fruit of distinct qualities, and possibly surpassing that which is now so much prized. It is not, perhaps, generally known, that the common and the Portugal Laurel, are so nearly related to the Cherry, as to belong to the same genus. An examination of their fructification will show this.

A marked difference between the inflorescence of the Cerasus chamæcerasus, here figured, and the Cerasus vulgaris, or common Cherry, will be observed; the habit of the plant is also very different. Grown on its own roots, it is but a low bush; but grafted on standards, it forms a round head, which with its drooping branches, becomes very ornamental, and has a novel effect. Its fruit is small, and very acid, but as previously suggested, a hybrid fruit between this and vulgaris, may prove an acceptable novelty.
ARMERIA CEPHALO'TES.

LARGE-HEADED THRIFT.

<table>
<thead>
<tr>
<th>Class</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>PENTANDRIA</td>
<td>PENTAGYNIA</td>
</tr>
</tbody>
</table>

Natural Order.
PLUMBAGINACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portugal</td>
<td>2 feet.</td>
<td>April.</td>
<td>Perennial</td>
<td>in 1775.</td>
</tr>
</tbody>
</table>

No. 1144.

Armeria is a name used by our old writers, and by some of them applied, as at present, to the common Thrift of our sea coast; but its meaning is by no means apparent.

This plant, which we met with in the Birmingham Horticultural Society's Garden, under the name of Statice pseudo-armeria, has lately been re-introduced, and its large globular heads of rose-coloured flowers greatly admired. Miller calls it a Statice, and mentions it as having been cultivated in English gardens in his time, but was destroyed by the severe frost of 1740. Professor Martyn states that it was again brought to England by Jacquin, in 1775. It would appear to have been again lost to our collections, and was then sent from France, in 1843, under different names, as a newly-discovered subject.

This Armeria, for its old name should be discontinued, has a handsome appearance in the borders, and some of its flowers vary considerably in colour, being darker than our representation of it. It will bear mild winters out of doors, but a single plant should have protection.
CUPHEA PLATYCENTRA.

BROAD-SPURRED CUPHEA.

Class. DODECANDRIA.

Order. MONOGYNY.

Natural Order. LYTHRACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers</th>
<th>Duration</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico.</td>
<td>15 inches</td>
<td>June to Oct.</td>
<td>Perennial.</td>
<td>in 1815.</td>
</tr>
</tbody>
</table>

No. 1145.

The Greek **cubhos**, a curve, is the foundation of the present generic name; the crooked capsule of the plant being hereby alluded to.

Although this very desirable species of Cuphea has long been known to botanists, the living plant has but lately been obtained. Its possession now, too, is more a circumstance of accident than design, it having sprung up in the garden of J. Anderson, Esq., of the Holme, Regent's Park, amongst earth that had been attached to fresh-imported plants from Mexico. It is a plant that certainly will continue to be a favourite, not alone for its neatness, and beauty—it must not be called splendour, but for the different purposes to which it is so well adapted. Its growth is low and compact, and its gay little flowers become regularly distributed over it, partly from their permanence, and partly from the habit of the plant; continuing thus in beauty from month to month, with a duration we are almost induced to say unequalled by any plant we have possessed. Being unintrusive in growth, it may be commonly mixed with other plants in the borders during summer, where its colour will form 287.
a contrast to almost every other flower; for grouping in beds, for edgings, and for an ornament amongst rock-work, it is equally desirable. Young plants, struck about midsummer, will continue especially useful, as winter flowerers in the greenhouse; and, last of all, we anticipate its becoming a general favourite as a window plant, for which purpose it seems particularly well adapted. It is gratifying to observe that it is more hardy than could have been expected, for, at the time we write (October), Dahlias and numerous other plants are the slain victims of a frosty night, whilst Cuphea platycentra remains gay and healthy at their feet.

From plants thus preserved, cuttings may be taken in March, and three or four being put into a pot of sandy soil, and a large tumbler turned over them, if plunged in the earth of a cucumber bed they would strike root quickly, and become flowering plants for the whole of the summer. There is scarcely a person, however humble, who may not indulge his love for plants, and thus, in spring, increase his stock. Any respectable neighbour possessing a hotbed would give place to a pot of cuttings. We regret to acknowledge that exceptions do exist, but in a general way, it would afford pleasure to the possessor of a cucumber bed to render this assistance to a neighbour who could not perhaps afford such indulgence himself. Cuttings being thus struck, they should be potted in a mixture of light loam and decayed leaves, with a little sand. Both this species and strigillosa (No. 1109) flourish in pots, in the open air during summer, regardless of neglect.
MYRICA GA'LE.

SWEET GALE.

Class. DIGÉCIA. Order. PENTANDRIA.

Natural Order. MYRICACEÆ.

<table>
<thead>
<tr>
<th>Native of Britain</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Inhabits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>4 feet.</td>
<td>May</td>
<td>Perennial</td>
<td>Swamps.</td>
</tr>
</tbody>
</table>

No. 1146.

Myrica is said to have been founded on the Greek word *myro*, to flow; from its preference to the neighbourhood of running streams. Tournefort adopted the name Gale for this plant; but Linneus, it may be presumed, disapproved of the Dutch origin of the word; and finding Myrica a name which lived in the nomenclature of the ancient Greeks, but like a half-pay naval officer, was unattached, he exercised the patronage awarded him by the world of natural science, and gave it the captaincy of this genus. The English name Sweet Gale, or Gaule, is pretty well known, especially in Scotland, Ireland, and Wales, where the plant is more abundant than in England, although not uncommon in the northern watery districts of Westmorland and Cumberland. It delights in marshes, moors, and boggy places amongst hills; hence its preference for the countries above alluded to. It is also found in the north of Europe, in Asia, and America.

The Myrica gale is a deciduous bushy shrub, composed of numerous stems, growing about a yard high. It is both monoecious and dioecious, its male
and female catkins being sometimes on the same plant, and sometimes on distinct plants. They are formed in the course of the summer’s growth, and remain undeveloped during the winter. “They are fully formed in March, expand in April, after which the leaves come forth, and in August or September the branches are laden with ripe fruit, whose scent is very agreeable, not unlike that of red cedar. This odour resides in the shining resinous particles, scattered over the berry, which easily rubs off, and is very durable, even in dried specimens, though it assumes, with age, the flavour of candied citron peel.” On this account, branches of it are laid amongst clothes, to give them a fine scent, and to drive away moths.

This plant has a bitter taste, and in northern countries was used in brewing as we now use hops. The berries, too, had their use in this way, as reported by Gerard, who says “the fruit is troublesome to the braine; being put into beere or aile, whilst it is boiling (which many vse to do) it maketh it heady, fit to make a man quickly drunke.” The Rev. J. Evans, in his “Tour through Wales,” mentions its being abundant in some places, and observes, “It is a little extraordinary that this plant, certainly possessed of powerful qualities, should find no admission into our Materia Medica. The poor inhabitants of Merionethshire are not inattentive to its virtues; they term it Bwrli, or the emetic plant, and use it for this purpose. An infusion of the leaves as tea, and an external application of them to the abdomen, are considered as a certain and efficacious vermisfuge.”
LEUCOJUM PULCHEL'LUM.

PRETTY SNOW-FLAKE.

Class. HEXANDRIA. Order. MONOGYNIA.

Natural Order. AMARYLLIDACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe.</td>
<td>1 foot.</td>
<td>April, May.</td>
<td>Perennial</td>
<td>in 1800.</td>
</tr>
</tbody>
</table>

No. 1147.

Leucojum is derived from the Greek leukos, white; and Ion, a violet; and the appellation Bulbous Violet is generally given to such plants of this genus as were known to old British botanists.

This plant is correctly named pulchellum, being the prettiest of the genus. In some works the species Æstivum has been so named, but it is decidedly distinct, as is Leucojum vernum, from the present plant; and whilst both the spring and summer Snow-flakes are common plants, this is rarely met with. To the obliging attention of the Messrs. Pope, of Handsworth, we owe the opportunity of figuring the Leucojum pulchellum; and those who are fond of the cultivation of hardy bulbs, than which no plants are more pleasing, we would advise to add this to their collections.

Both hardy and half-hardy bulbs are obtaining increased attention in this country, from the extensive annual importations of them from Holland, at a price much lower than in former years, and the facility with which, in that country, they are propagated, greatly encourages this commercial interchange.
Campanula, see No. 936, for derivation.

This fine species of Campanula was sent home from China by the London Horticultural Society's collector, Mr. Fortune, who says "there can be no doubt that this species will prove as hardy in England as the common Canterbury Bell. It is a great favourite with the Chinese in the northern parts of the empire. The name it bears is Tye-Chung-wha, or purple Bell flower, which coincides rather curiously with the 'Blue Bells of Scotland,' a pretty name which we give to another species of this genus. It was first found cultivated in the gardens of the mandarins, at Chusan and Shanghai, and subsequently in nurseries, where it was grown for sale."

"In the garden of the Horticultural Society it is found to grow freely in such soils and situations as are suitable to the more common species of the same family. It is easily multiplied by dividing the roots in autumn or winter, when in a dormant condition."

We are not enabled to state whether this plant will bear severe winters, it not having yet been exposed to one.
BALSAM'NA LATIFOLIA.

BROAD-LEAVED BALSAM.

Class.      Order.
PENTANDRIA. MONOGYNY.

Natural Order.
BALSAMINACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
</table>

No. 1149.

Balsamina, a name which Turner, who wrote in the reigns of Mary and Elizabeth, ridiculed as barbarous Latin, is derived from Balsamum, Balsam. It has been noticed by some of our older botanists, as having been given to a plant from which a balsam was obtained, of much virtue, in curing wounds. Peter Treveris, in his "Grete Herbal," published in 1526, tells us how the balsam was gathered. We will copy his words and orthography literally. He says, "It is of trouth that they do cut or slytte the tree and rote a lytell, & hange vyoles of glas at them and therin droppeth the iuce of the sayd clyftes, and so it is gadred."

The plants that now belong to Balsamina were formerly included in Impatiens. Their separation has been founded on their want of resemblance, in several particulars. Balsamina has all its anthers two-celled, its stigmas distinct, and peduncles one-flowered. Impatiens has two of its anthers one-celled, its stigmas joined, and its peduncles many-flowered. We mention these circumstances to show to those whose attention has not been called to these minute distinctions, that, in general,
many considerations combine to unite or disunite the various groups of plants.

This herbaceous species of Balsam is very distinct from the common garden Balsam—Balsamina hortensis. It has not appeared in a double state, nor in variety of colour, but this it may very probably do, under future cultivation. It is very possible that curious hybrid varieties may be obtained, between this and the garden Balsam, and an offspring not alone of handsome, but also robust, character obtained.

As that treatment which would be suitable to one, would be also suitable to the other of these plants, we will mention a few facts that have been arrived at in the course of cultivation. None has been more prominently evinced than that the Balsam is an exceedingly gross feeder. Even manure alone, if pretty well ameliorated by time, is not too rank for its sustenance. If plants be turned out, on a hotbed, where their roots can reach the manure, their propensity for rich feeding, will soon exhibit itself, by extraordinary growth. No better compost can be provided for them than a portion of an old hotbed, well dried and broken up, with a very small proportion of sand and loam. Even after this, liquid manure, will not be unacceptable.

Mr. Sangster, tried the effects of top dressings of sulphate of soda, nitrate of soda, British guano, and urates, separately, mixed with a little earth. The last killed the plant. Of the others, the first, did most good; the plant treated with it growing and blooming strongest. The others proved of benefit, but in a less degree.
IONOPSID'TUM ACAU'LE.
STEMLESS VIOLET CRUS'S.

Class.
TETRADYNAMIA.

Order.
SILICULOSA

Natural Order.
BRASSICACEÆ.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height</th>
<th>Flowers in</th>
<th>Duration</th>
<th>Cultivated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portugal</td>
<td>4 inches</td>
<td>July</td>
<td>Annual</td>
<td>in 1845</td>
</tr>
</tbody>
</table>

No. 1150.

This generic name has been derived from the Greek ion, a violet; and orsis likeness. It is not so happy an allusion to the character of the plant as we sometimes find invented.

With a drawing of this plant we were favoured from the Birmingham Horticultural Society’s Garden, and we are assured that notwithstanding its anomalous appearance with a stem, it is really the identical plant received from Portugal, under the name acaulis. The habit of plants, we well know, is greatly influenced by cultivation, and even in the wild state, their forms are subject to changes; even the common Primrose is not always stemless. Immutability belongs to nothing on earth.

In the Botanical Register we are told that this plant was received by the London Horticultural Society, from the garden of the Due de Palmella, near Lisbon, in 1845. It is found wild on the Basaltic Hills, near Lisbon, and occasionally on the limestone formation of Estremadura.

For rockwork this small plant is very suitable; it prefers a shady situation; otherwise it requires no peculiar attention.
Clematis Florida. 

Sieboldt's Virgin's Bower.

Class. Polyandria. 

Order. Polychygnia.

Natural Order. Ranunculaceae.

<table>
<thead>
<tr>
<th>Native of</th>
<th>Height.</th>
<th>Flowers in</th>
<th>Duration.</th>
<th>Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan.</td>
<td>10 feet.</td>
<td>June.</td>
<td>Perennial.</td>
<td>in 1837.</td>
</tr>
</tbody>
</table>

No. 1151.

The thin and twiggy branches which characterize the whole genus Clematis, are alluded to in the name, which is derived from the Greek klema, a twig.

It is probable, notwithstanding the dates given in catalogues, that the particular variety of Clematis florida, which was introduced to this country from Japan, in 1776, by Dr. Fothergill, was the double white; and, that twenty years subsequently, the single white was also obtained from the same country,—a plant, which in respect to its flowers, is of very distinct appearance, although not differing in colour. Dr. Simms, in 1805, published the single Clematis florida, intimating that he had met with it but a short time previously, whilst the double was not uncommon. Afterwards, thirty years had past away from the time just mentioned, and a third variety of this attractive plant made its appearance amongst us, and excited no inconsiderable degree of interest in the floricultural community. This may have been expected, for now that its transformed parts of fructification are coloured, it has become one of the most attractive of slender
climbers. Here its stamens, anthers, style, and stigma, become abortive, all being metamorphosed into linear lanceolate purple leaflets, thus forming what is really a double flower.

This variety, now published, of Clematis florida, has been called Clematis Sieboldtii, on account of its having been introduced by Dr. Von Sieboldt, to the gardens of the continent, whence it was quickly transmitted to the nurserymen of our own country. The continental national establishments, it is but justice to say, are in no wise backward in supplying similar establishments in this country with their newly acquired treasures; if, however, a plant happens first to become a mere object of commerce, England is never forgotten, as affording a ready and certain market for that which is attractive and good.

The cultivation of this, and some other species of Clematis, has exercised the ingenuity of our nurserymen and amateurs. Its long slender branches, of which few are produced, will continue extending against a wall, flowering at intervals of a few inches, from midsummer to autumn; but if such branches be carried forward in a line, they would be "lost in space." Small ornamental trellis frames, afford convenience, for concentrating the flowers. Still another mode has been adopted, with good effect, in pots and in the borders. This is by layering. In the spring, and subsequently, the stems should be pegged down, on the surface of the soil, moderately close together, which will bring a mass of flowers together, apparently of dwarf growth, that in some situations will be exceedingly attractive.
LOTUS MIN'IMA.
LEAST BIRD'S-FOOT TREFOIL.

Class.  
DIADELLIA.  

Order.  
DECANDRIA.  

Natural Order.  
LEGUMINOSÆ.  

<table>
<thead>
<tr>
<th>Native of S. Europe</th>
<th>Height.</th>
<th>Flowers in June</th>
<th>Duration.</th>
<th>Cultivated in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 inches</td>
<td></td>
<td>Perennial</td>
<td>1845</td>
</tr>
</tbody>
</table>

No. 1152.

Lotus, originally Lotos, is believed to be a word of Egyptian origin, taken up by the Greek botanists, but its meaning is unknown. It was subsequently used by Ovid, as the name of a daughter of Neptune.

Lotus minima, is amongst the smallest subjects of one of the most extensive natural families of plants; whose most prominent feature is its papilionaceous or butterfly-like flowers; and next to this, its leguminous or pea-like fruit; one or the other of which is always present, but both are not universally present in plants of this order.

This plant greatly resembles the British Lotus, corniculatus, and like it will form a close and beautiful carpet to the earth. That plant, and we believe this also, delights in the most arid sands, as if it came from the hand of its Maker, formed especially for growth upon, and the protection of, sandy places, which, but for such a protecting carpet, would be scattered to the winds.

Lotus minima is of the easiest culture; pretty for rockwork, producing compact green tufts, span-gled in summer with its golden flowers.
### INDEX TO VOL. XII.

<table>
<thead>
<tr>
<th>Systematic Name</th>
<th>English Name</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ageratum Mexicanum</td>
<td>Mexican Ageratum</td>
<td>1123</td>
</tr>
<tr>
<td>Alonsoa incisifolia</td>
<td>Cut-leaved Alonsoa</td>
<td>1117</td>
</tr>
<tr>
<td>Andromeda arborea</td>
<td>Sorrel Tree</td>
<td>1108</td>
</tr>
<tr>
<td>Anemone Japonica</td>
<td>Japanese Anemone</td>
<td>1165</td>
</tr>
<tr>
<td>Arbutus speciosa</td>
<td>Showy Strawberry Tree</td>
<td>1132</td>
</tr>
<tr>
<td>Armeria cephalotes</td>
<td>Large Headed Thrift</td>
<td>1144</td>
</tr>
<tr>
<td>Aster hyssopifolius</td>
<td>Hyssop-leaved Starwort</td>
<td>1092</td>
</tr>
<tr>
<td>Balsamina latifolia</td>
<td>Broad leaved Balsam</td>
<td>1149</td>
</tr>
<tr>
<td>Berberis dulcis</td>
<td>Sweet-fruited Barberry</td>
<td>1063</td>
</tr>
<tr>
<td>Berberis fascicularis</td>
<td>Bundled Barberry</td>
<td>1077</td>
</tr>
<tr>
<td>Brodiaea congesta</td>
<td>Crowded Brodiaea</td>
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