FLORA CONSPICUA;

A SELECTION OF

THE MOST ORNAMENTAL FLOWERING, HARDY, EXOTIC AND INDIGENOUS TREES, SHRUBS, AND HERBACEOUS PLANTS,

FOR EMBELLISHING

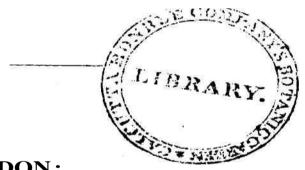
FLOWER-GARDENS AND PLEASURE-GROUNDS.

BY RICHARD MORRIS, F.L.S., &c.

AUTHOR OF "ESSAYS ON LANDSCAPE GARDENING," &C.

DRAWN AND ENGRAVED FROM LIVING SPECIMENS

BY WILLIAM CLARK.

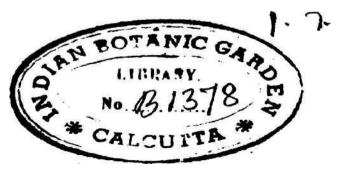


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PYRUS JAPONICA.

Japan Pyrus.

ICOSANDRTA. Class 12.

PENTAGYNIA. Order 4.

PYRUS. *Pirus* of Pliny: supposed to be from *afvp*, *fire*; the fruit drawing up to a point like a flame.

Linn. syst. 467. Willd. 1020.

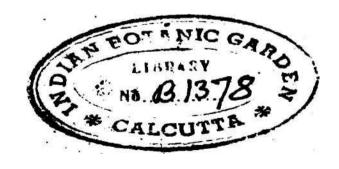
GENERIC CHARACTER.

Cal. superior of one leaf, five-cleft, permanent. Cor. Petals five, roundish, concave, larger than the calyx, and proceeding from it. Stam. Filaments twenty, awl-shaped, attached to the calyx, shorter than the corolla \$ anthers oblong, of two lobes. Pist. Germ inferior; styles five, filiform; stigmas simple. Per. Fruit roundish, umbilicated, with five membranaceous cells. Seeds two in each cell.

SPECIFIC CHARACTER.

Leaves elliptic-oblong, sharply serrated, smooth.

THE characters of this species frequently vary: sometimes having numerous petals, as a semi-double flower, but more frequently appearing with five or six. Xhe pericarpium is seldom larger than a walnut, and rarely perfects itself in this country. A white and also a semi-double variety of this species have been obtained, so nearly coinciding in habit with the plant here figured as not to warrant their being made distinct species.



The Pyrus Japonica is a native of Japan, and was introduced into this country by Sir Joseph Banks in It may be considered to rank among some other 1796. shrubs from that country, as the most ornamental which are cultivated in our gardens. It possesses in itself a peculiar recommendation, from its blooming at a season when few other flowers appear. Such flowers as present themselves before Spring has put on her verdant robes are viewed with peculiar pleasure and delight, and in a manner invite us to look forward for that season when Nature appears clothed in her loveliest hues. The flowers of the Pyrus Japonica are of a beautiful red, and are in great abundance over the whole plant, with the exception of the last year's shoots: the oldest branches of the tree will throw out spurs with flowers; they begin to make their appearance early in March, before the leaves, and continue in perfect beauty until near the end of April: throughout the summer a few blooms will occasionally appear. **This** plant is with good effect frequently trained against walls or trellis-work, and forms a desirable shrub, to disperse among open plantations and slirubberies, particularly if intermixed with the white variety, as they are proved to endure the severity of our winters. These shrubs are of free growth; and when planted against walls, pruning is necessary: some of the luxuriant young shoots may be removed without injury to the plants. This species of Pyrus is easily propagated, either by layers in the spring, or by cuttings in the autumn; and it adapts itself to almost any soil: in common garden earth it grows freely; flourish in the environs and is to of London.

The figure here given was taken from a luxuriant specimen against a south wall in Vincent-square, Westminster.

REFERENCES TO THE PLATE.

- 1. Section of calyx, showing the insertion of the stamens and pistils
- 2. One stamen and the pistils magnified.
- .'5. Outline of a perfect leaf.



GENTIANA ACAULIS.

Stemless Gentian, or Gentian el la,

PENTANDIUA.
Class 5.

DIGYNIA. Order 2.

GENTIANA. From *Gentius* (king of Illyria), who is said to have discovered it, or at least to have first experienced its virtues as a cure for the plague which infected his army.

Linn. gen. n. 322. Linn. spec. 330. Linn. syst. 267.

GENERIC CUARACTKR.

Col. Perianth five-parted, sharp, oblong, permanent. Cor. Petal one, tubular at bottom, at top five-cleft. Stam. Filaments five, shorter than the corolla. Fist. Germ oblong, cylindric, length of the stamens. Style none. Stigmas two, ovate. Per. Capsule oblong, one-celled, two-valved. Seeds numerous.

SPECIFIC CHARACTER.

Flowers solitary. Corolla five-cleft, bell-shaped, higher than the stalk.

JIOOT branched. Leaves ovate-lanceolate. Stem from one to two inches in height, with one or two pairs of leaves; a large solitary flower at the extremity. Calyx angular, divided at top, five lanceolate segments. Corolla monopeta-lous, deep blue, dotted inside.

The *Qentiana acaulis* is an herbaceous perennial, grows freely in strong earth, produces large tufts of flowers narticu-]arly showy, and forms an excellent edging for flower-beds; it flowers more freely if suffered, to remain than when frequently removed, and is increased by seeds and by separating the roots in the spring: excessive drought is injurious to it. Perhaps no herbaceous plant excels this in brilliancy of colour; and although humble in growth, possesses particular attractions. It flowers with greatest beauty in April and May, though in the summer and autumn a few blooms will occasionally appear: when growing in its wild state it has little or *no* stem.

It is a native of many parts *fof Europe—some say of England. In .London it does not thrive well, and rarely flowers: this may be attributed to the impurity of the air, as at the Nurseries a short distance from the metropolis it is seen flowering abundantly: a shaded situation is favourable to this plant, but pure air is indispensable.

REFERENCES TO THE PLATK.

^{1.} Section of the corolla spread, showing the insertion of the stamens.

^{2.} Pistil.



SANGUINARIA CANADENSIS, Canada Puccoon, or Blood-Wort.

POLYANDIUA.

MoNOGYNIA.

Class 13.

Order 1.

SANGUINARIA,—from its blood-coloured juice.

Linn. gen. 645. Linn. spec. 723. Willd. 1140.

GENERIC CHARACTER.

Cat. Perianth two-leaved, ovate, concave. Cor. Petals eight, oblong,

blunt. *Stam.* Filaments many, shorter than the corolla. Anthers

simple. *Pist*. Germ oblong, compressed. Style none. Stigma two-. grooved, height of the stamens, permanent. *Per*. Capsule **oblong**, two-valved. *Seeds* many, round, acuminate.

SPECIFIC CHARACTER.

Leaves upright, sinuated, lobed. Scape one-flowered.

ROOT tuberous, fleshy, bright-red internally, when cut affording juice of the same colour, from which it takes its name of *Sanguifiaria*: the juice is bitter and acrid. The root shoots out numerous slender stems, each bearing a flower of fight or ten petals. Filaments above twenty. Anthers yellow. Germ glaucous. Seeds shining, yellowish* A single leaf with each flower, of a glaucous green, with conspicuous veins. The base

of the stem surrounded by small, oblong, menibranaceous scales-There is a delicacy in this herbaceous plant which renders it attractive and worthy of cultivation: although it does not form a prominent feature in the flower-border, still it produces a good effect in the front of beds with other small flowers. It blooms in April, grows about nine inches high, with several stalks from the same root; thrives well in peat earth, or in light mould and rotten leaves. It is propagated by separating the roots in the autumn, as it is in a dormant state at this season. It loses its leaves about the end of July, after which the roots may be divided; but this should not be done until the plant is of two or three years growth.

It is a native of Canada, where it grows spontaneously in the woods, and was introduced here in 1680.

ntFEHBNCE TO THE PLATE.

1. Stamens and pistil magnified.



OROBUS VERNUS Spring Bitter-Vetch.

DIADELPHIA. Class 17.

DECANDRIA.
Order 4.

OROBITS. *OpoGog* of Theophrastus and Dioscorides: from *opcv*, to excite, and (3ov\$, an ox; this herb being used by the ancients to fatten oxen..

Linn. gen. n. 871. Linn. spec. 1028.

GENERIC CHARACTER.

Cal. Perianth one-leaved, tubular, blunt at the base, shrivelling. Cor. papilionaceous. Stam. Filaments diadelphous. Anthers roundish. Pist. Germ cylindrical, compressed. Style filiform. Stigma linear. Per. Legume round, long, acuminate, and ascending, one-celled, two-valved. Seeds numerous, roundish.

SPECIFIC CHARACTER.

Leaves pinnate-ovate. Stipules semi-sagittate, quite entire. Stem simple.

ROOT perennial, fibrous. Stem one foot high, unbranched, smooth, angular. Leaves alternate, petioled. Leaflets three pairs, ovate-lanceolate, sessile, quite entire, nerved, bright-green, smooth, tender. Stipules at the base" of the petioles. Midrib or rachis of the leaf long, channelled, ending in a sharp

point. Peduncles axillary. Corolla red, purple, and blue: the colours change as the corolla advances. Legumes straight, round, containing eight to ten rounded seeds.

The *Orobus vernns* is an herbaceous perennial, was introduced in 1629, and is a native of the Nortli of Europe. It blooms in April in open borders. If the roots be left for a few years in the earth without being separated, they produce handsome tufts of purple flowers. It grows about one foot in height, and presents a pleasing contrast with early-flowering herbaceous plants; as, *Scilla bifolia*, *Sanguinaria Canadensis*, *Cynoglossum omphaloides*, *Alyssum montana*, *Cyclamen persicum* and *Soldanella alpina*. Many of these little vernal flowers are not sufficiently conspicuous of themselves, but collectively produce a truly pleasing effect, that may be heightened by a judicious and tasteful arrangement.

This plant is propagated by dividing the **root**, either in the autumn, or so early in **the spring that** the young shoots may sustain no injury: it thrives well **in** common borders, provided the earth be not **too** light or dry.

REFERENCE TO THE L'LATE.

1. Stamens and pistils magnified.

POLYGALA

CHAM/EBUXUS.

Box-leaved Milkwort.

DIADELPHIA. • Class 17.

OCTANDRIA.
Order 3.

POLYGALA. From tfoXv, *much*, and yaAoc, *milk*; this plant being-supposed to make cattle yield much milk. The name occurs in Pliny; and Dioscorides has *iro\vya.\ov*.

Linn. gen. n. 85 1. Linn. spec. 989. Linn. syst. 639.

GENERIC CHARACTER.

Cal. Perianth five-leaved, small, permanent. Cor. subpapilionaceous. Standard tubular, short, reflex mouth, bifid. Keel concave. Stam. Filaments diadelphous, inclosed within the keel. Anthers simple. Pist. Germ oblong. Style simple, erect. Stigmjgtthickish,. bifid. Per. Capsule obcordate, two-celled, two-valved. Seeds solitary, ovate.

SPECIFIC CHARACTER.

:\$

Flowers scattered. Keel rounded at the tip. Stem shrubby. Leaves lanceolate.

THE branches are closely set with stiif smooth leaves of a lucid green. The flowers proceed from between the leaves, near the extremity of the branches; each flower stands on a peduncle proceeding from a kind of triphyllous cup formed

oi" floral leaves: the true calyx is composed of three leaves, which are nearly white: the two outer petals are similar to the wings of a papilionaceous flower, and are also white, or nearly so; the third petal, which forms a kind of tube and contains the stamens and pistils, is white at the base, but yellow towards the extremity, where it changes by degrees to a bright bay colour. Filaments four on each side, slightly united at the base.

The whole of the *Polygala* tribe is interesting:—of those which are hardy, some are herbaceous perennials, others are annuals. The *Chamcebuxvs* was introduced into England in 1658, and is the only hardy shrub in the genus: when cultivated, this shrub rises with branches from nine inches to a foot in height; in a wild state it does not grow so high.

It is a native of Austria, Germany and Switzerland, where it grows spontaneously on the mountains, flowering plentifully in May,*Juid partially until August. It thrives well in light mould: in peat or bog-earth it flourishes.

This shrub,—intermixed with Gatdtheria procumbens, Mit* chella nqtenS) 'L.inncea barealis* and other
dwarf-growing shrubs,

—will greatly enrich the front of American beds, where it will crow luxuriantly, forming a close and ornamental bujpi. It .may be propagated by separation, as it throws up numerous branches from the ground, which may be taken off with roots in the month of April.

REFERENCE TO THE PLATE.

Stamens and pistil magnified.



ANEMONE PULSATILLA.

Pasque-flower Anemone.

POLYANDRIA. Class 13. Poi.YGYNIA.
Order 7.

ANEMONE. Avefjuwvy, Hippocrates, Theophrastus, and Dioscorides: from AY5fjL,o\$, the wind; because the flower is supposed not to open unless the wind blows, or rather because it grows in situations much exposed to the wind.

Linn. gen. n. 694. Linn. spec. 759.

GENERIC CHARACTER.

Cal. none. Cor. Petals in two or three rows. Stam. Filaments nu merous, capillary, half the length of the corolla. Pist. Germs nu merous, in a head. Styles acuminate. Stigmas obtuse. Per. none. Receptacle globular. Seeds numerous, acuminate, retaining the style.

&

SPECIFIC CHAllACTEn.

Peduncle involucred. Petals straight. Leaves bipinnate.

PEDUNCLES e, rect, round, from six to eight inches high, villose, one-flowered. Involucre multifid, with the divisions linear and villose. Corolla purple. Petals lanceolate, villose without. Seeds ovate, tailed, hairy. Leaves rough, finely cut.

This herbaceous plant flowers in April. When established,, it produces Tine clusters of deep purple flowers about nine inches in height, and continues a succession of blooms for about a month. The flowers appear while the leaves are small and tender, but they afterwards attain their full size while the plant is still flowering; and die off early in July, about the time the seed perfects itself, leaving the little tuberous roots in a dormant state until the following spring. It is injudicious to take these roots out of the ground and keep them dry, as is necessary with some other of the Ancmonies: the spot where the I^itlsalilla is growing should be marked before the foliage has perished, that the roots may not be disturbed. Some of the other species of Anemoiiies may be cultivated in the same border with the Pulsatilla; as, JI. apennina^ A., 7ie-morosa₉ A. sylvestris. These, though all of low growth, are interesting in the flower-border.

The *JPulsaUlla* thrives in a light sandy earth and in an open situation. It is a native of Britain: is propagated either by seed or by parting the roots.

RHODODENDRON ARBOREUM.

Indian-tree Rose-bay.

DECANDRIA.

MoNOCiY.NIA.

Class 10.

Order 1.

RHODODENDRON. 'PoSotevSpoy of Dioscorides: from po\$ov, a rose, and \$e>\$pov, a tree.

.Linn. gen. n. 548. Don's Prod. Flora; Nepalensis, p. 154.

GENERIC CHARACTER.

Cal. Perianth five-parted, permanent. Cor. one-petaled, wheel funnel-form; border spreading, with rounded segments. Stam. Filaments ten, filiform, alm'ost the length of the corolla, declined. Anthers oval. Pist. Germ five-cornered, retuse. Style filiform, the length of the corolla. Stigma obtuse. Per. Capsule ovate, subangular, five-celled, divisible into five parts. Seeds numerous, very small.

SPECIFIC CHARACTER.

Leaves lanceolate, acute, silvery underneath. Mowers in clusters. Peduncles and calyr downy. Corolla bell-shaped, margin crenu-Iated, two-lobed. Capsule ten-celled, tomentose.

|^ twenty feet in height; brandies dichotomous, ascending. Leaves at the end of the branches, ovate-lanceolate, on short petioles, bright green on. the upper surface, downy beneath; midrib strong, much veined. Flowers deep crimson, from ten to twenty in clusters at the extremity of the branches. Calvx permanent, small, five-cleft. Corolla bell-shaped, dotted in the throat, lobed. Stamens ten, shorter than the corolla, falling with it. Anthers oblong. Germ superior, cylindrical, white, downy.

This magnificent shrub is a native of the Nepal mountains, and was introduced into this country in J817. In the *Flora IZxotica* it is said to have been first discovered by Captain ihirduicke on a tour to Sireenagur in 1796, growing in the mountainous tract called the Sewalic Chain, which separates the plains of Iliiulostan from the Himmaleh mountains: it is called by the natives the *Boorans*. Its wood is used for making stocks of matchlocks, or common muskets of Hindo-stan.

This species, upon its first introduction, was treated as a hothouse plant; but is now fully proved to bear the severity of our winters. Sir James Edward Smith, P.L.S., has a specimen in his garden which has stood in the open ground four years; and it lias been of late treated as a hardy tree in many collections.

Placed alone upon a lawn, this shrub will appear to great advantage; or mixed with the purple and pink hues of the various American species oi" this genus, its deep crimson blossoms will appear with additional splendour. Beautiful as this shrub is, it was rarely to be met with until within these few vears; but as it is now more generally dispersed, and as it flowers early in the summer, there is reason to expect that the seeds may be perfected in this country, though probably it may be propagated by layers, like the other species of llho-dodendron. We have to acknowledge the kindness received, in being allowed the use of the specimen from which the accompanying delineation was copied. This specimen was the first that flowered in the open ground in this country: it was presented by Mrs. Beaumont of Bretton Hall, Yorkshire, to the Linneaii Society, and exhibited at their meeting on Tuesday, June 7, 1825. Thanks are also due for assistance rendered by Mr. Don, Librarian of the Linnean Society, in obtaining this delineation, from whose Prodromus Florce Ne-palensis the specific characters of this plant are quoted; in which work this shrub is fully described under the natural order Ericca?*

REFERENCE TO THE PLATE.

Pistil: showing the germ, style, and stigma.

PULMONARIA DAVURICA

Daurian Lungwort.

PENTANDRIA.
Class 5.

MONOGYNIA.
Order 1.

PULMON'AHIA: so named from its being supposed to be a good remedy in disorders of the lungs (pulmones); or, according to others, from the spots on the leaves resembling those on some diseased lungs.

Linn. gen. n. 184.

GENERIC CHARACTER.

Cat. Perianth one-leaved, five-toothed, prismatic, pentagonal, permanent. Cor. one-petaled, funnel-form \$ tube cylindrical, the length of the calyx j border half-five-cleft, blunt, upright, spreading. Throat pervious. Statn. Filaments five, in the throat, very short. Anthers erect, converging. Pist. Germs four. Style filiform, shorter than the calyx. Stigma blunt, emarginate. Per. none. Calyx unchanged, fostering the seeds at bottom. Seeds four, roundish, blunt.

SPECIFIC CHARACTER.

Stem-leaves oblong, lanceolate, embracing. Root-leaves elliptic.

ROOT perennial. Stem one foot in height, erect, branched towards the top. Radical leaves ovate, on long footstalks, with two or three nerves going from each side the midrib towards the point. (5auline leaves narrow, lanceolate, entire,

ijtiite smooth. Flowers in nodding racemes, pale red, changing to bright blue. Peduncles hairy. Pedicles nbout the length of the calyx. Calyx five-cleft, hairy. Corolla cylindrical. Nectary, five hairy glands. Stamens on very short filaments, inserted into the tube. Style filiform, longer than the corolla. Stigma capitate, small.

This species, although the least in the genus in point of growth, may be ranked as the most delicate and beautiful: it grows about nine inches in height, and the flowers are beautifully diversified with different shades of blue and pink. It well merits a place in the ornamental flower-border, and may be planted amongst rock-work with other flowering alpine plants; and as it loves a light soil and dry situation, it may here meet with ii spot congenial to its habits. The beauty of many small alpine plants is much heightened through their being placed in favourable situations on rock-work, especially when tastefully arranged so as to harmonize. It is in a great measure through the introduction of ornamental rock-work in gardens, that the beautiful tribe of alpine plants have increased in estimation, and are now so much in repute. This species of Pulmonaria does not frequently perfect its seeds, but is propagated by separating its roots in the spring. It was introduced in 1812, and is a native of Dauria.

REFERENCK TO THE PLATE.

Mftgnified corolla cut open, showing the insertion of the stamens and pistil.



MAGNOLIA GLAUCA

SEMPERVIRENS Evergreen Swamp Magnolia.

POLYANDRIA. Class 13.

PoLYGYNIA.
Order 7.

MAGNOLIA t so named by Plumier in honour of Pierre Magnol, Professor of Medicine and Prefect of the Botanic Garden at Mont-pelier.

Linn. gen. n. 690.

GENERIC CHARACTER.

Cal. Perianth three-leaved; leaflets ovate, concave, petal-shaped, deciduous. Cor. Petals nine, oblong, concave, blunt, narrower at the base. Stam. Filaments numerous, short, acuminate, compressed, inserted into the common receptacle of the pistils below the germs. Anthers linear, fastened on each side to the margin of the filaments. Fist. Germs numerous, ovate-oblong, two-celled, covering a club-shaped receptacle. Styles recurved, contorted, very short. Stigmas villose, perpendicular with the style. Per. strobile ovate, covered with capsules, which are compressed, roundish, scarcely imbricate, clustered, acute, one-celled, two-valved, sessile, opening outwards, permanent. Seeds two or one, roundish, berried, hanging by a thread from the sinus of each scale of the strobile.

SPECIFIC CHARACTER.

Leaves ovate-oblong, glaucous underneath.

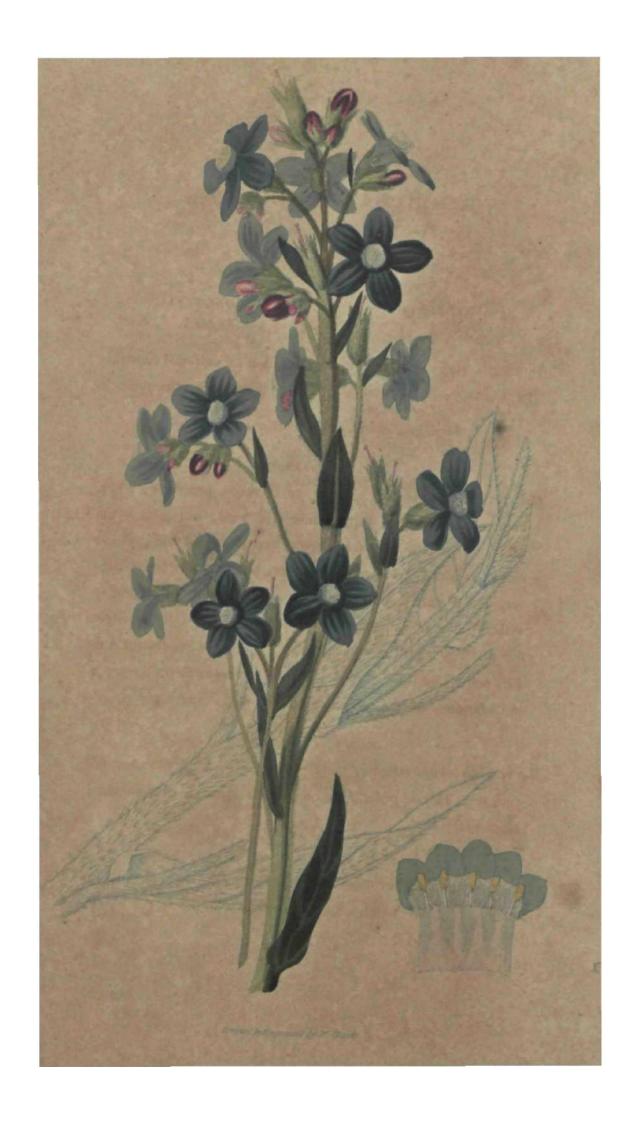
BRANCHES many, somewhat slender, covered with a smooth bark. Leaves oblong, entire, smooth, bright green on the upper surface, but white or glaucous underneatli. The flowers are solitary at the extremity of the branches, with from eight to ten white and concave petals. The fruit is conical and imbricated, about the size of a walnut, and when ripe is of a dark-brown colour. Seeds either singly or in pairs within the imbricated scales.

The Magnolia glauca[^] of which the plant figured is a variety, was introduced into this country in 1688, and is supposed to be the first of the genus that appeared: it was cultivated by Bishop Compton at Fulham. It is a native of North America. where it grows in low and swampy ground, and is known there by the names of White Laurel Swa?np Sassqfi-as, and Beaver Tree. It is supposed to have obtained the latter name from the circumstance of the root being eaten by beavers; by which means these animals are frequently caught. Kalm states, that in America this tree casts its leaves in the autumn, but that young trees will retain them through the winter. In woods in that country it grows in great luxuriance, and the flowers are particularly fragrant; so much so, that their scent is perceptible, if the wind be favourable, at the distance of three-quarters of a mile. The Americans cure coughs and other pectoral diseases by steeping the berries of this tree in brandy, and giving a draught of the liquor every morning: it is even said to have salutary effects in consumptions. For a cold, it is very common to boil the branches in water.

The *Magnolia glauca* has long been an acknowledged favourite shrub in our gardens; and the present variety possesses all the beauties of ihat plant, with the addition of retaining its leaves longer: it may indeed be considered as an evergreen, many of its leaves remaining green until the new ones appear. Its habit of growth is bushy, and it will attain the lieight of about twenty feet, producing flowers plentifully in the month of June, which are white, particularly fragrant, and nearly double. It flourishes best in swampy ground, but will grow extremely well in the American peat beds. It may also be recommended as an ornamental tree for the lawn; and the whole of the hardy Magnolia tribe would become conspicuous intermixed in an Arboretum. It is in contrast that most trees and shrubs are viewed to the greatest advantage.

This species may be propagated either by layers or by seeds, but these are not always perfected in this country. Seeds are to be obtained of the *M. glauca* from America, which are packed in sand, and should be kept so until the month of February, when they may be sown in pots, and placed in a moderate hot-bed until about an inch in height: they should then be put into other pots, and kept partially shaded and frequently sprinkled with water. They may the following season be bedded out, or kept in pots another year.

The nursery of Mr. Thompson at Mile End presents fine specimens of the different kinds of hardy Magnolia; from whence we were favoured with the present specimen.



ANCHUSA PANICULATA

Panicled Bugloss.

PENTANDRTA. Class .0.

MONOGYNIA.
Order 1.

AXCIIUSA. Ay^oucra, *itoLpcn ro ctyxeiVj* from its supposed constringent quality j or, as others say, because it strangles serpents.

Linn. gen. n. 182. Ait. Hort. Kew. I. 177-

GENERIC CHARACTER.

Cat. Perianth five-parted, oblong, round, acute, permanent. Cor. monopetalous, funnel-shaped -, tube cylindrical, the length of the calyx; limb semiquinquefid, erect, expanding, obtuse; throat closed with five small scales, convex, prominent, oblong, converging. Stam. Filaments very short, in the throat of the corolla; anthers oblong, incumbent, covered. Pist. Germs four. Style filiform, the length of the stamens. Stigma obtuse, emarginate. Per. none; but the calyx, enlarged and erect, contains the seeds in its bosom. Seeds four, oblongish, obtuse, gibbose.

SPECIFIC CHARACTER.

Leaves lanceolate, strigose, quite entire. Panicle dichotomous, divaricate. Flowers peduncled. Calyxes five-parted, with subulate segments.

ROOT biennial or perennial. Stem round, hirsute; branches alternate. Leaves lanceolate, entire, rough, very hairy.

Flower-buds purple, on short pedicels; in expanding changes to bright blue. Peduncles hairy. Calyx five-parted, hairy. Stamens on short filaments inserted on the bearded throat of the corolla.

This plant, although introduced as far back as 1777, is by no means common in our gardens: this cannot be on account of a deficiency in point of attraction. The colour of the bloom is of a splendid blue, somewhat approaching to purple, while the bud is of a most beautiful purple. In the herbaceous border it is evidently a showy plant; it shoots up with many branches to the height of about five feet, producing fine peduncles of flowers during the months of May, June, and July. Lt is considered in many works as a biennial, but it is known to last four or five years: when once established it is not very readily eradicated, from its dropping its seeds, as well as from the roots being so tenacious of life that small pieces being permitted to remain in the ground will spring up and produce plants.

It is a native of Madeira, and thrives best in sandy ground, but will grow very well in light garden mould. A large specimen of this plant may be seen in the herbaceous ground at Chelsea Botanic Garden, where Mr. Anderson, the curator, stated it had thrived for many years. The figure given here was taken from a specimen growing in a pot. It is cultivated is some nurseries under the name of *Anchusa ilalzca*, but this is a distinct species.

REFERENCE TO THE PLATE.

Corolla cut open, showing the insertion of thr stamens.



P^EONIA OFFICINALIS RUBRA Double Red Officinal Paeony.

POLYANDRIA. Class 13.

DIGYNIA.
Order 2.

PEONIA of Pliny 5 *Uociovicc* of Hippocrates and Dioscorides: from Paeon, a famous physician of antiquity.

Linn. gen. n. 678. Linn. spec. 747.

GENERIC CHARACTER.

Cal. Perianth five-leaved, small, permanent; leaflets roundish, con-cave, reflex, unequal in size and situation. Cor. Petals five, roundish, concave, narrower at the base, spreading, very large. Stam. Filaments numerous, capillary, short. Anthers oblong, quadrangular, erect, four-celled, large. Pist. Germs two, ovate, erect, tomentose. Styles none. Stigmas compressed, oblong, blunt, coloured, Per. Capsules as many, ovate-oblong, spreading and reflex, tomentose, one-celled, one-valved, opening longitudinally inwards. Seeds several, oval, shining, coloured, fastened to the opening suture.

SPECIFIC CHARACTER.

Leaves doubly-pinnate, sublobed. Leaflets oblong, veined underneath!

THE roots are composed of many roundish thick knobs or tubers, which are attached to each otL*. *>y fibres. The branches are about two or two feet and a half in height. The

leaves are much lobed, and variously cut into segments. Flowers solitary, large, and of a fine deep crimson.

Of the varieties of *Prconia* (*fficinaUs*, Mr. Sabine, in a paper in the Horticultural Transactions, vol. ii. on the double herbaceous *Pivonias*, mentions three—*P. ojjicinalh rubra*, *P. crffici-nalis carnescenS*) and *P. officinalis albicans*. The first of these (which is here figured), although seen in almost every garden, should not on that account be omitted from a publication like the present, nor should it detract from its merits as an orna-mental plant. Mr. Sabine has observed, "It is singular that none of the beautiful tribe here noticed has been figured in publications of later years."

This plant is of strong growth, and rises to the height of from two to three feet, with numbers of beautiful red flowers appearing in the months of May and June; and as it grows freely in common borders, is a desirable plant to add gaiety to the shrubbery. The roots are very prolific, in large clusters of tubers, which, if separated in September or early in October, will flower the succeeding summer, provided each of the tubers have eyes to shoot from. This variety being double, and deficient of stamens and pistils, cannot produce seeds; consequently can only be increased by the roots. The single-flowered of this species is seldom cultivated, and until recently was rarely met with; its habit of growth is very similar to the double, but the flowers are not so conspicuous.

It is a native of the South of Europe, and was cultivated in this country in 1560. It is supposed to be the *Pcconia* mentioned by Pliny as noted for its medicinal properties.



GENISTA TRIQUETRA.

Triangular Genista.

DIADELPHIA. Class 17.

DECANDRIA.
Order 4.

GENISTA: from *genu*, the kneej either because it is flexible, or because it is supposed to relieve pains in that joint.

Linn. gen. n. 859. Ait. Hort. Kew. 3. 14.

GENERIC CHARACTER.

Cal. Perianth one-leafed, small, tubular, two-lipped j upper lip two-toothed, more deeply divided; lower, three-toothed, nearly equal. Cor. papilionaceous. Banner oblong, remote from the keel, the whole reflex. Wings oblong, loose, shorter than the others. Keel straight, emarginate, longer than the banner. Stam. Filaments ten, connate, emerging from the keel. Anthers simple. Pist. Germ oblong. Style simple, rising. Stigma sharp, rolled in. Per. Legume roundish, turgid, one-celled, two-valved. Seeds solitary, usually kidney-form.

SPECIFIC CHARACTER.

Leaves ternate, the upper ones simple. Branches three-sided, procumbent.

BRANCHES flexuose, green, trailing on the ground.

Leaves trifkl, ovate, concave. Flowers in clusters, on short pedicels;

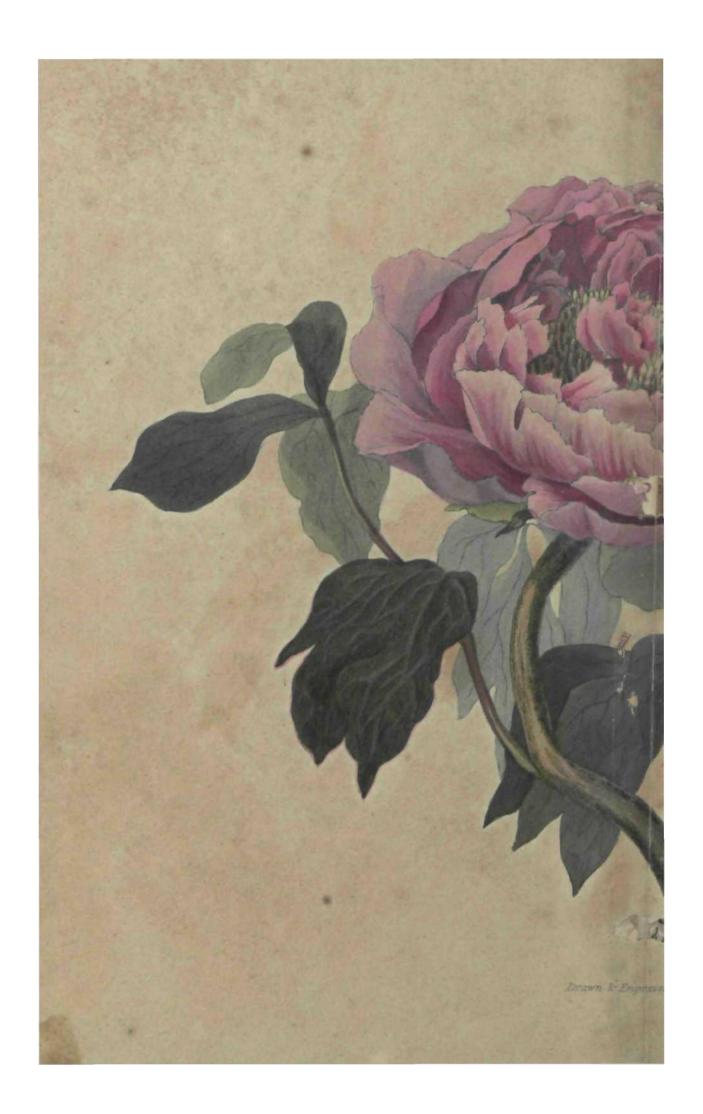
corolla papilionaceous; petals blight-yellow; calyx green. Pcricarpium oblong, one-celled. Seeds several, roundish, compressed.

This showy evergreen trailing shrub flowers in great profusion over the whole plant, producing a complete mass of yellow flowers during the months of May and June. In the shrubbery this plant becomes a conspicuous figure: its long and pliant branches in their natural position trailing along the ground, form an excellent fore-ground to more lofty shrubs; and if supported by stakes will materially enrich the body of the shrubbery itself. Other species of this genus, such as G. sagittalis, G. pilosa, G. anglica, and G. p'ocum-bens, though of the same habit of growth with the triquelra, but smaller and more delicate both in their nature and appearance, will not flourish when tied to a stake, and will therefore add to the beauty of the front of the shrubbery alone. The triquetra will grow luxuriantly in light garden mould, and will at times perfect its seeds; but may very readily be propagated by laying, which process should be performed early in April.

It is a native of Spain, France, and Italy; was introduced in 1748.

REFERENCE TO THE PLATK,

Calyx, stamens and pistil, magnified.



MOUTAN

Shrubby IVeony.

POLYANDIMA. Class 13.

YNA Order 2.

<; i:X KR1C < 11 A U ACT Kit.

i Vide *Pcconitt njjivinalia rubra*. 1*1. II.)

S PEC 1VIV. CHAR AC TKK.

Stum woody,])crcnniu1. Lt.n/lcts oblong, ovate, glaucous, ami some what hairy beneath; the terminal one three-lobud. tiennvns numerous, distinct.

'.BRANCHES shrubby and numerous, forming ii handsome bush of che height of from six to ten feet. Leaves on long stalks, alternate, spreading, and deciduous; leaflets ternate in an opposite direction, lobed, veined, and glaucous underneath; the terminal leaflets thrce-lobed. Leaf-buds scaly, of a fine pink colour. Flowers terminating the branches, solitary, from live to eight or even ten inches in diameter, always double, composed of many jilggcxl rose-coloured petals: the stamens appear partially in the centre of the flower; anthers yellow; germs uncertain in their appearance. The flower possesses a rather sickly odour.

Among the Chinese, a doubt exists concerning the origin of this magnificent shrub: some writers suppose it to have been obtained from the common Poeony by a particular process of culture; others affirm, with more probability, that it was discovered growing in the mountains of Northern China; that after its introduction into the southern provinces it became a general favourite among the florists, and that numerous varieties were consequently raised. So much prized were some of these, that they sold in China for a hundred ounces of gold.

It is very generally cultivated, and flourishes in the province ofLo-Yang. In England there are but two species of the I*eony,—that which is here figured P.papnvcra-rra, which has a large single flower, and was introduced by Sir Abraham [fume. Of/*. Moufau a variety has been obtained which is named P. Monlmi rosca.- it differs in the (lowers, which are of a somewhat, darker red. Notwithstanding the exertions of many botanists who have sent collectors to China, numerous varieties of this beautiful shrub have not yet bee-w obtained. These varieties are frequently depicted by the Chinese in various ornamental branches of art, as double ilowers in the different colours of pink, purple, crimson, yellow, and white; but the jealousy which the Chinese have ever entertained towards the English, and indeed towards foreigners generally, has hitherto frustrated the arduous exertions of botanists to obtain these splendid ornaments. The cunning and duplicity of the Chinese are such, that many specimens which have been imported as new, have proved on (lowering to be such only as were already possessed by this country. There are, however, some imported plants of this shrub having the ap-pearance of novelty now in the possession of the Horticultural Society, who have with much zeal endeavoured to obtain some of the valuable incognita of that country. The Moidan may truly be accounted one of the most ornamental shrubs in our gardens: it is sufficiently hardy to stand the winters of this country. The spring of the year, when it puts forth its shoots, is the time it is susceptible of injury from the weather, when the covering of a mat at night will be found a sufficient guard. The flowers, which appear during the months of May and June, give splendour to the shrub, not only by their individual beauty, but by their great profusion.

This shrub thrives best in a situation somewhat sheltered, and in eurth composed of a rich loam, rotten leaves, and *a* small portion of sand. It is propagated by laying, early in the spring; and in the autumn of the following year the layers may be taken off and potted. If these have a little protection by frames during the succeeding winter, and are kept one year in pots, they will become fine established plants, and may with safety be planted in the shrubbery or pleasure-ground.

This plant was introduced by the late Sir Joseph Banks in 1791.



LINUM NARBONENSE

Narbonne Flax.

PENTAXDRIA. Class 5.

PF.NTAGYNIA. Order 5.

LIXUM (Aivov of Dioscorides, Theophrastus, and other Greek authors) appears to be derived from *Xivscv*, *to hold*; the fibres of this plant being so remarkable for their tenacity.

Linn. gen. n. 389. Linn. spec. 398. Linn. syst. 302.

GENERIC CHARACTER.

Cal. Perianth five-leaved, lanceolate, upright, small, permanent. Cor. funnel-form. Petals five, oblong, gradually wider above, obtuse. Stam. Filaments five, awl-shaped, upright, length of the calyx. Anthers simple, arrowed. Pist. Germ ovate. Styles five, filiform, upright, length of the stamens. Stigmas simple, reflex. Per. Capsule globose, rudely pentagonal, ten-valved, gaping at the tip. Partitions membranaceous, very thin, connecting the valves. Sends solitary, ovate-flattish, acuminated, smooth.

SPECIFIC CHARACTER.

Calyxes acuminate. Leaves lanceolate, stiff, rugged, acuminate. Stem round, branched at the base. Filaments connate.

STEM from a foot to eighteen inches in height, branching out almost to the bottom with many long slender branches. Flowers at the extremity of the branches of a fine blue colour. The seed-vessels are small; calyxes iurg«», lanceolate, im-mhra-

nacrous at the bides, most exquisitely acuminate at the top. and having a sort of awl-shaped dagger-point. The root is perennial.

▶ Some of the species of this genus are in the highest estimation (or their utility, from the herbage being applied to the manufacture of linen cloth, while the seeds afford a valuable oil. The *Narboiiense*- though too small and delicate to afford either of these necessaries to mankind, may nevertheless claim some share of esteem as an ornamental herbaceous plant; no other of the genus can be considered to surpass it for brilliancy of colour: the bright and lively blue of the flowers, added to the succession of blooms it produces, renders it worthy ol'being intermixed in the herbaceous border with other delicate plants of the same height of growth. It is slender in habit, will thrive extremely well in light garden mould, and is readily propagated by seeds or by cuttings. It was introduced into this country in 1759.

The figure here represented was drawn from a specimen flowering in the herbaceous border at Mr. Knight's Exotic Nursery, Kino's Itoad, Chelsea.

ft i-: Kit HI-: .\'c its 'I'd THK PLATK.

- 1. Showing the stamens enveloping the germ.
- 2. The pistils exposed.

%* Since the publication of *Rhododendron arboreum*, Plate 7, we have been informed that a plant of this species flowered in July last in the conservatory of M. Boursault, Rue-blanc, Paris, and was there supposed to have been the first which had flowered in Europe.



GLADIOLUS CARDINALIS. Superb Corn Flag.

TItlANDRIA. Class 3.

MONOGYNIA. Order 1.

GLADIOLUS, mentioned by Pliny; supposed to have derived this name from *gladius*, a sword, alluding to the shape of the leaf.

Linn. gen. n. 57.

GENERIC CHARACTER.

Cal. a spathe, two-valved, inferior, shorter than the corolla; valves oblong, permanent 5 the outer one larger, inclosing the inner. Cor. one-petaled, superior; tube cylindric, bent; border somewhat bell-shaped, six-parted 5 segments oblong, form erect-patulous, the uppermost and lowest lateral, either without or within. Stam. Filaments three, inserted into the orifice of the tube, filiform, shorter than the corolla. Anthers ovate, incumbent. Pist. Germ inferior, triangular. Style filiform. Stigmas three, rolled back and spreading, blunt, villose. Per. Capsule ovate, three-cornered, blunt, three-celled, three-valved. Seeds very many, smooth.

SPECIFIC CHARACTER.

Leaves sword-shaped, many-nerved. Flowers all directed the same way, many on a stem. Corolla upright, with a bell-shaped border.

ROOT sBlid, round, covered with a brown membrane. Stem round, about two feet in height; leaves embracing the stem at bottom; flowers on the extremity of the stem on one side of it, in great numbers, of a fine scarlet, with a large white spot on each of the three upper segments of the petal: spathe green, enveloping the flower before it opens, and remaining after the flower has withered.

The beauties of this species cannot be surpassed by any in the genus; and from the root being hardy, it is rendered still more desirable. It was until lately in the possession of such only as could protect it in a greenhouse. This, as well as many other bulbous roots, natives of the Cape of Good Hope, have been proved to endure the winter of this country, and thrive extremely well, by the treatment adopted by the Hon. and Rev. Wm. Herbert at Spofforth. The method of preserving the roots is to plant them in a dry south border of light open and sandy earth, and in the winter to protect them with a covering of leaves. They should be planted early in the spring, that the bulbs may mature themselves in the spot where they are to pass the winter: it is very essential that the roots be well ripened. With these precautions there is little fear of their succeeding. Where the roots are well established, they will produce stems from two to three feet in height with a profusion of flowers, which, from the opposition of scarlet and white, become truly interesting, and vie in splendour with any of the bulbous tribe.

> "The passing Indian turns the admiring eye, Smit by the glories of her crimson dye."

This plant is readily increased by the roots, the separating of which should be done early in the spring; and it is better that the roots should remain in the border during the winter, provided it be tolerably dry, rather than be taken up. It was introduced from the Cape of Good Hope in 1790.

This figure was taken from a bed of luxuriant bulbs of this plant at Messrs. Whitley, Brames, and Milne's Nursery, Fulham.

REFERENCE TO THE PLATE.

Section showing the position of the stamens and pistil.



PHLOX CARNEA.

Pale Lychnidea.

PENTANDRIA. Class 5.

MONOGYNIA. Order 1.

PHLOX. \$AO£ of Theophrastus, meaning *ajlame*; supposed to be so named from the brightness of the flowers of some of the species. Dodonaeus supposed that <pAo£ used by Theophiastus applied to the *Viola tricolor*; but this term has been more generally applied to *Lychnis*, *Agrostemma*, or *Phlox*.

Linn. gen. n. 214.

GENERIC CHARACTER.

Cal. Perianth one-leafed, cylindrical, ten-cornered, five-toothed, acute, permanent. Cor, onc-petaled, valve-shaped j tube cylindrical, longer than the calyx, narrower below, curved in; border flat, five-parted j segments equal, blunt, shorter than the tube. Stam. Filaments five, within the tube of the corolla, two longer, one shorter. Anthers in the throat of the corolla. Pist. Germ, conical. Style filiform, the length of the stamens. Stigma trifid, acute. Per. Capsule ovate, three-cornered, three-celled, three-valved. Seeds solitary, ovate.

SPECIFIC CHARACTER.

Leaves lanceolate, smooth. Stem smooth. Flowers many.

ROOT fibrous, perennial; stem herbaceous, rising to the height of eighteen inches, on which the leaves are seated in pairs arranged opposite, sitting close to the stalk, smooth, entire, and midrib evident: the stem is terminated with dicholomous flower-stalks. Calyx five-parted, awl-shaped, permanent segments. Corolla pale pink, monopetalous, five-parted. Stamens shorter than the corolla, and seated in the throat.

All the species of this beautiful genus are well worthy of cultivation: the individual beauty of each is so decided, that it is unnecessary to select or point out any as the most attractive. The JP. carnea^ here represented, possesses a considerable degree of delicacy in colour, which partakes in some degree of an intermediate tone between the reds, purples, and blues, of others of this genus. In still further recommendation of this ornamental herbaceous plant, its style of growth is interesting, and its flowers continue in succession during the months of June and July. It flourishes in a border of rich mellow earth, rotten leaves, and garden mould; it sometimes requires watering in the summer season, excessive drought being injurious. It may be propagated by cuttings, or by separating the root; the former method is preferable. The cuttings should be taken about the end of June, and must be the young shoots near the surface of the ground: if they be placed under a hand-glass, kept partially shaded for a short time, and occasionally watered, they will strike freely, and become good plants for bedding out the following spring.

This plant was introduced in 1816. The figure was taken from Messrs. Buckingham and Chandler's Nursery, Vauxhall.

REFERENCES TO THE PLATE.

^{1.} CoroH.i cut open, showing the insertion of the stamens.

^{2.} Calyx and pistil.



17.

AZALEA PONTICA.

Yellow Azalea.

PENTANDRIA.

MONOGYNIA.

Class 5.

Order 1.

AZALEA: A£aAeof, dry; from its growing in a dry soil.

Linn. gen. $n.2\2$. Linn. spec. 1669.

GENERIC CHARACTER.

Cat. Perianth five-parted, acute, erect, small, coloured, permanent. Cor. monopetalous, bell-shaped, semiquinquefid; the sides of the divisions bent in. Stam. Filaments five, filiform, inserted into the receptacle, free. Anthers simple. Pist. Germ roundish. Style filiform, the length of the corolla, permanent. Stigma obftise. Per. Capsule roundish, five-celled, five-valved. Seeds many, roundish.

SPECIFIC CHARACTER.

Leaves shining, lanceolate, smooth on both sides j racemes terminal.

STEMS branching, woody, rising to the height of from six to eight feet in this countiy. Leaves green, tinged with brown on their upper surface, oblong, and alternate. The flowers are yellow, in clusters, at the extremity of the branches; corolla tubed, opening at the top into five segments; the stamens and pistil projecting beyond the corolla. A nthers simple, with pollen of a rich brown. Style filiform, extending beyond the stamens. Stigma obtuse, green.

This splendid family of shrubs is of modern introduction into the gardens of this country. The beauty not **only of the**

many hardy species of this genus, but of the numerous varieties that art has produced, entitle these shrubs to rank among the most ornamental plants that decorate the garden; indeed they already appear conspicuous in every good collection. The *A. pontica*, together with a fine white variety that has been raised- from it, may be recommended for their delightful odour as well as for their beauty. Assemblages of the species and varieties of this shrub produce most pleasing effects in appropriate parts of the pleasure-ground; the numerous shades of red, scarlet, pink, white, and orange, which these flowers afford during the months of May and June, produce a sort of enchantment upon the beholder.

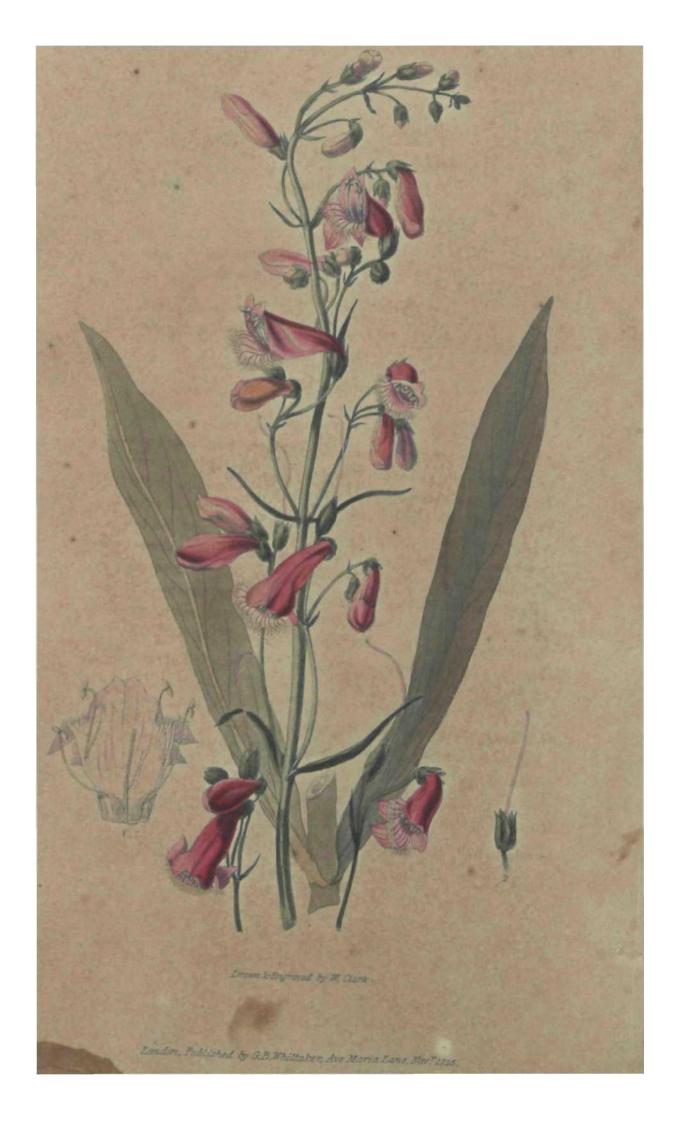
"But who can paint Like Nature? Can imagination boast, Amid its gay creation, hues like hers? Or can it mix them with that matchless skill, And lose them in each other, as appears In *every* bud that blows?"

In the American borders, among the *Kalmia*, *R7iododendron*₉ and others of this, beautiful tribe, the *Azalea* will be found highly ornamental.

Some singular accounts have been given respecting the medicinal properties of *A. pontica*. Professor Pallas relates, that bees frequenting the flowers of this plant produce honey supposed to be narcotic; and that cows, goats, and sheep, have been poisoned in consequence of feeding on its leaves. It is said in the journals of Mr. Anthony Hove, that a Tartarian farmer subsisted entirely upon the profits of honey produced by bees from this plant, which he sold at Constantinople and other parts of Turkey for medicinal uses.

The hardy Azaleas are all deciduous shrubs, and flower during the months of May and June: they are propagated by seeds and by layers. The latter process is the more expeditious; for the plants thus raised will frequently flower the first year after being removed from the shoot or mother-plant.

The A. pontica is a native of Pontus, and was introduced in 1793.



CHELONE BARBATA.

Bearded Chelone.

DIDYNAMTA.
Class 14.

ANGIOSPERMIA. Order 2.

CHELONE: from *^eXcvyyj, a tortoise*; supposed to be from the corolla bearing some resemblance to the vaulted form of the tortoise-shell.

Linn. gen. n. 7.48.

GENERIC CHARACTER.

Cat. Perianth one-leafed, five-parted, very short, permanent -, divisions erect, ovate. Cor. monopetalous, ringent. Tube cylindric, very short. Throat inflated, oblong, convex above, flat beneath. Border closed, small. Upper lip obtuse, emarginate; lower almost equal to the upper, very slightly trifid. Stam. Filaments four, hid beneath the back of the corolla. Anthers incumbent. The rudiment of a fifth filament, like the point of a dagger, between the upper pair of stamens. Pist. Germ ovate. Style filiform, situation and length of the stamens. Stigma obtuse. Per. Capsule ovate, two-, celled, longer than the calyx. Seeds very many, roundish, surrounded with a membranous wing.

SPECIFIC CHARACTER.

Root-leaves petioled, spatulate-lanceolate, quite entire. Stem-leaves lanceolate, sessile: peduncles long; lower tip of the corolla bearded.

ROOT perennial. Leaves opposite. Flowers scarlet, nodding in a-terminal panicle; partial peduncles two, three, or four-

flowered; segments of the calyx obtuse; lower lip of the co-▶ rolla with three acute reflexed segments; inner part of the throat clothed with a dense yellow pubescence.

The delicacy and grace of this herbaceous plant will ever be found sufficient to induce the lovers of flowers to give it a conspicuous place in the herbaceous border. The singular formation and pendent position of its little tubular flowers, the handsome pyramidical form produced by each stalk, and the height to which the centre stalk of the established plant will rise, often six feet, surrounded by other stalks of weaker and shorter growth, producing a succession of blooms for nearly two months, render this plant truly interesting.

It thrives well in common garden mould, but will grow luxuriantly with a portion of loam. As it does not perfect its seeds in this country, it must be increased by dividing the root, or by cuttings; which latter method will answer very well by taking the young shoots and placing the cuttings under a hand-glass.

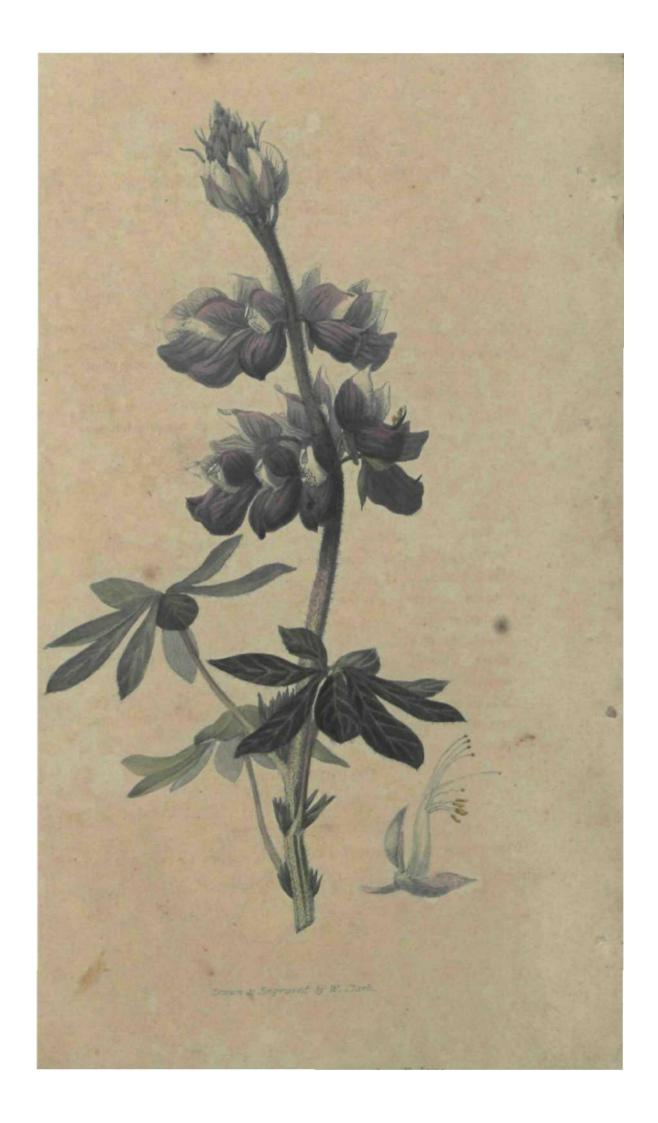
It is a native of Chili, and was introduced in 1793.

REFERENCES TO THE PLATE.

1. Corolla cut open, showing the insertion of the stamens 5 and

barren filament.

2. Pistil find calyx.



LUPINUS NOOTKATENSIS,

Nootka-Sound Lupine.

DIADELPHIA.

Class 17.

DECANDR1A.

Order 4.

LUPINUS: so named by Pliny and other ancient writers. Vossius gives the derivation of this name from *lupus*, a wolf j because plants of this genus ravage the ground by overrunning it after the manner of that animal:—or from *Xvtr*), *grief*; whence Virgil's epithet, *tristes lupini*; from the fanciful idea of its acrid juices when tasted producing a sorrowful appearance in the countenance.

Linn. gen. n. 865.

GENERIC CHARACTER.

Cat. Perianth one-leafed, bifid. Cor. papilionaceous. Banner cordate-roundish, emarginate, bent back at the sides, cqmpressed. Wings subovate, almost the length of the banner, not fastened to the keel, converging below. Keel two-parted at the base, sickle-shaped upwards, acuminate, entire, the length of the wings, narrower. Stam. Filaments ten, united, somewhat ascending, distinct above. Anthers five, roundish, and as many oblong. Pist. Germ awl-shaped, compressed, villose. Style awl-shaped, ascending. Stigma terminating, blunt. Per. Legume large, oblong, coriaceous, compressed, acuminate, one-celled. Seeds several, roundish, compressed.

SPECIFIC CHARACTER.

Flowers in whorls. Leaves and stem villose.

ROOT perennial. Stem from eighteen inches to two feet in height, closely covered with a fine hairiness. Leaves on foot-

stalks, divided into eight or ten digitate leaflets, terminating in points, and of a dark green, veined, and minutely haired. The flowers in whorls round the peduncle, and continue opening in succession, commencing at the bottom.

L. Nootkatensis and L. perennis are the only hardy herbaceous perennials in the genus; the others are annuals. The NootJcatensis is a showy plant for the herbaceous ground as well as for the front of the shrubbery, as it will readily establish itself in common borders, and flowers freely in the month of June. It differs in style of growth from the annual species, being more compact in habit, brighter in colour, and more decided in the opposition of the blue and white. It grows about two feet and a half in height. Where this plant is established, the seeds which drop will produce numerous young plants, provided the ground be not disturbed: should an increase be required, these may be transplanted into beds in the spring, and the following year they will flower.

This plant was introduced in 1795: it is a native of Nootka-Sound, from whence has originated its specific name.

REFERENCE TO THE PLATE.

Calyx, stamens, and pistil, magnified.





TIGRIDIA OXYPETALA.

Sharp-petaled Tiger-flower.

MONADELPHIA. **Class 16.**

TRIANDRIA. Order 1/

TIGRIDIA: from the petals being spotted like a tiger.

GENERIC CHARACTER.

Cal. Spathes one or two-flowered. Cor. Petals regularly divided into six; three exterior large and ovate, three interior smaller and seated round the base. Stam. Filaments three, attached, forming a tube round the pistil. Anthers oblong. Pist. Germ long, three-cornered. Style simple, erect. Stigmas three. Per. Capsule three-cornered, three-celled, three-valved. eb»-long, numerous, roundish.

SPECIFIC CHARACTER.

Glaucous -, segments of the corolla ovate, acute.. Style somewhat longer than the anthers -v divisions of the stigma davate.

ROOT bulbous, producing stems about eighteen inches high.

Leaves plaited, sheathing the stem at the base, sometimes longer than the stem. Spathe two-leaved, compressed, containing one or two flowers; corolla formed somewhat like a cup. The petals are six in number, alternately large and small, and are longer and more pointed than in Z! pavonia, in which the segments are cuneiform and acuminate, the style shorter than the anthers, and the divisions of the stigma subulate. In T. oxypetala the style rises above the anthers.

This splendid though curious plant was last year introduced from Mexico into this country. The rich orange-coloured petals, studded with dark-crimson irregular spots in the cup, will certainly cause it to be ranked for beauty at least on a par with, if not superior to, the T. pavonia, which has long been an acknowledged favourite. In groups, these flowers will give considerable splendour to the garden; singly, their beauty might be lost: intermixed groups of the two species would have a truly brilliant appearance. These two bulbs are alike hardy, and produce their fleeting blossoms about the same season, from the beginning of July until late in the autumn. Were it not for a succession of bloom, the Tigridia, notwithstanding its beauty, would fail to excite the interest of the botanist or the amateur; for the flowers no sooner expose themselves to view, than they begin to fade: a sultry day shortens the showy reign of this ephemeral flower to a few hours; its transitory existence impresses the beholder with regret, who cannot

> "" unpitying see the flowery race, Shed by the morn, their new-flushed bloom resign Before the parching beam."

This plant may be increased in the same manner as *T. pa-vonia*, by seeds and by roots: the bulbs flower much better if forwarded in pots ere they be planted out. In the autumn they should be taken out of the ground and placed hi a dry and airy situation, and protected against frost.

The *T. oxypetala* has this season flowered and perfected its seeds at the nursery of Messrs. Allen and Rogers, King's Road, from whence the drawing of the present figure was made.



BIGNONIA RADICANS

Ash-leaved Trumpet-flower.

DIDYNAMIA. Class 14.

ANGIOSPERMIA.
Order 2.

HIGNOXIA: so named by Tournefort in compliment to Abbe liiguon. librarian to Louis XIV.

Linn. gen. n. 759. Linn. spec. 871.

(JEKEKIC CHARACTER.

f.'ttl. Perianth one-leafed, erect, cup-form, five-cleft. Cor. mono-petalous, campanulate. Tube very small, the length of the calyx. Throat very long, ventricose beneath, oblong-campanulate. Border five-parted, the two upper divisions reflex, lower patulous. Stain. Filaments four, subulate, shorter than the corolla; two longer than the other two. Anthers reflex, oblong, as it were doubled. J*ist. Germ oblong. Style filiform, situation and form of the stamens. Stigma capitate. Per. Silique two-celled, two-valved; partition membranaceous, parallel, thickened at the sutures. Seeds very many, imbricate, compressed; membrane winged on both sides.

SPECIFIC CHARACTER.

Leaves pinnate j leaflets gashed. Stem with rooting joints.

BRANCHES long and pliant, putting out fibres at their joints for the purpose of attaching themselves to whatever they are growing upon. Leaves opposite at every joint. Leaflets in lour pairs, terminating by an odd one; they niv serrate, and end in a long sharp point. The flowers arc produced at the end of the shoots of the same year, in large bunches; they have long swelling tubes shaped somewhat like a trumpet, whence this plant has the appellation of Trumpet-flower. The corolla is orange.

This climbing shrub possesses peculiar attractions. The splendour of the large and numerous panicles of flowers of various shades of pink and orange with which it is adorned during the month of August, is sufficient to call forth the admiration of the lover of the flower-garden. The luxuriant growth of its branches will be found serviceable for the purpose of obscuring offensive walls, particularly if intermixed with climbing evergreens; the flowers of many of which, being much less showy, are nearly lost at the height to which these plants are at times required to be trained. The splendid flowers of the *B. radicans* will therefore enhance the value of such collections of climbers; and the flowers of each shrub will *add* materially to the delicacy, beauty, and brilliancy of each other.

This shrub is a native of North America, and was introduced in 1640. It is hardy, and may be propagated by layers or by pieces of the root: these should be put in about the beginning of April. The roots should be kept in pots for one year, when they may be planted out. A light sandy earth will be found most congenial to the growth of this shrub, which should be planted against a south or south-east wall.

This figure was drawn from a flourishing specimen which (lowered abundantly against the garden wall at Clarcinont.

REFERENCES TO THE PLATE.

- !. Part of the corolla removed, showing the position of the stamens with the barren filament.
- '2. Pistil,



ACONITUM VARIEGATUM.

Variegated Wolf's-Bane.

POLYANDRIA.

TRIGYNIA.

Class 13.

Order 3.

ACONITUM: supposed to have been derived from Aconee, a city of Bithynia, where it grew in great abundance.

Linn. gen. n. G82. Linn. spec. 750.

GENERIC CHARACTER.

Cal. none. Cor. Petals five, unequal, opposite in pairs. J. The highest helmet-tubed, inverted, the back upwards, obtuse; the top reflected to the base, acuminate, to which top the connecting base is opposite. 2, 3. The two lateral ones broad, roundish, opposite, converging. 4, 5. The two lowest oblong, pointing downwards. Nectaries two, concealed under the first petal, fistulous, nodding, mouth oblique j tail recurved, sitting on long subulate peduncles. Six little very short coloured scales in the same circle of the nectaries. Stam. Filaments subulate, very small, broader at the base, inclining towards the first petal. Anthers erect, small. Pist. Germs three (five), oblong, ending in styles the length of the stamens. Stigmas simple, reflex. Per. Capsules as many as the styles, ovate-subulate, straight, one-valved, gaping inward. Seeds very many, angular, wrinkled.

SPECIFIC CHARACTER.

Flowers with five pistils; divisions of the leaves parted half-way, broader above.

•STEM erect, about two feet high. Flowers in spikes, variegated, sometimes changing to plain. 'Leaves with footstalks placed alternate on the petiole.

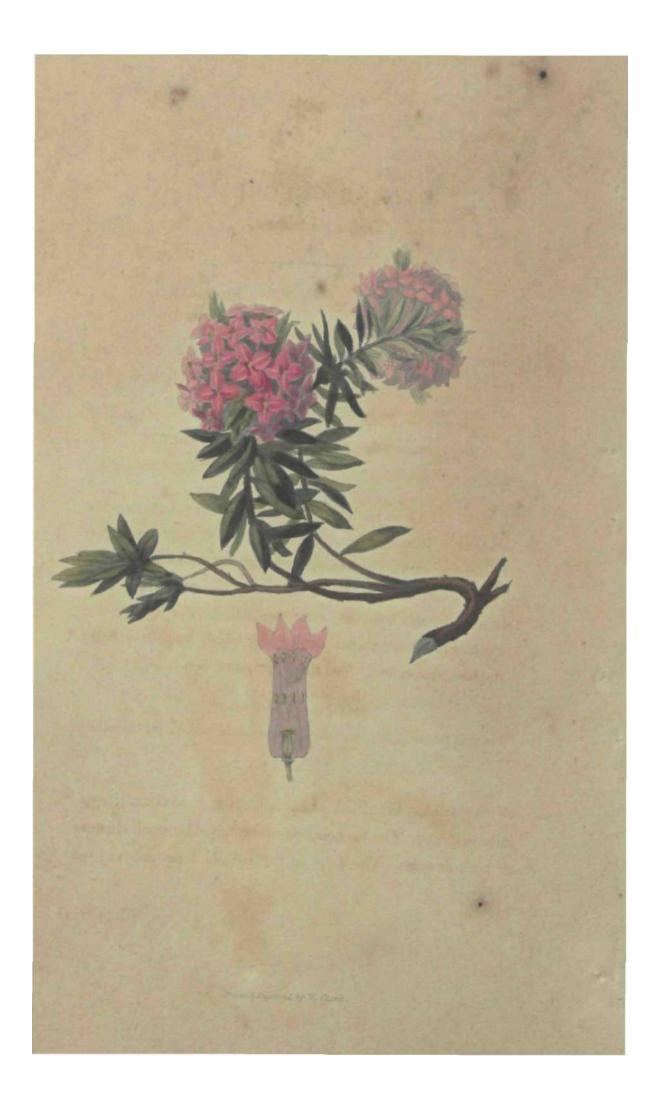
Of the many species of "Aconilum which are cultivated, the A. vcwieirahim is the most interesting. Its habit of growth is less straggling than that of many others, and it attains the height, of about two feet, bearing a spike of pale-blue flowers striped with white, which appear in the months of July and August. AH the species of Aconilum are considered to be deadly poisonous. The A. ISfapcllus^ or Monk's-Hood, is decidedly the most dangerous: neither the root, the stem, the leaves, nor the flowers are free from this horrid property: it is nevertheless serviceable in JMa£eri<i Mrdica. It is said that the juice of these plants is used by the huntsmen of the Alps for the purpose oi" poisoning their arrows. The A. Napelhis, being much stronger in its growth than the A. varicgatum, is consequently better fitted for the shrubbery; while the latter, being more delicate, is better suited for the flower-beds and herlmceous borders.

This plant is a native of Italy and Bohemia, and was introduced in 1752. It thrives well in light earth, and is increased by separating the roots.

The drawing of this figure was taken at Messrs. Buckingham and Chandler's, Vauxhall.

KKFERENCES TO THE 1'LATK.

- 1. Stamens and pistils.
- 2. Nectaries.



DAPHNE CNEORUM.

Trailing Daphne.

Oc.TANDRIA.
Class 8.

MONOGYNIA.

Order 1.

DAPIINK. *Axtpvv*) of Theophrastus and Dioscorides, after the nymph Daphne, in allusion to her metamorphosis into a laurel; from some of this genus bearing a resemblance to the laurel.

Linn. gen. n. 485. Linn. spec. 511. Linn, si/st. 3/1.

GENERIC CHARACTER.

Cat. none. Cor. one-petaled, funnel-form, withering, including the stamens. Tube cylindric, imperforate, longer than the border. Border four-cleft; divisions ovate, acute, flat, spreading. Stam. Filaments eight, short, inserted into the tube; the alternate ones lower. Anthers roundish, erect, two-celled. Pist. Germ ovate. Style very short. Stigma headed, depressed, flat. Per. Berry-roundish, one-celled. Seed single, roundish, fleshy.

SPECIFIC CHARACTER.

Flowers in bunches, sessile. Leaves lanceolate, naked, mucronate.

STEMS slender, branched. Leaves narrow, lanceolate, irregularly disposed. The branches are terminated by small clusters of pink flowers. The tube of the corolla long and narrow.

The leaves are sometimes acute, sometimes obtuse and emaigmate.

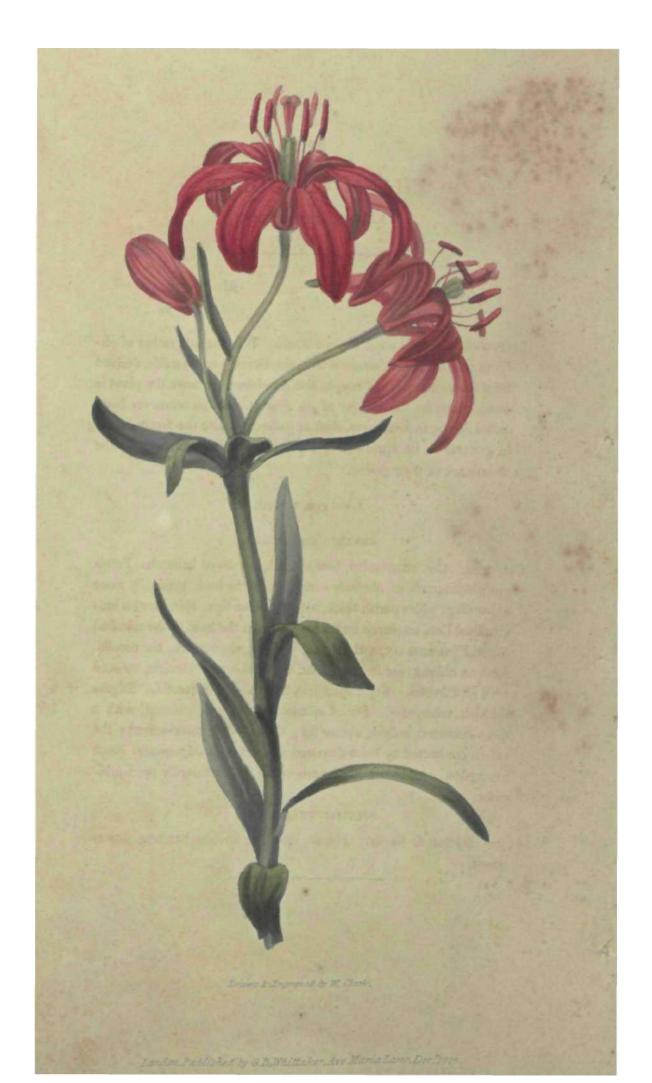
To any part of the flower-garden or pleasure-ground the Daphne Cneorum will add grace. This shrub, together with a variety that has been obtained possessing variegated leaves, are well suited for decorating rock-work, their natural prostrate disposition being in true accordance with such a situation: indeed, the very pleasing effect and the excellent relief produced by the judicious introduction of rock-work have been the means of raising many small plants from obscurity. However correct this remark may be, it is not so applicable to the D. Cneorum as to many other dwarf plants; for the delicacy of its growth, the fragrance of the flowers, and the modesty of the height to which this interesting shrub attains, adapt it more particularly for ornamenting the front of flower-beds. It flowers during the month of May, producing a profusion of pink flowers in clusters: it will also frequently flower a second time during the autumn, but neither so profuse nor so luxuriant as in the spring.

This shrub does not perfect its seeds in this country, but is readily propagated by laying performed in the spring. It grows well in peat earth, or in a mixture of peat and loam.

It is a native of the Alps of Europe, and was introduced in 1739.

REFERENCE TO THE PLATE.

Corolla magnified and expanded, showing the insertion of the stamens in the throat.



LILIUM CONCOLOR

One-coloured Lily.

HEXANDTIIA. Class 6.

MoNOCiYNIA.
Order 1.

LILIUM of Pliny and other Latin authors. This name is rather of obscure origin: some deduce it from the Greek \eipiov, a lily, derived from Xeiog, smooth, not rough, also handsome, because the plant is conspicuous for the beauty of its flowers. It has moreover been called xpivov, from xpipvov, dust or pollen, because the flowers seem in general to be sprinkled with a powdery substance, from the abundance of their pollen.

Linn. gen. n. 410.

GENERIC CHARACTER.

Cal. none. Cor. six-petaled, bell-shaped, narrowed beneath. Petals upright, incumbent, obtusely carinated on the back, gradually more expanding, wider 5 with thick, reflex, obtuse tips. (Nectary: a longitudinal line, engraven on each petal from the base to the middle.) Stam. Filaments six, awl-shaped^, upright, shorter than the corolla. Anthers oblong, incumbent. Pist. Germ oblong, cylindric, striated with six furrows. Style cylindric, length of the corolla. Stigma thickish, triangular. Per. Capsule oblong, six-furrowed, with a three-cornered, hollow, obtuse tip; three-celled, three-valved; the valves connected by hairs disposed in a cancellated manner. Seeds numerous, incumbent in a twin order, flat, outwardly semi-orbicular.

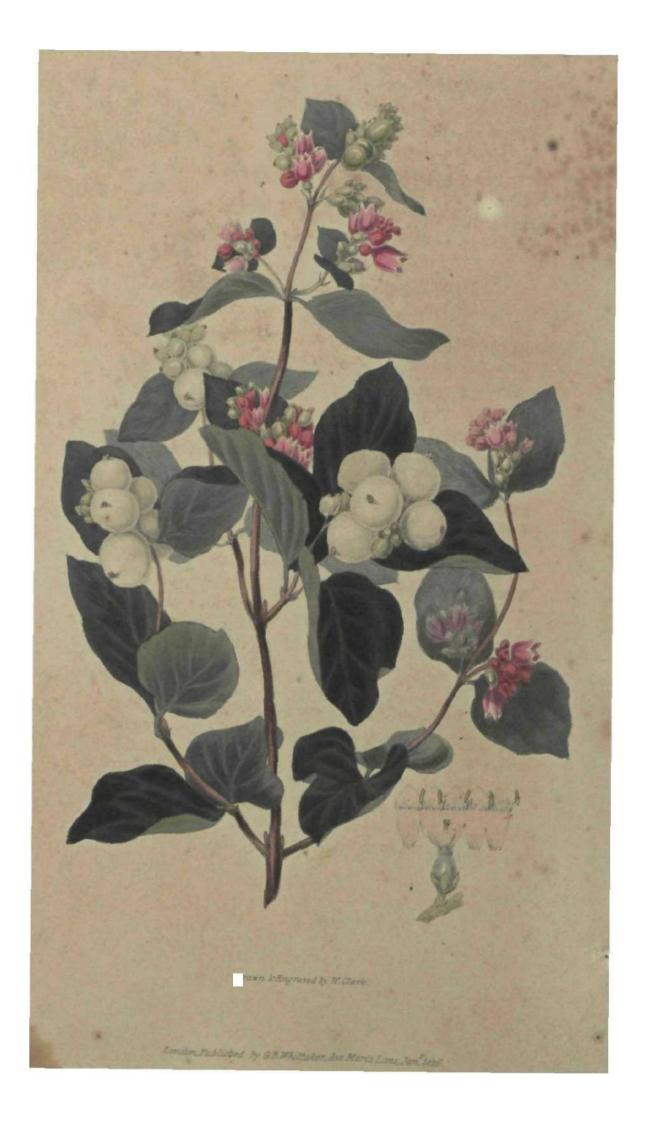
SPECIFIC CHARACTER.

Leaves scattered, linear. Flowers upright j corolla bending downwards.

ROOT bulbous. Stem about two feet in height, terminated with two or three scarlet flowers. Leaves alternate, deep green, paler underneath, linear-lanceolate, and smooth; to-wards the top of the stem somewhat verticillate. Petals six, brig-lit scarlet. Filaments red. Anthers scarlet, larsre, and incumbent. Pollen scarlet.

This bright scarlet flower was introduced from China in 1804, and although increased with facility has not yet become common in our gardens; but its beauty and free disposition to flower doubtless render it worthy of general cultivation. It possesses attractions more pleasing and interesting than many others of this family, though less conspicuous or gaudy: it appears unassuming and modest near those species which are of a more luxuriant habit of growth, while the brilliancy of its colour will cause it to shine in contrast to many delicate and dwarf herbaceous plants. It grows to the height of three or four feet, and when planted in light sandy earth will flower freely in the month of July, adding materially to the splendour of the flower-bed. It is increased by offsets from the roots, which, if taken off in October and bedded, will produce flowers the second year.

This figure was drawn from a specimen which flowered in a pot at the nursery of Mr. Brooks, Ball's Pond, Islington.



SYMPHORIA RACEMOSA, Snow-berry St. Peter's Wort.

PENTANDUIA. Class 5.

MONOGYNIA. Order 1.

, formerly called *Symphoricarpos*; from <*rvp*(*popEUj*, *to cluster* or *accumulate*, and *Kocpirog*, *fruit*.

Persoon Syn. 1. p. 214. Bot. Mag. 2211.

GENERIC CHARACTER.

Cat. Perianth superior, five-parted. Cor. campanulate 3 limb five-tleft, obtuse 5 faux filled with hairs, below which the tube abounds with honey. Stam. five, inserted at the upper part of the tube, shorter than the corolla. Pist. Germ ovate, with two or three small bracteas applied close to its base. Style filiform, length of the corolla. Stigma obtuse. Per. Berry two-celled. Seeds one in each cell, kidney-shaped, compressed.

SPECIFIC CHARACTER.

Irregularly branched, terminated by corollas bearded within.

A LOW bushy shrub; bark of the branches brightish-brown. Leaves opposite, round, ovate, with a mucro; mostly quite entire, but on the lower part of the shrub sometimes irregularly notched, smooth, glaucous. Flowers grow on the slender terminal branches in pairs, at first distant, but towards the extremities crowded together, supported 011 very short pedicles; sometimes the branches become leafy beyond the flowers.

The delicate appearance of this little shrub might induce the observer to suppose that its habit of growth was equally delicate. It is, however, a hardy shrub, and may be recommended not merely for this property, however desirable, but for the beautiful tints with which it is adorned in every part: die rich brown shining stem, furnished with dark-green leaves, yielding an excellent relief to the beautiful bunches of little, pink flowers, and to the more massy groups of white berries, which thickly beset this interesting shrub,

"where fruits and blossoms blush In social sweetness on the self-same bough,"

from the early part of July until the end of October, produce ii pleasing variety and contrast rarely to be seen in any other individual plant. No greater proof can be given of the delight excited by this little shrub in the lovers of plants, than that it is cultivated generally in the nurseries, and that although introduced so recently as 1817, it already adorns every collection where beauty is made a prominent feature. About the banks of the Missouri this elegant plant is found growing in abundance. It may be raised from seeds in this country; but the more preferable and expeditious mode of increasing will be by laying: the layers should be put down in a somewhat sandy earth about the beginning of April; and when separated from the original plant in the following spring, they may be planted in the common shrubbery borders, provided the earth be not too stiff. The specimen for this figure was from Messrs. Buckingham and Chandler's Nursery, Vauxhall.

TO TIIK PLATE.

Magnified section of the corolla, gcrm_, and calyx,



SPICELIA MARILANDICA

Perennial Worm-grass.

PENTANDRJA.
Class 5.

MONOGYNIA.
Order 1.

A: so named by Linnaeus in memory of Adrian

Spigdius, professor of anatomy and surgery at Padua.

Linn. gen. n. 209. *Linn, si/st.* \97.

GENEIIIC CHAKACTKR.

Cal. Perianth one-leafed, five-parted, acuminate, small, permanent. Cor. one-petaled, funnel-shaped; tube much longer than the calyx, narrowed below 5 border spreading, five-cleft 5 segments wide, acuminate. Stain. Filaments five, simple. Anthers simple. Pist. Germ composed of two globes, superior. Style one, awl-shaped, length of the tube. Stigma simple. Per. Capsule twin, two-celled, four-valved. Seeds numerous, very small.

■SPECIFIC CHARACTER.

Stem four-cornered, all the leaves opposite.

HERBACEOUS perennial root, producing two or three erect stems, about nine inches in height, with three or four pairs of acute-pointed leaves, placed opposite, seated close to the stalk, smooth, entire, and having several veins diverging from the midrib. The slem is terminated by a short spike oi llowers ranged on one side of the footstalk. Calyx short, cut into live acute segments. The outside of the flower is of a deep crimson, ami the inside of a pink, with the five segments of the corolla of a yellow colour. Stem simple, rugged, quadrangular, rigid, annual. Leaves opposite, sessile, ovate-lanceolate, entire, smooth, spreading. Spike generally solitary, with small opposite bracteas.

Of the genus *Spigelia* only two species are cultivated in this country. The plant here figured is the more interesting: its spikes of rich scarlet flowers add great beauty to the garden during the months of June and July. The roots of this herbaceous perennial arc sold for medicinal purposes under the names Worm-grass or Pink-root; and Woodville's Medical Botany mentions this species of *Spigclia* as a very efficient vermifuge. This plant is somewhat delicate, and will not ripen its seeds in this country; the only mode of propagation is by separating the roots, and this process is rather slow: it is not therefore probable that this showy flower will ever appear very common in our gardens.

It is a native of Virginia, Maryland, and Carolina, where it is called Indian Pink. It was introduced into this country in $69\pm$. The drawing of this figure was made from a specimen flowering in the gardens of Sion House, the seat of 11 is Grace the Duke, of Northumberland.

REFERENCE TO THE PLATE.

Corolla cut open,, showing the position of the stamens and pistil, also where the germ is attached to the calyx.



HELIANTHUS ATRORUBENS.

Shagreen-leaved Sunflower.

SYNGENESIA. Class 19.

POLYGAMIA FRUSTRANEA. Order 3.

HKLIANTHUS: from 'HAJOS, the Sun, and otvQos, ajlower.

Linn. gen. n. 979. Linn. spec. 1279. Hort. Kew. 5.

129.

GENERIC CHARACTER.

Cal. common, imbricate, somewhat squarrose, expanded -3 scales oblong, broadish at the base. Cor. compound radiate; corollets hermaphrodite. numerous in the disk: females fewer. very much longer in the ray. Stain, in the hermaphrodites: filaments five, curved, inserted below the belly of the corollet, the length of the tube. Anther cylindric, tubular. Pist. in the hermaphrodites: germ oblong • style filiform, length of the corollet j stigma two-parted, reflex: in the females, germ very small; style and stigma none. Per. none. Calyx unchanged. Seeds in the hermaphrodites solitary, oblong, blunt, four-cornered, compressed at the opposite angles; the inner ones narrower, crowned with two lanceolate, acute, deciduous chaffs: in the females none. Recept. chufFy, large, flat; chaffs lanceolate, acute, two separating each seed, deciduous:

SPECIFIC CHARACTER.

Leaves opposite, spatulate, crenate, triple-nerved, scabrous; culycine scales erect, the length of the disk.

STEM from two to three feet in height, round, dusky, purple, rough, with numerous small hairs. Root-leaves flat, hairy,

snuillt*r than those on the stem, which art twisted and waved, especially towards the end, rough and hairy. The disk of the flower dark-red; floscules in the ray, yellow, marked with a few lines, pointed and entire.

The coarse and vulgar appearance, together with the strong-growth of some of the Sunflower family, have long excluded them from ornamental flower-beds; but the species here figured possesses beauties which its brethren cannot equal. Its habit of growth is more delicate and graceful than that of many others in the *Ilclianthus* genus; the steins rise to the height of three feet, supporting solitary yellow flowers, with dark-red or brown disks. In the herbaceous border it is generally admitted, where its large flowers and leaves will increase at least in appearance the delicacy of the snialler and more tender plants. Darwin, alluding to the peculiar property of the *Ilclianthus* genus, thus expresses himself:

"Great *Ilelianihus* guides o'er twilight plains In gay solemnity his dervise-trains -7 With zealous step he climbs the upland lawn, And bows in homage to the rising dawn; Imbibes with eagle eye the golden ray, And watches, as it moves, the orb of day."

This species is frequently, though erroneously, named *Ilclianthus* glauca or Pascalia Virginica*

It is a native of Carolina, was found growing plentifully in Upper Louisiana by Mr. Nuttall, and has been seen in Pennsylvania and Virginia. It was introduced into this country in 1732, and is to be increased by separating the roots: the seeds will not come to perfection in this country, although the plant will grow and flower freely from July till October in light garden mould. This specimen was figured from Messrs. Buckingham and Chandler's, Vauxhall.

BKFERKN'CES TO THE PJ.ATi;.

- 1. Floret unopened, magnified.
- 2. Floret expanded, showing the stamens ar.d pistil.



FUMARIA EXIMIA Choice Fumitory.

DIADELPHIA.

HEXANDRIA.
Order 2.

Class 17.

A: from fumus, smoke, because this herb effects the eyes like* smoke; hence also its Greek name Ka?r>0£.

Dot. lieg. 50.

GENERIC CHARACTER.

Cal. Perianth inferior, of two equal, small leaves, mostly deciduous, often coloured. Cor. tubular, ringent, of two petals, each lobed and spreading at the extremity, gibbous, and holding honey at the base, variously formed in different species. Stam. Filaments six, capillary, united into two sets by their broad, elongated, membranous bases, sheathing the germen. Anthers small, roundish, vertical. Pist. Germen roundish or oblong. Style curved or oblique. Stigma obtuse. Per. Pod of two valves and one cell. Seeds one or more, roundish.

SPECIFIC CHARACTER.

Leaves tritcrnate. Stein erect, naked.

PERENNIAL root, which produces several stems about a foot and a half in height, terminated with numerous pink flowers at the cxlrcmily, which conic out on short peduncles. Leaves of a blue green on the upper surface, of a paler green underneath; they are on long stalks, springing from the base, and surrounding the flower-stalk.

The leaves of this graceful little plant form a handsome cluster close to the ground; while the flower-spikes, which rise to the height of about eighteen inches, are plentifully adorned with blooms during the months of May and June. The handsome style of growth renders this plant truly serviceable and a great favourite either for borders of flower-beds or for tufts; the latter of which become compact and very ornamental when the plant is well established. The seeds rarely come to perfection in this country; but by separating the roots in the spring the plant is easily increased. Light garden mould suits the nature of this herbaceous perennial.

It was introduced in 1812 from North America.

This interesting genus of plants has been divided into two other genera, *Cj/sticapnos* and *Corydalis*, among which latter is included the plant here figured. The old name is however here retained, as that by which the plant is better known.

Some of the species of this genus are noticed in the Pharmacopoeias. The *Fumaria afficinalis*, or Common Fumitory, is used in cutaneous diseases, but no mention is made of the present species as being in any degree serviceable in the Ma-teria Medica.

REFERENCE TO THE PLATE.

Stamens and pistil magnified.



DELPHINIUM MESOLEUCUM. White-eyed Larkspur.

PoLYANDRTA.

THIGY.INTfA.

Class 13.

Order 3.

DELPHINIUM (AEA^JWOV of Dioscorides): from a fancied resemblance of the flower, before it opens, to a dolphin.

Linn. gen. n. 681. DeCandolle Pro. Link's Hart. Her. 2. p. 80.

Syst. Veg.p. 55.

GENERIC CHARACTER.

Cal. none. Cor. Petals five, unequal, disposed in a circle \$ of which the uppermost is more obtuse than the rest in front, and is extended behind into a tubular, straight, long, obtuse horn: the rest ovate, lanceolate, spreading, nearly equal. Nectary two-cleft, seated in front within the circle of petals on the upper part, behind stretched out, involved within the tube of the petal. Stam. Filaments very many (fifteen to thirty), subulate, wide at the base, very small, inclined towards the petal. Anthers erect, small. Pist. Germs three or one, ovate, ending in styles, the length of the stamens. Stigmas simple reflex. Per. Capsules as many, ovate-subulate, straight, one-valved, gaping inwards. Seeds very many, cornered.

SPECIFIC CHARACTER.

Leaves spreading out from the base, cut in the form of wedges, much serrated on the edge; the *peduncles* finely covered with hair.

ROOT perennial, fibrous, from which branches three or four stalks, round, furnished with leaves alternately situated, and a spike of flowers at the extremity, rising to the height of about two feet. Leaves deeply cut into lobes, and irregularly pointed segments, supported on short footstalks. The flowers terminating the stems are of a beautiful bright blue, with a white eye: they are alternately placed round the stem, forming a kind of spike from six to nine inches in length.

It may be considered somewhat remarkable that this plant has not become more generally cultivated;—that it has decided claims to beauty will be undeniable. The attractions this flower possesses are certainly as great as those of the other species of *Delphinium*; yet it is scarcely known, or very rarely seen decorating the herbaceous flower-bed: it has nevertheless been introduced into this country for some length of time, but that period cannot be correctly ascertained; neither is it known from whence it was introduced. During the months of June and July the garden will most certainly be beautified by the addition of a plant like this; no difficulty of propagation can be urged as a reason for its exclusion from the flower-bed, for it may be increased by separating the root as well as by seed. The seeds should be sown in June, and the young plants should be planted in beds: they will become so far established by this means during the autumn, that in the following spring they may be transplanted into the borders. A mellow and light soil of decayed leaves find vegetable The mould is the earth in which this plant delights. specimen from which this drawing was made, flowered at Mr. Lee's Nursery, Hammersmith.



AZALEA NUDIFLORA 0 COCCINEA.

Scarlet Azalea.

PENTANDRIA.

MONOGYNIA.

Class 5.

Order 1.

Linn, gen. n. 212. Linn. spec. 214. Persoon Syn. 1. p. 212.

GENERIC CHARACTER.

Vide Azalea pontica. PL 17.

SPECIFIC CHARACTER.

Leaves ovate. Corollas hairy. ^'-amena very long.

STEM branched. Leaves oblong, smooth, alternate, petioled. The peduncles are axillary, long and naked, supporting a cluster of red flowers, which are tubulous, swelling at their base like those of the Hyacinth, and contracted at their neck; divided at top into five equal segments, spreading open. The stamens and style project beyond the corolla and stand erect. Although one^,of the species of this family of shrubs has already appeared in this publication, yet the beautiful and interesting variety of them will be sufficient to justify the early representation of another of the genus. Intermixed with the Rhododendron, Kalmai, Ledum, &c, these shrubs appear to the greatest advantage; the diversity of their foliage and bloom,

and the continued succession of flowers, present the most lively and handsome assemblage that plants are capable of producing: added to which, as these shrubs (denominated American shrubs) sustain their leaves during the winter, they are well calculated when planted in groups to add a great degree of cheerfulness to the pleasure-ground and arboretum, in that dreary season when little verdure is otherwise to be expected. Notwithstanding the many excellent properties and powerful attractions of the Azalea tribe, they will, like the rest of the American shrubs, be most probably ever limited in their cultivation; the peculiar peat-soil in which they thrive will however be obtained by those who delight in a good collection of ornamental shrubs.

As these species rarely produce seed, the propagation must be effected by laying. The beginning of April is the proper season for commencing this operation. The present shrub was introduced into this country in 1729. It is in its greatest splendour during the month of May. It is a native of Switzerland, where it grows in great profusion among the mountains; and the smallest portion of earth is found sufficient to yield it sustenance.



CENOTHERA MISSOURENSIS.

Large-fruited CEnothera.

OCTANDRIA.
Class 8.

MoNOGYNIA.
Order 1.

CENOTHERA: from OivoQypr} or OivoQypocs of Theophrastus.

Linn. gen. n. 469.

GENERIC CHARACTER.

Cal. Perianth one-leafed, superior, deciduous: tube cylindrical, erect, long, deciduous: border four-cleft; the segments oblong, acute, bent down. Cor. Petals four, obcordate, flat, inserted into the interstices of the calyx. Stam. Filaments eight, awl-shaped, curved inwards, inserted into the throat of the calyx, shorter than the corolla. Anthers oblong, incumbent. Pist. Germ cylindrical, inferior. Style filiform, the length of the stamens. Stigma four-cleft, thick, blunt, reflex. Per. Capsule cylindrical, four-cornered, four-celled, four-valved, with contrary partitions. Seeds very many, angular, naked. Receptacle columnar, four-cornered: with the angles contiguous to the margin of the partitions.

SPECIFIC CHARACTER.

Leaves lanceolate, veined. Petals serrated. Capsule elliptic, angular.

STEMS branched, prostrate, and of a fine purple; the leaves are seated close on the stem: the flowers appear at each joint; the petals are supported on a long tube somewhat resembling *longiflora*; calyx spotted; the capsules are seated close to the leaves.

This interesting dwarf plant has been described as a biennial; and though it will be found to live and (lower for more than two years, yet its existence is but of short duration; it would tV^{reforc} better support the appellation of a short-lived The present plant and the CE, macrocarpa perennial. have been imagined by some persons to 1/2 -he same; the flowers of both are similar in appearance and colour, but the straggling habit of growth and the narrowness of the leaves of the *missourensis* will mark a sufficient distinction. During the months of July and August the prostrate brandies of the *missourensis* are abundantly decorated by very numerous and luxuriant yellow flowers, which become truly conspicuous from their size, and particularly so from their being produced on a plant of such humble growth. intermixing this species with the (E. cccsintosa (a plant similar in its habit of growth, but bearing a white flower) a pleasing and beautiful group for ornamenting small beds on a lawn or in a flower-garden may be obtained. The careless mixture of the blooms appearing above the dark green through which the elegantly twining purple stem is casually seen, produces a beauty that every lover of the flower-garden must view with admiration. The rock-work of 've a considerable additional charm a garden will also: by a judicious decoration .vith these elegant little trailing These species of (Enolhera require an earth plants. tolerably rich: mellow loam, rotten manure, and decayed leaves will form a good composition. As there is no certainty of raising a supply by separating the roots, it is advisable to increase these plants by cuttings, which if planted in an earth somewhat sandy, placed under a hand-glass, and partially shaded, will readily strike: they should be kept in pots under the protection of a frame during the first winter, after which they will thrive well in the open border. This species was discovered by Mr. Nuttall growing freely near the banks of the Missouri, from whence it takes its name: it was introduced in 1811. This figure was taken from a specimen flowering at Messrs. Whitley, Brames, and Milne's Nursery, Fulham.



SCHIZANTHUS PORRIGENS.

Spreading Schizanthus.

DIANDRIA. Class 2. MONOGYNIA. Order 1.

SCHIZANTHUS: from crp£i£a;, to cut or cleave, and CLvbos, ajlower; from the laciniated form of the corolla.

Hooker s Ex. Flora 86.

GENERIC CHARACTER.

Cal. Perianth inferior, in five deep, linear, nearly equal, permanent segments. Cor. of one petal, ringent, reversed: tube compressed, the length of the calyx -, upper lip in five deep segments, lower in three. Stam. Filaments four; two of them abortive, villous, under the upper lip (which by the reversed position of the flower stands lowermost); the other two perfect, inserted into the lower lip. Anthers roundish, of two lobes. Pist. Germen superior, roundish. Style thread-shaped, longer than the tube of the corolla. Stigma club-shaped. Per. Capsule ovate, the length of the calyx, of two concave cloven valves, and two cells. Seeds several, kidney-shaped, rough. Receptacle orbicular, compressed, parallel to the valves.

SPECIFIC CHARACTER.

Calyx five-parted. Corolla divided in the upper part into five segments, in the lower into three.

ROOT annual. Stem very much branched, hairy.
Leaves pinnate, deeply divided into segments, slightly hairy;
smaller

towards the extremity of the branches. Flowers divaricated over the whole plant, each supported upon a short pedicel.

Such an elegant little annual as the S. porrigc?isq and one possessing so many attractions, is not generally to be met with: the delicacy of its growth, the multiplicity of its little sparkling blooms variegated with yellow and purple, and set with spots of a richer and darker hue, are charms to be regarded with satisfaction by every admirer of the many beautiful productions of nature. When to such recommendations is added the desirable property it possesses of flowering in the open air for so considerable a length of time as from July until destroyed by the frost, the desire already manifested by botanical collectors to adorn their gardens with this lately introduced beauty will not be considered a favouritism greater than deserved. Much resembling this species is another, S. pinnalus. On examination, however, the distinctions are evident: thepin-natiis is smaller, more upright in its growth, the lips of the corolla are always of an intense purple, the upper petal spotless, the bracteas large and foliaceous, and the footstalks of the fruit quite secund, deflexed from the base, and at the superior extremity singularly curved inwards. The S. porrtgens is raised from seed, which should be sown in pots about the end of February in a moderate hot-bed. When the young plants are sufficiently strong, they should be transplanted into separate pots and be protected till the end of May, at which time they may be planted in the open borders with safety. It thrives well in a soil of two parts peat-earth and one part loam.

This figure was drawn from a specimen which flowered at Mr. Palmer's, Bromley, Kent.



Drawn & Engraved by W. Clark.

POTENTILLA NEPALENSIS Nepal Cinquefoil.

ICOSANDRIA. Class 12. POLYGYNIA. Order 5.

POTEXTILLA: from *potentia*, on account of the root being powerfully astringent.

Linn. gen. n. 634. Hooker s Fl. Ex. 88. Don's Pro. Ft. Nep. p. 233.

GENERIC CHARACTER.

Cal. Perianth one-leafed, flattish, ten-cleft: the alternate segments smaller, reflex. Cor. Petals five, roundish, spreading, inserted by their claws into the calyx. Stam. Filaments twenty, awl-shaped, shorter than the corolla, inserted into the calyx. Anthers elongate. Pist. Germs numerous, very small, collected into a head. Styles filiform, the length of the stamens, inserted into the side of the germ. Stigmas obtuse. Per. none. Iiecept. roundish, small, permanent, covered with seeds, inclosed within the calyx. Seeds numerous, acuminate, wrinkled.

SPECIFIC CHARACTER.

Stem erect, hairy, many-flowered. Leaves pinnate, hairy.

STEM about a foot in height, hairy; at the extremity branching with flower-stalks. Flowers of a beautiful transparent bright red. The radical leaves long, quinate, hairy. Leaflets ovate-lanceolate, regularly serrated. The stem-leaves ternate, and

smaller thnu the others. Stipules situated at the footstalk of the leaves, ovate, large, green.

The introduction of this truly elegant species of JPotentilla was by means of seeds received by Dr. Graham from Nepal, whence they had been transmitted by Dr. Wallich. It flowered in the Botanic Garden, Edinburgh, in July 1823; since which time it has become circulated among many botanical collections, and it will doubtless hold a prominent situation in every bed of herbaceous plants where beauty and elegance guide the selection: in short, by all lovers of delicate and select flowers it requires only to be seen to become cultivated and admired. It will assimilate with the more choice and low-growing herbaceous plants, either in the border or on ornamental rock-work; the succession of its beautiful red flowers, supported on stems about a foot in height, which appear during the months of July and August, adds considerably to its claims. As this plant perfects its seeds in this country, no obstacle is in the way of its being generally cultivated. It thrives well in peat earth, or a composition of decayed leaves and peat.

This specimen was figured from Messrs. Whitley, Brames, and Milne's Nursery, Fulham, where it flowered very profusely in the American beds during the summer of 1825.

REFERENCES TO THE PLATE.

^{1.} Part of the calyx magnified, showing the insertion of the stamens.

^{2.} Pistils, with one stamen attached.



LILIUM POMPONIUM. Pomponian Lily.

HEXANDRIA. Class 6.

MONOGYNIA.

Order 1.

Linn. spec. 434.

GENERIC CHARACTER.

Vide *Lillum concolor*. PI. 24.

SPECIFIC CHARACTER.

Leaves scattered, awl-shaped. Flowers turned down. Corollas rolled back.

ROOT large, yellow, scaly, from which arises an upright stalk about three feet in height, furnished from the base to nearly the top with long narrow leaves having a longitudinal ridge on their under side: they are of a deep green, and terminate in acute points. The peduncle supports from five to nine flowers, each on a short pedicel. The flowers are yellow, with irregular-formed yellow spots almost approaching to lines; they hang down, and the petals are rolled back.

The genus *Lilium* contains many ornamental species remarkable for the great diversity of their colours. The present species, though possessing neither the multiplicity of tints nor

the loftiness of some of the species, is nevertheless graceful, and in height of growth is more desirable as a companion for the generality of herbaceous plants which decorate the flowerbed. It rises to the height of about eighteen inches: the stem from the ground upwards is decorated with closely set leaves ranged with the nicest precision, and is terminated by a cluster of gracefully pendent yellow flowers, in number from six to ten, which are seen in perfection during May and June. There are other species of Lilies which may well be grouped with the present figure, from their being somewhat similar in height of growth but different in colour: of these there are Lilium martagon and Lilium chnlccdonicum\ with their varieties. The root is bulbous, and is readily increased by offsets, which may be planted where they are to remain, as they frequently flower the first year after being taken off. The separating and planting these bulbs should be performed about the middle of March. They will be found to thrive in light garden mould with a small portion of sand.

This bulb is a native of the Pyrenees, and was introduced in 1620. This figure was drawn from a specimen which flowered at Messrs. Buckingham and Chandler's Nursery, Vauxhall.



OROBUS VARIUS.

Party-coloured Bitter-Vetch.

DIADELPIIIA. Class \7.

DECANDTUA.
Order 4.

GENERIC CHARACTER.

Vide Orobus vernus. PI. 4.

SPECIFIC CHARACTER.

Leaves pinnate. winged.

Stipules half-arrow-shaped, entire.

Stem

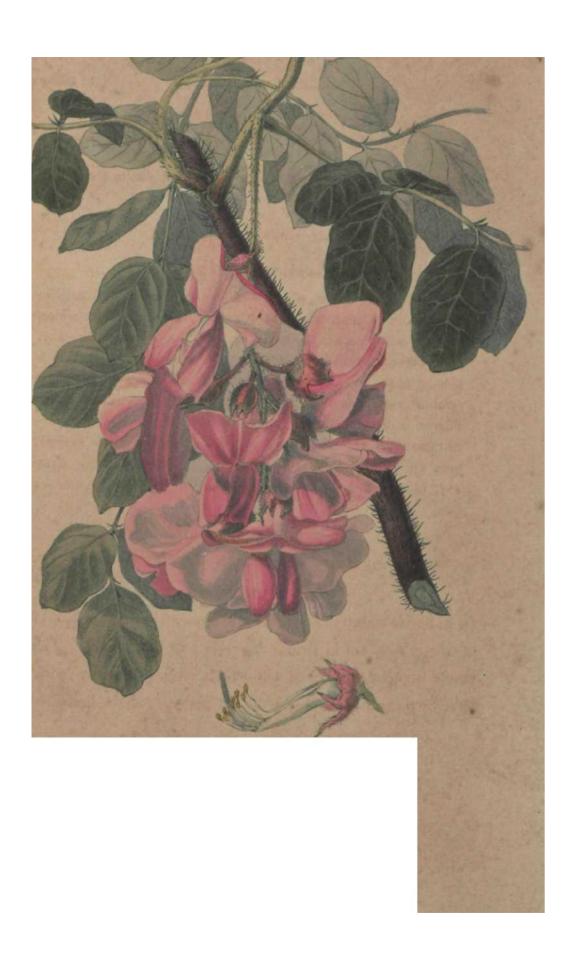
STEM herbaceous, rising from a foot to eighteen inches, much branched, the extremities freely producing flowers of different shades of white, yellow, and red. The stem, from being winged and so much branched, renders this plant easily distinguished from either *angustifolius* or *albus*: the former of these, Linnaeus seems to have confounded with this plant, which not only differs as above, but in the stipules being broader. The flowers appear in clusters of about*six or eight: their calyx red; standard crimson, fading to a pale yellow; wings and keel variegated with yellow and buff.

The diversity of colour displayed by this little herbaceous perennial is rarely met with in any other individual plant. Its delicacy requires it to be placed almost alone, in order that the beauties may be visible: its place in the flower-bed should be in the front, as it would be lost if suffered to be crowded by other plants. The stems rise to the height of about fifteen inches, and are just of sufficient strength to support themselves; they had therefore in general better be supported by small sticks, to prevent injury from wind. These flowers will continue in succession during the months of June and July, possessing the various shades of red, pink, and yellow. They will sometimes perfect their seeds, by which means they are increased. This plant thrives in a tolerably rich earth, composed of peat, loam, and decayed manure.

It is a native of Italy, and was introduced in 1759. The specimen from which this figure was drawn flowered at Messrs. Malcolm and Gray's Nursery, Kensington.

REFERENCES TO THE PLATE.

- 1. Standard.
- '2 & 3. Wings.
 - 4. Keel.
 - 5. Calyx,, stamens, and pistil^ magnified.



ROBINIA HISPIDA

Rose Acacia.

DIADELrHTA.

Class 17.

DECANDRIA.

Order 4.

ROBINIA: SO named in honour of John Robin, botanist to Henry IV. and Louis XIII. of France.

Linn. gen. n. 879. Linn. syst. 688.

GENERIC CHARACTER.

Cal. Perianth one-leafed, small, bell-shaped, four-cleft: the three lower toothlets more slender -3 the upper fourth toothlet wider, scarcely emarginate to the naked eye: all equal in length. Cor. papilionaceous. Standard roundish, larger, spreading, blunt. Wings oblong, ovate, free, with a very short blunt appendix. Keel almost semi-orbicular, compressed, blunt, the length of the wings. Stam. Filaments diadelphous, (simple and nine-cleft,) ascending at top. Anthers roundish. Pist. Germ cylindrical, oblong. Style filiform, bent upwards. Stigma villose in front, at the top of the style. Per. Legume large, compressed, gibbous, long. Seeds few, kidney-form.

SPECIFIC CHARACTER.

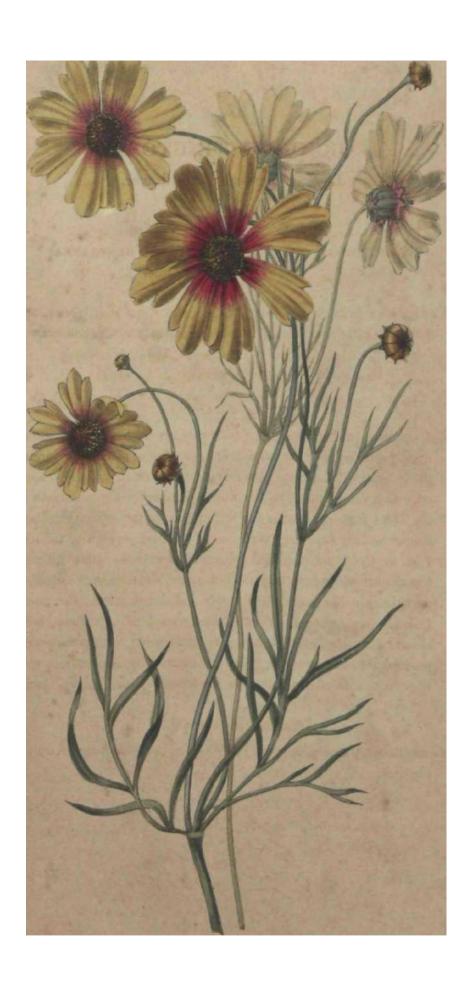
Racemes axillary. Leaves unequally pinnate. Stem unarmed, hispid.

In its native country this shrub will frequently attain the height of twenty feet, but in Britain is rarely half that height. The young branches are armed with closely set brown bristly hairs, in some measure resembling the Raspberry, but the hairs are more evident in this shrub. The leaflets are in six or seven pairs. The peduncles hang down with large clusters of pink flowers, each flower on a separate pedicel. The legumes are flat and oblong.

This shrub from its foliage alone is a truly ornamental plant; added to which, the beautiful racemes of pink flowers with which it is adorned entitles it to be ranked amonir the most ornamental shrubs. The place which it should occupy is the front of the plantation, as its flowers are produced close to the branches, and many of them towards the lower part of the plant; consequently, if it were closely surrounded with taller-growing shrubs, much of its beauty would be lost. It nevertheless must be in a situation somewhat sheltered from the wind, as the branches are of that brittle nature as to be frequently much damaged by it: it is tlirougli this liability to break that this shrub is rarely grown as a standard tree, though when so grown it has a very interesting appearance. Tliesc are obtained through being worked upon the common Acacia with stems about six feet high; and where they can be protected from injury, their introduction in this form is very desirable. In addition to the process of grafting, this shrub is raised from seeds imported from America, to which country it is indigenous. It was introduced here in 1758. It flourishes in a light vegetable earth with a portion of loam.

This figure was drawn from a specimen from Mr. Mackay's, Belgrave Nursery, King's Road.

REFERENCE TO THE PLATE. Calyx, stamens, and pistil.



COREOPSIS TINCTORIA.

Dyeing Tick-seed Sunflower.

SYNGENESIA. Class 19.

POLYGAMIA-FRUSTRANEA.
Order 3.

COREOPSIS: from w.opis > cimex, a bug or tick; and o^//^, fades, appearance; the seeds having some resemblance to these insects.

Linn. gen. n. 981.

GENERIC CHARACTER.

Cal. common, either simple, subimbricate, or doubled; the exterior usually with eight leaflets, which are coarse, and placed in a circle; the interior with as many larger ones, membranaceous, and coloured. Cor. compound rayed: corollets hermaphrodite numerous in the disk: females eight in the ray. Stam. in the hermaphrodites: filaments five, capillary, very short. Anther cylindric, tubular. Pist. in the hermaphrodites: germ compressed; style filiform, length of the stamens; stigma bifid, acute, slender: in the females, germ like the hermaphrodites 5 style and stigma none. Per. none. Calyx scarcely altered. Seed in the hermaphrodite solitary, orbi-culate, convex on one side, concave on the other, with a transverse protuberance at top and bottom, surrounded by a membranaceous edge, with a two-horned tip: in the females none. Recept. chaffy.

SPECIFIC CHARACTER.

Leaves linear, pinnate, opposite; the rays of the flower dark red near the disk.

STKM about three feet in height, smooth, and round, liranches dichotomous, on which the leaves are placed opposite, with numerous linear leaflets, deeply pinnated. Flowers terminating the branches, generally about three, on rather long pedicels. The ray of the corolla is composed of seven or eight yellow petals, with deep red toward the disk. The disk is of a dark brown or red.

This new and showy annual may be considered a great acquisition to our gardens,

where'er she
Rolls her dark eye., and waves her golden hair."

From the beauty of its flowers it may be said to have eclipsed all the other species of this family: the bright golden appearance of its petals, contrasted with the rich dark disk in the centre, renders it remarkably conspicuous. Its free disposition to flower, and the continued succession of blooms with which this plant is decked, demand for it a conspicuous place in the flower-border. It is readily raised from seeds, which should be sown about the middle of February in a moderate heat. The young plants should be potted oil" when about an inch m height, gradually brought into the open air, and planted in the ground early in May, in light garden mould. The gaiety and duration of the flowers of this annual beauty will render it an ever-pleasing acquisition to the flower-border. It may with good effect be planted in small beds, forming a group of itself, either in the pleasure-ground or flower-garden.

It is a native of Mexico, and was introduced in 1821.

This specimen was obtained from Messrs. Allen and llo-gers's Union Nursery, King's Itoad.



GENTIANA ASCLEPIADEA.

Swallow-wort Gentian.

PENTANDRTA.

DIGYNIA.

Class 5.

Order 2.

Linn. spec. 329. hot. Map. 1078.

GENERIC CHARACTER.

Vide Gentiana acaulis. PI. 2.

SPECIFIC CHARACTER.

Corolla five-cleft, bell-shaped[^] opposite, sessile. Leaves stem-clasping.

STEM upright, about one foot in height. Leaves smooth, embracing the stem, and terminating in an acute point: they are strongly marked with veins terminating at the point. Flowers bell-shaped, in pairs, and of a beautiful blue. This species is sometimes confounded with G. *scplcmjida*, as the corolla is sometimes six- or seven-cleft; but it may be distinguished in having the flowers in a spike nearly half down the stalk.

The interesting species of this tribe of plants demand the attention of every cultivator and admirer of flowers: they form a leading feature in almost every flower-border; nor are they wanting among the ornaments on rock-work. Some of

ROOT tuberous. Stems from a foot to a toot and a half in height, hairy, round, dusky red. Leaves alternate, except on the upper part of the stem. The flowers in large clusters at the extremity of the stems, of a bright orange.

This very splendid herbaceous plant would, no doubt, be found to adorn every garden if its propagation were more easily effected. Unfortunately, it does not perfect its seed in this country, and consequently it can be increased but slowly by its root alone.

In its native country (North America), it is found growing very luxuriantly in sandy gravel, where its roots frequently penetrate to the depth of three feet, and of proportionate bulk. The smaller-sized roots are sometimes imported into this country in very good preservation when packed in sand or in moss. These roots thrive very well when planted in sandy earth. Upon a sandy or gravelly bank it flourishes, which renders it well adapted for rock-work, where its fine orange clusters of flowers may be shown to advantage. The height it generally attains is about a foot and a half; and when in a soil and situation in which it delights, scarcely any herbaceous plant can vie with it for splendour. The beauty of these flowers is apparent in the months of July and August, during which time, others of the same genera are in flower; as A. amocna, A, si/riaca, and A. incamata, which, though not equal in beauty to *lubcrosa*, are nevertheless worthy of cultivation, and will look well in the same bed contrasted with each other.

This was introduced in 1690.

REFERENCES TO THE PLATE.

- 1. External petal
- 2. Internal petal, forming the nectary
- 3. The nectary, showing the projecting barren filament
- 4. Showing the position of the stamens, the situation of an outer petal, and part of the calyx
- 5. The pistil



PASSIFLORA C/ERULEA-RACEMOSA, Whitley's Hybrid Passion-Flower.

MONADELPIIIA.
Class 1C.

PENTANDRIA.
Order 2.

PASSIFLORA; formerly called *Flos Pass'umis*, from a fancy that all the instruments of our Saviour's Passion were displayed in the flower.

Linn, gen. n. 1021. Ilort. Sue. Trans.

GENERIC CHARACTER.

Cal. Perianth five-parted, flat, coloured. Cor. Petals five, semi-lanceolate, flat, blunt, of the same size and form with the calyx. Stam. Filaments five, awl-shaped, fastened to a column at the base of the germ, and united at the bottom, spreading. Anthers incumbent, oblong, blunt. J'ist. Germ roundish, placed on the apex of a straight cylindrical column. Styles three, thicker above, spreading. Stigmas capitate. Per. Berry fleshy, subovate, one-celled, pedicelled. Seeds very many, ovate, arilled. Recept. of the seeds triple, growing longitudinally to the rind of the pericarp.

SPECIFIC CHARACTER.

Leaves 3—5-parted. Segments thinly lanceolate, leathery, sharp at the point. Calyx of lanceolate segments, loose and keeled.

STEM flexuose, climbing, round, and of a bright green with a partial tinge of red: it throws out tendrils, by which it attaches itself to whatever it reaches. Leaves three-lobed, of a dark green above, but paler underneath, and strongly marked with red veins. Stipules in pairs, at the base of the leaf-stalk. Calyx green. Petals concave, pale purple and red. Flowers solitary.

Of the numerous varieties of Passion-Flower lately obtained, the present very handsome variety was the first. It was raised by Mr. Milne (of the firm of Whitley, Brames and Milne, Fulham,) in the year 1819. It was obtained by impregnating sonic llowevs of *P. cccrulca* with the farina of *P. raccmosa*. This experiment has produced a variety possessing the combined beauties of these two species, as well as the desirable property of being hardy.

here beauty plays

Her idle freaks; from family diffused

To family, as flies the father dust,

The varied colours run: and while they break

On the charm'(1 eye, th' exulting Florist marks

With secret pride the wonders of his hand."

Mr. Milne has produced many other varieties as well as the present; and his success gave the stimulus to other botanists to similar experiments, which have led to the production of many varieties, both hardy and tender. The luxuriant habit of growth and the free disposition to flower, render this a desirable shrub for covering a building or trellis-work where beauty is required. The free disposition of this climber to flower makes it very acceptable to entwine among others which, though luxuriant in foliage, are deficient in bloom. The foliage is of itself ornamental, and may indeed be said to be excelled by no other shrub. The facility with which this plant is increased by layers has enabled its numerous admirers to become possessed of it. It should be planted in a south or south-east aspect, in light garden mould; and it will produce a profusion of flowers from July until checked by the frost.

This specimen was drawn from a fine plant which flowered at Messrs. Whitley, Brames, and Milne's.



LOBELIA FULGENS.

Fulgent Lobelia.

PENTANDRTA.
Class 5.

MONOGYNIA.
Order 1.

LOBELIA: from Matthias de Lobel, a Flemish botanist, who was physician to King James I.

Linn. gen. n. 1006.

GENERIC CHARACTER.

Cat. Perianth one-leafed, five-cleft, very small, growing round the germ, withering 5 toothlets nearly equal. Cor. one-petaled, irregular; the tube cylindric, longer than the calyx, divided longitudinally above 3 border five-parted; divisions lanceolate, of which the two superior ones are smaller, less reflex, more deeply divided, constituting an upper lip 3 the three inferior ones more spreading, frequently larger. Stam. Filaments five, awl-shaped, the length of the tube of the petal, connate above. **Anthers** connate into an oblong cylinder, gaping five ways at the base. Pint. Germ sharp-pointed, inferior. Style cylindric, length of Stigma obtuse, hispid. Per. Capsule ovate, twoor three-celled, two- or three-valved, gaping at the top, girt by the calvx. Seeds many, very small. Recept. conic.

SPECIFIC CHARACTER.

Leaves oblong, lanceolate, rather seriate, slightly villose; flowers in a spike.

ROOT white and very fibrous. Leaves closely succeeding each other on the stalk; they are lanceolate, of a blueish green,

with a kind of pubescence on its surface giving it an appearance of velvet. Stem erect, rising to the height of about three feet. The flowers are of a brilliant scarlet, and form a spike at the end of the stem.

The splendour of this herbaceous perennial is such as to call forth the admiration of every beholder. Whether it be intermixed in the herbaceous border, or in a bed forming a group of the hardy species of this genus, among which there are many possessing much beauty, it will nevertheless be prominent for brilliancy. It may be grown to great perfection in pots, for the purpose of ornamenting flower-houses during the summer months; for this purpose it should be cultivated by means of artificial heat in the early part of the season, and may by this method be made to obtain the height of five or six feet, although in the open border it rarely exceeds the height of three feet: its earliest flowers appear in July, with a succession until the end of August.

Every facility is afforded by this plant for rapid propagation and general cultivation: it freely increases by its roots, which may be separated in the month of March, very small portions of which will produce plants. It thrives well in a light rich earth, composed of portions of light garden mould, decayed leaves, and rotten manure. It is a native of North America, The date of its introduction is not correctly ascertained.

REFERENCES TO THE PLATE

- 1. The stamens exhibited, showing their union at the anthers.
- 2. The pistil, with the corolla and calyx removed.



PHLOX SETACEA. Bristly Lychnidea.

PENTANDRIA.
Class 5.

MONOGYNIA. Order 1.

Linn. gen. n. 214.

Linn. spec. 217.

GENERIC CHARACTER.

Vide *Phlox carnea*. PI. 16.

SPECIFIC CHARACTER.

Leaves bristly-shaped, smooth; flowers solitary.

THE stalks if they be tied up will rise about one foot in height; but in their natural position trail upon the ground, raiding some stems and flowers about four or five inches. The leaves are closely set upon the lower part of the stem; they are of a dark green, somewhat hairy, and have a very bristly appearance, from whence is its name. The flowers are of a light purple, and larger than those of *subulata*; from which this plant differs also in the leaves, which are finer and more hairy than those *of subulata*.

This little herbaceous plant is peculiarly adapted for rock-work: in such a situation, though humble in its habit of growth, its profusion of flowers will be shown to great advan-

It may also be well recommended for decorating tage. the herbaceous border: indeed it appears with marked splendour and is viewed with great interest intermixed with other dwarf-growing herbaceous plants. The flowers are pink with somewhat of a purplish tinge, and appear in the months of June and July, at which time others of the same genus are in flower with which it may be intermixed, as P. amcena₉ JP. subulata₉ I^* , carnea,and for a further contrast of colours, the following dwarf plants would appear as companions to advantage: Gen-tiana ver?ia₉ Tthexia virginica₉ Globularia nudicaulis 9 Chironia Centaurium 9 Spigelia ma?'ila?idicao and Androsace carnea. These in combination are alike applicable for rock-work or for the herbaceous border. The plant here figured thrives in a light open earth, and is readily propagated by cuttings, which should be taken off about the beginning of July and placed under a hand-glass in a shaded situation, and in the following spring should be planted out or potted as may be required. It is a native of North America, and was introduced in 1790. The specimen from which the drawing for this figure was made, flowered at Mr. Knight's Nursery, King's Road, Chelsea,

REFEHENCKS TO THE PLATE.

- 1. Corolla cut open, showing the insertion of the stamens in the tube of the corolla, and the pistil and calyx at the base.
- 2. Pistil magnified.



DELPHINIUM ELEGANS /3 PLENO. Dark Purple Larkspur.

POLYANDRIA. Class 13.

TRIGYNIA. Order 3.

GENERIC CHARACTER.

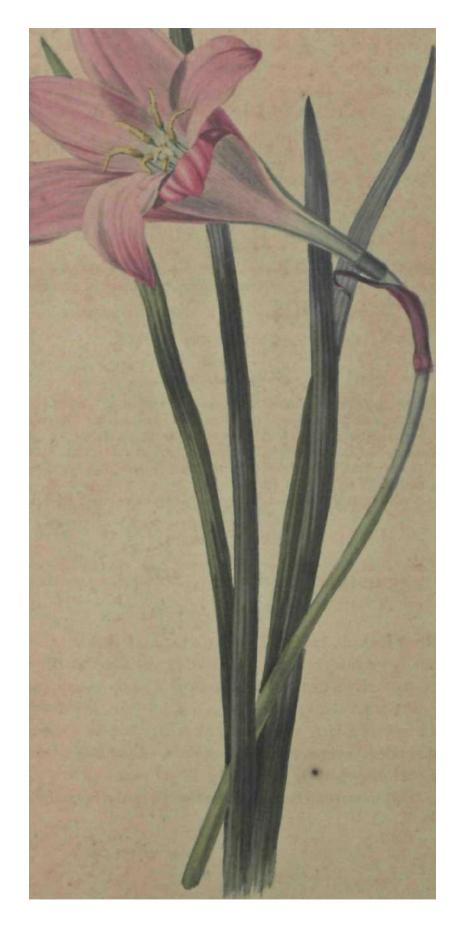
Vide Delphinium mesoleucum. PI. 29.

SPECIFIC CHARACTER.

Leaves smooth, five-parted \blacksquare lobes lanceolated. Calyx shorter than the petals j the spur curved.

THE stems generally attain about three feet in height, sometimes higher, and generally about three or four from the same root. Leaves of a light green, much fainter on the under side, very much divided into deeply laciniated segments. The flowers are closely but irregularly disposed along the stem; they are supported each on a peduncle from one to two inches long, and are of a beautiful dark purple, and in this variety double.

While examining the conspicuous ornaments of the herbaceous border, this variety of *Delphinium elegans* will be found to claim peculiar attention. It is distinguished as a variety from the true species by its double flowers, from whence it is



Dratn

gister under the name Zephyranthes grandiflora.

Unwilling to attach this plant to a new genus, for the formation of which no characters sufficiently remarkable appear, wishing to avoid the confusion occasioned by adopting new names which no essential characters will warrant. the present plant is here arranged under the genus *Amaryllis*, to which the character and general appearance bear so exact a resemblance, that no objection is anticipated to this adaptation:—for these reasons some other plants that have been figured in tins publication are attached to the genus to which they seemed more decidedly to belong, in preference to some of the new genera lately introduced. The desire of many botanists to form new genera upon the most trivial variations, may prove that they possess an extensive knowledge of the science; but it nevertheless serves to involve in mystery and confusion that science, which it should certainly be wished were rendered as simple as possible.

From the recent introduction of this plant, it has not yet stood the test of our winters: there is however every reason to suppose it perfectly hardy, from the circumstance of many other bulbs introduced from the same country flourishing in open borders. The same precaution, however, should be taken with this as with those alluded to, by planting it in a light open and sandy earth, upon a dry border, with the additional care of strewing some dry litter on the surface of the bed during the winter. By observing these particulars there is little doubt but it will be found to flourish and become as hardy as A. Atamasco and A. luted. This bulb with others, was introduced last year (1825), by Lord Napier, from Mexico, which country abounds with

".....fresh verdure and unnumber'd flowers,
The negligence of Nature, wide and wild;
Where undisguised by mimic art, she spreads
Unbounded beauty to the roving eye."

This specimen flowered in the hot-house of A. B. Lambert, Esq., Boyton House, Wilts, through whose kindness the present figure has been permitted to be engraved.



Plants which appear as early in the season as this species of Adonis have a decided claim to our notice. After the lone; and dreary months while vegetation has been lying dormant, it is with peculiar delight we view these flowers thus early waking to life and beauty. This plant is not merely early in the production of its flowers, but where it lias been so long established as to produce a tuft of any considerable magnitude, the luxuriance of its large yellow flowers contributes considerably to decorate the flower-border. From its being perfectly hardy and growing well in any prepared border, it may with good effect be placed amongst many low shrubberies, where, mixed with a few other early flowering herbaceous plants, it will assist to satisfy the eye previous to the shrubs themselves showing forth their verdure and floral beauty. It is readily increased by separating the roots early in March, about the end of which its flowers begin to appear, a succession of which is produced throughout April. It is a native of the North of Europe, and was introduced in 1731. This specimen was figured from the herbaceous border at Messrs. Malcolm and Gray's Nursery, Kensington.



GLYCINE SINENSIS. Chinese Glycine.

DIADELPHIA.

DECANDRIA.

Class 17.

Order 4.

GLYCIXK: from yXwavr, sweet.

Li tin. gen. n. 80S.

GENERIC CHARACTER.

Cal. Perianth one-leafed, compressed; mouth two-lipped 5 upper lip emarginate, obtuse 3 lower one longer, trifid, acute. Cor. Papilionaceous. Banner obcordate, the sides bent down, the back gibbous, the tip emarginate, straight, repelled from the keel. Wings oblong, towards the tip ovate, small, bent downwards. Keel linear, sickle-shaped, bent upwards at the tip, pressing the banner upwards, obtuse, towards the tip broader. Stam. Filaments dia-delphous, (simple and nine-cleft,) only a little divided at the tip, rolled back. Anthers simple. Pist. Germ oblong. Style cylin-dric, rolled back. Stigma obtuse. Per. Legume oblong. Seed kidney-form.

SPECIFIC CHARACTER.

Stem shrubby, twining 5 leaves divided into pairs 5 leaflets ovate-acuminate, downy.

BRANCHES shrubby, long and pliant: the flowers produced generally from small spurs, and begin to make their appear-

ance before the leaves, which succeed the flowers, and are divided into pairs of leaflets, and are of a pubescent or downy nature.

Among the numerous showy and ornamental shrubs introduced from China, the present species of Glyciiie demands a considerable degree of admiration. Scarcely any other climbing shrub can vie with it in the beauty and profusion of its delicately tinted racemes of flowers. Its light azure hue gives such an airiness to the whole plant, that, added to the delightful odour emitted, it seems formed to realize all the floral beauties that poetical license has figured to the imagination. In the conservatory this shrub is truly conspicuous; for when planted in the ground, its growth is remarkably luxuriant, producing shoots of above ten feet in length in one season- These shoots, when trained and spread out upon light wire-work extending over the roof of the house, produce, during the month of April, a dense mass of delicate flowers. Besides decorating the conservatory and greenhouse, it is found to flourish in the open air against trellis-work, or in open borders supported by a stake. Its hardihood adds much to its recommendation, as it thus becomes interesting to those who have not the convenience of a glass protection. Virandas, alcoves, porticos, and every description of trellis-work will be highly enriched by the addition of this among other climbing shrubs. When planted out of doors it does not produce its flowers and leaves until about the middle of May. It should be planted in an earth composed of loam, decayed leaves, and a small portion of peat and sand. It is increased by layers which should be made from wood of one year old. The drawing of the present figure was obtained through the kindness of J. C. Palmer, Esq., of Bromley, Kent, who possesses in his conservatory, among many other imported novelties from China, one of the first of this species that was introduced into this country, and who also lias some of these plants flourishing in the open air, without affording them the least protection from cold.



CAMPANULA PEREGRINA Hough Bell-flower.

PENTANDRIA.
Class 5.

MONOOYNIA. Order!.

CAMPANULA: from Campana, a little bell, from the shape of the corolla.

Linn. gen. ?i. 218. JVilld. Sp. PL 1. p. 906. Reich. Sp. PI. p. 462.

GENERIC CHARACTER.

Cal. Perianth five-parted, acute, erect, expanding, superior. Cor. Monopetalous, bell-form, impervious at the base, half five-cleft, marcescent; divisions broad, acute, spreading. Nectary in the bottom of the corolla, composed of five valves, acute, converging, covering the receptacle. Stam. Filaments five, capillary, very short, inserted on the tips of the valves of the nectary j anthers longer than the filaments, compressed. Pist. Germ angular, inferior: style filiform, longer than the stamens-, stigma three-parted, oblong, thickish 3 divisions revolute. Per. Capsule roundish, angular, three- or five-celled, emitting the seeds at so many lateral openings. Seeds numerous, small, liecep. columnar, adnate.

SPECIFIC CHARACTER.

Leaves ovate, rough; stem simple, hairy; corolla spreading.

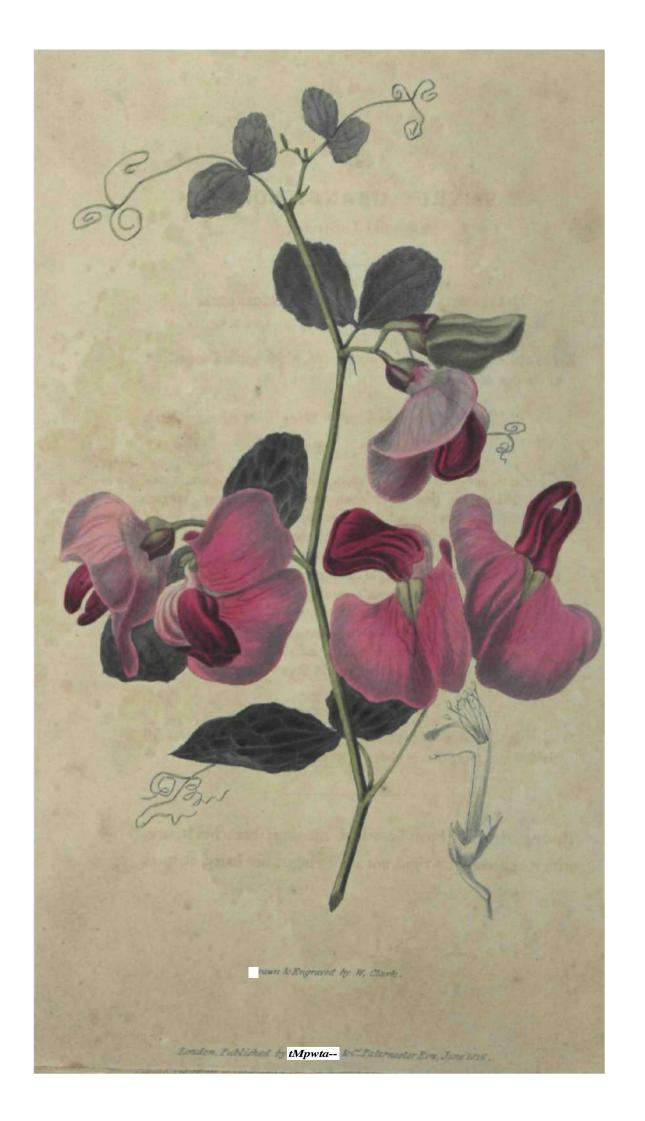
STEM herbaceous, from eighteen inches to two feet in height, round, hairy, and of a blueish colour. Leaves ovate, covered

with brown hairs, setting* close to the stalk, serrated on the edge, and somewhat undulated. Flowers arranged alternately along the stalk, form ing a handsome spike of purple flowers.

The genus to which this plant belongs is deservedly an universal favourite: it embraces in its family a very numerous and interesting variety, among which exists a wide diffusion of character of growth, from the unassuming C immilla and C. Jiederaccit rising their heads but a few inches from the ground, to the stately and showy C. laclca, frequently aspiring to the height of nine or ten feet. These lofty stems are surrounded by numerous milk-white flowers, forming to appearance a conspicuous pillar of snow. The species here figured, though it does not claim notice from its aspiring or conspicuous characters, nevertheless calls forth admiration from the delicacy of the purple flowers with which it is adorned: it is distinguished from others of the genus which approach it in size and other characters, by the richness of its dark eye. Its situation in the flower-bed must be near the front, arranged with such other plants as attain about one foot in height and flower in the month of July. It will be found to flourish in an earth composed of a good proportion of decayed leaves and rich vegetable mould. It sometimes perfects its seeds, by which means it is propagated. It was introduced about 1791', but from whence does not appear to be correctly known. This specimen flowered at Messrs. Whitley, Bramcs, and Milne's Nursery, Fulham.

RBFERKNCK TO THIS PL.ATJS.

Corolla removed showing the insertion of the Stamens and Pistil.



LATHYRUS GRANDIFLORUS.

Perennial Lathyrus.

DIADELPHIA. Class 17. DECANDniA.
Order 4.

LATHYRUS: from *KaQvpos* of Theophrastus, which implied something of the pea or vetch tribe.

Linn. gen. n. 8/2. But. Mas. 1938.

GENERIC CHARACTER.

Cat. Perianth one-leafed, half five-cleft, bell-shaped: divisions lance-olate, sharp: the two upper ones shorter j the lowest longer. Cor. papilionaceous: standard obcordate, very large, reflex on the sides and tip: wings oblong, lunulate, short, obtuse. Keel half-orbiculate, size of the wings, gaping inwards in the middle. Stam. Filaments diadelphous (single and nine-cleft), rising upwards. Anthers roundish. Pist. Germ compressed, oblong, linear. Style erected upwards, flat, wider above, with sharp tip. Stigma, from the middle of the style to the tip villose in front. Per. Legume very long; cylindric or compressed, acuminate, one-celled, bivalve. Seeds several, cylindric, globose, or but little cornered.

SPECIFIC CHARACTER.

Stem rough, four-sided 3 peduncle two-flowered, naked, tendril divided into two; leaves obovate, undulate.

ROOT perennial. Stem branched, clinging: branches square, with rounded angles, rigid, not at all winged, nor hairy, claspers

generally twice ternate with oval leaves, rather broadest towards the point, viewed undulated at the margin. Stipules very narrow, semi-sagittate. Pedicles nearly equal, united to the peduncle by a joint. Corolla very much resembling *Lathyrus odoratus*, but larger.

The want of a knowledge of this herbaceous plant must be the sole cause of its not beiniy more ijenerally cultivated in the flower-garden and herbaceous border, its beauty and neatness are surely sufficient to recommend it to the notice of every admirer of flowers.. If it be planted against a trellis, or in any situation where it can find support, it will attain the height of about seven or eight feet, and the profusion of flowers which it produces during the months of July and August, renders it a conspicuous and splendid ornament. It is not yet generally dispersed in collections, but wherever it is introduced it is certain to obtain admiration. It thrives in a light mellow earth, and may be propagated by the root as well as by seeds, which it sometimes produces though not invariably. It is a native of the South of Europe, and was introduced in 181 k The specimen here figured was obtained from Messrs. Chandler and Buckingham's Nursery, Vauxhall.

REFERENCE TO THE PLATE.Stamens, Pistil, and Calyx slightly magnified.

FUMARIA NOBILIS.

Large-flowered Fumitory.

DIADELPJIIA. Class 17. HEXANDRIA.
Order 2.

Linn, stjst. 63G. Bot. Mag. 195.3.

(JKNRRIC CHARACTER.

Vide PI. 28.

SPECIFIC CHARACTER.

Stems simple. Bracteas shorter than the flower, undivided.

HERBACEOUS, perennial. Root leaves seven to nine, a span in height, bipinnatc. Stem erect, angular, furnished with three or four leaves near the flower; they are sessile and compound, of a dark green on their upper surface, and glaucous underneath. The flowers are at the extremity of the stem forming a kind of abrupt raceme, they are all directed the same way. Bracteas ovate, lanceolate, entire. Flowers of a pale green or nearly white, excepting towards the throat, where they are of a dark brown approaching to black, with a bright yellow border surrounding. Calyx minutely toothed. Capsule thin, friable. Seed lar-re, lenticular, beaked, very smooth, dark and shining.

This herbaceous plant is conspicuous and interesting from the clusters of vellow flowers, rendered more showy by the dark spots, which serve to give brilliancy to the other parts. In addition to the contrast of the colours in this, which distinguishes it from other species of the genus, there exists a marked peculiarity in the style of flowering. In this, the flowers appear in a close cluster forming a sort of raceme, while in the other species they are more scattered. Though they are of shorter duration than many others, yet as they all appear nearly at the same time, they are when in flower decidedly the most conspicuous of the genus: they are in their greatest beauty and perfection towards the end of April, and continue at least a month. As this species does not readily perfect its seeds here, and is increased but sparingly from the roots, it is on this account much admired and cherished in places where it is cultivated. Nearly all the species in this genus are humble in growth, rarely exceeding a foot in height, and many are much less. This species attains the height of about one foot, and thrives well in a border of light but rich vegetable mould. It is a native of Siberia, and was introduced in 1783. This specimen was figured from Messrs. Malcolm and Gray's Nursery, Kensington.

REFERENCE TO TIIK PLATE.

The Corolla removed showing the situation of the Stamens and Pistil.



MAGNOLIA PURPUREA. Purple Magnolia.

PoLYANDUJA. Class 13.

POLYGYNJA.
Order 7.

Linn. gen. n. 600. IVilhL Sp. PL p. 1257. hot. Mag. 390.

(JKNi:IIIC CIIA11ACTEU.

Vide PI. 9.

.SPECIFIC CHARACTER.

Flowers six-pctalled, the exterior of the petals purple.

BRANCHES long and somewhat pliant; the bark of the young shoots smooth, shining, of a bright green, and with small white spots. The flowers at the extremity of the young shoots, solitary; petals six, ovate, concave, narrowing towards the base, the exterior of which are of a lively purple, the interior white. Calyx of two or three dark brown concave leaflets, which are deciduous. Leaves ovate, entire, of a bright green, and much veined. Stamens and pistils seated upon a conical receptacle, which afterwards supports the pericarp composed of numerous cells placed in an imbricated **form**, each of which contains one or two small ovate or roundish seeds.

The grandeur and magnificence of this tribe of shrubs niarli them as truly conspicuous objects the pleasure-ground. Amongst them are found all the qualifications for decorative shrubs;—a grand and ornamental style of growth, bold and conspicuous foliage, with flowers of corresponding magnificence, possessing a most delightful and fragrant odour. The M. grandi/loi-a, though deservedly most princely shrub in our ranks as the gardens₉ yet surpasses by little only the present species. The hardihood of the M. jmrpurca makes it well adapted to this country, and its free disposition to flower renders it peculiarly ornamental. It is generally cultivated against a wall or trellis, but will flourish in the open ground, although its flowers in such situation are not so luxuriant and numerous. It is found to flourish in a soil composed of peat and loam, and is increased by layers, which should be put down in a portion of sand towards the end of March. It is a native of China, and was introduced in 1792. This specimen flowered against the green-house at Coombe "Wood, the seat of the Earl of Liverpool.



CHRYSANTHEMUM SINENSE /3 PUR-

PURASCENS.

Starry Purple Chinese Chrysanthemum.

SYNGENESIA. Class 19.

PoI/YGAMIA Order 2.

CHRYSANTHEMUM. Xpuo-ocvBEftov of Dioscorides: from y^ovaros gold,

and ctv9o\$ a /lower.

Linn. gen. n. 966. Linn. Trans, vol. xiv. p. 142. Ilort. Trans.

vol. vi. p. 338.

GENERIC CHARACTER.

Cal. Common hemispherical, imbricate j scale close incumbent; the interior ones larger by degrees -, the innermost terminated by a parched scale. Cor. compound radiated; corollets hermaphrodite, tubular, numerous in the disk. Females more than twelve in the ray. Stain, in the hermaphrodites, five, capillary, very short. Anthers cylindric, tubular, shorter than the corolla. Pint. In the hermaphrodites, germs ovate, style filiform, longer than the stamens, stigmas two, re volute. Per. None. Calyx unchanged. Seed solitary, oblong, without any pappus. Rec. naked, dotted, convex.

SPECIFIC CHARACTER.

Leaves: lobes narrow, slightly serrated. Florets unequal in length, pointed at their termination, narrow and incurved at their centre.

ROOT perennial. Stem herbaceous, annual, about four *feet in* height. The brandies are numerous, and are terminated by broad loose clusters or corymbs of flowers. The expansion of a good flower exceeds three inches and a half. The florets ar^e a rich purple, paler where their anterior surface is exposed, and very pale at their extremities. In China the flowers are

much larger, and the plant, according to the information communicated by Mr. Parks, occasionally sports in the gardens of Canton producing perfectly white flowers. The leaves are small, reflexed, of a grayish green, and rather deeply divided; the lobes narrow and very slightly serrated with pointed ser-ratures.

This specimen is OIHJ of the many interesting plants introduced by the I Iorticultural Society from China. It was brought into this country by Mr. Parks in 1824. Scarcely any other tribe of herbaceous plants possesses greater attractions than this, not merely for its more extended and interesting variety of colours, but for its productions of flowers at a season when nearly all the brilliant attractions of the vegetable world are retiring either into total oblivion or else to a state of dormancy. Wheu the beauties of the flower-garden begin to decay, and the brown autumnal tints succeed the lively colours of Spring and Summer,

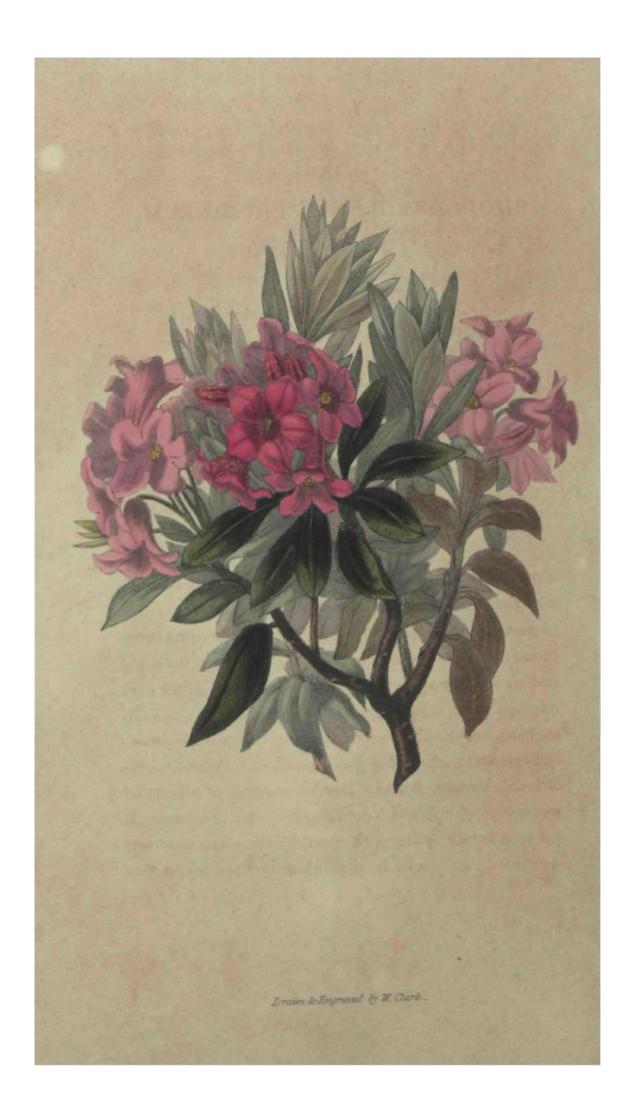
When o'er the cultivated lawns and dreary wastes Retiring Autumn flings her howling blasts, Bends in tumultuous waves the struggling woods, And showers their leafy honours on the floods,"—

then will appear this tribe of plants arrayed in all the splendour which the most diversified and interesting colours can convey. When the weather is mild, they continue in great perfection from October to the end of November; and when protected by means of glass, they are truly ornamental, and will adorn the green-house until after Christmas,

"And instant Winter's utmost rage defy."

The many beautiful varieties of this tribe which have been lately introduced, and the facility with which they are increased, have contributed to bring these plants so much into notice. They may be raised by cuttings of young shoots taken off* about the end of May or the beginning of June: these may be placed separately in small pots under a handglass in a shaded situation; as they become rooted and removed to larger pots, they require a rich mellow earth, when if the more luxuriant shoots be topped at their extremity, they will branch out and form very handsome bushy plants, and will flower extremely well in the pots. When planted in the open border or against a wall, they generally attain the height of from three to five feet.

The specimen for this drawing was kindly furnished from the splendid collection of this tribe of plants cultivated in the gardens of the Horticultural Society; it Chiswick.



RHODODENDRON FERRUGINEUM.

Rust-leaved Rose-bay.

DECANDRIA.
Class JO.

MONOGYNIA. Order 1.

Linn. Syst. 40.3. Spec. ;"iG2.

GENERIC CHARACTER.

Vide Rhododendron arhoreum. PI. 7.

SPECIFIC CHARACTER.

Leaves smooth, leprous underneath: corollas funnel-shaped.

STEMS very much branched, towards the ground spreading; they rise about a foot and a half high. The leaves are rather in clusters towards the extremity of the branches, dry, coriaceous, ovate, narrowed at both ends, bent back at the edge; underneath they are ferruginous, with innumerable little dark coloured dots; the younger leaves have generally a few cili-ate hairs, but these afterwards disappear. Flowers in an upright raceme at the end of every branchlet. Peduncles one-flowered, upright, dotted. Corollas nodding, of a beautiful rose colour, with yellowish dots, they have little or no scent. It has been known to vary with white flowers. The two lower segments of the corolla are a little narrower and longer than

the three others. Filaments whitish ml, hairy at bottom, the lower ones gradually shorter, not exceeding the tube, inserted into the receptacle itself by an attenuated toothlet; anthers oblong, erect, yellow. The stamens commonly fade before the corolla. Germ superior, green; style nearly the length of the stamens: stigma capitate, five-cleft.

This little shrub differs very much in character from many others of the genus. The compact evergreen bush which it forms, added to the beauty and profusion of its flowers, renders it truly attractive. The leaves of this shrub possess an interesting contrast of colour, the upper surface being of a bright and shining green opposed to the brown and ferruginous appearance of the under part; it is in this peculiar property that it differs from 11. hirsnlum, which in other respects it greatly resembles. The dwarf habit of growth of 11. Ji?miginewn permits it to be arranged in the American bed with the Ledum and Kalmia tribes, intermixed with Qaulthcria -procumbent ILpigea repens[^] and many of the hardy species of Erica which flower about the same time, producing a pleasing assemblage. These, with the greater portion of American plants, generally flower during the months of May and June. That part of the pleasure-ground allotted to this tribe of plants may by judicious planting be rendered beautiful in the extreme: and here the dwarf plants alluded to contribute in a considerable degree to produce a continuation of flower, commencing at the more lofty species at the back, down to those of more humble growth in front. This species of Rhododendron is propagated in a similar manner to the others,—by layers, which should be put down early in May; it requires to be planted in peat earth. This specimen was figured from Messrs. Malcolm and (i ray's Nursery, Kensington.



LONICERA FLAVA. Bright Yellow Honeysuckle.

PENTANDRIA. Class f>.

Mon'ogynia. Order I.

LOXICEKA: so named by Plumier in honour of Adam Lonicer, physician at Frankfort.

Linn. gen. n. 233. Bot. Mag. 1318.

CEXHRIC CHARACTER.

Cal. Perianth five-parted, superior, small. Cor. one-petalled, tubular 5 tube oblong, gibbous; border five-parted 5 divisions revolute, one of which is more deeply separated. Stam. Filaments five, awl-shaped, nearly the length of the corolla. Anthers oblong. Pist. Germ roundish, inferior. Style filiform, the length of the corolla. Stigma obtuse-headed. Per. Berry umbilicated, two-celled. Seech roundish, compressed.

SPECIFIC CHARACTER.

Leaves ovate, glaucous beneath, much veined, marginated, connected at the base, perfoliated.

STEM shrubby and climbing. Leaves ovate, or nearly cordate; in pairs, and are stem-clasping; also alternately opposite: such as appear near the base of the young shoots are less true in their forms; losing the character of the cordate form, and are more oblong. The shoots appear in pairs, and emanate from the base of the leaves.

There does not exist a tribe of shrubs more generally ad-

mi red than the I\tiniccra. Hy the humble peasant who decorates his cotlagi; door, and by the more refined proprietor of a domain who cultivates the rarer species to ornament the arches oi' his conservatory,—the fragrant Honeysuckle is equally admired. Many of the species wall their delightful sweets throughout the pleasure-ground: even in the wood, where neglected Nature rears some of her rudest productions, will often be seen the delicate I lonevsuckle stretching: out its brandies for support, and emitting to the gale the delightful distilled from its mellifluous tubes. beautify-ing the sequestered wood or the retired paths of the arboretum, or decorating the veranda or alcove, these shrubs seem constituted to realize those floral delights which the poet is so ambitious to convey—

ce Fair Loniccra prints the dewy lawn And decks with brighter blush the vermil dawn, Winds round the shadowy rocks and fancied vales, And scents with sweeter breath the summer gales; With artless grace and native ease she charms, And bears the horn of plenty in her arms."

The present species possesses a similarity in point of growth to many of the climbing sorts, but differs in its flowers, which are oi* a bright yellow.

This plant is perfectly hardy. It should be planted against a wall or trellis-work, though from the beauty of its flowers it frequently is seen adorning the green-house or conservatory. It thrives well in a mixture of peat loam and vegetable mould, and is increased by layers put down in the month of March. In the open ground the flowers are produced early in June: in the green-house, about a month earlier.

It is a native of North America, and was introduced in 1810. This specimen was figured from the gardens of the Count de Vfinde, Bayswater.

UEFEKEKCKS TO TIIK PLATE.

- 1. Stamens showing their insertion.
- 2. Pistil.



TRILLIUM GlIANDIFLORUM.

Large-flowered Trillium.

HEXANDRJA. Class 6.

TRIGYNIA Order 3.

Linn. gen. ii.4.")l). Hooker's Par. Lnn. J. But.

G EXK111C CIIA It AC T K K.

Cat. Perianth three-leaved, spreading; leaflets ovate, permanent. ("or. Petals three, subovate, larger than the calyx. Slam. Filaments six, awl-shaped, shorter than the calyx, erect. Anthers terminating¹, oblong, length of the filaments. Pist. Germ roundish. Styles filiform, recurved. Stigmas simple. Per. Berry roundish, three-celled. Seeds many, roundish.

SPECIFIC CHARACTER.

Leaves rounded at the base. Flowers ovate, lanceolate, recurved, white.

ROOT perennial. Stem herbaceous, from six to twelve inches in height, producing three leaves, from the centre of which a solitary flower appears, supported by a stem about two inches in length. Leaves almost always in threes, on stalks rising direct from the root; they are of an ovate-lanceolate form, and are of a bright green on their upper surface, but of a fainter or rather brown tinge underneath. The flowers are



AQUILEGIA CANADENSIS f3 GRACILIS.

Slender Canadian Columbine.

POLYANDUIA.

PENTAGYNIA.

Class 13.

Order f).

AQUILKGIA or ALMILIXA, from /ifju'dn, an eagle; because the nectaries seem to resemble eagles' claws. The English name Columbine is derived from Coliunba, a pigeon; from the resemblance which these parts of the wild plant bear both in form and colour to the head and neck of a pigeon.

Linn. gen. n. GS-1«. *Linn. spec.* 7~)2.

(iFA'HRIC CHARACTER.

Cal. none. Cor. Petals five, lanceolate, ovate, flat, spreading, equal. Nectaries five, equal, alternate with the petals 5 each horned, gradually broader upwards, with an oblique mouth, ascending outwardly, annexed inwardly to the receptacle 5 produced below into n»long attenuated tube with an obtuse top. St<un. Filaments thirty to forty, subulate, the outer ones shorter 5 anthers oblong, erect, the height of the nectaries. Pist. Germs live, ovate-oblong, ending in subulate styles longer than the stamens. Stigmas erect, simple. Chuffs ten, wrinkled, short, separate, and involving the germs. Per. Capsules five, distinct, cylindric, parallel, straight, acuminate, one-valved, gaping from the tops inward. Seeds very many, ovate, keeled, annexed to the gaping suture.

SPECIFIC CIIARACTKR.

Nectaries **straight.** *Stamens* longer than the corolla.

ROOT perennial. Stem slender, erect, of a bright brown, supporting both leaves and flowers towards its summit: these

U:HVt's a IV M > |I| It'{ 11 i 1I .'<? simple, ami llRM'elv lol)UlK while 1 I'KlSf

ironi the root arc compound, being hitcruate. The flowers arc supported on loot-stalks from two to three inches in length. The corolla is composed of five nectaries, of a strong red towards their summit., and ol a bright yellow at the mouth, between each of which is seated live small linear petals, also red. Thi' pericarp is composed oi five lobes.

The original species ol' $A < juilt \setminus ixia$ ctmuilcnsis lias long been known and admired by the cultivators of choice flowers. The present figure is a variety which has been produced from that alluded to, anil is found to possess all the attractive (jualities of the parent plant, added to a peculiar delicacy of nature of Us own, which has /riven rise to ils present disliii<niishiii££ name as a variety. Its style of growth is more slender and delicate than in the original .species: and it requires more delicacy ol treatment in its cultivation, being very particular in its soil and situation. It should be planted in a light earth composed of decayed leaves with a small portion of loam: it is more likely to succeed if kept in a pot. Thus treated, its beauties are displayed to better advantage; and it may here be better protected against a very destructive enemy, the wire-worm, which frequently attacks it in the open ground. It generally attains the height of from nine incln.s to a foot, producing a succession of flowers during the month of May. It will per-feet its seeds, by which means it is readily increased.

The species from which this variety was produced is a native of Canada, and was introduced in UJK).

This specimen was figured from the Collection of Edward Jesse, Esq., Hushy Park Cottage, whose kindness in allowing the drawing 10 be made is acknowledged.

HKFKUKXtKS TO T11K I'LATK.

- 1. The stamens exhibited with a portion of the corolla.
- 2. TLstils.



VERBENA LAMBERT1

Lambert's Vervain.

DIDYNAMIA. Class 14.

AXC-JOSPEUMIA. Order 2.

VERBENA: from its being one amongst the. herbs with which the altars and sacred places were adorned, and the chief priest, was crowned. The laurel, olive, myrtle, &c. were termed *Verbenas* for the same reason.

Linn. gen. n. 32. But. Mag. 2200.

GENERIC CHARACTER.

Cal. Perianth one-leafed, anefular, tubular, linear, five-toothed j the fifth toothlet truncate, permanent. Cor. one-petalled, unequal; tube cylindrical, straight for the length of the calyx, then widening and curved in; border spreading, half five-cleft j segments rounded, almost equal. Stam. Filaments two or four, bristle-shaped, very short, lying within the tube of the corolla; two of them shorter (where there are four). Anthers curved in, as many as there are filaments. Pist. Germ four-cornered. Style simple, filiform, length of the tube. Stigma obtuse. Per. very slender, and scarcely manifest, or almost none. Calyx containing the seeds. Seeds two or four, oblong.

SPECIFIC CHARACTER.

Spike solitary, long. Stem hairy, decumbent from the root. Leaves deeply cut into lobes unto the extremity.

ROOT biennial. Stem decumbent, from which the leaves and shoots appear in pairs, very much haired, affording a marked

difference (Voni V. Aublv.lia[^] from which it also differs in habit. Leaves opposite, also hairy, and marked with deep incisions to the point, supported upon footstalks of an inch and a hall" in length. The flowers at first appear in a cluster, opening at the bottom of the spike, which afterwards shoots to the length of six inches, bearing a succession of flowers to its extremity.

This little decorative biennial adds more to the ornament of the (lower-garden than any others of the genus: and indeed far more so than can be conveyed by the delineation of an individual figure. The beauty and richness of the purple tinge possessed by the blossoms of these plants when growing in masses in the (lower-bed produce an interesting appearance; and the continuity of flowers with which they are decorated adds still more to their attractions. They remain in a stute of blossom for some months from the early part; of June. It ripens its seed freely, whereby it is readily increased. The seed should be sown in the autumn, either on a sheltered border or in pots, when it would be as well to afford them some slight protection during the winter: and in the spring plant them in the open ground; they will flourisli in any light open earth. As this plant is to be so easily obtained, it may be unsparingly dispersed among the flower-beds; and, unless carried to excess, the distribution of this plant may add considerably towards the grand assemblage the flower-garden presents during the summer months.

It is a native of Carolina, and was introduced in 1816*.

This specimen was obtained from Boy ton House, Wilts, through the kindness of Aylmer liourke Lambert, Esq., Vice President of the I Jnnscan Society.

REFERENCES TO THE PLATE.

- 1. Corolla open, showing the insertion of the stamens.
- 2. Pistil.



CASSIA ODOIIATA,

Sweet-scented Cassia.

DECANDRIA.
Class 10.

MONOGYNTA.
Order 1.

CASSIA; by Dioscorides xz < r < nct. The derivation of this term is unknown.

Linn. gen. n. 514.

G ENEILIC CII Ail ACTKR.

Cat. Perianth pentaphyllous, concave, coloured, deciduous. Cor. Petals five, roundish concave, the inferior ones more distant, more spreading, larger. Stam. Filaments ten, declined: the three inferior ones longer; the three superior ones shorter. Anthers: the three inferior very large, gaping at the tip; the four lateral ones without the rostrum gaping; the three superior ones very small, sterile. Pist. Germ sub-columnar, long peduncled. Style very short* Stigma obtuse, ascending. Per. Legume oblong, partitions transverse. Seeds many, roundish, affixed to the superior suture.

SPECIFIC CHARACTER.

Leaflets in eight pairs. Stipules linear, pointed.

STEM shrubby, of a brownish green. Leaves alternate, of a dark green on their upper surface, but lighter with a brown tinge underneath. Flowers yellow, sweet-scented. Stamens with purple anthers. Pistil green.

The propriety of the introduction of this interesting new Cassia into a work professing to depict hardy plants only, may be questioned by many: but, although hitherto cultivated in the green-house, this plant will doubtless endure the open, air of this country with the same precaution merely as is bestowed upon many other shrubs which are exposed to the open air, and which are natives of the same part of New South Wales. Many of these plants have been inured to the climate of this country, and it is therefore not anticipating too much to expect that this will prove equally hardy. This plant has been very recently introduced from New South Wales; and the present specimen was kindly forwarded by Aylmer Bourke Lambert, Esq. from Boy ton House, Wilts, where it flowered in the green-house in the month of May. When planted in the open air in a dry border of a north-west aspect, and in a soil composed of peat-loam and a little sand, it will no doubt flower luxuriantly, of which its habit indicates a free disposition. In the open air the flowers will not appear until the end of June. Like many of the species in this genus, the flowers are yellow; but this species differs very essentially from any of the others, in the peculiar fragrance of its flowers. It has not been sufficiently long in this country to ascertain whether it will mature its seed: probably it will not in the open air, but it may be increased by layers or by cuttings.

It was introduced by seeds from New South Wales in 1825.

REFERENCES TO THE PLATE.

- 1. Insertion of the stamens and pistil,
- 2. Petal.



OYTISUS PURPUREUS.

Purple-flowered Cytisus.

DIADELPHIA.

Class 17.

DECANDRIA.

Order 4.

CYTISUS: *Kururos* of Hippocrates and Theophrastus. Said by Pliny to have been first found in the isle of Cythus, whence it is supposed to have derived its name.

Linn. gen. n. S77. Linn. sysi. 667.

GENERIC CHARACTER.

Cal. Perianth one-leafed, bell-form, short, obtuse at the base: mouth two-lipped; upper lip two-cleft, acuminate j lower three-toothed. Cor. papilionaceous. Standard ovate, rising upwards, sides reflex. Wings the length of the standard, straight, obtuse. Keel somewhat bellied, acuminate. Slam. Filaments diadelphous (single and nine-cleft) rising upwards. Anthers simple. Pist. Germ oblong. Style simple, rising upwards. Stigma obtuse. Per. Legume oblong, obtuse, attenuated at the base, stiff. Seeds a few, kidney-form, compressed.

SPECIFIC CHARACTER.

Mowers peduncled, solitary. Leaves smooth. Stems decumbent, becoming shrubby. Legumes sickled above.

STEM shrubby, smooth, brownish, pliant, prostrate. Leaves scattered, alternate, petioled; leaflets sessile, ovate, sharpish, dark green, quite entire. Flowers axillary, solitary, erect, on a short pedicel. Calyx tinged with purple. Corolla lame, fine purple. Filaments all connate. Anthers orange-coloured. Legume much narrower at the base, subpeduncled, linear, compressed, sickle-shaped, black when ripe, and commonly smooth.

Few shrubs which ornament the lawn or pleasure-ground are more interesting when in flower than this species of Cyti-sus. Whether it be cultivated as a dwarf shrub in its natural style of growth in trailing on the ground, or as a standard in being worked upon a stem of the common Laburnum, it invariably attracts attention. When it is placed alone on the lawn as a standard, its branches having a natural disposition towards the earth, they hang in a pendent manner round the main stem, upon which they are worked by the process of budding; and when in flower present a very lively appearance. Other species of this genus may be treated in the same manner. The C. supinus when thus worked assumes the same habit of growth, while the *C. argentcus* and *C.* capitatus present their shoots upwards; but either, as dwarfs or standards, arc very ornamental. The C. purpiireus, when cultivated as a dwarf shrub, has a good effect grouped with many of the species of Dap/me, - also in the front of the American beds intermixed with the Ledum tribe and other dwarf shrubs. When cultivated in this manner it does not attain above a foot in height, as its habit is to trail upon the surface of the ground. It is readily increased by layers, and thrives well in a light vegetable earth. The flowers are purple, and appear in great profusion in the month of May.

It is a native of Austria, and was introduced in 1790.



PAPAVER NUDICAULE £ COCCINEA, Scarlet Naked-stalked Poppy.

PoLYANDKJA. Class 13.

MoNOGYNIA, **Order 1.**

PAPAVER, from Vappa.

gen. n. (>4S.

GENERIC CHARACTER.

Cat. Perianth two-leaved, ovate, emarginate j leaflets subovate, concave, obtuse, caducous. Cor. Petals four, roundish, Hat, spreading, large, narrow at the base, alternately less. Stain. Filaments numerous, capillary, much shorter than the corolla. Anthers oblong, compressed, erect, obtuse. Pist. Germ roundish, large. Style none. Stigma peltate, Hat, radiate. Per. Capsule crowned with the large stigma, one-celled. Seeds numerous, very small. liecept. longitudinal plaits, the same number with the rays of the stigma, fastened to the wall of the pericarp.

SPECIFIC CHARACTER.

Calyx egg-shaped, hairy, rough. Leafstalks radical, very long. Leaves downy, lobed 5 lobes acutely dentated.

ROOT biennial. Root-leaves hispid, broader, shorter, less deeply divided, and fewer segments than in the others, which are divided into narrower and longer segments: they are of a very glaucous green, more particularly so underneath. Stems herbaceous: they rise about a foot in height, they are

naked, and »upport on the extremity a solitary flower. hi ill is variety the flowers are a beautiful scarlet.

Of the numerous species and varieties of this tribe of plants, very few are admitted as ornaments to the flower-garden: many of the annual kind are excluded, either from possessing too gaudy an appearance or from the liability to scatter their seeds too numerously on the border, producing a multiplicity of plants, and a monotony of foliage and bloom. Independent of the very gaudy species there are some well worthy of cultivation in ornamental flower-borders. The P. nudicaule (from which the present variety has been produced) possesses a degree of interest from its free production of delicately tinted yellow flowers, about a foot or rather more in height. It is from this species the present as well as many other varieties have been produced, varying principally in the colour of the flowers, which in different plants produce variations of all the shades of yellow, orange, and scarlet. The variety represented by this figure has been selected for the brilliancy of its colour, for being less fugitive than many of the others, and for transferring its beauties with truth to its offspring, while many of the others sport to a great extent with their colours. This variety, intermixed with P. nudicaule in the border, will be found to assist in adding to each other a degree of brilliancy which will render them conspicuously ornamental. They may be admitted both in clumps in the flower-garden and in the front of the shrubbery-borders: they grow freely in light vegetable earth, and may be increased by seeds.

The *P. nudicaule* is a native of Siberia, and was introduced in 1730.

This species was figured from Mr. Knight's Nursery, King's Road, Chelsea.



CYCLAMEN COUM, Hound-leaved Cyclamen.

PENTANDUIA. Class 5.

MONOCYNIA.
Order 1.

CYCLAMEN, from Yi

Linn. gen. n. 20 1. hot. Mag. \setminus .

GliNKItIC CHARACTER.

Cat. Periunth half five-cleft, roundish, permanent j divisions ovate, Cor. one-petalled. Tube somewhat globose, twice as large as the calyx, small, nodding. Border bent upwards, five-parted, very-large, divisions lanceolate. Neck prominent. Stam. Filaments five, very small in the tube of the corolla, converging. Pist. Germ roundish. Style filiform, straight, longer than the stamens. Stigma sharp. Per. Berry globose, one-celled, gaping five ways at the top, covered with a capsular shell. Seeds very many, somewhat ovate cornered, llecept. ovate, free.

SPECIFIC CHARACTER.

Leaves orbicular, cordate, quite entire.

ROOT perennial, tuberous. Leaves plain, orbicular, with short weak petioles; their underside is very red in the beginning of winter, but that colour goes off in the spring; their upper side is smooth, of a lucid green, and spread flat open; whereas the other sorts are hollowed and reflex at the base. The flowers are of a bright purple, and are supported on stalks about three inches in height.

with Scarcely i » n v gcini:-; nia-Ls nu:!r iinivci a! cn Lliiin **t_Iliit** oi* tile Cyclamen. The lew species which this gc:iii possesses, vary very little from each other, vet thev posses very threat attractions: a slight variation the cliaracter < their leaves, in the colour of their flowers, or tlie time of thei appearance, are the only observable differences. The specie here figured possesses advantages over the rest, as it put forth its (lowers as early as February, a season when the mos trifling signal of the return of vegetation impresses the mine with an engaging interest, it recalls the delights attendant upon the production of those floral beauties which ever yield pleasure and delight. As the flowers of this little ornament do not rise above the height of four inches, they are in danger of being obscured in the border. and they are therefore frequently cultivated in pots. They will however flower as well in a dry border composed of light vegetable mould and sand; and in this situation are more likely to perfect their seeds. When grown in pots they should, about the end of July, when their die off. kept tolerably dry for about three leaves be months. They are propagated by seed, whicli i.i. produced: these seeds should be sown in flat pots immediately after they are ripe, which is about the middle of August. They will appear during the autumn, and should be kept in a frame or pit throughout the winter, and early in the spring should be planted out either into the ground or into separate pots.

This is a native of the South of Kurope, and was introduced in 1731.

Figured from Messrs. Chandler and Buckingham's Nur-