UC-NRLF

B 2 929 357

8000780837

GENERAL LIBRARY - U.C. BERKELEY

YD 28164

up to 16 vols.

200. //

to
100. //

The Frontist V. 14

Floral Register V. 15 (2 Parts)

The Auctarium V. 16 (2 Parts)

#56

250⁰⁰

150⁰⁰

150⁰⁰

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. I.

“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 BALDWIN AND CRADOCK, PATERNOSTER ROW.

1825—6.

THE
BOTANIC GARDEN

COMPRISING
THE EDIBLES OF THE EAST
HIGHLY ILLUSTRATED REPRESENTATIONS
OF THEM
ORNAMENTAL FLOWERING PLANTS

PLANTED
IN GREAT BRITAIN
WITH
THEIR NAMES, CLASSES, ORDERS, HISTORY, QUALITIES, CULTURE,
AND PHYSIOLOGICAL OBSERVATIONS.

BY
J. MAUND, F.R.S.

Add.

A third edition, with a new and improved
A new edition, with a new and improved
And a new edition, with a new and improved
Something to be done, and something to be done.

London:
PUBLISHED BY MAUND AND TAYLOR, STATIONERS' COURT.

Maund, Printer, Bromsgrove.

To
Her Most Gracious Majesty,
The Queen.

In grateful acknowledgment
of her
Condescension and Patronage,
this Volume

Is most respectfully
Dedicated.

By
Her Majesty's
Most loyal, obliged,
And devoted, Servant.

Benjamin Maund.

TO
THE LOVERS OF BOTANY,
IN PARTICULAR,
AND
THE ADMIRERS OF A FLOWER GARDEN,
GENERALLY,
THIS ATTEMPT
TO INCREASE THEIR GRATIFICATIONS,
IS
MOST RESPECTFULLY INSCRIBED.

PREFACE.

Man, by nature, inherits the love of flowers. The domains of the noble, and the cottage of the humble, alike proclaim to us the dominion of this passion.

If the busy scenes of life, in which many are obliged to move, suppress for awhile this divine excitement, yet the chief occupant of their thoughts is no sooner relinquished, than natural inclinations immediately evince themselves. They sigh for rural retirement, there to enjoy the uncontaminated atmosphere of nature, to cultivate its choicest gifts, and to linger over its vegetable beauties.

The attraction of a flower garden, the health yielded by its cultivation, and the ten thousand gratifications arising out of it, are freely acknowledged by every one. Open as these manifold pleasures are, to the least individual amongst us, the author of the Botanic Garden was desirous of producing a work, at such moderate price, as none may be excluded from possessing. One that should disseminate information amongst the lovers of flowers, encourage the taste for their cultivation, and yield a stimulus to the exertions of those who duly appreciate the enjoyments that invariably arise from so pure a source.

Whether he has effected the desired object is left to the decision of his readers. The best exertions of his humble ability have been employed; and the encouragement of the public has laid him under obligations to continue those efforts with redoubled zeal.

Much of a work like the present must necessarily be dependant on the labours of preceding botanists; on men who have toiled, and some who still toil, to raise to perfection a delightful science, inexhaustible in extent and intricate in its ramifications. In this little work it is not the province of the author to wade deep in the current of science and research. He humbly collects from the sweets and the beauties that float on the surface, and of these he has pleasure in composing a nosegay, as a periodical present to the lovers of a flower garden.

Many ideas, it is presumed, will be found in the following sheets, which have arisen from the author's own experience. Others may be met with, which for the hundredth time are presented to the eye of the reader. But whether old or new, original or selected, his endeavour will be to keep in view one principal object—the production of every useful and interesting information connected with the subjects on which he treats.

Regarding the correctness of the plates he can speak with confidence. Talented artists have lent their aid, and every exertion has been made to render them as perfect portraits as the state of the arts, and pecuniary remuneration, will admit.

That he owes much gratitude to several individuals of noble rank, for their condescension in forwarding his views, he is deeply sensible. He would have pleasure in a more explicit acknowledgment of their favours; but that superior minds feel no gratification in whatever may assume the form of adulation.

The reception of the Botanic Garden can but inspire the author with additional zeal in his favourite pursuit, and stimulate his endeavours to secure a continuance of that patronage which in the present excess of literary productions, may be deemed no rifling distinction.

INDEX.

<i>Systematic Name.</i>	<i>English Name.</i>	<i>No.</i>
<i>Achillea speciosa</i> , - - -	Spear-leaved Milfoil, . . .	44
<i>Adonis vernalis</i> , - - -	Spring Adonis, . . .	27
<i>Amaryllis lutea</i> , - - -	Yellow Amaryllis, . . .	2
<i>Amsonia latifolia</i> , - - -	Broad-leaved Amsonia, . . .	18
<i>Andromeda calyculata</i> , - -	Calycled Andromeda, . . .	20
<i>Anthericum liliastrum</i> , - -	Savoy Spider-wort, . . .	88
<i>Argemone Mexicana</i> , - - -	Mexican Argemone, . . .	85
<i>Asclepias tuberosa</i> , - - -	Tuberous Swallow-wort, . . .	78
<i>Buddlea globosa</i> , - - -	Round-headed Buddlea, . . .	58
<i>Cacalia coccinea</i> , - - -	Scarlet-flowered Cacalia, . . .	76
<i>Calceolaria corymbosa</i> , - -	Chili Slipper-wort, . . .	67
<i>Campanula pumila</i> , - - -	Dwarf Bell-flower, . . .	48
<i>Catananche cærulea</i> , - - -	Blue-flowered Catananche, . .	15
<i>Centaurea suaveolens</i> , - -	Yellow Sultan, . . .	95
<i>Chelone barbata</i> , - - -	Scarlet Chelone, . . .	81
<i>Chelone obliqua</i> , - - -	Red-flowered Chelone, . . .	92
<i>Chrysanthemum tricolor</i> , - -	Three-col. Chrysanthemum, . .	91
<i>Cochlearia Grœnlandica</i> , - -	Greenland Scurvy-grass, . . .	64
<i>Colutea frutescens</i> , - - -	Scarlet Bladder Senna, . . .	37
<i>Coreopsis lanceolata</i> , - - -	Spear-leaved Coreopsis, . . .	46
<i>Coreopsis tenuifolia</i> , - - -	Slender-leaved Coreopsis, . . .	62
<i>Coreopsis tinctoria</i> , - - -	Arkansa Coreopsis, . . .	13
<i>Cuscuta verrucosa</i> , - - -	Wart-calyxed Dodder, . . .	10
<i>Cytisus capitatus</i> , - - -	Headed Cytisus, . . .	90
<i>Daphne gnidium</i> , - - -	Flax-leaved Daphne, . . .	72
<i>Delphinium grandiflorum</i> , - -	Large-flowered Larkspur, . . .	29
<i>Dianthus Chinensis</i> , - - -	China Pink, . . .	65
<i>Digitalis lutea</i> , - - -	Small yellow Foxglove, . . .	94
<i>Dodecatheon Meadia</i> , - - -	American Cowslip, . . .	25
<i>Dracocephalum speciosum</i> , - -	Showy Dragon's-Head, . . .	57
<i>Epilobium Dodonæi</i> , - - -	Dodonius's Epilobium, . . .	55
<i>Erica Australis</i> , - - -	Spanish Heath, . . .	54
<i>Erica herbacea</i> , - - -	Early dwarf Heath, . . .	22
<i>Erica mediterranea</i> , - - -	Mediterranean Heath, . . .	74
<i>Erinus alpinus</i> , - - -	Alpine Erinus, . . .	11
<i>Fragaria Indica</i> , - - -	Yellow-flowered Strawberry, . .	7
<i>Fumaria nobilis</i> , - - -	Great-flowered Fumatory, . . .	69
<i>Gaultheria procumbens</i> , - - -	Trailing Gaultheria, . . .	17
<i>Gaura biennis</i> , - - -	Biennial Gaura, . . .	75
<i>Genista sagittalis</i> , - - -	Jointed Genista, . . .	50
<i>Gentiana acaulis</i> , - - -	Gentianella, . . .	51
<i>Globularia vulgaris</i> , - - -	Common Globularia, . . .	9
<i>Gnaphalium arenarium</i> , - - -	Sand Everlasting, . . .	38
<i>Helleborus niger</i> , - - -	Christmas Rose, . . .	8
<i>Hesperis matronalis, alba</i> , - -	Double White Rocket, . . .	39
<i>Hesperis matronalis, pur.</i> - -	Double Purple Rocket, . . .	70
<i>Hibiscus Syriacus</i> , - - -	Althea Frutex, . . .	77

<i>Systematic Name.</i>	<i>English Name.</i>	<i>No.</i>
<i>Iberis sempervirens</i> , - - -	Narrow-leaved Candy-tuft, . . .	82
<i>Iris Susiana</i> , - - -	Chalcedonian Iris, . . .	30
<i>Iris versicolor</i> , - - -	Changeable Iris, . . .	3
<i>Jasminum revolutum</i> - - -	Curled-flowered Jasmine, . . .	12
<i>Kalmia glauca</i> , - - -	Glaucous Kalmia, . . .	43
<i>Kalmia latifolia</i> , - - -	Broad-leaved Kalmia, . . .	33
<i>Lachenalia tricolor</i> , - - -	Three-col. Lachenalia, . . .	21
<i>Ledum buxifolium</i> , - - -	Box-leaved Ledum, . . .	52
<i>Ledum palustre</i> , - - -	Marsh Ledum, . . .	47
<i>Lilium bulbiferum</i> , - - -	Bulb-bearing Lily, . . .	31
<i>Lilium tigrinum</i> , - - -	Tiger-spotted Lily, . . .	53
<i>Linaria purpurea</i> , - - -	Purple Flax-weed, . . .	34
<i>Linum alpinum</i> , - - -	Alpine Flax, . . .	14
<i>Lobelia fulgens</i> , - - -	Fulgent Lobelia, . . .	73
<i>Lobelia siphilitica</i> , - - -	Blue Lobelia, . . .	61
<i>Lonicera Tartarica</i> , - - -	Tartarian Honeysuckle, . . .	23
<i>Lychnis Chalcedonica</i> , - - -	Double Scarlet Lychnis, . . .	87
<i>Menziesia globularis</i> , - - -	Globe flowered Menziesia, . . .	89
<i>Mirabilis Jalapa</i> , - - -	Common Marvel of Peru, . . .	16
<i>Oenothera macrocarpa</i> , - - -	Large-fruited Oenothera, . . .	41
<i>Oenothera pumila</i> , - - -	Dwarf Oenothera, . . .	35
<i>Oenothera purpurea</i> , - - -	Purple-flowered Oenothera, . . .	79
<i>Orobus vernus</i> , - - -	Spring Bitter-Vetch, . . .	23
<i>Passiflora cærulea</i> , - - -	Common Passion flower, . . .	4
<i>Pentstemon pubescens</i> , - - -	Hairy Pentstemon, . . .	42
<i>Phlox ovata</i> , - - -	Oval-leaved Phlox, . . .	59
<i>Phlox cæthea</i> , - - -	Fine-leaved Phlox, . . .	68
<i>Phlox triflora</i> , - - -	Three-flowered Phlox, . . .	6
<i>Polygala chamæbuxus</i> , - - -	Box-leaved Milkwort, . . .	24
<i>Primula acaulis</i> , - - -	Double Primrose, . . .	60
<i>Primula farinosa</i> , - - -	Bird's Eye Primrose, . . .	96
<i>Primula Sinensis</i> , - - -	Chinese Primrose, . . .	1
<i>Pyrus Japonica</i> , - - -	Japan Apple Tree, . . .	49
<i>Ramonda Pyrenaica</i> , - - -	Borage-leaved Ramonda, . . .	83
<i>Rhododendron hirsutum</i> , - - -	Hairy-leaved Rhododendron, . . .	63
<i>Senecio elegans</i> , - - -	Purple Groundsel, . . .	40
<i>Sisyrinchium striatum</i> , - - -	Streaked Sisyrinchium, . . .	66
<i>Spigelia Marilandica</i> , - - -	Indian Pink, . . .	93
<i>Spiræa lævigata</i> , - - -	Smooth Spiræa, . . .	32
<i>Statice oleæfolia</i> , - - -	Olive-leaved Sea Lavender, . . .	86
<i>Symphytum Bohemicum</i> , - - -	Red-flowered Comfrey, . . .	71
<i>Tagetes patula</i> , - - -	French Marigold, . . .	56
<i>Teucrium Pyrenaicum</i> , - - -	Pyrenean Teucrium . . .	80
<i>Tigridia Pavonia</i> , - - -	Tiger Flower, . . .	5
<i>Trillium grandiflorum</i> , - - -	Large-flowered Trillium, . . .	26
<i>Tussilago fragrans</i> , - - -	Sweet-scented Coltsfoot, . . .	19
<i>Valeriana montana</i> , - - -	Mountain Valerian, . . .	36
<i>Verbascum phœniceum</i> , - - -	Purple-flowered Mullein, . . .	45
<i>Vesicaria utriculata</i> , - - -	Smooth Vesicaria, . . .	84

Primula Sinensis.

$\frac{3}{8}$

Amaryllis lutea

$\frac{1}{8}$

Iris versicolor

$\frac{1}{8}$

Passiflora carulea

$\frac{1}{8}$

PRIMULA SINENSIS.

CHINESE PRIMROSE.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

PRIMULACEÆ.

Native of China.	Height. 6 inches.	Flowers in Mar. July.	Duration. Perennial.	Introduced in 1822.
---------------------	----------------------	--------------------------	-------------------------	------------------------

No. 1.

Primula is derived from the Latin *primus*, first, from its early flowering; hence its English name also, prime-rose, now contracted to primrose. *Sinensis*, from *Sinæ*, the name of an ancient people, who are supposed to have inhabited that part of the Chinese empire now called Cochin China.

This plant is the *Primula prænitens* of the Botanical Register; but as the term *Sinensis* has not been established for another species, upon authority worth naming, we give it the preference, from its prior adoption.

The attention of the Horticultural Society was first drawn to this beautiful plant in the year 1819, when a drawing of it was received from John Reeves, Esq., a corresponding member, residing at Canton. A plant, and seeds also, were subsequently sent off by him to the society; the former perished during its passage, and the latter did not vegetate. Since that period it has been introduced by Capt. Rawes, and as it possesses beauties so completely distinct from every other primula we know, it is likely to become a distinguished favourite in our gardens.

Its mode of inflorescence is particularly beautiful ; for out of a simple umbel or head of flowers, rises a distinct scape or stalk, supporting a second umbel, and from this is produced a third, and sometimes a fourth ; by which peculiarity, and its free increase of flowering side shoots, it remains in bloom during the greater part of the year. Our drawing was taken at an early stage of the blossom, and represents the first umbel only.

Having been introduced so lately, its habits are but imperfectly known ; it may, however, be considered hardy, as plants of it were exposed in the open air during the winter of 1823, in different parts of the kingdom, without sustaining injury.

It may be propagated very readily by offsets, and flourishes exceedingly in a pot of compost, made with equal parts of peat, rich loam, and sand ; or it may be planted in a warm dry border, of light soil, and have the protection of a hand glass during severe frost.

Seeds are produced very freely by the *Primula Sinensis*, and from them young plants may be propagated in abundance, and with little trouble. They should be sown as early as March, in pots of light rich earth, placed in a hotbed ; and the young plants, when large enough, should be potted singly, and be gradually inured to the open air ; but they will require occasional shade in the summer. The protection of the cold frame is necessary for them during the first winter of their growth, and in April, part may be removed to dry parts of the borders, for flowering ; and part may be retained in pots, as portable summer or winter ornaments.

Lindley's Col. Bot.

AMARYLLIS LUTEA.

YELLOW AMARYLLIS.

Class.

HEXANDRIA.

Order.

MONOGYNIA.

Natural Order.

AMARYLLIDÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Spain.	4 inches.	Sept. Oct.	Perennial.	in 1596.

No. 2.

Amaryllis, the name of a shepherdess in Theocritus and Virgil. Lutea, yellow, its colour. It is sometimes called Autumnal Narcissus.

Known as this hardy, fast-increasing, plant has been for two or three hundred years, it is remarkable that it should not be nearly as common as our yellow crocus, to which, at first sight, it appears so closely allied. But it is not the harbinger of spring: it does not excite the delightful sensations which every daisy, every buttercup of that joyous season, is calculated to arouse.

"What lovely prospects wait each wakening hour,

When each new day some novelty displays;

How sweet the sunbeam melts the crocus flower,

Whose borrow'd pride shines dizen'd in his rays."

CLARE.

It grows well in almost any soil or situation, except under the dripping of trees; for as its bulbs are reproduced but slowly, during the severity of winter, the leaves continue to increase till spring; at which time the bulbs will become fully matured, and the leaves will die. Transplanting may then be performed with propriety, till vegetation is re-assumed in July.

Aiton's Hort. Kew. ed. 2, vol. 2. p. 223.

IRIS VERSICOLOR.

CHANGEABLE IRIS.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
IRIDÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
N. America	15 inches.	June.	Perennial.	in 1732.

No. 3.

This plant has received its name from the Latin term iris, which signifies a rainbow; and the colours of some of the species render it very appropriate. It has been termed the various-coloured, or parti-coloured; changeable-coloured appears a more correct translation, and is equally characteristic of the flower, for it may be observed daily to assume a different hue.

An eastern, or even northern, border is suitable to this plant. It flourishes in any light garden soil, and the roots may be divided in autumn. It may also be raised from seeds, which should be sown in September, and the plants will come up in the following spring; but if the seeds are sown in the spring, they will lie a year in the ground before they vegetate.

That correct observer of nature, Bradley, speaking of one of the bulbous Irises, says, the finest varieties that he ever saw, were raised from seed; 'I would,' he further observes, 'advise every one to raise seedlings.'

Orris root is the tuber of the Florentine Iris, which will hereafter be noticed.

Hort. Kew. 2, v. 1, 116.

PASSIFLORA CÆRULEA.

COMMON PASSION FLOWER.

Class.

PENTANDRIA.*

Order.

TRIGYNIA.

Natural Order.

PASSIFLOREÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Brazil.	30 feet.	Aug. Oct.	Perennial.	in 1699.

No. 4.

Passiflora is derived from the Latin *patior*, to suffer; and *flos*, a flower; from the fancied resemblance of the different parts of the flower and plant to the instruments of Christ's suffering. The five stamens were compared to his five wounds; the three styles, more aptly, to the nails by which he was fixed to the cross; the column which elevates the germen, to the cross itself; and the rays of the nectary, to his crown of thorns; the petals to the ten apostles, Judas and Peter being rejected; the tendrils to a cord, the leaf to a hand, &c. &c. *Cærulea*, from the Latin, blue.

Parkinson, in his *Paradisus Terrestris*, gives what he calls 'The Iesuite's Figure of the Maracoc,' which is a representation of the flower, composed of the very instruments of torture themselves; but in noticing these fancies, he is very angry at the superstition that suggested them; observing that it is 'All as true as the sea burnes.'

It may be propagated from seeds, cuttings, or

* Sir J. E. Smith, in his excellent *Introduction to Physiological Botany*, coincides with Schreber and Thunberg, in placing this genus in the class *Pentandria*.

layers. Cuttings may be taken early in the spring, of the preceding year's growth; or in June of the young shoots, and struck under a hand-glass. It sometimes ripens its seed in the open air in England; and these may be sown in pots, placed in a hotbed, in March; and the plants gradually exposed to the open air after Midsummer.

Miller says, 'I have found the plants which have been propagated two or three times, either by layers or cuttings, seldom produce fruit; which is common to many other plants.' This observation of Miller's should not be lost sight of. It may, in many instances of fruit culture, prove very important, as the mode of propagation has undoubted influence on the habits of many vegetables.

Parkinson, in his notice of the maracoc, which was a species of the passion flower, cultivated when he wrote in 1629, says, that it showed a remarkable particularity in rising from the ground a month sooner, if a seedling plant, than if it grew from roots brought from Virginia.

It appears highly desirable to propagate from seeds, which has been done by several eminent botanists, and beautiful new varieties have been produced. Some of these are minutely described in the Transactions of the Horticultural Society.

The *Passiflora cærulea* requires to be trained against a wall, with a southern aspect; and in winter the roots should be covered with straw, as this will protect them from injury, even if the head of the plant be destroyed. In March the shoots may be very much shortened, which will encourage a vigorous growth.

Tigridia Pavonia

$\frac{1}{3}$

Phlox triflora

$\frac{1}{2}$

Helleborus niger

$\frac{1}{2}$

Fragaria Indica

$\frac{1}{2}$

TIGRIDIA PAVONIA.

TIGER FLOWER.

Class.

MONANDRIA.

Order.

TRIANDRIA.

Natural Order.

IRIDEE.

Native of	Height.	Flowers in	Duration.	Cultivated
Mexico.	1 foot.	July, Sept.	Perennial.	in 1796.

No. 5.

Ferraria Pavonia, Linneus's name of the present plant, was derived from John Baptista Ferrarius, who first figured and described the *Ferraria undulata*. Linneus made choice of his specific name, Pavonia, in consequence of Mutis having sent him a drawing of the flower under this appellation, which he had given it from Pavon, the name of a favourite pupil; and not, as is generally supposed, from the Latin pavo, a peacock, on account of the beauty of its colours.

This species is now separated from *Ferraria*; and its present generic name, *Tigridia*, comes from *tigris*, a tiger, by reason of its spots. *Leopardia* would, perhaps, on such account, have been a more appropriate appellation.

The exquisite union of colours and conformation of parts in this beautiful production, abash every attempt of the pencil; description or portraiture can but do it discredit. We regret its visit being so transient, opening in the morning and finally closing in the afternoon; and yet it is certain that much of our pleasure depends on such circumstances. Sturm justly observes, "If flowers retained their beauty

throughout the year, they would not impart to us the delight they now do: their absence makes us long for their return. The constant variation and succession of all terrestrial objects, constitute one of the chief sources of our happiness."

If the bulbs be planted in the borders, or on separate beds, about the middle of April, the spring frosts will have ceased before the leaves appear through the soil, and no protection be required to be given them. To produce earlier flowers they may be put into pots in a common hotbed, in the beginning of March, and watered sparingly till the leaf appears. If a sufficiency of air be allowed them, they will bear exposure early in May; and then should be turned into the borders for flowering, taking care to retain the balls of earth quite perfect about the roots, which will be much assisted by a copious watering supplied a few hours before their removal. They neither increase as fast, nor flower quite as freely if left in the pots. The roots should be taken up before frosts commence, and those bulbs which are attached together should remain so; then be gradually dried, and afterwards secured in paper bags, and kept in a cool dry place till spring.

The *Tigridia* increases its bulbs rapidly, and also produces seeds, from which it may be raised by sowing them in pots, in a hotbed, in the spring. The seedling bulbs will, of course, require taking up as before directed; and they will flower, some in the second, and the remainder in the third year.

The root is an ovate bulb, which is eatable when roasted, tasting like a chesnut.

PHLOX TRIFLORA.

THREE-FLOWERED PHLOX.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

POLEMONIACEÆ.

Native of N.America.	Height. 2 feet.	Flowers in August.	Duration. Perennial.	Introduced in 1815.
-------------------------	--------------------	-----------------------	-------------------------	------------------------

No. 6.

Linneus did not, in this genus of plants, retain the old name *Lychnidea*, in consequence of its near approach to *Lychnis*, the name of another genus; but chose the present name *Phlox*, perhaps, only by reason of its analogy to the former, both being derived from Greek words signifying flame or lightning. *Triflora*, from the branches of the corymbus being mostly three-flowered.

Every individual of this family inherits some desirable quality; the greater part of them are extremely showy; several grow higher than the present plant; and a few clothe the border with a close foliage during the whole year. England now possesses about thirty species of *Phlox*, brought principally from North America, within the last eighty or ninety years.

It will grow in any common soil, but best in a mixture of peat and loam. It may be easily increased by cuttings, taken early in the summer, or by dividing the roots in autumn; but this latter practice should not be resorted to oftener than once in two or three years, or the roots will be much weakened.

Sweet's Fl. Gar. p. 29.

FRAGARIA INDICA.

YELLOW-FLOWERED STRAWBERRY.

Class.
ICOSANDRIA.

Order.
POLYGYNIA.

Natural Order.
ROSACEÆ.

Native of E. Indies.	Height. 4 inches.	Flowers in May, July.	Duration. Perennial.	Introduced in 1804.
-------------------------	----------------------	--------------------------	-------------------------	------------------------

No. 7.

Fragaria, so named from the fragrancy of its fruit. *Indica*, from its native country.

The English name Strawberry is, without doubt, derived from the practice of laying straw about the roots of such plants, to preserve the fruit from the soil. Straw, slates, &c. used in this way yield two advantages;—at the same time as the fruit is kept clean, the soil is preserved in a moist and cool state.

It is principally remarkable for its union of the cinquefoil blossom with the fruit of the strawberry, and certainly forms a pretty variety amongst the closer sorts of rock plants.

The *Fragaria Indica* is frequently treated as a greenhouse plant, but is now found to bear our winters without injury. Its fruit is of no further value than for its ornamental appearance, not possessing the prominent characteristics of its tribe, fragrance and flavour.

It propagates itself readily by its emission of roots from the joints, as the common varieties usually do; and flourishes in a sandy soil, where the situation is warm and sheltered.

Hort. Kew. 2, v. 3, 273.

ETHNOGRAPHICAL

YELLOW-BELLIED STARLING

CLASS

CLASS

ORDER

ORDER

DESCRIPTION

DESCRIPTION

DESCRIPTION

PLATE

The yellow-bellied starling is a small, slender, insectivorous bird, about 5 inches in length, with a slender bill and a long, deeply forked tail. It is principally distinguished by its yellow throat and breast, which are marked with dark spots. The head is brown, with a white forehead and a white patch on the cheek. The back is brown, with a white patch on the wing. The tail is long and deeply forked, with a white patch on the outer edge. The legs are brown. It is a very common bird in the United States, especially in the Eastern States. It is found in the fields and meadows, and is very numerous in the spring and summer months. It feeds on insects, and is very useful to the farmer. It is a very social bird, and is often seen in large flocks. It is a very beautiful bird, and is much admired by the people. It is a very common bird in the United States, especially in the Eastern States. It is found in the fields and meadows, and is very numerous in the spring and summer months. It feeds on insects, and is very useful to the farmer. It is a very social bird, and is often seen in large flocks. It is a very beautiful bird, and is much admired by the people.

PLATE

HELLEBORUS NIGER.

CHRISTMAS ROSE.

Class.

POLYANDRIA.

Order.

POLYGYNIA.

Natural Order.

RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	9 inches.	January.	Perennial.	in 1596.

No. 8.

Helleborus, from the Greek, expressive of its poisonous qualities; or, according to Bergeret, from the river Eleborus. Niger, from the Latin, black, the external colour of its root.

The flower, at its first opening, is white, afterwards rather pink, and finally becomes green. The tubular nectaries ranged round the germen, merit the attention of the physiologist.

A tincture of the roots of black hellebore, is employed in medicine; but as its effects are somewhat uncertain and dangerous, we forbear giving its mode of preparation. It may not be amiss, however, for the information of those who use the roots, to observe that others, and sometimes still more dangerous ones, are substituted for them. The following description of the genuine is from the Edinburgh Dispensatory.

“The roots consist of a black furrowed roundish head, about the size of a nutmeg, from which short articulated branches arise, sending out numerous corrugated fibres, about the thickness of a straw, from a span to a foot in length, deep brown on the outside, white or yellowish white within, and of an

acid, nauseous, and bitterish taste, exciting a sense of heat and numbness in the tongue, and of a nauseous acid smell. These fibres only are used in medicine, and the head and decayed parts are rejected. For the roots of the real black hellebore, the roots of the *Adonis vernalis*, *Trollius Europæus*, *Actæa spicata*, *Astrantia major*, *Helleborus viridis* *fœtidus*, *Veratrum album*, and *Aconitum neomontanum* are often substituted. The last is a most virulent poison, and may be distinguished by its roots being fusiform, or nearly globular, sending out numerous very brittle fibres, of a greyish black or brown colour, as thick as a man's finger, and repeatedly divided."

If the virtues of this plant, like those of many others, were formerly too much extolled, they are probably now undeservedly neglected ; it is indeed to be regretted that the study of medical botany has, of late years, made so little progress ; or, it may rather be said, that in the last age it should have so far declined. Modern chemists are, however, showing the potent effects of condensed vegetable properties, which promises fair to constitute a new era in medical knowledge.

In a moist situation, where a little peat has been mixed with the soil, this plant flowers abundantly ; and the flower stems will grow higher, and the blossoms be altogether improved by the assistance of a hand glass, which may be placed over them on four small pots, so as to admit a free current of air underneath. It is readily increased by dividing the roots, which is best effected in the early part of autumn.

Globularia vulgaris.

$\frac{1}{2}$

Cuscuta verrucosa.

$\frac{1}{2}$

Erinus alpinus.

$\frac{1}{2}$

Jasminum revolutum.

$\frac{1}{2}$

GLOBULA'RIA VULGA'RIS.

COMMON GLOBULARIA.

Class.
TETRANDRIA.

Order.
MONOGYNIA.

Natural Order.
GLOBULARIÆ.

Native of Europe.	Height. 6 inches.	Flowers in May, June.	Duration. Perennial.	Cultivated in 1629.
----------------------	----------------------	--------------------------	-------------------------	------------------------

No. 9.

This plant was named by Tournefort, from the flowers growing many together, in the form of a little globe or ball. Parkinson says 'The Italians call it Botanaria, because the heads are found like buttons.'

The Globularia vulgaris, is a pretty close-growing plant, which was classed by several of our old botanists with the garden daisy; and called Bellis cœrulea, or blue daisy. In some situations it seldom blossoms so freely as may be wished; but this defect will generally be found to arise from its situation being too dry and warm: hence it is well adapted to a northern border, or the cool side of artificial rock work.

It may be propagated from seeds, or by parting the roots, which is best effected in September, when the plants will have an opportunity of making new roots before frosts commence. It flourishes in a shady situation, in a light rich soil or in sandy peat; and to encourage a good bloom, should not be too frequently transplanted. It will succeed very well if kept in a pot, and placed during winter in a cold frame, with the alpine plants.

GLORIFICATION

ATLANTIC OCEAN

CUSCUTA VERRUCOSA.

WART-CALYXED DODDER.

Class.
PENTANDRIA.

Order.
DIGYNIA.

Natural Order.
CONVOLVULACEÆ.

Native of Nepaul.	Height. 6 feet.	Flowers in September.	Duration. Perennial.	Introduced in 1822.
----------------------	--------------------	--------------------------	-------------------------	------------------------

No. 10.

Some authors have deduced the word *Cuscuta*, from the modern Greek, others from a similar Asiatic word. *Verrucosa*, from the Latin *verruca*, a wart. The English appellation, *Dodder*, seems to have been derived from the German word *Dotter*, or Dutch *Tauteren*, signifying to shoot up.

This is a plant which twines round ivy or shrubs of any description that it comes in contact with; and though raised from seeds in the soil, as are most other vegetables, yet no sooner does it meet with support from a neighbouring branch, than, like many individuals of a superior order of creation, it quits its original friend and supporter, and clings to a new acquaintance. It twines in a direction contrary to the apparent course of the sun, and throwing out little vesicles which attach themselves to the plant that supports it, thereby draws its necessary nutriment, and dies off at the root, becoming completely parasitical.

It flourishes most on soft succulent shrubs; and should severe frosts destroy it, young plants may be raised from seed in the spring; and they will produce their fragrant little flowers in autumn.

Sweet's Fl. Gar. 6.

ERINUS ALPINUS.

ALPINE ERINUS.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINEÆ.

Native of Pyrenees.	Height. 3 inches.	Flowers in April, May.	Duration. Perennial.	Cultivated in 1759.
------------------------	----------------------	---------------------------	-------------------------	------------------------

No. 11.

The Greek term ERINOS, whence comes our Erinus, was applied by the ancients to a vegetable, very different from any contained in the present genus; it was the Wild Fig of the Greeks, and its name was, probably, derived from a verb, implying to exert or strive, because the Greek plant endeavoured to erect itself by means of walls or stones. Alpinus, from the Latin, belonging to the Alps.

This interesting little subject presents us with its pretty flowers at that season, when all animated nature seems most capable of such enjoyment.

“Propitious spring comes forth in bright array,
With Venus, goddess of the vernal day;
Her mild precursor, Zephyr, wafts the breeze,
With balmy wings, o’er all the budding trees:
Maternal Flora, with benignant hand,
Her flowers profusely scatters o’er the land.
These deck the vallies with unnumber’d hues,
And far around their fragrant sweets diffuse.”

TIME’S TELESCOPE.

The Erinus alpinus requires a dry shady situation. It may be propagated by dividing its roots, and should be planted in loam without manure.

Hort. Kew. 2, v. 4, 49.

BRITISH ALPINES

ALPINE BRITISH

1875

1875

1875

1875

1875

1875

1875

1875

The Greek term *Alpinos*, whence comes our *Alpine*, was applied by the Greeks to a vegetable very different from any contained in the present genus; it was the Wild Fig of the Greeks, and its name was probably derived from some vegetable to exert its native, because the Greek plant seldom seemed to great itself by means of walls or stones. *Alpinus*, from the Latin, belonging to the Alps.

This interesting little subject presents us with its pretty flowers at that season when all animated nature seems most capable of such enjoyment.

"Proportion quite even both in height and

With Vines, garden of the world say

Her soft perfume, fragrant, with the breeze

With many wings, o'er all the budding trees

Mineral fountains, with verdant head,

Her flowers brightly scatter o'er the land.

There deck the valleys with numerous bloom

And for around that fragrant sweet is diffused

Alpine's perfume

The British alpine requires a dry shady situation. It may be propagated by dividing its roots, and should be planted in lean without manure.

Plant. Rev. 2. v. 4. 48.

JASMINUM REVOLUTUM.

CURLED-FLOWER JASMINE.

Class.

DIANDRIA.

Order.

MONOGYNIA.

Natural Order.

JASMINEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
China.	16 feet.	May, Aug.	Perennial.	in 1812.

No. 12.

Jasminum is derived from two Greek words, signifying a violet, and odor, on account of the fine scent which its flowers possess. Revolutum, in allusion to the curling of its petals.

We are told by Capt. Hardwicke, in the Asiatic Researches, that a species of yellow Jasmine, which is supposed to be the present one, was observed by him, on the frontiers of Hindostan, and which formed a large bush. We have never seen the Jasminum revolutum treated as a standard shrub, though it appears well calculated for that purpose, if sufficiently hardy. Trained against a southern wall, it puts forth vigorous shoots and produces abundance of flowers of the richest fragrance, and most brilliant golden hue.

It may be propagated readily by cuttings, taken in the spring, and appears to grow very well in any common soil. A little straw or matting should be laid over the roots to protect them from frosts of long continuance; and in very inclement seasons, a slight covering over the branches also will prove beneficial, by preserving the young and succulent shoots which the luxuriant habit of the plant will leave rather

too tender to withstand the severity of our winters, though the older branches remain uninjured.

The flowers of this as well as the common Jasmine, are admirably adapted to the use of the toilette ; and to some of our fair readers the following method of extracting perfumes may not be wholly unacceptable. We copy it from the Family Receipt Book.

‘Procure a quantity of the petals of any flowers which have an agreeable fragrance ; card thin layers of cotton, which dip into the finest Florence or Lucca Oil ; sprinkle a small quantity of fine salt on the flowers, and lay them, a layer of cotton, and a layer of flowers, until an earthen vessel or a wide-mouthed glass bottle is full. Tie the top close with a bladder, then lay the vessel in a south aspect to the heat of the sun, and in fifteen days, when uncovered, a fragrant oil may be squeezed away from the whole mass, little inferior, if that flower is made use of, to the dear and highly valued Otto or Odor of Roses.’

When the aroma or odor is united with a rectified spirit, it is usually termed an essence ; and this may readily be obtained by mixing a portion of the oil, prepared as above directed, with an equal quantity of alcohol ; shake them together in a phial, and the spirit will become impregnated with the perfume of the oil. They may afterwards be poured from each other, and the essence preserved for use.

From the *Jasminum officinale* the Italians obtain an essential oil, by distillation, which is held in high estimation amongst them as a remedy for rheumatic pains, and for application to paralytic limbs.

[Faint, illegible text, likely bleed-through from the reverse side of the page]

Coreopsis tinctoria

$\frac{3}{5}$

Linum alpinum

$\frac{3}{2}$

Catananche caerulea

$\frac{3}{5}$

Mirabilis jalapa

$\frac{3}{2}$

COREOPSIS TINCTORIA.

ARKANSA COREOPSIS.

Class.
SYNGENESIA.

Order.
POLYGAMIA FRUSTRANEA.

Natural Order.
CORYMBIFEREE.

Native of N. America	Height. 3 feet.	Flowers in Aug. Oct.	Duration. Annual.	Introduced in 1823.
-------------------------	--------------------	-------------------------	----------------------	------------------------

No. 13.

Coreopsis, from two Greek words, signifying the appearance of a bug or tick, in allusion to the fancied resemblance of its seed to such insects. Tinctoria, from the Latin tinctura, a colour or dye, expressive of the colouring properties of its petals.

The appellation Arkansa, indicates the situation, in North America, where it was discovered by Professor Nuttall, during his travels through that country. Nearly all the individuals belonging to the genus Coreopsis, are interesting hardy subjects, chiefly natives of the same inexhaustible, and comparatively unexplored, source of the wonders of nature.

The Coreopsis tinctoria is a remarkably pretty slender-growing annual, and having been lately introduced amongst us, is by no means common. It will flourish in any rich soil, and may be treated as are the usual annuals of our gardens, by being sown at the end of March. If early flowers are desired, the seed may be sown a fortnight sooner, in a hotbed, and the plants removed into the borders in April. In dry situations autumn-sown plants will frequently endure the winter.

LI'NUM ALPI'NUM.

ALPINE FLAX.

Class.

PENTANDRIA.

Order.

PENTAGYNIA.

Natural Order.

CARYOPHILLEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	8 inches.	June, Aug.	Perennial.	in 1739.

No. 14.

Linum comes from the Greek word *LINON*, signifying flax or cotton; or cloth manufactured from either of them. *Alpinum*, from the Latin *alpinus*, belonging to the Alps. Our English word *flax*, is of Saxon origin, from *flex*.

This little plant resembles the *Linum usitatissimum*, or common flax, so well known; but is shorter in the stem, and the flowers are much larger.

It may be propagated by cuttings, which strike readily under a hand-glass; or the seeds may be sown as soon as they are ripe. It is a pretty plant for rock work or the fronts of borders, and prefers a dry sandy soil.

Flax appears to have been cultivated by the Egyptians, upwards of three thousand years ago, for we read of it in the book of Exodus, chap. 9, ver. 31; though it does not appear at what precise period it first became employed for the purposes to which we now convert it.

Notwithstanding the mention of linen is found in the works of the most ancient historians, it is not quite certain that it was, in their time, manufactured either of flax or hemp.

The Greeks are said, at a very early period, to have been supplied with their fine linen from Egypt; but their term LINON applies indiscriminately to cloth of cotton or flax; and it is probable, that the former was used many ages before the latter.

Herodotus, the Greek historian, who lived about two thousand years ago, and who travelled in Egypt, frequently notices the use of linen, but we neither find it determined by the historian himself, nor any of his commentators, that flax was, at that period, manufactured into cloth. It may have been cultivated for its seed only.

Linseed oil, which is expressed from the seed of the common flax, is highly valuable to the arts, particularly as a component part of paint.

An infusion of flax seed has been found to be extremely useful as a pectoral drink, in coughs, colds, and affections of the lungs. It is thus prepared:—Take an ounce of bruised flax seed, half an ounce of sliced liquorice root, and pour upon them a quart of boiling water; let it macerate an hour near the fire, and then strain it off for use. A teacup-full may be taken five or six times in the course of twenty-four hours; when a fresh supply should be made.

Equal parts of linseed oil and lime water, form a liniment that no family should be without. It is singularly useful in the cure of burns and scalds; and if timely applied, prevents the inflammation attendant on these cases.

The flax stem, when macerated in streams or ponds, is said to communicate a poisonous quality to the water; and an act of Henry VIII. prohibited the practice, under pain of twenty shillings.

CATANANCHE CÆRULEA.

BLUE-FLOWERED CATANANCHE.

Class.

SYNGENESIA.

Order.

POLYGAMIA EQUALIS.

Natural Order.

CICHORACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
S. Europe.	2 feet.	July, Sept.	Perennial.	in 1596.

No. 15.

Catananche is derived from two Greek words, signifying compulsion; from its supposed power of causing an irresistible impulse to love; a quality which, formerly, it was ridiculously imagined to possess. Cærulea, from the Latin, blue.

The blue-flowered Catananche appears to have been an old inhabitant of our gardens, and it is said to be synonymous with the *sesamoides parvum* of Gerarde; if so, the figure given of it by that author, is certainly inferior to most of those he has supplied us with.

Miller observes that it may be propagated by heads taken from the mother plant. This we have never tried, finding it easily raised from seeds, and we judge with much more success than by dividing.

Sow seeds of the Catananche cærulea in March or April, in rich light soil, and when the young plants come up, they should be thinned, if required, and kept clear from weeds till autumn. The seedlings may then be planted out, one in a place, in dry situations, where they are intended to remain, and an abundance of flowers will be produced in the following summer.

Hort. Kew. 2, v. 4, 469.

CATACLYSMIC DEFORMATION

BY H. H. HODGKINS

Geological Institute

University of Chicago

Abstract. The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions.

The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions. The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions.

The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions. The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions.

The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions. The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions.

The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions. The term "cataclysmic deformation" is used to describe a type of deformation which is characterized by a sudden and violent change in the shape and position of a body of rock. This type of deformation is usually associated with the occurrence of earthquakes and volcanic eruptions.

MIRA'BILIS JALA'PA.

COMMON MARVEL OF PERU.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
NYCTAGINEÆ.

Native of India.	Height. 3 feet.	Flowers in August.	Duration. Perennial.	Cultivated in 1596.
---------------------	--------------------	-----------------------	-------------------------	------------------------

No. 16.

This plant is said to have received its name, *Mirabilis*, from the 'wonderful diversity of colours in the flowers.' We may venture an opinion that it arose from the diverse combination of them ; for the colours in a single flower are by no means numerous. One plant will produce many flowers entirely red, some of a clear yellow, and others variegated in different degrees, with red, yellow, and occasionally with cream colour. There is a purple and white variety also, which possesses the same changeful propensity in the disposition of its two colours, but we are not aware of these colours ever being mingled with the red and yellow ; and seedling plants most frequently produce plain flowers only.

The specific name, *Jalapa*, was adopted on the supposition that the officinal *Jalap* was produced by the *Mirabilis*. This error has been corrected by Dr. Houston, who discovered, in the Spanish West Indies, that the plant from which the *Jalap* of the shops is prepared, is a species of *convolvulus*, and is now known as the *Convolvulus Jalapa*.

Bullock, when travelling in Mexico, in 1823, observed that *Jalap* was chiefly produced in the

neighbourhood of Xalapa: hence its appellation; the J and the X, in the Spanish language, having the same sound, and being interchangeable.

Our old herbalists, two centuries ago, were well acquainted with this plant, and 'dwell with great marvel thereon.' Parkinson calls it the 'Meruaile of the World,' and mentions, amongst others, one that he possessed with blossoms of a pale purple or peach colour.

It has obtained the appellation of the four-o'clock plant, from the flowers usually opening about that time in the afternoon. In cool or gloomy weather, however, they continue expanded during the next day; otherwise the warmth of the sun, early in the morning, closes them to open no more: when evening again arrives, we find our plant with fresh embellishments, as gay as before.

The Marvel of Peru is usually cultivated as a half-hardy annual; but it is far better to take up the roots on the first approach of frost, and lay them in dry sand, in a cellar, till the last week in March; when they may be replanted in the borders for flowering. As the roots, when thus put out into the borders, will sometimes remain in the ground a considerable time before they vegetate, it is preferable to plant them in deep pots of soil, and place them in a hotbed till they have grown an inch or two: they may then be turned out, with the balls of soil unbroken, into the situations in which they are intended to flower. If seedlings are desired, raise them in a hotbed, as early as is convenient, that they may blow before the sharp autumnal nights prevent it.

Gaultheria procumbens.

$\frac{1}{2}$

Amsonia latifolia.

$\frac{1}{2}$

Tussilago fragrans

$\frac{1}{2}$

Andromeda calyculata. lotjelia.

$\frac{1}{2}$

GAULTHERIA PROCUMBENS.

TRAILING GAULTHERIA.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
ERICÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
N. America.	5 inches.	July, Aug.	Perennial.	in 1768.

No. 17.

The present genus has been named after Dr. Gauthier, or Gautier, a physician and botanist of Canada; whence the *Gaultheria procumbens* was first introduced. *Procumbens*, from the Latin, implying a bending downwards.

Our present is an interesting little subject, and is, in appearance, somewhat like the *vaccinium*, or bilberry tribe. Its pendent crimson berries sometimes remain on the plant and accompany the flowers of the following year. They form a pretty contrast to each other; and with its motley evergreen foliage, constitute a small, though brilliant, ornament in a shady part of the garden.

The inhabitants of some parts of North America are said to use the leaves as we do that incomparable produce of the 'Celestial Empire'—Tea.

An infusion of them certainly possesses considerable fragrance; and were we not prejudiced in favour of our accustomed beverage, might be thought equally pleasant; and would, probably, be found equally wholesome.

It should be planted in peat, in a cool situation; where it will slowly increase by its creeping roots.

GAULTHERIA PROCUERENS.

TRAILING GAULTHERIA.

Canada.
MONOCHLADIA.

Chlor.
DECANDRIA.

Western Canada.
BRIDGE.

Native of Alaska.	Flowers in June.	Collected
June 10, 1890.	July 1, 1890.	1890.

No. 17.

The present genus has been named after Dr. Gaultier, or Gaultier, a physician and botanist of Canada; whence the Gaultieria procuerens was first introduced. Procuerens, from the Latin, implying a leading downwards.

Our present is an interesting little subject, and in appearance, somewhat like the Vaccinium, or bilberry tribe. Its pendant crimson berries sometimes remain on the plant and accompany the flowers of the following year. They form a pretty contrast to each other; and with its modest evergreen foliage, constitutes a small, though brilliant, ornament in a shady part of the garden.

The subspecies of some parts of North America are said to use the leaves as we do that in Europe. The produce of the 'Cobalt' Empire.—T.C.

An interest of their country, between Canada and the States; and were we not prejudiced in the favor of our own country, might be thought equally plausible; and would, probably, be found equally wise.

It should be planted in part, in a cool situation; where it will slowly increase by its creeping roots.

For Nov. 2, 1890.

AMSONIA LATIFOLIA.

BROAD-LEAVED AMSONIA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
APOCYNÆÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
N.America.	15 inches.	June, July.	Perennial.	in 1759.

No. 18.

The appellation *Amsonia* appears to have been first given to this plant by the author of the *Flora Virginica*, Mr. Clayton, who discovered it in Virginia; but we are not told in what its name originated; a supposition may be ventured that he made choice of it from the name of some person or place. *Latifolia*, from the Latin *latus*, broad, and *folium*, a leaf.

This plant has long been an inhabitant of the English parterre, and is generally thought to have been cultivated by Miller. This, however, is not quite certain; for, in his dictionary, he speaks of the *Tabernæmontana Amsonia*, which is considered synonymous with the present *Amsonia latifolia*, as having white flowers; ours it will be seen are light blue.

It does not increase rapidly, though it may occasionally be divided at the root. It succeeds best in a warm situation where the soil is continually kept in a moderate degree of moisture. It may be planted in a compost of peat and loam, with the addition of a small quantity of sand, and should not be frequently removed.

Hort. Kew. 2, v. 2, 72.

TUSSILAGO FRAGRANS.

SWEET-SCENTED COLTSFOOT.

Class.

SYNGENESIA.

Order.

POLYGAMIA SUPERFLUA.

Natural Order.

CORYMBIFEREÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Italy.	8 inches.	January.	Perennial.	in 1806.

No. 19.

The term *Tussilago* has been derived from the Latin *tussis*, a cough; and *ago*, to drive away; on account of the efficacy of one of its species in affections of the lungs. *Fragrans*, from the Latin, fragrant. The English name *Coltsfoot* has arisen from the shape of its leaves.

The bloom is odoriferous in a high degree, very similar to the *Heliotropium Peruvianum*; and if the plant be made an inhabitant of the greenhouse, or sitting room, when in flower, very few that we are acquainted with, afford so rich a perfume; though the peculiar almond-like scent may not be equally agreeable to all.

The foliage of our present subject, and its habits also, bear a strong resemblance to the *Tussilago farfara*, a native of our own fields; and with which many a worthy farmer regrets his too intimate acquaintance. It is, indeed, a rank weed, betraying a sterile soil.

Notwithstanding the *Tussilago fragrans* is highly valued for the odour of its blossoms, produced at a dreary period of the year; yet we warn the unwary florist against introducing it into his borders,

without first inclosing its roots within the narrow precincts of an earthen flower pot. If this be neglected his fragrant friend may, probably, by its creeping, or rather running, roots, make a rapid tour over great part of his garden.

Having noticed the *Tussilago farfara*, or common Coltsfoot, we may, perhaps, be allowed the present opportunity of making further mention of it.

Curtis, in his *Flora Londinensis* mentions a practice prevalent amongst the Tartars of carrying burning touchwood, which was probably made of the roots of *Tussilago*, the smoke being intended to protect them from the annoyance of gnats. Thus the invention of a pipe may have arisen in the necessity of sometimes employing the breath to quicken the fire.

He further observes, 'The custom of smoking this plant, which still prevails, is of ancient date. Pliny directs the dried leaves and root of Coltsfoot to be burnt, and the smoke drawn into the mouth through a reed and swallowed, as a remedy for an obstinate cough.'

Coughs have frequently been much relieved by persons smoking the dried leaves; and they are used as the principal ingredient in the manufacture of British Herb Tobacco. An infusion of the dried flowers, sweetened with honey, has been found particularly efficacious in complaints of this nature.

The downy substance which is found growing on the under surface of the leaves of the common coltsfoot, when dipped in a strong solution of saltpetre, and gradually dried, is said to form an admirable tinder.

ANDROM'EDA CALYCU'LA TA, latifolia.

BROAD-LEAVED CALYCELED ANDROMEDA.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.

ERICEE.

Native of	Height.	Flowers in	Duration.	Introduced
Newfoundl ^d	2 feet.	Mar. Apr.	Perennial.	in 1748.

No. 20.

Andromeda, a celebrated classic beauty of antiquity, the daughter of Cepheus and Cassiope. She was bound by the nymphs to a rock, to be devoured by a sea monster, because her mother proudly preferred her beauty to theirs; but Perseus, rescued and married her. Calyculata, double calyxed, from the presence of two minute ovate leaflets, which grow on the base of the calyx.

This pretty evergreen shrub, with some trifling variations in its growth, is found native nearly all round the northern parts of the globe; as in Siberia, Sweden, and North America. Being highly astringent to the taste, its medicinal qualities are probably of a tonic nature. The combined circumstances of situation and properties in the Andromeda calyculata are such as M. Pastié of the Royal Academy of Sciences of Paris may advance in support of his new hypothesis. He thinks it of the highest importance, in making ourselves acquainted with the medicinal properties of plants, that we attend to their native situations; and even conceives this of greater consequence than knowing to what genus they belong, or the chemical principles that

enter into their composition. He observes, that all plants which grow on high cold grounds have a tonic and stimulant power; whilst those are found of contrary qualities which are natives of opposite situations.

“Nor ev’ry plant on ev’ry soil will grow :
The sallow loves the wat’ry ground, and low ;
The marshes, alders ; Nature seems t’ordain
The rocky cliff for the wild ash’s reign :
The baleful yew to northern blasts assigns,
To shores the myrtles, and to mounts the vines.”

DRYDEN’S VIRGIL.

Santolius Victorinus, a French writer, seems to have had the above lines of Virgil in mind when he wrote the following; which occur in Evlyn’s translation of M. Quintinye’s French Gardener, a work showing much experience, combined with considerable ingenuity and talent.

“All soils affect not every sort of stock,
The apple chooseth earth, the pear the rock ;
The peach flies marshes, some delight to share
The hottest sun, and choose an open air .
Some love the shade, here trees and shrubs will spread,
There flowers from seed adorn a noble bed.”

The severest cold will not affect the *Andromeda calyculata*, but it is desirable with this, as with most other of the northern plants, that they be kept somewhat shaded during the continuance of our hot months.

It should be planted in a mixture of peat and fresh loam; and may be propagated by layers, which will not be sufficiently rooted for separation in less time than two years.

Hort. Kew. 2, v. 3, 55.

Lachenalia tricolor

36

Erica herbacea

Lonicera Tartarica

37

Polygala Chamæbuxus

LACHENALIA TRICOLOR.

THREE-COLOURED LACHENALIA.

Class.

HEXANDRIA.

Order.

MONOGYNIA.

Natural Order.

ASPHODELEE.

Native of	Height.	Flowers in	Duration.	Introduced
C. G. Hope.	8 inches.	April, May.	Perennial.	in 1774.

No. 21.

The term *Lachenalia* was derived from the name of Wernerius de la Chenal, an eminent botanist of Switzerland. *Tricolor*, three-coloured, from the presence of three colours on the flowers, but these have very little permanency. They change considerably as the flowering advances.

Many bulbous plants possess a singular mode of reproduction, in the formation of little buds or bulbs on their flowering stems, which admit of separation; and, being properly treated, grow to perfection. The bulb-bearing lilly (*lilium bulbiferum*,) and tiger lilly (*lilium tigrinum*) are familiar examples of this peculiarity.

A still more singular occurrence is stated by Sir J. E. Smith; who says that he has had scaly bulbs form even on the flower stalk of the *Lachenalia tricolor*, whilst lying for many weeks between papers to dry, which on being put into the ground became perfect plants.

The production of a viviparous progeny, under such circumstances, is well calculated to remind us that no means are too difficult to be employed by the Almighty for the preservation of an individual

even of the lowest order of creation. The farther we explore the operations of nature, the more shall we find to delight and surprise us.

Nothing can exceed the ingenuity of the various contrivances, if we may be allowed these expressions, that exists for the more certain propagation of many of our commonest plants. Seeds appear to be the legitimate source of reproduction in vegetables; but nature admits no bounds to her efforts. Where her usual purposes meet with opposition, she employs other means for the accomplishment of the same ends. Numerous plants produce seeds very abundantly, and at the same time a vigorous production takes place at the roots; whilst others increase very slowly by the latter means. We may, however, in general, observe that the vegetating power of herbaceous plants, if not required for the seasonable support of seeds, will be exerted in the increase of their species, either by the multiplication of tubers or bulbs, beneath or above the soil; by suckers, by runners, offsets, or by some other mode, agreeably to the nature of the plant. These observations cannot, of course, apply to exotics growing in a soil or climate uncongenial to their nature.

The *Lachenalia tricolor* will succeed in a warm border, with the protection of a hand glass in severe frosts. Or, which is frequently more convenient, it may be planted in a pot of light soil, composed of equal parts of fine sand, rotten leaves, and fresh loam, and be afforded the protection of a cold frame, or other sheltered situation during frost; and such treatment will insure success. It should be very sparingly watered during winter.

ERICA HERBACEA.

EARLY DWARF HEATH.

Class.

OCTANDRIA.

Order.

MONOGYNIA.

Natural Order.

ERICÆ.

Native of Austria.	Height. 6 inches.	Flowers in Jan. Mar.	Duration. Perennial.	Introduced in 1763.
-----------------------	----------------------	-------------------------	-------------------------	------------------------

No. 22.

From the Greek EREICO, to break, from its supposed quality of breaking, or rather dissolving, the stone in the bladder. Herbacea, from the Latin, herbaceous. It is sometimes called Erica carnea. Several other synonyms also have been applied to this species, but they are not in use.

Perhaps no tribe of plants yields more ample evidence of the rapid progress of floriculture in this country than the present.

Miller, not sixty years ago, described but five sorts of heath as known in England; but at the present period there are upwards of three hundred distinct species. Out of this number, according to Dr. Withering's arrangement, five only are indigenous to Great Britain; and unfortunately very few of the exotics will bear the severity of our climate, having been chiefly introduced from the Cape of Good Hope.

This heath may be raised from cuttings, but as its procumbent branches increase freely, in any light soil, a convenient mode of propagation is offered by layers, which will root sufficiently to admit of separation in eighteen months.

Hort. Kew. 2, v. 2, 366.

LONICE/RA TARTA/RICA.

TARTARIAN HONEYSUCKLE.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAPRIFOLEÆ.

Native of Russia.	Height. 5 feet.	Flowers in Apr. May.	Duration. Perennial.	Cultivated in 1752.
----------------------	--------------------	-------------------------	-------------------------	------------------------

No. 23.

Adam Lonicer, in honour of whom this genus has been named, was a physician and botanist of Frankfurt, where he died in 1588. Tartarica, from Tartary, whence seeds were sent to Petersburg, and thence to England.

This species of *Lonicera* constitutes a pretty variety amongst low-growing shrubs. Its delicate spring foliage contrasts admirably with the deep green tints of Portugal laurel, *lauristinus*, and others of our favourite evergreens.

In its native country it is said to be frequented by the *Lytta vesicatoria*, or blistering fly. They are gathered from it by shaking the branches over a cloth, and after being killed by the fumes of vinegar, are dried in a stove, and preserved for use. These are sometimes mixed with another insect, the *melolontha vitis*, which does not stimulate the skin. The latter is easily distinguished by its shape, which is nearly square, and should be rejected as useless for the purposes intended.

This *Lonicera* is of easy propagation either by layers or cuttings, but does not generally succeed in the smoke of towns.

Hort. Kew. 2, v. 1, 379.

POLY'GALA CHAMÆBUX'US.

BOX-LEAVED MILKWORT.

Class.
DIADELPHIA.

Order.
OCTANDRIA.

Natural Order.
PEDICULAREÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	6 inches.	April, May.	Perennial.	in 1658.

No. 24.

This genus appears to have obtained its name from the supposition that some of its species increase the quantity of milk in cows that feed upon it. It is a compound of two Greek words, POLU, much, and GALA, milk. By some of our botanists of the seventeenth century, the present subject was called Chamæbuxus, from the Greek, signifying low-growing box; hence the term has been retained as a trivial name.

This is a most desirable low evergreen shrubby plant, producing a profusion of fragrant flowers during the months of April and May; and partially through the summer.

Several varieties of the Polygala chamæbuxus are spoken of; some with red flowers others with red and yellow; but we believe they are not at present known in England.

It grows extremely well if planted in peat, or peat and loam, and increases freely by its creeping roots. When a removal or division of the plant is required, it may be safely effected in April, or the beginning of September, care being taken to water it if requisite.

Hort. Kew. 2, v. 4, 245.

POLY-GALA CHAMBERLAIN

BOX-LEAVED MINTWORT

Class: *Malvaceae*
 Order: *Malvales*
 Natural Order: *Malvaceae*
 Distribution: *Malvaceae*

Number of leaves: 10-15
 Number of flowers: 10-15
 Number of seeds: 10-15
 Number of fruits: 10-15

No. 10

This genus appears to have obtained its name from the supposition that some of its species increase the quantity of milk in cows that feed upon it. It is a compound of two Greek words, *poly*, much, and *gala*, milk. By some of our botanists of the nineteenth century, the present subject was called *Chamberlainia*, from the Greek, signifying low-growing tree; hence the term has been retained as a trivial name.

This is a most desirable low evergreen shrubby plant, producing a profusion of fragrant flowers during the months of April and May; and persisting through the summer.

Several varieties of the *Polygala chamberlainia* are spoken of; some with red flowers others with red and yellow; but we believe they are not at present known in England.

It grows extremely well if planted in peat, or peat and loam, and increases deeply by its creeping roots. When a removal or division of the plant is required, it may be easily effected in April, or the beginning of September, care being taken to water it if requisite.

Bot. Rev. 2, v. 215

Dodecatheon Meadia.

$\frac{1}{2}$

Trillium grandiflorum.

$\frac{1}{2}$

Adonis vernalis.

$\frac{2}{3}$

Orobus vernus.

$\frac{1}{2}$

DODECATHEON MEADIA.

AMERICAN COWSLIP.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PRIMULACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Virginia.	12 inches.	May.	Perennial.	in 1744.

No. 25.

Dodecatheon is formed of two Greek words, signifying twelve gods. Meadia was the only name this plant first received, and it was given to it by Catesby, in honour of Dr. Mead, an English physician of considerable eminence. It is not quite obvious why Linneus rejected Meadia, and adopted Dodecatheon, as a generic term; a name applied by Pliny, it is supposed, to our English cowslip. Meadia, as it stood named by Catesby, must be considered as reasonable an appellation, since Dr. Mead appears to have been a man fully worthy of the honour at first done him.

Very few plants excite more general interest than is produced by the Dodecatheon Meadia. It is one of those attractive flowers that will bear the most scrupulous examination, and still leave us the more in admiration of its beauties.

The grains of the farina or dust of this flower, when inspected with the assistance of a compound microscope, will be found to be peculiarly beautiful. They are distinctly organized minute pearls. So minute, that one square inch will contain of them upwards of three millions; and as squares cannot

be covered by circles, more than one fifth of the space will still be left unoccupied. Or, to be more particular in numbers, presuming that a square inch will contain three millions of circles, in direct rows each way, the area of each of such circles will be the 3,819,709th part of the area of an inch.

Mr. Phillips's simile, in his amusing work, the *Flora Historica*, is an apt one. He says the petals are reflexed, or turn back over the calyx, giving the appearance of an half-expanded parasol; a resemblance which is considerably heightened by the long tapering shape of the parts of fructification, and the golden colour of the anthers.

The flowers, during their expansion, assume an elegantly pendent position, as best adapted to their protection and fertilization; but when the farina has fallen and the flower fades, the peduncles, with the seed vessels, become perfectly erect.

The chief care necessary in the cultivation of the *Dodecatheon*, is the planting it in a shady situation. It flourishes in any cool light soil, particularly in peat; and may be safely removed in the autumn, or early in the spring. It frequently ripens its seed, and from these may be readily propagated. If they are sown in pots in the autumn, they will vegetate in the spring, when great care should be taken that the young plants be not injured by the heat of the sun. Keep them in a shady situation, moderately moist, and clean from weeds. After their leaves are decayed, they may be removed, but this should not be deferred later than the middle of September; when they may be put into the borders to remain for flowering.

TRILLIUM GRANDIFLORUM.

LARGE-FLOWERED TRILLIUM.

Class.
HEXANDRIA.

Order.
TRIGYNIA.

Natural Order.
SMILACEÆ.

Native of N. America.	Height. 6 inches.	Flowers in April.	Duration. Perennial.	Cultivated in 1796.
--------------------------	----------------------	----------------------	-------------------------	------------------------

No. 26.

Trillium, from the triple formation of the several parts of the plant and flower. It is composed of three leaves, three stigmas, three petals, three calyx-leaves, and the berry is three-celled. Grandiflorum, from the Latin grandis, great; and flos, a flower. This plant has also been called Trillium erythrocarpum, red-fruited.

All the Trilliums that we are at present acquainted with are natives of America; growing there in woods and shady places. They may be raised from seeds, sown in September or October, which will come up early in the following spring. The young plants should be kept moist and cool during the summer, and in September the roots may be transplanted into shady borders of light earth where they are intended to remain. In England, these plants increase very slowly at the root, and the original ones are frequently lost, even under the care of the most experienced cultivators; and if the seeds are sown in the spring they remain twelve months dormant, which may lessen the chances of success. These combined circumstances tend to limit the whole of the Trilliums to the borders of the curious.

Par. Lond. t. 1.

ADONIS VERNALIS.

SPRING ADONIS.

Class.
POLYANDRIA.

Order.
POLYGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Europe.	12 inches.	Mar. April.	Perennial.	in 1731.

No. 27.

Adonis, whom this flower has been named after, was the favourite of Venus. Vernalis, from the Latin, belonging to the spring.

Some of our fabulists have a pleasant conceit respecting these 'personages:' we relate it as being in some degree explicable. They say that when Venus and Proserpina contended before Jupiter, which should have Adonis, Jupiter referred them to Calliope, whom he appointed to be judge of their quarrel. Calliope gave this sentence; that Adonis should live with Venus six months, and the remaining six he should reside with Proserpina. The fable is thus explained: Venus represents the earth, and Adonis the sun. During half the year his splendid beams reign over all our varied plains, attired with beauteous flowers, and enriched with fruit and corn; the other half he seems to lose his influence, and goes as it were to rule in the darker regions with Proserpina.

To encourage a good blossom, the Adonis Vernalis should not be frequently removed. If it be performed in the autumn, the flowering of the following spring may, possibly, receive but little injury.

Hort. Kew. 2, v. 3, 350.

ADONIS VERBALES

STUDYING ADONIS

OLYMPIA

WATSON BOOKS
HARTFORD, CT

Table 1			
Name of	Height	Weight	Age
Europe	12 inches	120 lbs	1731
Table 2			
No. 12	120 lbs	1731	1731

Adonis, when this flower has been raised after
was the favorite of Venus. Venus, from the
Latin, belonging to the spring.

Some of our libels have a pleasant account re-
specting these 'personages'; we relate it as being in
some degree explicable. They say that when Ve-
nus and Proserpina contended before Jupiter, which
should have Adonis, Jupiter referred them to Cal-
lus, whom he appointed to be judge of their quar-
rel. Callus gave this sentence; that Adonis
should live with Venus six months, and the remain-
ing six he should reside with Proserpina. The de-
cision is thus explained: Venus represents the earth,
and Adonis the sun. During half the year his re-
sidence is on our varied plains,
adorned with beautiful flowers, and enriched with
fruit and corn; the other half he seems to lose his
influence, and goes as it were to reside in the darker
regions with Proserpina.

To encourage a good blossom, the Adonis Venus-
his should not be frequently removed. It is the per-
fected in the autumn, the flowering of the following
spring may, possibly, receive but little injury.

O'ROBUS VER'NUS.

SPRING BITTER-VETCH.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of Europe.	Height. 12 inches.	Flowers in April.	Duration. Perennial.	Cultivated in 1629.
----------------------	-----------------------	----------------------	-------------------------	------------------------

No. 28.

Orobus comes from the Greek oro, to exite; and bous, an ox; in allusion to the utility of some of the plants belonging to this genus in fattening cattle. Vernus, from the Latin ver, spring, its time of flowering.

This is the Orobus venetus of Gerrarde and Parkinson, though the latter mentions it as double the height of our plant. He says, 'This pretty kinde of pease blossome beareth diuers slender, but upright, greene branches, somewhat cornered, two foote high, or thereabouts.'

It is, indeed, a very pretty kind of pease blossom, and so early a visitor cannot fail of being welcome in our borders. Its colour varies as the flowering advances; till, on fading, it becomes a light blue; and the gay diversity thus afforded yields a pleasing effect.

We never have seen it produce any seeds. It may be divided for increase, in autumn, but its deeply penetrating strong roots should not be too frequently removed. A shady situation is usually recommended for the Orobus vernus; we find it, however, succeed in almost any soil or aspect.

Hort. Kew. 2, v. 4, 303.

Delphinium grandiflorum.

½

Iris Susiana.

¼

Lilium bulbiferum.

½

Spiraea hevigata.

DELPHINIUM GRANDIFLORUM.

LARGE-FLOWERED LARKSPUR.

Class.
POLYANDRIA.

Order.
TRIGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of Siberia.	Height. 2 feet.	Flowers in June, Aug.	Duration. Perennial.	Cultivated in 1758.
-----------------------	--------------------	--------------------------	-------------------------	------------------------

No. 29.

The appellation applied to this genus has proved less mutable under the hand of science than many others, though we are strongly inclined to believe that it has usurped the name of another tribe. The delphinium or Greek DELPHINION of Dioscorides, received its name from the fancied resemblance of its flower bud to a dolphin. Any one who will compare the unopened flowers of the several species of delphinium and aconitum, will readily observe, that the latter bear a much stronger similitude than the former, to that fish.

The beautiful double variety of *Delphinium grandiflorum*, so well known, and generally called the Siberian Larkspur, is an offspring of the plant before us; and is increased by division.

The present one may be increased by dividing the roots in the usual season; or by seeds, which are freely produced. They may be sown either in autumn or spring, but those sown at the former time will produce the strongest plants. These should be kept thin and free from weeds during the summer; and, not later than October, be transplanted for flowering.

IRIS SUSIANA.

CHALCEDONIAN IRIS.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
IRIDEE.

Native of Levant.	Height. 2 feet.	Flowers in May.	Duration. Perennial.	Cultivated in 1596.
----------------------	--------------------	--------------------	-------------------------	------------------------

No. 30.

Peculiar circumstances, or qualities, belonging to plants, which sometimes give rise to their generic names, will rarely be found equally applicable to all the individuals which must necessarily be included in the same genus. The Latin term iris, a rainbow, applies admirably to many of the plants bearing that name, but, certainly, not to the present one, having no such variety of colour.

Wonderful as were the exertions and penetration of the great Linneus, and eminently skilled as are many of his successors, still the efforts of science are inadequate when applied to the development of the laws of nature. Her laws are fixed, but so diversified, so complex, so utterly inexplicable to human understanding, that man, the boasted lord of the creation, must stand abashed by his ignorance, and science herself confess her defects.

Naturalists have zealously and meritoriously explored her mysteries, and endeavoured to assign to her specific laws, whereby to circumscribe her economy; but still before the code could ever be completed, her numerous exceptions to its general enactments, have baffled the efforts of her legislators.

Thus it is with the classification of the animal, the vegetable, and the mineral, kingdoms. Ingenious distinctions have been laid down for the discrimination of one family from another, but in spite of our science in defining divisions, anomalous subjects continually step in and show that our system is unfounded in nature. Indeed, how can we hope to class, with precision, the component parts of these several kingdoms, when human science is inadequate to point out a clear line of distinction between the three kingdoms themselves.

Nevertheless, the present state of the science is truly inestimable to us. Men the most learned and industrious have contributed to its present perfection, and talents the most eminent have been devoted to its extension. Much has been attained, and still much we may hope to discover, notwithstanding the whole depth of the subject is alone fathomable by him who framed its laws.

This magnificent plant has frequently been imported from Constantinople, and received its trivial appellation, *Susiana*, from a western district of Persia, which was known to the ancients by that name. *Susa*, now called *Caster*, was the capital of that district, and the term, in the language of the country, signifies Lilies. *Chalcedon* a city of Asia opposite Constantinople.

It requires to be planted in a warm, dry, loamy, or gravelly soil, or it will rarely be found to blossom freely. To preserve the plant in health, it seems desirable to transplant it once in four or five years, as parts of the old roots undergo decay, and injure the young ones.

LILIUM BULBIFERUM.

BULB-BEARING LILY.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
LILIACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Italy.	3 feet.	May, June.	Perennial.	in 1596

No. 31.

LEIRION is the Greek name of the Lily; and from it, through the Latin, our term *Lilium* has been derived.

Much has been said on the analogy between bulbs and buds, and their affinity is more perfect than many of our readers probably imagine.

This species of Lily presents a pretty example of the bulb produced in the usual situation of the bud, and the affinity thereby becomes more evident. We shall treat this subject more at length in a future number.

The culture of this plant is extremely easy. The old roots increase very little, but the bulbs taken from the stem, in August, and then deposited in the soil, will produce one leaf in the following spring: in the second year a small bulb-bearing stem, about fifteen inches high; but not usually a flower: in the third year a stronger stem, bearing bulbs, and terminated by one of its beautiful blossoms; and a handsome head of them may be expected in the following summer. Transplanting should be effected in autumn; and shade or exposure will be equally suitable.

Hort. Kew. 2, v. 2, 241.

SPIRÆA LÆVIGATA.

SMOOTH SPIRÆA.

Class.
ICOSANDRIA.

Order.
DI-PENTAGYNIA.

Natural Order.
ROSACEÆ.

Native of Siberia.	Height. 4 feet.	Flowers in Apr. June.	Duration. Perennial.	Cultivated in 1774.
-----------------------	--------------------	--------------------------	-------------------------	------------------------

No. 32.

The term *Spiræa* has been deduced from the Greek *SPEIRA*, a rope; and is applied to this genus in consequence of the flexibility of the branches in some of its species. *Lævigata* from the Latin *lævis*, smooth.

There are several species of *Spiræa* well known in our gardens, as the *Spiræa salicifolia*, usually called the *Spiræa frutex*: and the *Spiræa hypericifolia*, sometimes known by the name of *Hypericum frutex*. Our present subject is not quite so frequently met with as either of these, though not less interesting, nor less entitled to a place in every shrubbery. Its summer foliage is generally retained in a dry state, during winter, and forms a nice shelter to the young shoots, which are usually rather succulent, and, seem to need some such protection against the inclemencies of winter.

It may occasionally be propagated by suckers, though not so freely as are some others of the same family. Or it may readily be raised by layers, which should be confined under the soil in autumn, and they will be sufficiently rooted for separation in twelve months.

Hort. Kew. 2, v. 3, 254.

SPHÆRA LAEVIGATA.

SMOOTH SPHÆRA.

Order.
DI-TETRASTYLIA.

Class.
CORACORHIZA.

Subgenus.
BOVACER.

Number of Stems.	Height, 4 feet.	Flowers in April, June.	Flowers in November, February to May.
---------------------	--------------------	----------------------------	---

No. 32.

The term *Sphæra* has been bestowed from the Greek *sphæra*, a globe; and is applied to this genus in consequence of the flexibility of the branches in some of its species. *Laevigata* from the Latin is viz., smooth.

There are several species of *Sphæra* well known in our gardens, as the *Sphæra salicifolia*, usually called the *Sphæra frutes*; and the *Sphæra hypochæris*, sometimes known by the name of *Hypochæris frutes*. Our present subject is not quite so frequently met with as either of these, though not less interesting, nor less entitled to a place in every shrubbery. Its summer foliage is generally retained in a dry state, during winter, and forms a nice shelter to the young shoots, which are usually rather succulent, and seem to need some such protection against the inclemencies of winter.

It may occasionally be propagated by suckers, though not so freely as are some others of the same family. Or it may readily be raised by layers, which should be confined under the soil in autumn, and they will be sufficiently rooted for separation in twelve months.

Hort. Kew. 2, v. 3, 264.

Kalmia latifolia.

Linaria purpurea.

Enothera pumila.

$\frac{3}{2}$

Valeriana montana.

$\frac{1}{2}$

KAL'MIA LATIFOLIA.

BROAD-LEAVED KALMIA.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHODORACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America	4 feet.	May, July.	Perennial.	in 1734.

No. 33.

Peter Kalm was an eminent botanist of Finland, and professor of the science at Abo. He imbibed a love of nature among the flowery rocks of Sweden; the wilds also of North America, and icy forests of Russia were alike explored by him. He published his travels through North America in 1753, which were translated into English by Mr. Forster in 1771; and Linneus, it may be conceived, paid no more than due respect to merit, in bestowing his name on this splendid family of plants. *Latifolia*, from the Latin *latus*, broad; and *folium*, a leaf.

The first sentiment excited by the presence of this beautiful North American shrub, is one of regret, arising out of the difficulty of keeping it in perfect health. The principal requisites towards this appear to be purity of air, moisture and shade during our summer months, and a proper imitation of its native soil.

Abercombie says, 'most of the exotic shrubs brought from America, were originally found growing on tracts of ground resembling our beds of peat, and the luxuriance of these vegetables may partly be ascribed to the excessive moisture which is

peculiar to some parts of America. One great object is to imitate the American peat. This is a composition of the branches, twigs, leaves, and the roots of trees; with small plants, grass, and weeds; by having lain immemorially in water, the whole is formed into a soft mass; and when the materials are completely decayed and blended so as to be homogeneous in appearance, the compound is the finest vegetable mould: where this description of peat cannot be obtained, recourse must be had to the best that can be procured from marshes, bogs, or heathy commons, which must be well turned and sweetened, and mixed with sand and rotten leaves.

Of this soil distinct beds should be formed, about three feet deep, for this class of American plants, with a shade of shrubby or lofty trees on the south side; and if the beds could be so placed as to admit an occasional flow of water being turned through a stratum of pebbles, laid three or four feet beneath the surface, little doubt would exist of success.

It is preferable to transplant in spring or autumn, but it may be effected at almost any period, if the earth be not too much disturbed from the fibrous roots, which are so small and numerous as to retain the soil in one compact mass. But little difficulty would exist in the cultivation of the *Kalmia*, *Rhododendron*, and other similar plants, if a sufficiency of moisture could be conveniently afforded them during our summer months. In most situations they require copious waterings in very warm weather.

Our drawing is from the pale-flowered *Kalmia latifolia*, and we intend resuming the subject, with further directions, under another variety of it.

LINARIA PURPUREA.

PURPLE FLAX-WEED.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
S. Europe.	4 feet.	June, Sep.	Perennial.	in 1648.

No. 34.

The term *Linaria* appears to have had its origin from *Linum*, flax; just as Flax-weed and Toad-flax are deduced from the English word, on account of the similarity of the plants.

This species is frequently known as the *Antirrhinum purpureum*, in which genus it was placed by Linneus: modern botanists have, however, divided the *Antirrhinums* into two genera, and this plant now stands with the appellation by which it was well known to Gerarde, Parkinson, Bauhin, and others. *Purpurea*, from the Latin, purple.

Its erect and elegant growth renders it well suited to contrast with more diffuse subjects of its own stature; and the simplicity of its culture will qualify its deficiency of that splendour which may attach to some of its more fastidious neighbours.

It produces seed freely, and from these may be readily propagated. If sown in the autumn upon a tolerably dry soil, they will not fail to come up, and produce much stronger plants than those sown in spring; and when once established it may be expected, by seed, to increase spontaneously, though in very wet soils it will sometimes fail.

Hort. Kew. 2, v. 4, 12.

ÆNOTHERA PUMILA.

DWARF ÆNOTHERA.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of N. America.	Height. 1 foot.	Flowers in May, Aug.	Duration. Perennial.	Cultivated in 1757.
--------------------------	--------------------	-------------------------	-------------------------	------------------------

No. 35.

From two Greek words OINOS and THERA, the first signifying wine, and the second a pursuit, in consequence of the dried roots acquiring the flavour of wine. Pumila, from the Latin, little.

Ænothera has, by different authors, been accented on the antepenultimate, and on the penultimate syllable: the latter agrees best with the derivation.

Though this is the smallest Ænothera that we are acquainted with, it forms a pretty ornament amongst rock-work, and plants of like size; and we find it possess this advantage, that whilst blossoming through the hottest months, it rarely suffers by drought.

It is easily increased by parting the roots in spring or autumn; but it will produce much finer plants, and flower better, when raised from seeds. Miller directs that they be sown in autumn, in pots, placed under a hotbed frame until the spring, when the plants will appear: when fit to remove, plant a few in small pots, to be sheltered under a common frame in winter; others may be set in a sheltered border, and the following summer they will produce flowers and seeds in plenty.

Hort. Kew. 2, v. 2, 343.

ONOTHERA FUMIDA

SWAMP ONOTHERA.

Order.
NORONCHIA.

Class.
OCCIDENTAL.

Natural Order.
ONAGRARIA.

Name of N. American.	Height. 1 foot.	Flowers in May, Aug. Tyrone, N. Y.	Cultivated in 1855.
-------------------------	--------------------	--	------------------------

No. 25.

From two Greek words *onon* and *thera*, the first signifying wine, and the second a parasite, in consequence of the dried roots acquiring the flavor of wine. *Fumida*, from the Latin, fume.

Onotera has, by different authors, been accounted on the antipathetic, and on the penultimate syllable: the latter agrees best with the derivation.

Though this is the smallest *Onotera* that we are acquainted with, it forms a pretty ornament amongst rock-work, and plants of like size; and we find it possesses this advantage, that whilst blossoming through the hottest months, it retains verdure by drought.

It is easily increased by parting the roots in spring or autumn; but it will produce rough flower plants, and flower better, when raised from seeds. Miller directs that they be sown in autumn, in beds placed under a hotbed frame until the spring, when the plants will appear: when fit to remove, plant a few in small pots, to be sheltered under a common frame in winter; others may be set in a sheltered border, and the following summer they will produce flowers and seeds in plenty.

Roots New York, 1855.

VALERIANA MONTANA.

MOUNTAIN VALERIAN.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
DIPSACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Switzerland	1 foot.	May, June.	Perennial.	in 1739.

No. 36.

Of the origin of the term *Valeriana* we have nothing certain on record. Some persons have supposed it to have originated in the name of an eminent physician, *Valerius*, who is said to have first used one of the species of it in medicine; whilst others think the term may have come from the Latin *valere*, to be well. *Montana*, from the Latin *mons*, a mount.

We are not aware that this species has been employed in medicine, but the *Valeriana officinalis* is not only used against particular disorders; but, according to *Gerarde*, was in his day employed as a pot herb by the inhabitants of the north. He quotes a lame couplet in its praise, and says, 'some woman poet or other hath made these verses.' Could this venerable herbalist be introduced to some of our 'woman poetry' of the nineteenth century, we think he would not, so unceremoniously, cast a slur on the productions of the fair sex.

It flourishes in a light dry soil, and is readily increased by a separation of its roots. Though increase be not wanted, it will still be desirable to divide and transplant it occasionally.

Hort. Kew. 2, v. 1, 74.

VALERIANA MONTANA

MOUNTAIN VALERIAN.

Order.
MONOCOTYLA

Class.
TRIENELLA

Nearest Order.
DIPYCNEL

Native of Switzerland	Height. 1 foot.	Flowers in May, June.	Discovered in 1736.
--------------------------	--------------------	--------------------------	------------------------

No. 26.

Of the origin of the term Valeriana we have nothing certain on record. Some persons have supposed it to have originated in the name of an eminent physician, Valerius, who is said to have first used one of the species of it in medicine; whilst others think the term may have come from the Latin *valere*, to be well. *Montana*, from the Latin *mons*, a mount.

We are not aware that this species has been employed in medicine, but the Valeriana officinalis is not only used against particular disorders; but, according to Gerard, was in his day employed as a pot herb by the inhabitants of the north. He quotes a Latin couplet in its praise, and says, 'some woman poet or other hath made these verses.' Could this venerable herbulet be introduced to some of our 'woman poets,' of the nineteenth century, we think he would not, so unceremoniously cast a slur on the productions of the fair sex.

It flourishes in a light dry soil, and is readily increased by a separation of its roots. Though increase be not wanted, it will still be desirable to divide and transplant it occasionally.

Hort. Kew. 2. p. 174.

Colutea frutescens.

72

Gnaphalium arenarium.

73

Hesperis matronalis.

74

Senecio elegans.

75

COLUTEA FRUTESCENS.

SCARLET BLADDER SENNA.

Class.

DIAPHYLLA.

Order.

DECANDRIA.

Natural Order.

LEGUMINOSAE.

Native of	Height.	Flowers in	Duration.	Cultivated
C. G. Hope.	4 feet.	June, Aug.	Perennial.	in 1683.

No. 37.

The term *Colutea* has been introduced from the Greek name of a plant in Theophrastus, but no further knowledge appears to exist of its origin or application. It probably comes from ΚΟΙΛΟΣ, a spacious cavity, in allusion to its distended seed vessel. *Frutescens*, from the Latin *frutex*, a shrub. The common term *Bladder Senna*, has been given to it from its bladder-like pods, and the general resemblance of its foliage to that of the officinal *Senna*. It is also said to possess a portion of the cathartic qualities of that plant.

Colutea is one of the unfortunate genera, among many others, that has come, perfected as it were, from the hand of the great father of our artificial system, to suffer amputation and distribution in after ages. The *Colutea frutescens* is now found in the modern catalogues as *Sutherlandia frutescens*, in consequence of this name being adopted in the *Hortus Kewensis*, after Mr. Robert Brown. To the very eminent abilities of the author of the *Prodromus Novæ Angliæ* every one must be ready to pay the tribute of praise; but, perhaps, that very acuteness of observation and depth of botanical science for

which he is celebrated, may render him more nice in his generic divisions than the plain botanist may admit to be necessary, or, indeed, than is useful to the practical man; for certain it is, that the extension of our botanic vocabulary, and perplexing increase of synonyms, form a considerable drawback on any advantage that may accrue from nicer distinctions. Both Sir J. E. Smith and Dr. Sims are of opinion, that the genera *Sutherlandia* and *Swainsonia* are too nearly allied to *Colutea* to admit separation.

Its beautiful scarlet flowers, contrasted with its silvery foliage, render this a peculiarly ornamental little shrubby plant; and after its brilliant blossoms are faded, its large inflated pods still excite an interest in its welfare. It is rather tender, and is frequently kept in the greenhouse, where it never blossoms so luxuriantly and fine as in the open air.

It should be planted against a wall in a warm sheltered situation, in light dry soil, and in frosty weather be protected by litter and matting; or if kept in a pot, in the house, it should be placed near to the window, and will always be benefited by being fully exposed in mild weather.

Treated as a hardy plant, it does not continue more than three or four years: this, however, is not important, since it is easily raised from seeds, which may be sown early in the spring, in pots, placed in a cool cucumber frame, and the plants should be hardened to the open air as early as possible. If thus forwarded, they will blossom in the latter part of the summer; or if not at that time, early in the following season.

GNAPHALIUM ARENARIUM.

SAND EVERLASTING.

Class.

SYNGENESIA.

Order.

POLYGAMIA SUPERFLUA.

Natural Order.

CORYMBIFERÆ.

Native of Europe.	Height. 9 inches.	Flowers in June, July.	Duration. Perennial.	Cultivated in 1739.
----------------------	----------------------	---------------------------	-------------------------	------------------------

No. 38.

The name comes from the Greek GNAPHALON, signifying down or wool, such as is produced by dressing or shearing cloth, in allusion to the wooliness of the foliage. Arenarium, from the Latin arena, sand, indicative of the soil it usually prefers.

The presence of the flowers of this Gnaphalium, in many parts of Europe, gives rise to feelings of melancholy and sadness, which Englishmen have never been taught to connect with them. The contrary is rather the case, for they are introduced among us in bouquets for festivities, and embellishments for head dresses. They are sometimes artificially tinged with a diversity of hues, and from their continued beauty, in a dry state, they have obtained the title Everlasting.

Some of our readers may not be informed of the prevalent practice amongst the inhabitants of the continent, in using these flowers to decorate the monuments and graves of their departed relatives and friends. The French are particularly partial to these flowers, and designate them as we do, IMMORTELLE. It has been observed by Mr. Phillips, that 'since the hill of Pere la Chaise has been

converted into a cemetery for the city of Paris, the demand for these flowers in the French capital has been so considerable, as not only to employ many hands in the cultivation of them, but numerous families are regularly occupied, and entirely supported by forming these flowers into garlands and crosses, which are offered for sale by the cottagers near the entrance of this celebrated burial ground; and but few persons can visit the romantic and hallowed spot without having some name called to their remembrance which draws from them this slight token of remembrance; for here we find a mingled mass of monuments, recalling to our recollection the sweet lines of the poet, the ready wit of the critic, the piety of the priest, the heroic deeds of the soldier, the bravery of the sailor, the labours of the naturalist, the beauties of the artist, and the loves of Abelard and Heloise; here we meet fond parents with wreaths of IMMORTELLES to drop on the sod of their blighted hopes, and affectionate children placing crosses of everlasting flowers on the head of their parents' graves.'

The cultivation of this plant is particularly easy where the soil is light and dry, but in damp situations it frequently dies under the influence of the moisture of our climate during the three first months of the year. It should be divided in spring or autumn, and if the soil be stiff, mix with it an ample portion of drift sand; this will generally preserve it in health; but should it not do so, plant it on little hillocks of light soil, which may be raised six or eight inches high, as a further defence against damp; and half cover the soil with small pebbles.

HESPERIS MATRONALIS. plena alba.

DOUBLE WHITE ROCKET.

Class.

TETRADYNAMIA.

Order.

SILIKUOSA.

Natural Order.

CRUCIFEREE.

Native of	Height.	Flowers in	Duration.	Cultivated
Italy.	18 inches.	June, July.	Perennial.	in 1597.

No. 39.

Hesperis, from the Greek 'ESPEROS, evening; in consequence of the fragrance of some of this tribe at that time. We are told that the ladies of Germany cultivate these flowers in pots, to secure the evening perfume of them in their apartments, whence they have been called dames' violets; and this allusion has been Latinized into matronalis. The name of Rocket seems to have come to us through the Latin eruca, signifying canker-worm as well as the name of this plant, and as it frequently dies with the unskilful, without a perceptible cause, the term may be as applicable as many others in our scientific nomenclature.

Many and contradictory directions have been given for the cultivation of this plant, evidently by persons not at all practically acquainted with its habits. The best information we have ever seen printed is contained in Rees's Cyclopædia. The grand secret consists in cutting down the flower stems of a plant or two, before they are much exhausted by the bloom, thus a good stock of offsets will be produced. A cool and rather moist situation for the rocket is always to be preferred.

Hort. Kew. 2, v. 4, 122.

SENECIO ELEGANS.

PURPLE GROUNDSEL.

Class.

SYNGENESIA.

Order.

POLYGAMIA SUPERFLUA.

Natural Order.

CORYMBIFERÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
C. G. Hope.	2 feet.	June, Oct.	Annual.	in 1700.

No. 40.

Senecio, from the Latin senex, an old man; a name which has been given to it from the fancied resemblance of its seed down to the grey or silvery head of age. Elegans, elegant. The seed of this plant is usually sold under the name of Jacobæa, which term has been handed down from some old botanists, who called it Flos Sancti Jacobi, or the flower of Saint James.

The Senecio elegans may be raised from seeds, sown with other hardy annuals in the spring, and requires no peculiar care.

The double one, which is merely a variety of the same, is an extremely beautiful plant; and although it does not come within our limits as a hardy one, we may be pardoned the union of it with its synonymous species. It is usually cultivated in pots, as an ornament for the house, yet few plants are better adapted for giving assistance to the brilliancy of the flower border, where, during the summer months, it will grow with greater luxuriance and beauty than in any other situation.

It is a tender plant, and where there is not a greenhouse protection, it may be kept during the

winter, in a dry airy room, protected from frost; and should be very sparingly supplied with water, or its succulent stems will be liable to decay. In the beginning of March, propagation may be commenced by cuttings, and if one plant only has been preserved through the winter, an abundance of others may be raised from it. Two joints are sufficient to constitute a cutting, and it should be taken off close beneath the lower one. It is usual to slit it a quarter of an inch upwards from the bottom, through the joint, which certainly in some plants facilitates their rooting, and can injure none. These should be planted in pots of light rich earth, two or three in each, then watered immediately; and bell glasses, or in the absence of these, tumblers or goblets, be turned over them. If in this state it be convenient to place the pots in a warm cucumber frame, the cuttings will strike root more quickly, but if not they may be placed before the window of a warm room having a southern aspect, where they will generally succeed very well. The glasses should, occasionally, be taken from them for a few minutes, and wiped, but not be altogether removed till the cuttings have struck root. When they begin to grow freely, they may be transplanted into separate pots, be gradually hardened to the open air, and kept in readiness to turn into the borders about the middle of May, where they will prove a conspicuous ornament all the summer. The white variety of the double Groundsel is far less common than the purple; and though not so gay an ornament, is a very desirable one either for pot culture or to beautify the parterre.

Enothera macrocarpa.

18

Pentstemon pubescens.

19

Kalmia glauca.

Achillea speciosa.

20

ÆNOTHERA MACROCARPA.

LARGE-FRUITED EVENING PRIMROSE.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N.America.	18 inches.	June, Aug.	Perennial.	in 1811.

No. 41.

Ænothera, from the Greek, explained under Ænothera pumila, No. 35. Macrocarpa is also of Greek extraction, signifying large-fruited.

Nearly the whole of the genus Ænothera, or Evening Primrose, a name by which some of the species are so familiar to us, are extremely ornamental plants. They have obtained the latter well-known appellation from the circumstance of their flowers expanding in the evening; though this peculiarity does not equally apply to all the individuals of the genus.

The species Macrocarpa has been considered synonymous with Missourensis.

It is easily propagated by cuttings, which may be planted in pots, and placed in a hotbed, or under a hand glass, till they have struck root; they will there be convenient for removing into warm parts of the flower border, or to place in a cold frame for more effective winter protection.

It should be planted in a situation that is favourable to its trailing on the ground, unless considerable attention can be paid to the support of its succulent stems.

Bot. Mag. t. 1592.

PENTSTEMON PUBESCENS.

HAIRY PENTSTEMON.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
BIGNONIACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
N. America.	18 inches.	July, Sept.	Perennial.	in 1758.

No. 42.

From two Greek words, signifying a fifth stamen, which name has been chosen to distinguish this genus from others of the same class; though the additional stamen is always more or less imperfect. Pubescens, from the Latin, downy.

It is frequently known as the Chelone pentstemon; and this, some of the best botanists still consider its legitimate title; but the use of the new name amongst those who never even pretend to judge of its propriety, has rendered its adoption almost necessary, that the plant might be recognized by those who know it by no other appellation. It was first adopted merely on account of a trifling variation in the rudiment of the additional filament already alluded to.

It is of easy cultivation, and may be propagated either by seeds, cuttings, or separation at the root. Seeds should be sown in the spring; and the plants, which require no other care than that of being kept free from weeds, will blossom in the following summer. If cuttings are taken as early in the spring as the plants will admit, they will flower in the following autumn.

KAL'MIA GLAU'CA.

GLAU'COUS KALMIA.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHODORACEÆ.

Native of N. America.	Height. 3 feet.	Flowers in April, May.	Duration. Perennial.	Cultivated in 1767.
--------------------------	--------------------	---------------------------	-------------------------	------------------------

No. 43.

Kalmia, after Peter Kalm, noticed at No. 33, where a return to the same subject was anticipated under another variety of *Kalmia latifolia*. The *Kalmia glauca* is now given, there being but little difference in the nature of the several species. In America it is called the spoon tree, in consequence of the natives making use of the wood, which is close and hard, for the purpose of forming various articles of household utility.

Miss Edgeworth, in her tale of "To-morrow," ingeniously alludes to the poisonous properties of the leaves of this splendid plant. It forms one of her auxiliaries in the delineation of the evils of procrastination, which she has given with a force and feeling not to be surpassed. The incident is founded on the communication of Dr. Barton, in the American Transactions; who states that in Philadelphia, in the winter of 1790, an official proclamation was issued, warning all persons from eating pheasants. This, the Doctor observes, was done on a well grounded opinion, that several persons had died from the use of some of these birds which had fed on the leaves of the *Kalmia*.

Opposed to this opinion, is that of Mr. Wilson, the ornithologist, who says that he has found the crops of these birds distended almost entirely with the buds of the *Kalmia*, but that he has eaten freely of the flesh of such of them, without any ill consequence having arisen.

Its noxious character has been strongly exhibited on the rattlesnake. A few drops of a tincture prepared from the leaves having been poured on this reptile, it died shortly afterwards. And the deleterious effects of the leaves on the human system, are such as should excite a strict guard against their being eaten by children.

Kalm, himself, states that both sheep and calves had died from eating them, and that cows and horses had suffered greatly from the same cause. On the other hand, when the ground is covered with snow, stags browse them as their common food, without any ill effects having been known to arise from the use of the venison.

In the cultivation of plants generally, but more particularly those of difficult growth, attention should always be given to the peculiar situation of them in their native soil. Professor Kalm has chiefly noticed the broad-leaved species, and found it succeed best on the sides of hills, especially on the north side; and says, on meeting with a steep place near a brook, or on the side of a hill towards a marsh, you are sure to find it. This alone speaks pages to the attentive cultivator; particularly when he is told that vegetable earth or peat constitutes its native soil, in a climate no milder than our own.

ACHILLE'A SPECIO'SA.

SPEAR-LEAVED MILFOIL.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native Co	Height.	Flowers in	Duration.	Introduced
Unknown.	3 feet.	July, Aug.	Perennial.	in 1804.

No. 44.

The name *Achillea* is deduced from Achilles, the famous Grecian hero, whose strength and prowess form so conspicuous a character in the *Iliad*. Clad in armour, impenetrable and resplendent, Homer compares him with the sun:—

“ Not brighter, Phœbus in th' ethereal way,
Flames from his chariot and restores the day ”

Speciosa, from the Latin, handsome. Many of the plants now coming under the denomination of Milfoil, do not possess the character which this name seems to have been first intended to indicate; the Latin *Millefolium*, being compounded of *Mille*, a thousand, and *folium*, a leaf; and used to characterize some of these plants, which have very numerous pinnæ or leaflets.

The flowers of this *Achillea* are, probably, not so showy and attractive as the florist may be led to expect from its appellation of *Speciosa*. The plant, however, is of handsome upright growth, and its serrated foliage particularly neat. In very light soils it sometimes spreads too freely; therefore is of easy culture, and admits a division of its roots at the usual season.

Verbascum Plonaceum.

3/5

Coreopsis lanceolata.

3/5

Ledum palustre.

Campanula pusilla.

VERBASCUM PHŒNICEUM.

PURPLE-FLOWERED MULLEIN.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
SOLANEE.

Native of S. Europe.	Height. 4 feet.	Flowers in May, Aug.	Duration. Perennial.	Cultivated in 1596.
-------------------------	--------------------	-------------------------	-------------------------	------------------------

No. 45.

Verbascum seems to be of very uncertain derivation, and the term having been used by the oldest writers, its origin is likely to remain in obscurity. A supposition has been ventured that it is a corruption of barbasicum, from barba, bearded, on account of the woolliness of some of the species. Phœniceum, from the Latin, signifying purple-coloured.

Of the origin or application of our English term Mullein, we find no traces, otherwise than as the name of a plant. Some of these being soft and woolly, as before observed, it probably has been applied from the Latin mollis, as indicative of that quality.

With our drawing of this plant we have given a representation of a section of its stem. On cutting the stem through transversely, the arrangement of its sap vessels are as perfectly exhibited as in vegetables of a more ligneous formation; and it is pretty certain that its functions of vegetable life are performed by ascending and descending fluids upon the selfsame principles.

On the circulation of vegetable fluids, various theories have, at different periods, been promulgated

by ingenious physiologists. Their theoretical speculations, however, have been pursued with much abstruseness and uncertainty, and it was left for the present age to exhibit, with somewhat like precision, the laboratory of nature in the vegetable kingdom. Mr. Knight, the president of the Horticultural Society, from thirty years' intense application to this subject, has determined, by ingenious and satisfactory experiments, many of the phenomena of vegetation, particularly such as are connected with the circulation of the sap, the perspiration of plants, &c.

These subjects, perhaps, some of our readers may not have had occasion to examine. As they cannot fail to prove of peculiar interest to many enquiring minds, we shall have pleasure, as opportunity offers, in giving the opinions of eminent botanists, and the result of various experiments connected with this department of vegetable physiology.

This species of *verbascum* is particularly handsome, and we have observed that the flowers of a plant which has remained in its present situation four or five years, are now produced of a darker hue than when it was first planted. This possibly may have arisen from the presence of a portion of peat soil, which, from an alkaline quality that exists in it, is sometimes found to change pinks into purples; perhaps from the neutralization of acids, which produce effects directly opposite.

It never has perfected seeds with us, nor does it increase very much at the root, but it may be propagated by cuttings of the young flowering stems, which strike root readily under bell glasses. It does not require any peculiar soil or situation.

COREOPSIS LANCEOLATA.

SPEAR-LEAVED COREOPSIS.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of Carolina.	Height. 3 feet.	Flowers in July, Oct.	Duration. Perennial.	Introduced in 1724.
------------------------	--------------------	--------------------------	-------------------------	------------------------

No. 46.

The plants of this genus are sometimes called tick-seed sun flowers, in allusion to the shape of their seed; which circumstance is regarded in the systematic appellation coreopsis, noticed under No. 13. Lanceolata, from the form of the leaves, which approaches that of a lance or spear.

There are very few plants which exhibit a more rich profusion of golden flowers, and also produce them as long in succession as the Coreopsis lanceolata. From its medium height it is well suited either to the borders allotted to the growth of herbaceous subjects, or for introduction into the mingled plantation of low flowering shrubs, where it will form a conspicuous ornament.

It may be increased by dividing the roots in spring or autumn, but preference should be given to the former season; or cuttings may be taken at any time during the summer months, provided it be sufficiently early to admit of their making strong root before the commencement of cold weather. Not less than two months should be allowed for this purpose, even with the assistance of bell or hand glasses.

LEDUM PALUSTRE.

MARSH LEDUM.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHODORACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Europe.	3 feet.	April, May.	Perennial.	in 1762.

No. 47.

The name of this genus has been adopted from LEDON, which the Greeks applied to a species of cistus that produced their LEDONON, our labdanum, a resinous substance sometimes employed in plasters, and also in fumigations for its perfume. The term has been improperly referred to lædendo as its original. Palustre, from the Latin, marshy, in allusion to its native situation.

This plant, when bruised, has a rather pleasant aromatic scent, similar to that of fresh gathered hops; and Linneus tells us that the inhabitants of some parts of Sweden, make use of the leaves in their beer, which produce an agreeable flavour, but an intoxicating quality.

The Laplanders are said to strew the branches amongst their grain to drive away mice.

A little variety occurs in the colour of its flowers. Some are of a clear white; whilst others are delicately tinged with a pale pink.

The Ledums come under the denomination of peat plants; and grow best in that soil. This species succeeds best in a shady situation, and in the summer should be supplied with copious waterings.

Hort. Kew. 2, v. 3, 48.

LENUM TAIETRE.

MARSH LINDEN.

MOOREA.

MOOREA.

MOOREA.

Height of tree	10 to 15 feet
Flowers in	terminal panicles
Flowers in	terminal panicles

MOOREA.

The name of this genus has been adopted from a native name, which the Greeks applied to a species of the same genus, and which they called *leucon*, a name which they derived from the Greek word *leu*, white, and *kon*, a tree. The name has been improperly referred to the genus as the original *leucon*, from the Latin, *leucon*, in allusion to its native situation.

This plant, when pressed, has a rather pleasant aromatic scent, similar to that of fresh extracted hops; and Linnaeus tells us that the inhabitants of some parts of Sweden make use of the leaves in their beer, which produces an agreeable flavour, but an intoxicating quality.

The Laphanthe are said to throw the branches amongst their grain to drive away mice.

A little variety occurs in the colour of its flowers. Some are of a clear white; whilst others are delicately tinged with a pale pink.

The Laphanthe come under the denomination of pest plants; and grow best in that soil. The species succeeds best in a shady situation, and in the summer should be supplied with copious watering.

CAMPANULA PUMILA.

DWARF BELL-FLOWER.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of	Height.	Flowers in	Duration.	Introduction
Switzerland	3 inches.	June, Aug.	Perennial.	not known.

No. 48.

Campanula, from the Latin; the diminutive of campana, a bell; a name appropriately bestowed on this genus, from the shape of the flowers. Pumila, also from the Latin, signifying little.

This very pretty campanula, has been noticed by the greater part of our botanical writers as a variety of *Campanula rotundifolia*. It is, however, very different in several particulars, and may well claim the distinction of a separate species.

There are two varieties, the blue and the white; and where the soil is rich and loose, it is difficult to keep their thread-like roots within proper limits; which if not attended to may occasion inconvenience by their mingling with other plants.

During a part of the summer, this plant affords a very attractive border. Its little pendent blue, or more exquisitely delicate white, blossoms, which are yielded in "lovely profusion," form an unbroken line of neatness and simplicity. This effect is best obtained by enclosing the roots between two rows of tiles or slates, placed in the ground edgeways, about two inches apart, with their upper edges even with the surface of the soil.

Hort. Kew. 2, v. 1, 345.

Pyrus Japonica.

25

Genista sagittalis.

26

Gentiana acaulis.

27

Ledum buxifolium.

PYRUS JAPONICA.

JAPAN APPLE-TREE.

Class.

ICOSANDRIA.

Order.

PENTAGYNIA.

Natural Order.

ROSACEÆ.

Native of Japan.	Height. 6 feet.	Flowers in Jan. June.	Duration. Perennial.	Introduced in 1796.
---------------------	--------------------	--------------------------	-------------------------	------------------------

No. 49.

With the exposition and inferences of Linneus before us respecting the word *Pyrus*, as given by Sir J. E. Smith, we cannot submit to the deduction of the term from the Greek *PUR*, fire, which is stated as given in consequence of the fruit drawing to a point like a flame. De Theis says, from the Celtic *PEREN* comes the Anglo-Saxon *PERE*, the English *PEAR*, and the French *POIRE*. Hence *Pyrus* may easily be formed. According to the same writer, *API*, the Celtic name of a fruit of the same kind, is the origin of the Greek *APIOS*, the German *APFEL*, and our *APPLE*. Some authors, who will have *Pyrus* to be of Greek extraction, deduce it from *APIOS*, with the addition of an *R*, &c.

That our readers may be prepared to meet new names, they should be informed that *Chænomeles Japonica*, and also *Malus Japonica*, are amongst those lately bestowed on this shrub.

The mere mention of *Pyrus* opens to our view such a field of speculations as it were impossible to pass without notice. We have the *Pyrus malus*, under which name is arranged all the varieties of that valuable fruit the Apple; and *Pyrus communis*

botanically including the numberless sorts of pears, so common amongst us.

We can but regret that many favourite old sorts of these fruits are unavoidably falling to decay. Trees, like animals, grow old and diseased; and it is observed, that every bud or graft of such old tree, when attached to another stock, still inherits the age of its original, and its consequent disease. The invigoration yielded by its new alliance is only temporary. Thus, concisely, we warn our readers from vain attempts to propagate healthy trees from worn-out varieties. Every man should propagate from seeds, or graft from sorts that are known to have been recently so raised; and fruitful plantations would be the consequence.

The *Pyrus Japonica* is a great acquisition to our gardens, from the beauty, and from the long succession of its flowers. Indeed it is far more easy to name the season of its flowering, than to say when none are produced. Its fruit, which never appears to ripen here, is extremely stony and ungrateful; nevertheless, after having been laid by for a time, it emits a rich fruit-like odoriferous flavour.

It is well calculated for training against trellis work or a wall, and also makes a pretty standard shrub, when spreading from a single stem about two feet in height. It requires no peculiar care, either as regards soil or situation.

The best method of propagation is by layers, which should be put down in the autumn, and they will strike root freely in the following year. Cuttings are sometimes taken. A part of them will grow, but they produce weak plants.

GENISTA SAGITTALIS.

JOINTED GENISTA.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Germany.	1 foot.	May, June.	Perennial.	in 1758.

No. 50.

It is pretty generally agreed that *Genista* has been derived from the Latin genu, the knee ; but on what account authors appear less unanimous. Some say in allusion to the bending, or singular connexion of one part of the stem to another ; whilst others conceive that it arose from their similar flexibility ; or its utility in relieving pain in that joint. *Sagittalis*, also from the Latin, signifying, of an arrow, perhaps from the leaf having the appearance of the feathered end of an arrow.

The singular formation of this plant will always claim for it a place in the garden of the curious. The leaves are produced one from the end of another ; alternately from the upper and under sides, connected by the midrib, which has a partial termination at the end of each.

It may be divided at the root, though a better mode of propagation is from seeds. These should be sown in the autumn, and the plants kept free of weeds during the next summer. In September they may be transplanted to the situation where they are intended to remain. It succeeds in almost any soil or aspect.

Hort. Kew. 2, v. 4, 259.

1894-1895

1894-1895

1894-1895

1894-1895

1894-1895

1894-1895

GENTIANA ACAULIS.

GENTIANELLA.

Class.

PENTANDRIA.

Order.

DIGYNIA.

Natural Order.

GENTIANEE.

Native of Alps of Eur.	Height. 3 inches.	Flowers in April, May.	Duration. Perennial.	Cultivated in 1629.
---------------------------	----------------------	---------------------------	-------------------------	------------------------

No. 51.

This genus of plants has received its name in honor of Gentius, a king of Illyria, who is said to have discovered one of the species of it. He is also supposed to have experienced its virtues in his army, as a cure for the plague. Acaulis, from the Greek, signifying stemless, which it is in its native alpine situations. Gentianella is formed as the diminutive of Gentian, to characterize a small species.

It cannot but be sincerely regretted by the zealous votaries of Flora, who happen to possess their parterres of beauty within the influence of the smoke of towns, that this interesting plant is so fastidious as to refuse yielding its exquisitely brilliant blue flowers amongst them; though in high situations whether planted in strong or light soil, it generally flowers in great splendour. Pure air has always been deemed indispensable, yet peculiar management may possibly surmount the difficulty; for in situations where it never, or very rarely, produces flowers, we have generally observed it appear healthy and increase luxuriantly. This would suggest the propriety of planting it in poor soil, for sometimes by checking luxuriance we obtain, from some other

plants, both flowers and fruit. Upon this principle it is that various arts are successfully practised on fruit trees; such as curtailing their roots, cutting notches in the larger limbs, and also that of ringing them. The latter method may, with the greatest confidence, be recommended for practice on young free-growing apple or pear trees, which frequently increase their wood too fast to admit of fruit being produced. It may be useful to some of our readers, and shall be briefly stated.

If blossoms have not been usually produced, ringing should be performed after the fall of the leaf. This is called procuration ringing. When trees blossom, but fail to bear fruit, it may be done whilst they are in flower. This is called maturation ringing; and will induce the production of much finer fruit than would ever be yielded without it. The operation merely consists in taking a ring of the bark entirely off the whole circumference of a branch or limb of the tree. The breadth of the ring, on a luxuriant apple or pear tree, may be a quarter of an inch; but on those of slow growth, it should be rather less.

This practice is not so strictly applicable to stone fruits, from the propensity of the trees to gum and canker about the wound. Yet we have successfully practised it on these, taking care to ring such parts as have free growth, making the ring but narrow, and doing it at a period when the sap is most inactive. Thus may fruit trees be rendered productive, and flowering plants ornamental, where neither was the case before art stepped in and forced the efforts of nature.

LEDUM BUXIFOLIUM.

BOX-LEAVED LEDUM.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHODORACEÆ.

Native of Carolina.	Height. 1 foot.	Flowers in April, May.	Duration. Perennial.	Introduced in 1736.
------------------------	--------------------	---------------------------	-------------------------	------------------------

No. 52.

The derivation of the name of this genus, from the Greek LEDON, has been noticed under No. 47. Buxifolium, from buxus, box; and folium, a leaf; in consequence of the resemblance of the foliage of this plant to that of the common box.

A retrospective glance would seem to indicate the metamorphosis of our "Botanic Garden" into an orchard. We, however, never intend being fettered by the limits of a particular subject. The whole vegetable kingdom is before us, and to the extent of our humble capacity we shall lay hold on any part of it that may seem to develop a source of knowledge, either useful to the hands of the practical, or gratifying to the minds of the speculative.

The *Ledum buxifolium* is a beautiful close-growing little evergreen shrub, rarely reaching the height of twelve inches, which should be planted in sandy peat, in a cool and rather shaded situation; and, as far as is possible, where it may have the advantage of pure air. Its chief demand on our care arises in the heat of summer, when it should be very frequently watered, or it will be liable to be lost. It is propagated slowly by layers.

Hort. Kew. 2, v. 3, 48.

Lilium tigrinum.

1/2

Erica Australis.

Epilobium Dodonsei.

Tagetes patula.

1/2

LILIUM TIGRINUM.

TIGER-SPOTTED LILY.

Class.

HEXANDRIA.

Order.

MONOGYNIA.

Natural Order.

LILIACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
China.	4 feet.	July, Aug.	Perennial.	in 1804.

No. 53.

Lily, from the Greek *LEIRION*. The derivation and application of its trivial name are sufficiently evident.

We know of very few plants that excited more general interest than did the Tiger Lily on its introduction to this country. Every one heard of, admired, and resolved on possessing, this Chinese beauty; and in a very short time, from its facility of propagation, the cottager and nobleman boasted alike of its splendour in their borders. Happily, our nature will not admit the continued exertion of these strong feelings of delight, which are generated by novelty; or, we should be unceasingly carried about by ecstasies, and temperate reason could no where build her throne.

In a former number the resemblance of the bulb and the bud was hinted at. Their utility, as regards vegetation, is precisely the same; for they both constitute what Linneus calls the hybernaculum, or the winter quarters, of the young plant. Their principal difference exists in the situation which they occupy; and in the present, and a few other plants, even this distinction is wanting.

'I consider (says T. A. Knight, Esq. in a letter to the author,) a bulb to differ from an ordinary bud, only in having a reservoir of a different form attached to it. The bud of a tree, or of the tuberos root of a potatoe, is attached to a mass of alburnum and bark, from which, when it germinates, it draws its requisite nutriment. A bulbous root, such as the common onion, has numerous thick and fleshy scales, which in their incipient state, might have extended into leaves, but which, instead of extending themselves, remain short and are distended by becoming reservoirs of the true sap of the plant, as the bark and alburnum were in the cases before-mentioned.'

He observes, also, 'Buds of every kind have their attached reservoirs, without which they cannot live and extend themselves. Some species of trees and herbaceous plants possess a power which others do not, of re-producing buds upon the surface of their alburnum. It is, however, the unanimous opinion of the continental naturalists, and of the English and Scotch, with the exception of myself, that all buds originate from the Medulla; and it is true, that in all cases, almost, a bud may be traced to the Medulla; but I have, in a great many instances, occasioned buds to be generated upon the smooth surface of the alburnum; and I have often seen them thus produced naturally.'

If the bulbs which are produced on the stems of this magnificent Lily, be planted in the borders as soon as they fall, or can be easily detached, they will grow, and in most cases blossom at three years old, but stronger in the fourth year.

ERICA AUSTRALIS,

SPANISH HEATH,

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ERICACE.

Native of	Height.	Flowers in	Duration.	Cultivated
Spain.	2 feet,	April, May.	Perennial.	in 1769.

No. 54.

Erica, from the Greek EREICO; see No. 22. Australis, from the Latin, southern; a specific name given in consequence of its having been introduced from the southern part of Europe.

This plant will always prove a peculiarly interesting appendage to the peat border, and should never be dispensed with. The hardy heaths form a little tribe of shrubs whose beauties we cannot class with the splendour of the Kalmias, the Azaleas, and the Rhododendrons; but they equally interest us through a far different medium. They introduce themselves to our feelings by their modesty and humility; and we readily admit the propriety of Dr. Watts's assertion—

“Humility's a plant of lovely growth.”

Still the humble growth of some of the tender species of Erica, whose flowers are occasionally very specious, may further remind us of him who is humble only to embellish his grandeur.

The Erica australis should be planted in sandy peat; or in a mixture of peat and fresh loam; and like most other of the hardy heaths, though they make root but slowly, may be increased by layers.

Hort. Kew. 2, v. 2, 396.

EPILOBIUM DODONÆI.

DODONÆUS'S EPILOBIUM.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Switzerland	9 inches.	July, Aug.	Perennial.	in 1798.

No. 55.

Epilobium is compounded of three Greek words, EPI LOBOU ION, a violet upon a pod ; or, more literally, upon - a pod - a violet : not that a violet resembles the blossom, but is intended to indicate a beautiful flower. Dodonæi from Dodonæus, an eminent physician and botanist of Friesland, who lived in the sixteenth century, and published several botanical works in German, illustrated by wood cuts, similar to those of Gerarde and Parkinson.

This species has been noticed, by some writers, as synonymous with Epilobium angustissimum. Ours is a plant with procumbent stems, and otherwise differing from angustissimum.

It is the prettiest plant that we know of the tribe, and is never troublesome by spreading at the root, which some of the Epilobiums are found to be.

After it has done blossoming, the whole of the stems may be cut off, or they will continue to grow, and thus, sometimes, lessen the vigour of the roots. It is easily increased by separating the young shoots in the spring, which will succeed, notwithstanding they may be entirely devoid of any fibrous appendage.

TAGE'TES PAT'ULA.

FRENCH MARYGOLD.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of Mexico.	Height. 3 feet.	Flowers in Aug. Oct.	Duration. Annual.	Cultivated in 1596.
----------------------	--------------------	-------------------------	----------------------	------------------------

No. 56.

Apuleius, a celebrated platonic philosopher of the second century, is said to have used this term; its derivation must therefore be doubtful. De Theis has derived it from Tages, an Etruscan deity, grandson of Jupiter and teacher of divination. Patula, from the Latin, spreading.

Why this plant is called French Marygold is now somewhat difficult to determine; but it is more than probable that it received this appellation in consequence of its seed having been first imported to this country from France.

Its cultivation is so generally known, that nothing need be said respecting it; except to warn our readers against a formidable enemy to the young plants. If they be much eaten, a single examination, late at night, with the assistance of a light, will show the depredators to be young earwigs, (*Forficula auricularia*). Woollen cloth, loosely folded; hollow bean stalks; or two small boards, placed upon each other, with one edge of the upper one raised sufficiently to admit their creeping between them, will form useful traps, and the insects may be destroyed every morning.

Hort. Kew. 2, v. 5, 88.

Dracocephalum speciosum. $\frac{1}{2}$

Buddlea globosa. $\frac{1}{2}$

Phlox ovata. $\frac{1}{2}$

Primula acaulis. $\frac{2}{3}$

DRACOCEPH'ALUM SPECIO'SUM.

SHOWY DRAGON'S HEAD.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of N. America	Height. 3 feet.	Flowers in August.	Duration. Perennial.	Introduced in 1822.
-------------------------	--------------------	-----------------------	-------------------------	------------------------

No. 57.

Dracocephalum is a term compounded of two Greek words, **DRACON**, a dragon; and **CEPHALE**, the head, on account of the fancied resemblance of its corolla to the head of that fabulous animal. *Speciosum*, from the Latin, showy.

This is a handsome erect herbaceous plant, of somewhat larger growth than the *Dracocephalum denticulatum*, to which it bears considerable resemblance, but from its late introduction, is not so frequently met with.

It will grow in any common garden soil, but prefers a rich and rather light loam. It increases freely at the root, and may be divided in spring, or in the autumn.

We ought not, perhaps, to pass by the present opportunity of making further mention of the ideal animal whose name has assisted in distinguishing this genus of plants. We say ideal, because much that we have heard and read of dragons, during childhood, must have been so. Such tales may serve the purpose of the nurse, but are highly ridiculous, and improper to be implanted in the youthful mind. No opportunity should, therefore, be lost in unde-

PHLOX OVA'TA.

OVAL-LEAVED PHLOX.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
POLEMONIACEÆ.

Native of N. America.	Height. 6 inches.	Flowers in May, June.	Duration. Perennial.	Cultivated in 1790.
--------------------------	----------------------	--------------------------	-------------------------	------------------------

No. 59.

Though the term *Lychnidea* has been expelled from Botanical genera, it is sometimes, nevertheless, used as an English name for this tribe of plants; see No. 6. *Ovata*, from the Latin, signifying egg-shaped, or of an oval figure.

The *Phlox ovata* is a beautiful herbaceous plant, and however often met with will always be welcome. We believe there is not one individual in this tribe but has powerful claims to the attention of every true florist; we may therefore presume that our readers will have pleasure in being occasionally introduced to others of the same family.

This little plant, though from North America, was for many years, after its introduction, regarded as a subject for the greenhouse, and indeed in moist situations it will occasionally decay.

The greater part of the *Phloxes* delight in peat, or a mixture of that soil with loam; peat, however, seems rather too retentive of moisture to suit the *Phlox ovata*; but if planted in sandy loam, in a warm situation, the severest frosts will not be found to injure it. It may be propagated by parting the roots, or by cuttings.

Hort. Kew. 2, v. 1, 327.

[Faint, illegible text]

[illegible]

PRIMULA ACAULIS;

Flore pleno rubra, et flore pleno alba.

PRIMROSE;

Double Crimson, and Double White.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

PRIMULACEÆ.

Native of Britain.	Height. 3 inches.	Flowers in April, May.	Duration. Perennial.	Cultivated in 1640.
-----------------------	----------------------	---------------------------	-------------------------	------------------------

No. 60.

This plant has received its name from the Latin *primus*, first, on account of its early flowering; though not quite correctly, for we have aconites, snowdrops, and crocuses, before the delicate primrose dares to unfold its beautiful petals. *Acaulis*, from the Greek, stemless.

The beautiful varieties of primroses which inhabit our gardens, whether crimson, lilac, or white, double or single, are alike included under one species. Indeed, much difficulty has arisen respecting the origin, and consequently, the proper specific division, of several of the *primula* tribe. Linneus considers the primrose, the cowslip, and oxlip, originally but one distinct species, and several reasons may be advanced in support of this theory; yet still the partially distinct characters of the primrose and cowslip should incline us now to separate them, whatever may have been their origin. We certainly have seen flowers of the primrose supported on a scape or stalk, and thus approach the oxlip; whilst the cowslip, when brought into cultivation, will have its flowers enlarged, and thus also incline towards the oxlip. Hence a tendency is shown, in the two ex-

tremes of distinction, to verge towards each other; indeed, a host of connecting links between these plants will present themselves to the diligent and inquiring botanist.

Be the scientific difference or connection of these British subjects whatever it may, it does not lessen the value of our attractive and modest primrose, that lives on banks and hides its beauties beneath the brambles' shade,—

“Lorn tenant of the peaceful glade,
Emblem of virtue in the shade,
Rearing thy head to brave the storm
That would thy innocence deform.
Of all the flowers that greet the spring,
Of all the flowers the seasons bring;
To me while doom'd to linger here,
The lowly Primrose shall be dear.” MAYNE.

The two peculiarly pleasing varieties of which we now present figures, are the most elegant little subjects that we are acquainted with in the species. They are usually planted in a loamy soil; we, however, find a sandy peat, with a little loam, more suitable to their growth. As the double white does not freely produce offsets that can be conveniently slipped from the old plant, it will be found an advantageous practice to slit the thick part of the old root longitudinally with a knife, into as many parts as the head will admit; observing to retain a portion of the fibrous roots to each division. These being planted in pots or the borders, should be regularly supplied with water till they have taken root; but during the winter, if in pots, they require little or no water.

Hort. Kew. 2, v. 1, 307.

There is a certain amount of evidence to show that the
 people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit.

The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit. The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit.

The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit. The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit. The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit.

The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit. The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit.

The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit. The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit. The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit.

The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit. The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit. The people of the world are not so much interested in the
 things of the world as they are in the things of the
 spirit.

Lobelia syphilitica.

$\frac{1}{2}$

Coreopsis tenuifolia.

$\frac{1}{2}$

Rhododendron hirsutum

Cochlearia Greenlandica.

LOBELIA SIPHILITICA.

BLUE LOBELIA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of Virginia.	Height. 18 inches.	Flowers in Aug. Sept.	Duration. Perennial.	Cultivated in 1665.
------------------------	-----------------------	--------------------------	-------------------------	------------------------

No. 61.

Lobelia is a name instituted by Plumier, after Matthias de Lobel, a Flemish botanist of the sixteenth century; who, in youth, acquired an ardent love of plants; and, through life, cultivated the science of botany with considerable success. He was appointed botanist to King James I., and died near London, at the advanced age of seventy-eight. Woodville observes that this plant derived its appellation, Siphilitica, from its efficacy in the cure of siphilis, according to the experience of the North American Indians. As its antisiphilitic powers have not, however, been confirmed by European practice, it may be needless to treat at all on its medical qualities.

Several plants of the Lobelia tribe possess very active medicinal properties, particularly the Lobelia Tupa, a native of Chili. This species is poisonous in the extreme, and acts as an emetic, simply by smelling the flowers.

Whether the Lobelia siphilitica be planted in the open ground, or kept in a pot, the offsets, should be divided in the spring; and they will blossom freely without further care.

COREOPSIS TENUIFOLIA.

. SLENDER-LEAVED COREOPSIS.

Class.

SYNGENESIA.

Order.

POLYGAMIA FRUSTRANEA.

Natural Order.

CORYMBIFERE.

Native of	Height.	Flowers in	Duration.	Introduced
N. America	15 inches.	July, Aug.	Perennial.	in 1784.

No. 62.

Coreopsis, from the Greek CORIS, a bug; and OPSIS, appearance; in allusion to the apparent similarity of the seed and the insect. From this circumstance it is, in part, that these plants are sometimes called tick-seed sunflower. Tenuifolia, from the Latin tenuis, slender; and folium, a leaf.

There were formerly between thirty and forty distinct species of Coreopsis described, and nearly the whole of them, like tenuifolia, hardy and herbaceous. The genus has, however, been somewhat curtailed, from the generic characters of some of its former species having been found such, as of necessity, required their removal to other families. They are generally showy plants; and more perfect instances of their attraction need not be given, than in the two species already published in this work, No. 13, and No. 46. The former of these, the Coreopsis tinctoria, has spread over Great Britain more rapidly than any plant we have ever known. In the three years, since the period of its introduction, its beauty has secured it a passport to almost every respectable garden in the kingdom; where it will continue to be cultivated as one of the most

desirable annuals that our transatlantic friends have ever bestowed upon us.

The *Coreopsis tenuifolia* requires no peculiar care, but may be planted in any common garden soil. Its increase at the root will admit a division every other year, or even more frequently.

It is a desirable plant, from the compactness of its growth and neatness of its slender foliage. It opens its brilliant flowers before the gay annuals of the autumn are over prominent; a season which is usually burthened with these tints of gold. Nature, indeed, seems prodigal of this rich dress. The opening of spring exhibits her in the garden, attired in aconites, crocuses, and the gay variety of narcissuses; whilst the meadows, in a blaze of buttercups and cowslips, remind us of the descent of Jupiter in a shower of gold.

The pleasures of hope are multiplied as we approach the object of anticipation; and now, at the vernal equinox, the very mention of spring is exhilarating in the extreme, when

“All that is sweet to smell, all that can charm
Or eye or ear, bursts forth on every side,
And crowds upon the senses.

“By nature’s swift and secret working hand,
The garden glows, and fills the liberal air
With lavish fragrance: while the promised fruit
Lies yet a little embryo, unperceived,
Within its crimson folds.

“Ye fostering breezes blow,
Ye softening dews, ye tender showers, descend!
And temper all, thou world reviving sun,
Into the perfect year.”

THOMSON.

Hort. Kew. 2, v. 5, 133.

RHODODENDRON HIRSUTUM.

HAIRY-LEAVED RHODODENDRON.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.

RHODORACEÆ.

Native of Switzerland.	Height. 18 inches.	Flowers in May, July.	Duration. Perennial.	Introduced in 1739.
---------------------------	-----------------------	--------------------------	-------------------------	------------------------

No. 63.

Rhododendron is deduced from two Greek words, **RODŌN**, a rose, and **DENDRON**, a tree. The name was first adopted by Dioscorides. Linneus's application of it does not, however, appear to be continued to the same plants. Our Nerium is supposed to have first borne the appellation. Hirsutum, from the Latin, rough or hairy.

Our present subject bears a strong affinity to the Rhododendron ferrugineum, excepting that the under side of its leaves are less rusty, and they are also fringed with rigid hairs, which are not found on the leaves of the Rhododendron ferrugineum.

It is rather more free in growth than the last-mentioned species, and generally possesses an advantage over it, in the abundance of its beautiful blossoms.

These plants are propagated, in Great Britain, principally by layers; as they rarely produce seeds or suckers, except in their natural climate. The usual time of laying them is the latter part of summer, and the heads only of the young shoots should be left above the soil. Peat soil and a northerly aspect will be found most suitable.

Hort. Kew. 2, v 3, 49.

REPRODUCTION OF THE
HONEY-LEAVED MONOPHYLLA

THE HONEY-LEAVED MONOPHYLLA is a small, bushy plant, growing in the open woods, and is very common in the mountains of the State of New York. It is a member of the family of the same name, and is very common in the mountains of the State of New York.

Height of plant	1 to 2 feet
Length of leaves	1 to 2 inches
Width of leaves	1/2 to 1 inch
Color of leaves	Green
Color of flowers	White
Color of fruit	Red

The honey-leaved monophylla is a small, bushy plant, growing in the open woods, and is very common in the mountains of the State of New York. It is a member of the family of the same name, and is very common in the mountains of the State of New York. The plant is very common in the mountains of the State of New York, and is very common in the mountains of the State of New York. The plant is very common in the mountains of the State of New York, and is very common in the mountains of the State of New York.

The honey-leaved monophylla is a small, bushy plant, growing in the open woods, and is very common in the mountains of the State of New York. It is a member of the family of the same name, and is very common in the mountains of the State of New York. The plant is very common in the mountains of the State of New York, and is very common in the mountains of the State of New York.

The honey-leaved monophylla is a small, bushy plant, growing in the open woods, and is very common in the mountains of the State of New York. It is a member of the family of the same name, and is very common in the mountains of the State of New York. The plant is very common in the mountains of the State of New York, and is very common in the mountains of the State of New York.

The honey-leaved monophylla is a small, bushy plant, growing in the open woods, and is very common in the mountains of the State of New York. It is a member of the family of the same name, and is very common in the mountains of the State of New York. The plant is very common in the mountains of the State of New York, and is very common in the mountains of the State of New York.

COCHLEARIA GRÆNLANDICA.

GREENLAND SCURVY-GRASS.

Class.
TETRADYNAMIA.

Order.
SILICULOSÆ.

Natural Order.
CRUCIFERÆ.

Native of Greenland.	Height. 2 inches.	Flowers in June.	Duration. Perennial.	Cultivated
-------------------------	----------------------	---------------------	-------------------------	------------

No. 64.

From the Latin cochleare, a spoon; a term applied to this family of plants from the formation of their leaves being concave, and resembling an old fashioned spoon. Grænländica, from the country where it has been found. It has, occasionally, been met with also in the Orkneys, and on the mountains of Scotland.

This species is, by some authors, termed a starved variety of the officinalis, an English species, pretty well known in the north, and on the sea coast, a plant which has obtained for the genus the title of scurvy-grass. Its efficacy in scorbutic affections appears to be established on the most respectable authorities, and though various preparations of the Cochlearia officinalis are prescribed, it is generally acknowledged that the green plant taken as a salad, is by far the most efficacious mode of employing it as an antiscorbutic.

The best method of keeping the Greenland scurvy-grass, is in a small pot of light loam; and like most other alpine plants, it succeeds best in a high and open situation, where it has the full advantage of pure air.

Withering, 678.

COCHLEARIA GRENLANDICA.

GREENLAND STURDY-GRASS.

Order.
NIGHTSHADES.

Order.
NIGHTSHADES.

Medical Properties.
Cathartic.

Native of	Height	Flowers in	Duration	Cultivated
Greenland	2 inches	June	Perennial	

No. 44.

From the Latin cochlear, a spoon; a term applied to this family of plants from the formation of their leaves being concave, and resembling an old fashioned spoon. *Cochlearia*, from the country where it has been found. It has, occasionally, been met with also in the Orkneys, and on the mountains of Scotland.

This species is, by some authors, termed a sturdy variety of the officinale, an English species, pretty well known in the north, and on the sea coast, a plant which has obtained for the genus the title of sturdy-grass. Its efficacy in acrobatic affections appears to be established on the most respectable authorities; and though various preparations of the *Cochlearia officinalis* are prescribed, it is generally acknowledged that the green plant taken as a salad, is by far the most efficacious mode of employing it as an antiscorbutic.

The best method of keeping the Greenland sturdy-grass, is in a small pot of light loam; and like most other alpine plants, it succeeds best in a high and open situation, where it has the full advantage

of pure air.

Dianthus Chinensis.

½

Sisyrinchium striatum.

½

Calceolaria corymbosa.

Phlox cetacea.

½

DIANTHUS CHINENSIS.

CHINA PINK.

Class.
DECANDRIA.

Order.
DIGYNIA.

Natural Order.
CARYOPHYLLÆ.

Native of China.	Height. 9 inches.	Flowers in July, Sept.	Duration. Perennial.	Cultivated in 1713.
---------------------	----------------------	---------------------------	-------------------------	------------------------

No. 65.

Linneus, duly appreciating the beauty and fragrance of this genus of plants, seems to have been desirous of distinguishing it by a name, and called it Jove's Flower; deriving *Dianthus* from the Greek DIOS, of Jove, and ANTHOS, a flower. *Chinensis* from its native country.

This plant is usually mentioned as biennial. We have considered it perennial, from conviction that it most probably is perfectly so in its native climate. It may be cultivated with advantage as an annual, as it perfects its seed in the first season of its growth, but having found it continue three years in a healthy state, it would be improper to term it annual or biennial.

The numerous combinations of colour into which this well-known little subject is prone to sport, renders it truly interesting. Each succeeding flower may be anticipated as more beautiful than its predecessor.

The China Pink, or Indian Pink, as it is sometimes called, may be raised from seeds, which should be sown on the borders, or a hot-bed, at the latter end of March. A dry light soil is best suited to it.

SISYRIN'CHIUM STRIA'TUM.

STREAKED SISYRINCHIUM.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
IRIDÆ.

Native of Mexico.	Height. 18 inches.	Flowers in June, July.	Duration. Perennial.	Cultivated in 1788.
----------------------	-----------------------	---------------------------	-------------------------	------------------------

No. 66.

The word *Sisyrinchium* is deduced from the Greek *sus*, a hog, and *rygchos*, a snout. This name has been handed down to us from classic authors who lived before the birth of Christ; but it has not been precisely determined what plant then bore the appellation. There is nothing in this genus that entitles it to such a name; nothing, at least, that we can trace. *Striatum*, from the Latin, in reference to its striated leaves and flowers.

In the late general catalogues, this plant is called *Marica striata*, after Curtis; but we follow the authority of the most eminent modern authors and nurserymen, by retaining its previous appellation.

The *Sisyrinchium striatum* is well adapted for the mingled flower border of herbaceous plants, as it continues in bloom during the whole of June and July, and exhibits a pretty variety of flowers in connexion with its Iris-like foliage.

It is easily increased, by a division of its roots in autumn or spring, and should be planted in a strong loamy soil. As it is sometimes destroyed by severe frosts, it will be advisable to protect a plant in the cold frame.

Hort. Kew. 2, v. 4, 136.

CALCEOLARIA CORYMBO'SA.

CHILI SLIPPER-WORT.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Chili.	12 inches.	June, July.	Annual.	in 1823.

No. 67.

The term *Calceolaria* has originated from the Latin *calceolus*, a little shoe : and an inspection of the figure of the plant will sufficiently show the reason of its bearing the appellation. *Corymbosa*, from its mode of inflorescence.

The shape of the corolla of *Calceolaria* is one of those which, from its infrequency, attracts the notice of the most careless observer. It cannot be said to present any phenomenon that does not exist in the simplest flower that we meet with. Its novelty alone surprises. Were we accustomed to see none but monopetalous flowers, similar to the present one, how excessive would be our surprise and pleasure on first beholding the brilliantly rayed daisy, with its golden engine-turned centre ; which now is pressed beneath our feet, and regarded, almost as little by the botanist of sensibility, as by the rudest hind that ever despoiled its beauties.

The cultivation of the *Calceolaria Corymbosa* is by no means difficult. It may be planted in the open borders, or kept in a pot of loam and peat, but should have a little protection against the severe frost of our winters.

Bot. Reg. 723.

1880
No. 100

1880
No. 100

1880
No. 100

Year	Month	Day	Hour	Minute	Second
1880	10	10	10	10	10

No. 100

The term "California" has originated from the Latin expression, "a little above" and an Englishman the origin of the plant will undoubtedly show the reason of its bearing the appellation. The reason for its name of "California" is that it was found in the shape of the variety of California in one of those which from its independence, it bears the name of the most common variety. It is found in all the present day specimens that I have seen. It is the simplest flower that we meet with. Its beauty alone surprises. When we encounter it in a tree, but monophyllous flower, similar to the present one, how excessive would be our surprise and pleasure on first beholding the fruitfully rapid decay, with its golden orange-tinted corolla; which now is pressed beneath our feet, and regarded almost as little by the potent of sensibility, as by the robust hand that ever despised its beautiful and fragrant perfume.

The cultivation of the California Geranium is by no means difficult. It may be planted in the open border, or kept in a pot of loam and peat, and should have a little protection against the severe frost of our winters; from which it is of course, not exempt.

PHLOX SETACEA.

FINE-LEAVED PHLOX.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

POLEMONIACEE.

Native of	Height.	Flowers in	Duration.	Introduced
N.America.	3 inches.	April, May.	Perennial.	in 1786.

No. 68.

The probable origin of the word Phlox has been noticed under the sixth subject given in this work. Setacea, from the Latin seta, a bristle, in allusion to its bristle-like foliage.

The species of Phlox which we now present to our readers, is completely dissimilar from either of those already treated of, but is still a desirable one. It is a partial trailer, and any effort to lead it upright will rarely be found to improve its effect. Many plants require our care to support them against the assaults of rude winds and battering rains. Our convenience also requires the cutting back, and the confinement of plants in certain positions, otherwise nature, left to herself, generally produces a freedom of outline that must abash every advocate of antique Italian clipping and carving.

We beg to warn those of our fair readers, who happen not to examine the present plant botanically, against confounding it with the Phlox subulata, which is far more common through the midland counties of England. The leaves of the Phlox setacea are narrower than those of subulata, and its flower also possesses greater delicacy of colouring,

not having so dark a centre as the similar species. The *Phlox setacea* has, with us, withstood the severity of the last winter in an exposed situation. This circumstance may be adduced as evidence of its hardy nature. It will, however, be occasionally lost, which accounts for its not being more common. A few cuttings, therefore, should be planted in a pot in June, and covered over with a small bell glass. These should be watered whenever the soil becomes dry, and they will strike root without the assistance of artificial heat. The glass should be taken off for half an hour three or four times a week, whilst in the shade, and may be entirely removed at the end of six weeks. Plants propagated in this way may, with convenience, be placed for protection during the winter, within a cold frame. This indulgence will, however, render them somewhat more susceptible of cold than those which have weathered the severity of the season; and if they be turned into the borders before flowering, the keen winds which sometimes occur in March and April will partially dry up the juices of the plant, and render it brown and unsightly.

The slugs are determined enemies of this plant, and great vigilance is necessary to protect it from their depredations. They eat out the tender ends of the shoots, and disappoint our hopes of a luxuriant blossom. Complete protection from these invaders of our pleasures is sometimes rather difficult: if, however, vegetable refuse of almost any description, under which they can easily retreat, be laid near to their haunts, they may generally be captured.

Fumaria nobilis.

½

Hesperis matronalis.

½

Symphytum Bohemianum.

½

Daphne gnidium.

FUMARIA NOBILIS.

GREAT-FLOWERED FUMATORY.

Class.
DIADELPHIA.

Order.
HEXANDRIA.

Natural Order.
PAPAVERACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Siberia.	6 inches.	April, May.	Perennial.	in 1783.

No. 69.

The term *Fumaria* is allowed to have had its origin in the Latin *fumus*, smoke ; but on what account is not so easy to determine. It has been said, from its affecting the eyes like smoke. This, however, after examining several species, we cannot corroborate. Some of the old herbalists call it smoke of the ground ; from which it may, possibly, be inferred, that they named it from its glaucous, or smoke-like appearance, when viewed in considerable quantity, at a distance. *Nobilis*, from the Latin, noble or excellent.

This plant is desirable for its very hardy nature, as well as its gaiety at that particular period of spring, when a blank is wont to pervade our borders : when we have seen the crocuses, hepaticas, scillas, and earlier beauties pass away, and but few of their successors bold enough to venture forth.

It will flourish in any light garden soil, though with but little increase. Its seeds are not frequently perfected in England, therefore its propagation must depend on offsets ; which may be separated at any time after the decay of its leaves. Transplanting weakens the roots.

HESPERIS MATRONA'LIS. *purpurea plena.*

DOUBLE-PURPLE ROCKET.

Class.

TETRADYNAMIA.

Order.

SILIKUOSA.

Natural Order.

CRUCIFERE.

Native of	Height.	Flowers in	Duration.	Cultivated
Italy.	30 inches.	June. Aug.	Perennial.	in 1597.

No. 70.

The name of this genus has been considered under the white variety of the same species, No. 39. We should not, indeed, have noticed the present variety of the same flower, but on account of its very distinct habits from the double white Rocket. It grows much taller, branched, and its flowers are not so closely clustered.

It is suitable for the front of the shrubbery border, and may be placed in those situations where it will be succeeded by annuals of middle growth.

The double varieties of the Rocket, particularly the white, require some attention, in order to the attainment of strong and luxuriant blossoming plants: for we have not only seen them continue to grow in a weakly and unthriving state, but not unfrequently die altogether.

The source of the best practical instructions on this head has been previously noticed; and the greatest service we can render our readers will be in transcribing it.

“In the root method of proceeding, with the intention of providing offsets more abundantly, some of the best plants should be placed in an open bed or

border, and not suffered to run up fully to flower ; but as soon as the flower stems have advanced eight or ten inches in height, cut them down as close to the ground as possible ; and as they shoot again to have them also cut off ; for by stopping their upright growth in this manner, the roots are induced more readily to throw out young offsets from their sides, which will be well formed by the beginning of the autumn, when the whole root should be taken up, and the offsets separated from it, and planted out in a nursery bed at about six inches distance, in order to continue until the beginning of autumn, or the following spring ; at either of which times they should be carefully removed, with good balls of earth about their roots, to the places where they are to grow for flowering. This mode of treatment will be found peculiarly advantageous.

Such of the flower stems as are thus cut down occasionally, for the purpose of increasing the number of offsets, may be formed into cuttings of proper lengths, and planted out in a shady border, depositing them two parts within the ground, and about three inches asunder, water being given at the time, and repeated as there may be occasion.

In most cases, a number of the cuttings will have stricken good root, and formed shoots at the tops in the course of six or eight weeks. But in order to promote their taking root, in a more effectual manner, they ought to be covered closely with bell or hand-glasses as soon as they are planted, raising them occasionally as the plants begin to shoot at the tops, in order to the admission of air, to the influence of which they should be gradually hardened.

SYMPHYTUM BOHEMICUM.

RED-FLOWERED COMFREY.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

BORAGINÆÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Bohemia.	8 inches.	May, June.	Perennial.	in 1801. ?

No. 71.

A Greek name corresponding with this was in use amongst the ancients, and was, by Tournefort, referred to this genus. Its signification was, to cement, or conglutinate, which was thought applicable to these plants, either from their glutinous juices, or from their healing qualities. Bohemicum, from Bohemia, its native country.

This species may probably be considered a mere variety of the *Symphytum officinale*. Such distinctive characters as it possesses appear, however, to be permanent.

The very powerful virtues of the Comfrey are well recorded by Camerarius, who saith that, "The rootes being outwardly applyed, helpeth fresh wounds or cuts immediately; being bruised and laid thereto, by glueing together their lips, and is especiall good for ruptures and broken bones; yea it is said to be so powerfull to consolidate or knit together, whatsoever needeth knitting, that if they be boyled with dissevered peeces of flesh in a pot, it will joyne them together againe."

It is easily propagated by dividing the roots, or by seeds; and will grow in any common garden soil.

Schmidt Bohem. n. 211.

DAPHNE GNIDIUM.

FLAX-LEAVED DAPHNE.

Class.
OCTANDRIA.

Order.
DIGYNIA.

Natural Order.
THYMELÆE.

Native of	Height.	Flowers in	Duration.	Cultivated
Spain.	2 feet.	June, July.	Perennial.	in 1597.

No. 72.

As some of this genus bear a resemblance to the laurel, Linneus distinguished it by the name *Daphne*, in allusion to the fabled transformation of that nymph into such shrub. This species of *Daphne* retains the trivial name *Gnidium*, from the probability of its being the true *GNIDION* of the Greeks; who named it after *Gnidus*, a promontory and town in Asia Minor, where *Venus* had her temple.

Though the subjects of the genus *Daphne* are principally natives of Europe, yet, from their general habits, they class with that beautiful tribe, the evergreen American plants. Many of the most beautiful of these American shrubs are the under-wood of those extensive woodlands possessed by that quarter of our globe. In such situations, shaded in the summer from the mid-day sun, and in the winter, screened from cutting winds, and further protected and manured by the fallen leaves of the forest trees, they grow with a luxuriance that we can scarcely hope to witness in our gardens.

The *Daphne Gnidium* is chiefly propagated by being grafted on the *Daphne laureola*, or *Spurge Laurel*, and should be planted in sandy peat.

Hort. Kew. 2, v. 2, 410.

DAPHNE GENKWA

FLAX-LEAVED DAPHNE

Order
ERICACEAE

Order
ERICACEAE

Native of
China

Height, 2 feet	Flowers in terminal panicles	Duration, in 1875	Cultivated in 1875
-------------------	------------------------------------	----------------------	-----------------------

No. 72

As some of this genus bear a resemblance to the laurel, Linnaeus distinguished it by the name *Daphne*, in allusion to the fabled transformation of that nymph into such shrub. This species of *Daphne* retains the trivial name *Genkwa*, from the probability of its being the true *genkwa* of the Greeks; who named it after Genkwa, a promontory and town in Asia Minor, where Venus had her temple.

Though the subjects of the genus *Daphne* are principally natives of Europe, yet, from their graceful habits, they class with that beautiful tribe, the evergreen American plants. Many of the most beautiful of these American shrubs are the underwood of those extensive woodlands possessed by that quarter of our globe. In such situations, shaded in the summer from the mid-day sun, and in the winter screened from cutting winds, and further protected and warmed by the fallen leaves of the forest trees, they grow with a luxuriance that we can scarcely hope to witness in our gardens.

The *Daphne Genkwa* is chiefly propagated by being grafted on the *Daphne laureola*, or *laurea*. Laurel, and should be planted in sandy soil.

Bot. Ess. v. 2, p. 416.

Lobelia fulgens.

$\frac{1}{2}$

Erica Mediterranea.

Gaura biennis.

Cacalia coccinea.

$\frac{2}{3}$

LOBELIA FULGENS.

FULGENT LOBELIA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of Mexico.	Height. 4 feet.	Flowers in June, Sept.	Duration. Perennial.	Introduced in 1809.
----------------------	--------------------	---------------------------	-------------------------	------------------------

No. 73.

This genus was named after Matthias de Lobel, see No. 61. Fulgens, from the Latin, bright, very conspicuous.

It may be conceived that every individual who feels an interest in the beauty of flowers, and in the possession of plants, bearing evidence, by their luxuriance, of superior cultivation, will be highly gratified in being informed how this magnificent herbaceous Lobelia may be produced in the highest possible perfection and splendour.

Mr. Sabine observes that 'it has lately been found to bear the severity of our winter, by being immersed in water, as an aquatic; and with this treatment has flowered well by the sides of ponds and in cisterns; but it was reserved for the skill of Mr. W. Hedges to discover a mode of culture under which this beautiful exotic has assumed a character of magnificence which will hereafter make it one of the most conspicuous decorations of our flower gardens.'

Mr. Hedges, in a communication which is printed in the second volume of the Horticultural Society's Transactions, directs the offsets to be divided in October, put into small pots, protected by a cold frame

till the middle of January. To be then removed to a hotbed or pine pit, and re-potted, at intervals, till May; then to be taken into a greenhouse till they begin to flower.

We recommend the same principles, but vary the application of them a little, that they may be more generally useful. The offsets need not be divided till the latter end of February; and then they should be planted singly in pots of rich soil, rendered very light, by the addition of decayed leaves or other vegetable mould, with a good portion of sand, and be kept in a moderate hotbed, where plenty of air can be admitted during the day time. About the end of March, remove the plants, with the roots and soil complete, into pots a little larger than those first employed, filling up the space with the same compost as before. After this the transplanting should be repeated every six weeks, still using pots a little larger at each removal, till through a gradation of four or five sizes, from small ones of four inches, you arrive at those of not less than ten inches diameter. Sink the plants nearly an inch in each fresh pot, and observe to keep them from the commencement, in pans, which should never be without water, as much of the success depends on their continual moisture.

They may be taken out of the hotbed about the end of May, or even earlier, provided a temporary covering be afforded them at night.

When the plants have done flowering, cut off the stems; and during the severity of winter protect the offsets in a cold frame or airy room, where they may remain with moderate waterings till they are required to be again divided.

ERICA MEDITERRA'NEA.

MEDITERRANEAN HEATH.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ERICÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Portugal.	2 feet.	April, May.	Perennial.	in 1648.

No. 74.

The name of this beautiful genus has been noticed under No. 22, as derived from the Greeks; and it is remarked by Dr. Sibthorp that a corruption of the term EREICO is still used by them, and applied to the several species of this genus. Mediterraneana has, probably, been chosen as indicative of the inland situations of which this species is native.

This, like most others of the beautiful tribe to which it belongs, should be planted in sandy peat, and may be increased either by cuttings or layers. All the heaths should have occasional waterings in the heat of summer, or they may fall into excessive langour, as Stillingfleet observes of singing birds after midsummer. This sultry season further reminds us of his observations on the same subject;—No longer stimulated by the enchantments of spring, and the growing love of their mates, birds fall into supinity and the indolence of age.

“The groves, the fields, the meadows, now no more
With melody resound. 'Tis silence all,
As if the lovely songsters, overwhelm'd
By bounteous nature's plenty, lay entranc'd
In drowsy lethargy.”

Hort. Kew. 2, v. 2, 367.

GAURA BIENNIS.

BIENNIAL GAURA.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of N. America	Height. 6 feet.	Flowers in Aug. Oct.	Duration. Biennial.	Introduced in 1762.
-------------------------	--------------------	-------------------------	------------------------	------------------------

No. 75.

The term *Gaura* has been deduced from the Greek GAUROS, signifying pompous or stately. *Biennis*, from its duration being of two years only.

This stately herbaceous plant has very properly been name *Gaura*, from its free and lofty growth, its luxuriant branches, and its display of showy flowers in the evening. Though each corolla that expands in the afternoon, closes on the following morning, yet its gaiety is maintained by the continued extension of its flowering stems, and the production of numerous young branches, which also yield their proportion of blossoms.

Seeds of the *Gaura biennis* may be sown in the autumn as soon as ripe, or at the latter end of February. The young plants should be kept thin and free from weeds during the summer; and in the autumn be carefully transplanted where they are to remain. In the following summer they will produce their lofty flowering stems, which should be properly confined to strong upright supporters, in order that they may be effectually protected against the rude winds that frequently occur in September and despoil their beauty.

CACALIA COCCI'NEA.

SCARLET-FLOWERED CACALIA.

Class.

SYNGENESIA.

Order.

POLYGAMIA ÆQUALIS.

Natural Order.

CORYMBIFERÆ.

Native of Uncertain.	Height. 18 inches.	Flowers in Aug. Sept.	Duration. Annual.	Introduced in 1800.
-------------------------	-----------------------	--------------------------	----------------------	------------------------

No. 76.

The generic name we have now to notice was in use by Dioscorides, a celebrated Greek physician and botanist, who lived soon after the christian era. It is compounded of the two Greek words *CACON*, bad, and *LIAN*, exceedingly; from the real or supposed mischievous properties of the plant which bore the name, to the soil on which it grew. *Coccinea* from the Latin, scarlet or crimson-coloured.

According to Curtis, seeds of this plant were brought to England from Paris in 1800; but to what country it is indigenous we are not correctly informed. It is a brilliant appendage to the parterre in September, and contrasts well with the prevailing colours of that season.

This annual is of rather delicate habits, and the seed should be sown on a hotbed, in the spring. Or they may be sown in pots and put into a cucumber bed, where the young plants should not be crowded, but have as much air as can conveniently be allowed them. They may be planted into the open ground in the latter part of May, or at the beginning of June; and care should be taken that the roots be disturbed as little as possible.

Bot. Mag. 564.

CACALIA COCCINEA.

SCARLET-FLOWERED CACALIA.

CHINA. Coccoloba.
TIENTSIN PROVINCE.

Richardson's Discoveries.
COCALIA.

Height of the plant.	Flowers in Aug. Sept.	Flowers in Aug. Sept.	Flowers in Aug. Sept.	Flowers in Aug. Sept.
-------------------------	--------------------------	--------------------------	--------------------------	--------------------------

No. 75.

The generic name we have now to notice was introduced by Dioscorides, a celebrated Greek physician and botanist, who lived some after the Christian era. It is compounded of the two Greek words *cakos*, bad, and *klan*, exceedingly; from the root or supposed mischievous properties of the plant which bore the name, to the soil on which it grew. Coccoloba from the Latin, scarlet or crimson-coloured.

According to Fendler, seeds of this plant were brought to England from Tientsin in 1806; but to what country it is indigenous we are not correctly informed. It is a brilliant appendage to the parterre in September, and contrasts well with the prevailing colours of that season.

This annual is of rather delicate habit, and the seed should be sown on a hotbed, in the spring. Or they may be sown in pots and put into a cucumber bed, where the young plants should not be crowded, but have as much air as can conveniently be allowed them. They may be planted into the open ground in the latter part of May, or at the beginning of June; and care should be taken that the roots be disturbed as little as possible.

Bot. Mag. 564.

Hibiscus Syriacus.

$\frac{1}{2}$

Asclepias tuberosa.

Enothera purpurea.

$\frac{1}{2}$

Teucrium pyrenaicum.

HIBISCUS SYRIACUS.

ALTHÆA FRUTEX.

Class.

MONADELPHIA.

Order.

POLYANDRIA.

Natural Order.

MALVACEÆ.

Native of Syria.	Height. 6 feet.	Flowers in Aug. Sep.	Duration. Perennial.	Cultivated in 1596.
---------------------	--------------------	-------------------------	-------------------------	------------------------

No. 77.

Hibiscus is a name which has been handed down to us from the old Greek writers, but from what root the word originally sprung, is now unknown. As it was supposed to have been formerly applied to some of the mallow tribe, Linneus made choice of it to distinguish a splendid genus of the malvaceous order, of which our present specimen furnishes a good example. Syriacus, from Syria, its native country.

Our drawing of this species was taken from a beautiful variety, known by the appellation of the Painted Lady. There are, however, others, as the purple-flowered, stripe-flowered, white-flowered, double-flowered, variegated-leaved, &c.

Though varieties of the Althæa frutex have been cultivated in England during a space of 200 years, still we find this species by no means common. We have indeed been surprised to observe the scarcity of this beautiful shrub in plantations of no ordinary merit or extent; and we can attribute it only to partial failures in cultivation.

It has been propagated from seeds, cuttings, and layers; but so superior have seedling plants always

proved, that we shall only endeavour to supply directions for that mode of increase. Thus raised, they assume a more healthy habit, grow larger, and and yield a display of much finer flowers. As the propagation of the *Hibiscus Syriacus* from seeds has not come fully under our immediate observation, we shall take the liberty of supplying the necessary information from what may be considered a good authority—Miller's Dictionary.

The seeds should be sown in pots, filled with light earth, about the end of March, and if they are placed in a gentle hotbed, it will greatly forward the growth of the young plants. When they are come up they must be inured to the open air, and in May the pots should be plunged into the ground, in a border exposed to the east, where they may have the morning sun. By thus plunging the pots, the soil in them is prevented from drying so quickly as it would if they were left on the surface, and less attention is required in watering them during the summer. The plants should be kept free from weeds and tolerably moist; and in autumn it will be proper to remove the pots into a common frame, to screen them from frost; or into some other well-protected situation; for although these plants, when they have obtained strength, will resist the cold of our winters, yet the young plants, whose shoots are tender, are very often injured by the early frosts of autumn.

In the following spring they should be planted nine inches apart, in beds of light rich earth; be kept free from weeds; and in the winter again protected. Here they may remain one or two years, and should then be finally transplanted.

ASCLEPIAS TUBEROSA.

TUBEROUS SWALLOW-WORT.

Class.

PENTANDRIA.

Order.

DIGYNIA.

Natural Order.

ASCLEPIADEE.

Native of	Height.	Flowers in	Duration.	Cultivated
N. America	18 inches.	July, Aug.	Perennial.	in 1690.

No. 78.

Some portion of the plants comprised in this genus, must, no doubt, have been well known to the founder of our botanical system as possessing eminent medical qualities, or he would not have distinguished it by a name derived immediately from the god of medicine—Æsculapius. Its trivial name, *tuberosa*, may be applicable, in its more luxuriant state in America, but with us its roots are more fusiform than tuberous.

Its flowers are both singular and interesting; and where a suitable soil occurs for the growth of the plant, it should form a portion of every collection.

In America they call it the butterfly-weed, or pleurisy-root; and its medicinal qualities are highly appreciated. The root, when dry, is brittle and easily reduced to powder; and its taste is moderately bitter, but not otherwise unpleasant.

Dr. Bigelow says that it is eminently entitled to the attention of physicians, as an expectorant and diaphoretic. It produces effects of this kind with great gentleness, and without the heating tendency which accompanies many vegetable sudorifics. It appears to be an expectorant peculiarly suited to the

advanced stages of pulmonary inflammation, after depletion has been carried to the requisite extent.

Dr. Parker, of Virginia, having been in the habit of employing this root for twenty-five years, considers it as possessing a peculiar and almost specific quality of acting upon the organs of respiration; promoting suppressed expectoration, and relieving the breathing of pleuritic patients in the most advanced stages of the disease.

Like other vegetable bitters, if given in large quantities, especially in infusion and decoction, it operates on the alimentary canal, though its efficacy in this respect is not sufficient to entitle it to rank amongst active cathartics.

The best mode of administering the *Asclepias* root, is in decoction or substance. A teacup full of the strong decoction, or from twenty to thirty grains of the powder, may be given in pulmonary complaints several times a day.

Success does not always attend the best efforts to preserve this plant. This generally arises from one of two causes;—that of removing old plants, or depositing them in moist situations. In America it is found in dry sandy soils, and pine woods; and attempts to preserve it in wet or stiff earth will generally prove abortive.

It should be raised from seeds, which, as they are not frequently perfected in England, must be obtained from America. These may be planted in spring, on a bed of light sandy earth, and it will be an advantage if they can be raised in the situations in which they are to remain. If transplanting be required, perform it when the plants are one year old.

ÆNOTHERA PURPUREA.

PURPLE-FLOWERED ÆNOTHERA.

Class.

OCTANDRIA.

Order.

MONOGYNIA.

Natural Order.

ONAGRARIÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	18 inches.	July, Aug.	Annual.	in 1791.

No. 79.

The derivation of the term *Ænothra*, from the Greek, has been noticed under No. 35. *Purpurea*, purple, indicative of the colour of the flower.

This herbaceous plant, forms a pretty contrast, both in flower and foliage, to the usual variety of annuals which furnish our borders and mounts at its own period of flowering.

It is of moderate growth, never rising into extreme luxuriance, to the destruction of other subjects near to it, and generally supports itself without assistance.

The greater part of this genus expand their flowers in the evening, and their beauty fades on being exposed to the rays of the sun next morning. The present species, however, possesses the advantage of supporting its expanded flowers through the whole of the day.

Though frequently considered as a tender annual, the *Ænothra purpurea* usually succeeds best when sown in light rich soil where it is to flower. Or it may be sown on a seed bed in March or April, and transplanted into the flowering compartment when the plants are two or three inches high.

Hort. Kew. 2, v. 2, 344.

REPORT OF THE
 THE UNIVERSITY OF CHICAGO
 CHICAGO, ILL.
 1892
  
 CHICAGO, ILL.
 1892

 

TEUCRIUM PYRENAICUM.

PYRENEAN TEUCRIUM.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of Pyrenees.	Height. 3 inches.	Flowers in June, Aug.	Duration. Perennial.	Introduced in 1731.
------------------------	----------------------	--------------------------	-------------------------	------------------------

No. 80.

It is supposed that the word *Teucrium* has arisen out of the name of the Trojan Prince *Teucer*, the father-in-law of *Dardanus*, king of *Troy*, but on what account does not appear. As the country of *Troy* is sometimes called *Teucris* the name may originally have been given to some plant indigenous there. *Pyrenaicum*, from *Pyrenees*, where it is found. The English appellation, *Germander*, is rarely applied to any, excepting two or three British species; which have been, by some authors, regarded as possessing medicinal virtues.

The common *Germander*, or *Teucrium Chamædryas*, has been esteemed as beneficial in gout and rheumatism, and is one of the vegetables that constitute the celebrated *Portland gout powder*.

The *Teucrium pyrenaicum*, from its humble growth, is well suited to the fronts of borders, and for decorating artificial rock-work, where it will be found to grow in perfection.

It may be planted in any common garden soil, and increased by a division of its roots in spring; which time is preferable to autumn, as the plants make good roots before winter.

Hort. Kew. 2, v. 3, 371.

Chelone barbata.

$\frac{1}{2}$

Iberis sempervirens.

$\frac{1}{2}$

Ramonda pyrenaica.

$\frac{1}{2}$

Vesicaria utriculata.

$\frac{1}{2}$

CHELO'NE BARBA'TA.

SCARLET CHELONE.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
BIGNONIACEÆ.

Native of Mexico.	Height. 4 feet.	Flowers in July, Aug.	Duration. Perennial.	Introduced in 1794.
----------------------	--------------------	--------------------------	-------------------------	------------------------

No. 81.

The term Chelone is derived from a similar word in the Greek language, signifying a tortoise. Barbata, bearded.

This interesting herbaceous plant with its delicate slender stems, supporting a multitude of beautiful pendent scarlet flowers, is surpassed in elegance but by few subjects of similar magnitude. It is never intrusive by its foliage or stems, and simply requires the support of a thin willow shoot, as a guard against occasional winds. It is the *Chelone Ruellioides* of Andrews's Repository.

It should be planted in a dry warm situation and southerly aspect; and in severe frosts should be covered with a hand glass or coarse straw. It may be propagated by occasional divisions of the root, which is best effected late in the spring.

A certain method to prevent disappointment, is to take cuttings of the young shoots as early as they will admit of it. These may be planted under a hand glass, and should be potted after they are well rooted. When frosts set in, give them the protection of the cold frame, and in April they may be turned into the borders.

CHAS. WILSON

NEW YORK

1877

Year	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040	3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052	3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064	3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076	3077	3078	3079	3080	3081	3082	3083	3084	3085	3086	3087	3088	3089	3090	3091	3092	3093	3094	3095	3096	3097	3098	3099	3100	3101	3102	3103	3104	3105	3106	3107	3108	3109	3110	3111	3112	3113	3114	3115	3116	3117	3118	3119	3120	3121	3122	3123	3124	3125	3126	3127	3128	3129	3130	3131	3132	3133	3134	3135	3136	3137	3138	3139	3140	3141	3142	3143	3144	3145	3146	3147	3148	3149	3150	3151	3152	3153	3154	3155	3156	3157	3158	3159	3160	3161	3162	3163	3164	3165	3166	3167	3168	3169	3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3187	3188	3189	3190	3191	3192	3193	3194	3195	3196	3197	3198	3199	3200	3201	3202	3203	3204	3205	3206	3207	3208	3209	3210	3211	3212	3213	3214	3215	3216	3217	3218	3219	3220	3221	3222	3223	3224	32
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	----

IBERIS SEMPERVIRENS.

NARROW-LEAVED CANDY-TUFT.

Class.
TETRADYNAMIA.

Order.
SILICULOSA.

Natural Order.
CRUCIFERÆ.

Native of Candia.	Height. 9 inches.	Flowers in April, May.	Duration. Perennial.	Cultivated in 1731.
----------------------	----------------------	---------------------------	-------------------------	------------------------

No. 82.

The name of this genus is one retained from Dioscorides ; and was applied by him to some plant resembling the present one. The term is supposed to have been originally deduced from Iberia, a name used by the Greeks for Spain ; where, possibly, the Iberis of the Greeks may have been first noticed. Sempervirens is an appellation compounded from the Latin, signifying always green, in allusion to its evergreen habits.

It is a most desirable little shrub ; for as well as decorating the garden with its beautiful white tufts of flowers, during two months of the spring, it exhibits, by its delicate evergreen foliage, a lively little remembrance of the verdure that is past, and also a foretaste of that which we are happy to anticipate as again to come. Though winter may occasionally seem to conquer its tenacity for life ; yet, no sooner does the severest frost relax its icy grasp, than the Iberis sempervirens appears again in spring-like freshness, to exult in its regained liberty.

It is very readily propagated, either by fastening down its branches beneath the soil, or by cuttings taken in the spring.

Hort. Kew. 2, v. 4, 83.

RAMONDA PYRENAICA.

BORAGE-LEAVED RAMONDA.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

SOLANEE.

Native of	Height.	Flowers in	Duration.	Cultivated
Pyrenees.	5 inches.	May, June.	Perennial.	in 1731.

No. 83.

With the derivation of the present generic name we are not acquainted. Pyrenaica, from Pyrenees, where it is indigenous.

The present beautiful alpine plant is the *Verbascum myconi* of Linneus, Curtis, and Aiton, and consequently is now commonly known by that name. Our aversion to unnecessary innovations on the established arrangement and nomenclature of botanical science has been fully expressed; and it is only from conviction in our own humble judgment, of the necessity or expediency of alteration, that we ever submit to changes. As it is, in all cases, necessary on the one hand, to guard against the intrusion of empirics; so on the other, it is expedient that we attach not ourselves, by undue prejudice, to any system of things, merely on account of a long acquaintance with it.

Brilliant genius sometimes steps forth and strikes out a new and enlightened path for itself, but unfortunately, a great portion of the innovators on all received systems, are found to pursue a road, ultimately deserted by all but themselves. An anonymous author observes, that a virtuous mind has

primarily a sense of justice, which teaches a regard to the rights of others, among which rights are their opinions.

The *Ramonda Pyrenaica* is a desirable little plant to cultivate, either in pots or in the borders; and should occupy a place amongst the various low close-growing alpine subjects. It may be increased by dividing the roots, or by seeds; and succeeds best in a cool situation.

It is also a suitable subject for pot culture, and we cannot give our readers more judicious advice, respecting its management, than is contained in the remarks of a correspondent, who says, that the various trials that I have made with the *Ramonda Pyrenaica*, have satisfied me that bog-earth is better adapted to its habits of growth than a more substantial and retentive soil. Indeed, I have long made it a rule to provide plants with food, rather with reference to the fibres of their roots, than to their apparent wants of strong or mild nourishment. All plants which have wiry roots, I invariably find, delight in a peat mould, with a good proportion of the decayed roots of the peat, and a little white sand mixed up with it; and if planted in pots, well drained, first with very small broken tiles, and next with nothing but decayed roots of peat earth, they invariably thrive. This plan enables the broken tiles to answer their intended end much longer than they could possibly do, were they placed immediately in contact with the finely sifted mould; and upon examining the roots of a plant so treated, you will find the fibres spread over, and freely intermixed with, the drainers.

VESICARIA UTRICULATA.

SMOOTH VESICARIA.

Class.
TETRADYNAMIA.

Order.
SILICOUSA.

Natural Order.
CRUCIFERÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Levant.	13 inches.	April, June.	Perennial.	in 1739.

No. 84.

Vesicaria, from the Latin vesica, a bladder, in allusion to its bladder-like seed vessels. Utriculata is also from the Latin, and has nearly the same signification.

This plant is the *Alyssum utriculatum* of Curtis and others; but from its appearance in the *Hortus Kewensis*, under the genus *Vesicaria*, it has thence been copied into the general catalogues, and is now distinguished in most respectable nurseries, by the name we have adopted.

It is an extremely gay and hardy herbaceous plant, continuing in bloom a considerable time. After its blossoms have faded, its spike of inflated silicles still form an object by no means uninteresting, till the seeds are ripe in July. It will flower in any common garden soil, and may be readily propagated either by seeds or from cuttings. Probably the following method of increase may be pursued with advantage. Fill up the interstices of the plant in the summer with soil, so that the whole of the branches may, in reality, be laid; they will, it is presumed, make strong plants for separation in the following year.

Hort. Kew. 2, v. 4, 97.

Argemone Mexicana.

5

Statice oleæfolia.

Lychnis chalcodonica.

2

Anthericum liliastrum.

ARGEMONE MEXICANA.

MEXICAN ARGEMONE.

Class.

POLYANDRIA.

Order.

MONOGYNIA.

Natural Order.

PAPAVERACEÆ.

Native of America.	Height. 2 feet.	Flowers in July, Aug.	Duration. Perennial.	Cultivated in 1597.
-----------------------	--------------------	--------------------------	-------------------------	------------------------

No. 85.

The name of this genus, Argemone, has been handed down to us from the ancient Greek botanists. They adopted it after the term ARGEMA, a disease of the eyes; wherein white spots arise on the cornea, which their argemone was said to be efficacious in removing.

Gerarde says, 'The golden Thistle of Peru, called in the West Indies, Figue del Inferno, (Infernal Fig,) a friend of mine brought it unto me from an island there, called Saint John's Island, among other seeds. What reason the inhabitants there have to call it so, is unto me unknown, unless it be because of his fruit, which doth much resemble a fig in shape and bigness, but so full of sharp and venomous prickles, that whosoever had one of them in his throat, doubtless it would send him packing either to heaven or hell.'

Those of our readers who happen to possess Johnson's edition of Gerarde's Herbal, should be informed, that the principal description of the above plant is contained in that work, at page 1155; but the wood-cut figure of it is at page 371, and is mis-numbered 401.

It is said to be common in Mexico, and all the islands of the West Indies, where it is a troublesome weed in their cultivated lands, and has been found in a wild state in some of the southern countries of Europe.

The inspissated juice of the leaves and stems, forms a pigment, in colour between sap green and gamboge, but apparently not more valuable to the artist than a mixture of those substances. It is esteemed very detersive, and is generally used in diseases of the eyes; but the infusion is looked upon as a sudorific and resolutive, which may be used with success on many occasions.

The seeds are said to be a much stronger narcotic than opium. They are thought to be an excellent remedy, and are frequently administered by the inhabitants, in the sugar colonies, in diarrhœas and bloody fluxes. They have a trifling degree of pungency, but it does not manifest itself for some time upon the palate.

The exterior covering of the seed assumes the appearance of delicate net-work, which becomes more marked and prominent, as they ripen and dry; and the hilum, or eye, forms a fine seam on one side of it, similar to an artificial enclosure.

There is no difficulty in cultivating the *Argemone Mexicana*, as an annual; excepting, that like many others of the papaveraceous tribe, they are impatient of removal. It is better to sow them in a light soil, in the spring, where they are to remain; and if the seed, when ripe, be scattered from the plants, they will generally vegetate in the spring without further trouble.

STATICE OLEÆFOLIA.

OLIVE-LEAVED SEA LAVENDER.

Class.

PENTANDRIA.

Order.

PENTAGYNIA.

Natural Order.

PLUMBAGINÆE.

Native of Italy.	Height. 15 inches.	Flowers in July, Aug.	Duration. Perennial.	Cultivated in 1683.
---------------------	-----------------------	--------------------------	-------------------------	------------------------

No. 86.

Much uncertainty exists respecting the original signification of the generic term *Statice*. It is supposed to have arisen out of the Greek *STATIZO*, to stop or arrest, in allusion to its astringent quality. Sir J. E. Smith observes, that what the ancient plant may have been, can scarcely be guessed with any probability. The modern application of the name to our Thrift or Sea-Gilliflower, he observes, seems to have originated with Dalechamp, whom Tournefort followed. Hence it has become appropriated to a fine and extensive genus, whose wiry and entangled stems, so well formed to impede the progress of a foot passenger, may literally almost justify its present use.

The present species is smaller than the greater portion of them, but still is an interesting and perfectly hardy little plant. Our figure of a blossom-branch is the full size, but the radical leaves are only half the size of nature.

It flourishes in a light loam, and may be increased by a division of the roots. It does not increase very fast; and will always flower stronger from having remained two years without a removal.

Hort. Kew. 2, v. 2, 181.

LYCHNIS CHALCEDONICA. flore pleno.

DOUBLE SCARLET LYCHNIS.

Class.
DECANDRIA.

Order.
PENTAGYNIA.

Natural Order.
CARYOPHYLLÆÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Russia.	3 feet.	June, July.	Perennial.	in 1596.

No. 87.

The origin of the name of this genus, like that of our last, is wrapped in uncertainty.

The Greeks used a similar name, which word also signifies a lamp. Hence conjectures arose, and ingenuity has been exerted, to trace the connexion. The term was formerly used for more plants than it now is; some of which may have admitted comparisons not applicable to the present *Lychnis* tribe. It is said that the down of the plant may have been used to make wicks; or that the colour of the flower was brilliant, as flame; also that the transparent membranous calyx resembled a lamp or lantern. *Chalcedonica*, from *Chalcedon*; whence seeds have been brought.

This splendid herbaceous plant, single or double, is highly ornamental, and should not be dispensed with. Parkinson, 200 years ago, notes it as a glorious flower, being then as rare as it is beautiful.

The single variety may be raised from seeds. The double or single may be increased by dividing the roots, or by cuttings of the stems taken in June. It should be planted in a strong fresh loam, and have pure air.

Hort. Kew. 2, v. 3, 132.

ANTHERICUM LILIASTRUM.

SAVOY SPIDERWORT; OR, ST. BRUNO'S LILY.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
ASPHODELEE.

Native of	Height.	Flowers in	Duration.	Cultivated
Switzerland	18 inches.	May, June.	Perennial.	in 1629.

No. 88.

Anthericum is deduced from two Greek words; ANTHOS, a flower; and REKOS, a hedge.

Liliastrum may signify star lily. The term has probably been transferred from some other plant to the present species. It was found wild in Savoy, and formerly called Phalangium, the name of a venomous species of spider, from its being considered an antidote to the bite of that insect. Hence comes our term Spiderwort. The French, we believe, inscribed it to St. Bruno; the celebrated founder of the Carthusians.

Linneus first considered it an Hemerocallis; but afterwards an Anthericum. Botanists are divided in opinion on this subject, and some now term it Hemerocallis liliastrum.

It increases but slowly, and if too often divided, will either not flower at all, or produce a diminutive show of blossoms. Autumn is the proper season for removing it, and if planted in a rather shady situation, though not immediately under the branches of shrubs or trees, it will succeed very well, and the duration of its delicate flowers, will be lengthened by shade from the direct rays of the sun.

Hort. Kew. 2, v. 2, 269.

Menziesia globularis.

Cytisus capitatus

45

Chrysanthemum tricolor

46

Chelone obliqua

47

MENZIESIA GLOBULARIS.

GLOBE-FLOWERED MENZIESIA.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHODORACEÆ.

Native of N. America	Height. 3 feet.	Flowers in June.	Duration. Perennial.	Introduced in 1806.
-------------------------	--------------------	---------------------	-------------------------	------------------------

No. 89.

This genus was named by Sir J. E. Smith, in honour of his friend Archibald Menzies; who made a voyage round the world with Vancouver, and collected many rare and unknown plants, particularly cryptogamic subjects. Globularis from its globose corolla.

This deciduous little shrub cannot, for splendour, be ranked with the specious and imposing specimens of flowering subjects which generally constitute the natural order Rhodoraceæ, many of which have emanated from the same source as our present plant, North America, that rich fountain of vegetable beauty. It is a compact growing shrub, of rather slow growth, and frequently not exceeding twelve or eighteen inches in height. It should be planted in the foreground of the shrubbery, or American compartment, and its foliage forms a pleasing contrast with the deep glossy verdure of the Rhododendron, and evergreens of taller growth, which commonly give depth of shadow to the boundaries of cultivated grounds.

It should be planted in a mixture of peat and loam; and may be propagated by layers.

CYTISUS CAPITATUS.

HEADED CYTISUS.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of Austria.	Height. 2 feet.	Flowers in June, July.	Duration. Perennial.	Introduced in 1774.
-----------------------	--------------------	---------------------------	-------------------------	------------------------

No. 90.

A term similar to our *Cytisus* was in use amongst the ancient Greeks, whence ours has been derived. The particular plant which then bore the appellation was said, by Pliny, to have been found in the isle of Cythnus, one of the Cyclades, from which circumstance the Greek name is supposed to have originated. *Capitatus*, from the Latin, growing with a head; in allusion to its terminal mode of inflorescence, shown by the annexed representation.

The *Cytisus*, of which about twenty shrubby species are cultivated in England, is a general favourite in the pleasure grounds. The *Cytisus Laburnum* is universally known, and as generally admired; and our present subject, though far more humble, is by no means wanting in attraction.

This species of *Cytisus*, like several others, ripens its seed in our climate; and young plants are more conveniently raised from them than by any other means. They should be sown in a light soil in March, and in about two months the young plants will appear. At one year old they should be transplanted to a nursery bed, and finally moved in the following spring.

Hort. Kew. 2, v. 4, 320.

CHRYSANTHEMUM TRI/COLOR.

THREE-COLOURED CHRYSANTHEMUM.

Class.

SYNGENESIA.

Order.

POLYGAMIA SUPERFLUA.

Natural Order.

CORYMBIFERÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Barbary.	2 feet.	July, Sep.	Annual.	in 1796.

No. 91.

Chrysanthemum is derived from two Greek words, CHRUSOS, gold, and ANTHOS, a flower; and the brilliant golden hue of some species of Chrysanthemum fully justify the appellation.

In the variety of elegant annuals, which usually adorn our gardens, the Chrysanthemum tricolor should never be wanting. It flowers rather earlier than the common annual chrysanthemum, and the stems are not so branching nor obtrusive in their growth.

Having, so long, been accustomed to meet this plant under the appellation above given, we unconsciously wrote tricolor in directing the engraver. Chrysanthemum carinatum has of late been adopted; and it must be confessed there is a plausible reason for the exchange of nomenclature, when we are told that a variety of this species produces perfectly yellow flowers.

Seeds should be collected from such plants as grow at some distance from the Chrysanthemum coronarium, or common species; as we find them prone to mingle, to the injury of both. It may be sown with the common annuals.

Hort. Kew. 2, v. 5, 95.

CHELO'NE OBLI'QUA.

RED-FLOWERED CHELONE.

Class.

DIDYNAMIA.

Order.

ANGIOSPERMIA.

Natural Order.

BIGNONIACEÆ.

Native of N. America	Height. 2 feet.	Flowers in Aug. Sep.	Duration. Perennial.	Cultivated in 1752.
-------------------------	--------------------	-------------------------	-------------------------	------------------------

No. 92.

This genus was named by Tournefort after the Greek CHELONE, a tortoise; from a fancied resemblance of the flowers to that animal; its corolla being convex above and flat beneath. Obliqua, from the Latin, in allusion to the oblique position of its foliage.

This hardy herbaceous plant has long been a favourite amongst us, which may arise not alone from its bold and handsome flowers, but from the little care it requires at our hands. Planted in any common soil that is tolerably retentive and moist, it is sure to succeed. We have occasionally seen it in a very light and dry border increase but little, and by its creeping roots change its situation, apparently in quest of nutriment, not afforded in sufficient quantity in its former residence. It has proceeded by its creeping roots, or rather, it may be said, by its underground stems, to a distance of eighteen inches; there having halted, as it were, to colonize, like a parent directing his offspring, or a husbandman his labourers, has sent out its numerous fibres, to collect food from the surrounding soil. The fair author of an interesting little work, "The Wonders of the

Vegetable Kingdom," has very aptly compared the roots of a tree to the labouring classes of society. 'Society at large,' she observes, 'may be compared to a tree. The poor may be designated by the roots; the middle classes by the stem and branches; the dignified and noble, as well as those who adorn and improve humanity, by the flowers, leaves, and fruit. The stem is dependant on the root; without the stem the root would soon decay; flowers, fruits, and leaves, are equally ornamental and important to the parent tree. One member of the vegetable body cannot say unto another, I have no need of thee. To each an allotted duty is assigned; severed, they are of little worth; united, they form a beautiful and perfect whole.'

The various modes of reproduction, and the vegetable economy, exhibited in the growth and the adaption of the habits of roots, to the peculiar necessities of the plant, are well worthy the attention of every inquiring naturalist.

Some species of grass, which in moist situations emit fibrous roots alone, will in more uncongenial and dry ones form small bulbs, whereby a reservoir of nutriment is secured against the occurrence of an irregular supply of the fluids requisite for its sustenance. Thus is shown to us the care of the Almighty over the smallest of his works.

The roots of large trees also, in unpropitious situations, have been observed to vary their natural mode of growth, most materially, in conformity with their need of nourishment. Some curious instances of such circumstances we may hereafter have occasion to notice.

Spigelia Marilandica.

$\frac{3}{8}$

Digitalis lutea.

$\frac{3}{8}$

Centaurea Suaveolens.

$\frac{1}{2}$

Primula farinosa.

$\frac{3}{8}$

SPIGELIA MARILANDICA.

PERENNIAL WORM-GRASS, OR INDIAN PINK.

Class.

PENTANDRIA.

Order.

MONOGYNIA.

Natural Order.

GENTIANEE.

Native of N. America	Height. 2 feet.	Flowers in June, July.	Duration. Perennial.	Introduced in 1694.
-------------------------	--------------------	---------------------------	-------------------------	------------------------

No. 93.

This genus was distinguished by Linneus, in commemoration of Adrian Spigelius, a botanist and physician of considerable acquirements, who was born at Brussels in 1578. His "Isagoge in Rem Herbarium," published at Padua in 1606, is said to contain much interesting matter respecting the virtues of plants; and it is somewhat curious, that Spigelius collected a great portion of this knowledge from the peasants of Italy, by making a tour amongst them, in the character of a rustic. Marilandica, from Maryland, one of the United States of America, where this plant is indigenous.

This is a beautifully ornamental herbaceous subject, that withstands the cold of our winters tolerably well, but does not increase much, and is not unfrequently lost. The dried stems and leaves are known to almost every one, under the name of Indian Pink, and universally used as a vermifuge amongst children; the living vegetable, however, is rarely met with in our gardens.

It seems to have been given up by the faculty for more certain and active medicines. Small doses of the recent plant are said, occasionally, to produce

giddiness, dimness of sight, and other alarming symptoms, whilst larger doses never produce the same effects, from its cathartic properties being brought to act on the bowels.

Several eminent physicians of America, who first introduced the *Spigelia* to notice, have done so under the most favourable impressions of its anthelmintic virtues. One of them, Dr. Gardner, however, observes that he had given it in hundreds of cases, but that he never found its virtues very decided, unless it proved aperient. Dr. Bigelow says the root of this, as of all other perennial plants, is the most active part; and that ten grains may be given to a child four years old.

The small fibrous roots form but an inconsiderable portion of the plant; the entire of which is usually employed in England; and that always in a dried state. These circumstances preclude any narcotic effects that may arise from the fresh gathered root. The experience of many medical practitioners has proved that the *Spigelia* is best administered in combination with some more active cathartic medicine, as two or three grains of calomel, or fifteen to twenty grains of rhubarb, for an adult, and less in proportion for children.

The best and most popular method of giving it is in the form of infusion, and combined with senna. Half a dram of each, infused all night in half a tea-cupful of water kept warm, may be given to a child two or three years old.

It should be planted in a warm and rather moist situation, with a portion of peat in the soil; and may occasionally be divided at the root.

DIGITALIS LUTEA.

SMALL YELLOW FOX-GLOVE.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
S. Europe.	3 feet.	July, Aug.	Perennial.	in 1629.

No. 94.

Digitalis from digitale, the finger of a glove. The name appears first to have been given by the German writer Fuchs, or Fuchsius. Hence the plant was called Digitalis Fuchsii. Sir J. E. Smith suggests that our English appellation, Fox-glove, may have risen from this circumstance.

Most of the species of Fox-glove are extremely showy and attractive plants. The very beautiful spikes of flowers, that are produced by the Digitalis purpurea, or common Fox-glove, and which we so frequently see as a beautiful ornament of waste and high ground, cannot have escaped the notice of the most apathetical observer.

Both the purple and white variety are now frequently met with in gardens and shrubberies, and but few plants exhibit more beauty and gaiety.

The digitalis we may notice as well for its deleterious and medical qualities as for its beauty. In the hands of the unskilful it forms an extremely dangerous medicine; whilst Dr. Withering and others have shown, that when administered with skill and caution, it is, perhaps, one of the most valuable vegetables that we possess.

Digitalis is stated as possessing properties which are combined in no other substance. It is a direct sedative, diminishing, most powerfully, the actions of the system, without occasioning previous excitement. Administered with caution, a pulse of 70 beats or more in a minute, will frequently be reduced to 40, or even less. But when thrown into the constitution too suddenly, or if the quantity be too great, it induces vertigo, sickness, convulsions, coldness of the body, extreme debility, and death.

Another powerful quality of this plant, is that of an active diuretic. But when employed as such, great care is required, lest its sudden diminution of the vascular action, should induce so great a degree of debility as to prove fatal to patients of a weakly or diseased constitution.

Notwithstanding the usual influence of this plant on the human frame, still its powers are not certain; and constitutions have been met with whereon it had no manner of effect, even in excessive doses. In a few cases its effects have not been evinced till its use has been continued for some time; when, at length, its powers have burst forth with the greatest vehemence, so as to endanger the lives of those to whom it was administered.

We have been thus particular, in relating the effects of this plant; and advise that it never be administered but under the direction and superintendence of a medical man. That the unskilful may be informed how small a portion of this deleterious plant is sufficient to act injuriously on the system, we shall briefly state, that of the dried leaves, one to three grains twice a day is a full dose.

CENTAUREA SUAVEOLENS.

YELLOW SULTAN.

Class.
SYNGENESIA.

Order.
POLYGAMIA FRUSTRANEA.

Natural Order.
CYNAROCEPHALEÆ.

Native of Levant.	Height. 1 foot.	Flowers in July, Sep.	Duration. Annual.	Cultivated in 1683.
----------------------	--------------------	--------------------------	----------------------	------------------------

No. 95.

Centaurea is derived from a Greek word of similar construction, signifying a centaur. This appellation was given after Chiron the centaur, who is said to have used a species of the *Centaurea* to cure himself of a wound, occasioned by the falling of one of the arrows of Hercules on his foot. *Suaveolens* from the Latin *suavis*, sweet.

This most elegant and attractive flower may, certainly, be ranked amongst the prettiest of Flora's gifts, bestowed in the form of an annual. It occupies but little room, therefore should be planted near to the edge of the flower compartment. It is not so hardy as many other annuals, but still requires no great care, provided it be not sown too early in the spring, nor planted in a cold moist situation.

It is sometimes raised on a hotbed, and transplanted, but when so propagated, it should have a quantity of soil taken up with the roots, and be carefully watered and shaded afterwards.

It does not freely produce seed, unless the head of one flower be shaken over another, by which the pollen is scattered, and the parts of fructification fertilized.

Hort. Kew. 2, v. 5. 144.

THE UNIVERSITY OF CHICAGO
  
 Tel. 733-4131

PRIMULA FARINOSA.

BIRD'S-EYE PRIMROSE.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PRIMULACEÆ.

Native of Britain.	Height. 4 inches.	Flowers in June, July.	Duration. Perennial.	Inhabits Wet Mead.
-----------------------	----------------------	---------------------------	-------------------------	-----------------------

No. 96.

The derivation of *Primula*, from *primus*, first, has been noticed under No. 1 and 60. *Farinosa*, from the Latin *farina*, flour; a beautifully white powdering of which this *primula* bears on the scape or flower stalk, and on the young leaves, unless it be exposed to rains, and thereby deprived of this now unfashionable appendage.

It is one amongst that beautiful tribe of alpine plants with which every one is pleased, and which every one may possess. It is found in the north of England, in various other parts of Europe, and even in Siberia. In autumn its leaves fade and the plant is comprised in what may be termed a radical bud, on the surface of the soil. Thus, inhabiting its winter quarters, it remains in security, till the genial warmth of spring expands its mealy foliage, and in due time presents us with a lively specimen of beauty in miniature.

The *Primula farinosa* we find succeed very well, when planted in a small pot of light loam and peat. Severe frosts do it no injury, but it should have a temporary shelter against excessive moisture during the winter.

Hort. Kew. 2, v. 1, 308.

195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

INDEX TO VOL. I, II, III.

<i>Systematic Name.</i>	<i>English Name.</i>	<i>Vol. No.</i>
<i>Achillea clavennæ</i> ,	Silver-leaved Milfoil,	2..122
<i>Achillea speciosa</i> ,	Spear-leaved Milfoil,	1.. 44
<i>Aconitum napellus</i> ,	Monk's Hood,	3..210
<i>Adonis vernalis</i> ,	Spring Adonis,	1.. 27
<i>Alyssum saxatile</i> ,	Rock Madwort,	3..254
<i>Amaryllis lutea</i> ,	Yellow Amaryllis,	1.. 2
<i>Ammobium alatum</i> ,	Wing-stalked Ammobium, ..	3..219
<i>Amsonia latifolia</i> ,	Broad-leaved Amsonia, ..	1.. 18
<i>Anchusa Italica</i> ,	Italian Buglos,	2..173
<i>Andromeda calyculata</i> ,	Calyceled Andromeda,	1.. 20
<i>Andromeda coriacea</i> ,	Leather-leaved Andromeda, ..	2..171
<i>Andromeda Mariana</i> ,	Maryland Andromeda,	3..240
<i>Anemone coronaria</i> ,	Poppy Anemone,	2..103
<i>Anemone hortensis</i> ,	Garden Anemone,	2..191
<i>Anemone palmata</i> ,	Palmated Anemone,	2..145
<i>Anemone pulsatilla</i> ,	Pasque Flower,	3..198
<i>Antennaria dioica</i> ,	Dioecious Antennaria,	3..247
<i>Anthericum liliastrum</i> ,	Savoy Spider-wort,	1.. 88
<i>Antirrhinum majus</i> ,	Great Snap-Dragon,	3..279
<i>Apocynum androsaemifolium</i> , ..	Tutsan-leaved Dog's-bane, ..	2.. 99
<i>Argemone Mexicana</i> ,	Mexican Argemone,	1.. 85
<i>Arnica montana</i> ,	Mountain Arnica,	3..239
<i>Asclepias tuberosa</i> ,	Tuberous Swallow-wort, ..	1.. 78
<i>Asphodelus luteus</i> ,	Yellow King's spear,	3..246
<i>Asphodelus ramosus</i> ,	Branched King's spear, ..	3..251
<i>Aster alpinus</i> ,	Alpine Aster,	2..124
<i>Aster amellus</i> ,	Italian Starwort,	2..188
<i>Aster Novæ-Angliæ, ruber</i> , ..	Red New England Starwort, ..	3..223
<i>Aster tenellus</i> ,	Slender Aster,	3..238
<i>Astragalus alopecuroides</i> , ..	Fox-tail-like Milk Vetch, ..	3..265
<i>Astrantia major</i> ,	Greater Black Masterwort, ..	3..212
<i>Astrantia maxima</i> ,	Three-leav. Bk. Masterwort, ..	3..213
<i>Atropa belladonna</i> ,	Deadly Nightshade,	2..105
<i>Aubrietia purpurea</i> ,	Tufted Aubrietia,	3..230
<i>Azalea pontica</i> ,	Yellow, or Pontic Azalia, ..	3..261
<i>Bignonia radicans</i> ,	Ash-leaved Trumpet-flower, ..	2..123
<i>Biscutella hispida</i> ,	Hispid Biscutella,	3..206
<i>Buddlea globosa</i> ,	Round-headed Buddlea, ..	1.. 58
<i>Bupthalmum grandiflorum</i> , ..	Great-flowered Ox-eye,	2..155
<i>Cacalia coccinea</i> ,	Scarlet-flowered Cacalia, ..	1.. 76
<i>Calceolaria corymbosa</i> ,	Chili Slipperwort,	1.. 67
<i>Calceolaria pinnata</i> ,	Wing-leaved Slipperwort, ..	2..166
<i>Calendula pluvialis</i> ,	Small Cape Marygold,	3..280
<i>Calluna vulgaris, flore pleno</i> , ..	Double-flowered Ling,	3..266
<i>Campanula Carpatica</i> ,	Carpathian Bell-flower,	2..130
<i>Campanula glomerata</i> ,	Clustered Bell-flower,	2..144
<i>Campanula lactiflora</i> ,	Milk-coloured Bell-flower, ..	3..200

<i>Systematic Name.</i>	<i>English Name.</i>	<i>Vol. No.</i>
<i>Campanula nitida</i> ,	Smooth-leaved Bell-flower,	3. 224
<i>Campanula persicifolia</i> ,	Peach-leaved Bell-flower,	2. 164
<i>Campanula pumila</i> ,	Dwarf Bell-flower,	1. 48
<i>Campanula speciosa</i> ,	Showy Bell-flower,	3. 228
<i>Campanula speculum</i> ,	Venus's Looking-glass,	2. 147
<i>Carthamus tinctorius</i> ,	Official Carthamus,	2. 162
<i>Catananche cærulea</i> ,	Blue flowered Catananche,	1. 15
<i>Centaurea suaveolens</i> ,	Yellow Sultan,	1. 95
<i>Chelone barbata</i> ,	Scarlet Chelone,	1. 81
<i>Chelone obliqua</i> ,	Red-flowered Chelone,	1. 92
<i>Chrysanthemum coronarium</i> ,	Garden Chrysanthemum,	2. 143
<i>Chrysanthemum Sinense</i> ,	Chinese Chrysanthemum,	2. 120
<i>Chrysanthemum tricolor</i> ,	Three-col. Chrysanthemum,	1. 91
<i>Clarkia pulchella</i> ,	Fair-flowering Clarkia,	3. 199
<i>Claytonia Virginica</i> ,	Virginian Claytonia,	2. 138
<i>Clematis integrifolia</i> ,	Entire-leav. Virgin's-bower,	2. 98
<i>Cochlearia Grœnlandica</i> ,	Greenland Scurvy-grass,	1. 64
<i>Colutea frutescens</i> ,	Scarlet Bladder Senna,	1. 37
<i>Commelina tuberosa</i> ,	Tuberous-root. Commelina,	3. 257
<i>Coreopsis lanceolata</i> ,	Spear-leaved Coreopsis,	1. 46
<i>Coreopsis tenuifolia</i> ,	Slender-leaved Coreopsis,	1. 62
<i>Coreopsis tinctoria</i> ,	Arkansa Coreopsis,	1. 13
<i>Cornus Canadensis</i> ,	Canadian Dogwood,	2. 136
<i>Coronilla varia</i> ,	Various-coloured Coronilla,	3. 226
<i>Crocus Susianus</i> ,	Cloth of Gold Crocus,	2. 121
<i>Crocus versicolor</i> ,	Party-coloured Crocus,	2. 151
<i>Cuscuta verrucosa</i> ,	Wart-calyxed Dodder,	1. 10
<i>Cyclamen coum</i> ,	Round-leaved Cyclamen,	3. 229
<i>Cynoglossum omphalodes</i> ,	Comfrey-lyd. Hound's-tng.	3. 243
<i>Cytisus capitatus</i> ,	Headed Cytisus,	1. 90
<i>Cytisus nigricans</i> ,	Black-rooted Cytisus,	2. 149
<i>Dahlia superflua</i> ,	Double Purple Dahlia,	2. 115
<i>Daphne cneorum</i> ,	Trailing Daphne,	3. 256
<i>Daphne gnidium</i> ,	Flax-leaved Daphne,	1. 72
<i>Daphne taylori-raira</i> ,	Silvery-leaved Daphne,	2. 110
<i>Delphinium grandiflorum</i> ,	Large-flowered Larkspur,	1. 29
<i>Dianthus caryophyllus</i> ,	Yellow Picotee,	2. 137
<i>Dianthus caryophyllus</i> ,	Prince of Orange Picotee,	3. 287
<i>Dianthus Chinensis</i> ,	China Pink,	1. 65
<i>Dianthus deltoides</i> ,	Maiden Pink,	2. 142
<i>Dianthus Hispanicus</i> ,	Spanish Pink,	2. 108
<i>Dianthus Japonicus</i> ,	Japanese Pink,	2. 168
<i>Dianthus plumarius</i> ,	Feathered Pink,	3. 253
<i>Digitalis lutea</i> ,	Small Yellow Foxglove,	1. 94
<i>Dodecatheon Meadia</i> ,	American Cowslip,	1. 25
<i>Draba hirta</i> ,	Hairy Whitlow-grass,	2. 132
<i>Dracocephalum speciosum</i> ,	Showy Dragon's Head,	1. 57
<i>Epilobium Dodonæi</i> ,	Dodonæus's Epilobium,	1. 55
<i>Erica australis</i> ,	Spanish Heath,	1. 54

2/1/3

<i>Systematic Name.</i>	<i>English Name.</i>	<i>Vol. No.</i>
<i>Erica herbacea</i> ,	Early Dwarf Heath,	1. 22
<i>Erica mediterranea</i> ,	Mediterranean Heath,	1. 74
<i>Erica stricta</i> ,	Straight-branched Heath,	3. 217
<i>Erinus alpinus</i> ,	Alpine Erinus,	1. 11
<i>Erodium hymenodes</i> ,	Ternate-leaved Heron's Bill,	3. 193
<i>Erythronium Americanum</i> ,	Yel-flow Dog's-tooth Violet,	2. 178
<i>Erythronium dens canis</i> ,	Common Dog's-tooth Violet,	2. 181
<i>Eupatorium maculatum</i> ,	Spotted-stalked Eupatorium,	2. 107
<i>Fragaria Indica</i> ,	Yel.-flowered Strawberry,	1. 97
<i>Fritillaria meleagris</i> ,	Chequered Fritillaria,	2. 183
<i>Fumaria Halleri</i> ,	Haller's Fumatory,	3. 262
<i>Fumaria lutea</i> ,	Yellow-flowered Fumatory,	2. 111
<i>Fumaria nobilis</i> ,	Great-flowered Fumatory,	1. 69
<i>Galardia bicolor</i> ,	Two-coloured Galardia,	2. 100
<i>Gaultheria procumbens</i> ,	Trailing Gaultheria,	1. 17
<i>Gaura biennis</i> ,	Biennial Gaura,	1. 75
<i>Genista sagittalis</i> ,	Jointed Genista,	1. 50
<i>Gentiana acaulis</i> ,	Gentianella,	1. 51
<i>Gentiana asclepiadea</i> ,	Swallow-wort-leav. Gentian,	3. 282
<i>Gentiana Catesbæi</i> ,	Catesby's Gentian,	2. 113
<i>Gentiana verna</i> ,	Spring Gentian,	2. 179
<i>Geum Chilense</i> ,	Chile Geum,	3. 273
<i>Gilia capitata</i> ,	Cluster-flowered Gilia,	3. 202
<i>Globularia vulgaris</i> ,	Common Globularia,	1. 9
<i>Gnaphalium arenarium</i> ,	Sand Everlasting,	1. 38
<i>Gypsophila prostrata</i> ,	Trailing Gypsophila,	2. 150
<i>Helianthemum roseum</i> ,	Rose-coloured Sun-Rose,	3. 267
<i>Helleborus niger</i> ,	Christmas Rose,	1. 8
<i>Helonius bullata</i> ,	Spear-leaved Helonius,	3. 235
<i>Hesperis matronalis, alba</i> ,	Double White Rocket,	1. 39
<i>Hesperis matronalis, pur.</i>	Double Purple Rocket,	1. 70
<i>Hibiscus Syriacus</i> ,	Althæa Frutex,	1. 77
<i>Hyoscyamus niger</i> ,	Common Henbane,	2. 172
<i>Hypericum Kalmianum</i> ,	Kalmia-leav. St. John's-wt.	3. 194
<i>Iberis sempervirens</i> ,	Narrow-leaved Candy-tuft,	1. 82
<i>Iris pumila</i> ,	Dwarf Iris,	3. 263
<i>Iris Sibirica</i> ,	Siberian Iris,	3. 274
<i>Iris Susiana</i> ,	Chalcedonian Iris,	1. 30
<i>Iris variegata</i> ,	Variegated Iris,	3. 278
<i>Iris versicolor</i> ,	Changeable Iris,	1. 3
<i>Isotoma axillaris</i> ,	Axillary-flowered Isotoma,	3. 218
<i>Jasminum revolutum</i> ,	Curled-flowered Jasmine,	1. 12
<i>Kalmia glauca</i> ,	Glaucous Kalmia,	1. 43
<i>Kalmia latifolia</i> ,	Broad-leaved Kalmia,	1. 33
<i>Kaulfussia amelloides</i> ,	Amellus-like Kaulfussia,	2. 169
<i>Lachenalia tricolor</i> ,	Three-coloured Lachenalia,	1. 21
<i>Lathyrus tuberosus</i> ,	Tuberous Lathyrus,	2. 139
<i>Ledum buxifolium</i> ,	Box-leaved Ledum,	1. 52

<i>Systematic Name.</i>	<i>English Name.</i>	<i>Vol. No.</i>
<i>Scabiosa atropurpurea</i> ,	Sweet Scabious,	2..119
<i>Schizanthus porrigens</i> ,	Spreading Schizanthus,	2..126
<i>Scilla bifolia</i> ,	Two-leaved Squill,	2..125
<i>Scilla bifolia, alba</i> ,	White two-leaved Squill,	2..176
<i>Scilla Sibirica</i> ,	Siberian Squill,	2..192
<i>Scutellaria Columnæ</i> ,	Heart-leaved Scull-cap,	2..141
<i>Senecio elegans</i> ,	Purple Groundsel,	1.. 40
<i>Sida malvæflora</i> ,	Mallow-flowered Sida,	3..237
<i>Silene acaulis</i> ,	Stemless Catchfly,	3..232
<i>Silene fimbriata</i> ,	Fringe-flowered Catch-fly,	2..128
<i>Sisyrinchium striatum</i> ,	Streaked Sisyrinchium,	1.. 66
<i>Solanum dulcamara</i> ,	Woody Nightshade,	2..109
<i>Spigelia Marilandica</i> ,	Indian Pink,	1.. 93
<i>Spiræa laevigata</i> ,	Smooth Spiræa,	1.. 32
<i>Spiræa trifoliata</i> ,	Three-leaved Spiræa,	2..153
<i>Statice oleæfolia</i> ,	Olive-leaved Sea Lavender,	1.. 86
<i>Stevia purpurea</i> ,	Purple Stevia,	2..180
<i>Symphoria, racemosa</i> ,	Snowberry,	2..117
<i>Symphytum Bohemicum</i> , ..	Red-flowered Comfrey,	1.. 71
<i>Tagetes lucida</i> ,	Lucid Tagetes,	3..215
<i>Tagetes patula</i> ,	French Marigold,	1.. 56
<i>Teucrium Pyrenaicum</i> ,	Pyrenean Teucrium,	1.. 80
<i>Tiarella cordifolia</i> ,	Heart-leaved Tiarella,	3..216
<i>Tigridia Pavonia</i> ,	Tiger Flower,	1.. 5
<i>Thymus lanuginosus</i> ,	Woolly Thyme,	2..184
<i>Tolpis barbata</i> ,	Yellow Hawkweed,	3..259
<i>Trillium grandiflorum</i> ,	Large-flowered Trillium,	1.. 26
<i>Tritoma media</i> ,	Lesser Tritoma,	3..204
<i>Trollius Europæus</i> ,	European Globe-flower,	3..209
<i>Tulipa Gesneriana</i> ,	Common Tulip,	3..245
<i>Tulipa suaveolens</i> ,	Sweet-scented Tulip,	2..175
<i>Tussilago fragrans</i> ,	Sweet-scented Coltsfoot,	1.. 19
<i>Uvularia grandiflora</i> ,	Large-flowered Uvularia,	2..187
<i>Vaccinium amœnum</i> ,	Broad-leaved Wortleberry,	3..211
<i>Valeriana montana</i> ,	Mountain Valerian,	1.. 36
<i>Verbascum phœniceum</i> ,	Purple-flowered Mullein,	1.. 36
<i>Verbena Aubletia</i> ,	Rose-flowered Vervain,	3..205
<i>Verbena pulchella</i> ,	Pretty Verbena,	3..277
<i>Veronica urticæfolia</i> ,	Nettle-leaved Speedwell,	2..167
<i>Vesicaria utriculata</i> ,	Smooth Vesicaria,	1.. 84
<i>Vinca herbacea</i> ,	Herbaceous Periwinkle,	3..233
<i>Xeranthemum annuum</i> ,	Annual Xeranthemum,	2..114
<i>Xeranthemum lucidum</i> ,	Shining Xeranthemum,	2..135
<i>Yucca gloriosa</i> ,	Glorious Adam's needle,	3..286
<i>Zephyranthes Atamasco</i> , ..	Atamasco Lily,	3..285
<i>Zinnia elegans</i> ,	Purple-flowered Zinnia,	2..170
<i>Zinnia multiflora</i> ,	Red-flowered Zinnia,	2.. 97
<i>Zizyphus paliurus</i> ,	Christ's Thorn,	2..118

(A B)

950
16
XP1-1-

14 DAY USE
RETURN TO DESK FROM WHICH BORROWED

LOAN DEPT.

This book is due on the last date stamped below, or
on the date to which renewed.
Renewed books are subject to immediate recall.

MAY 7 1967 1

RECEIVED

MAY 4 '67 - 10 AM

NOV 7 1973 7 5

REC'D CD JAN 8 '74 - 5 PM

JAN 3 1 1981

REC. CIR. AUG 2 1 '80

MAR 4 1985
RECEIVED

FEB 24 1985

CIRCULATION DEPT.

AUG 18 1998

LD 21A-60m-2,'67
(H241s10)476B

General Library
University of California
Berkeley