Executed & Publishd, by E.O. Donovan, as the Act directs, 8th Dec^r. 1789.

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THE
BOTANICAL REVIEW,
OR THE
BEAUTIES OF FLORA:

ALETRIS CAPENSIS, WAVED-LEAVED ALETRIS,
or BASTARD ALOE.

Class and Order.

HEXANDRIA MONOGYNIA,

Generic Character.

Corol. infundibuliformis. Stamina, inserta laciniarum basi.
Cap. 3-locularis.

Specific Character.

ALETRIS *capensis* Acaulis, foliis lanceolatis undulatis,
Spica ovata, floribus mutantibus. *Sp. Pl.* p. 456.

Explanation of the FIGURES.

A. A Flower laid open, (half the natural size) 1, 1, the
six Stamens; 2, the Style; 3, the Germen.

B. The three cells of the Germen, or Seed Vessel.

C. The construction of the Fertilizing Dust or Farina,
deeply magnified by a microscope.

B.

The

The Stamens are the male, the Pistil and Germen the female organs of Plants, without which perfect or at least fruitful Seeds could not be produced; a faithful investigation of those parts cannot therefore but be acceptable to the curious in Botany.

The male organs consist of two parts; the filament, which is a fine thread-like substance, supports on its summit a small vessel, called the Anthera, divided into several cells, in which the Farina is prepared: the Farina is so small that the minutest inspector, with the naked eye, cannot even distinguish between a single atom or a cluster of twenty. When perfect, it is diffused over the Stigma or summit of the Style, and thence proceeds the generation of perfect seeds.*

N. B. In this Plant it is of a yellow colour.

The Draught of the *Aletris capensis*, owing to the natural size of the Plant, is drawn on a scale of one-third, as it would have answered little purpose, in such a small scope, to have figured any part as large as the real object.

This Specie, whose beautiful delicacy and majestic elegance must in many points stand unrivalled, is a native of the Cape; was introduced into this country by Mr. W. Malcolm, in 1768: has a bulb root, and is in flower late in the season.

As it produces many young bulbs at its roots, they are cut off; which being set into good loam, with the assistance of real or artificial heat, never fail to prosper: during winter, it requires a moderate heat in the stove.

* This, and every other part which concern the fructification, may be found amply illustrated in our Essay.

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ILLICIUM FLORIDANUM. RED FLOWER
ANISEED TREE.

Class and Order:

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 6-phyllus. *Petala* 27. *Caps.* plures, in orbem digestæ,
bivalves, monospermæ.

Specific Character.

ILLICIUM *Floridanum*, floribus rubris.

Explanation of the FIGURES.

- A. The Capsules, Petals, &c.
- B. The Capsules taken from the Stamens.
- C. The order of the Stamens.
- D. The side view of a Stamen.
- E. The under side of the same.
- F. The form of the Farina when magnified: to the naked eye this is a white dust.

G. A Stigma: to the naked eye they appear covered with Farina, when magnified. See the Figure.

This, not long since scarce and valuable Plant, is, from the multiplicity of off-sets which it produces, at length become so plentiful as to have many possessors, it will, however, require some extent of time, before the whole of the curious can be gratified with this additional ornament to their collection.

We understand this Plant came into our country in 1766, and that we are indebted to John Ellis, Esq. for its introduction. Being a native of Florida, it requires the heat of a stove:

stove: they are usually cultivated by cuttings; *i. e.* the branches are cut off at the joint, which, being put into good bog loam, with a proper degree of heat, is mostly productive of a healthy Plant.

It flowers about April. The flowers shortly drop off, and as shortly are succeeded by others, till about July or August; it sometimes raises itself, in elevation, several feet; at this period, its many branches, number of blossoms, and plenitude of young foliage, exhibit a spectacle which, for elegance, is scarce conceivable.

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GEUM MONTANUM, MOUNTAIN AVENS, or
HERB-BENNET.

Class and Order.

ICOSANDRIA POLYGYNIA.

Generic Character.

Cal. 10-fidus: laciniae alternae minores. *Petala* 5,
Sem. aristata.

Specific Character.

GEUM. *Montanum*, caule unifloro, aristis rectis villosis, foliis
pinnatis pilosis: foliolo extimo maximo subrotundo; infe-
rioribus sensim minoribus. *Hortus Kewensis*.

GEUM. *Montanum*, flore inclinato solitario, fructu oblongo:
aristis plumosis rectis. *Sp. Pl.* p. 717.

CARYOPHYLLATA-pinnis confertioribus extrema subro-
tunda, tubis rectis. *Hall. herb.* 336.

CARYOPHYLLATA-alpina lutea. *Bauh. pin.* 322.

CARYOPHYLLATA-alpina. *Pon. bald.* 342.

CARYOPHYLLATA-montana. *Cam. epit.* 727.

CARYOPHYLLATA-alpina minor. *Bauh. pin.* 322. *prodr.*

^{139.}
CARYOPHYLLATA-alpina minima, flore aureo. *Barr.*
rar. 588. t. 399.

Explanation of the FIGURES.

A. The Stamens, &c. seen by tearing off part of the Ca-
lyx.

B. The Stamens taken away to shew the Styles.

C. The Calyx.

E. The order of the Styles shewn by a section.

C

F. One

F. One of the Styles (*magnified*). *Though the Stigmata of those Styles to the naked eye appear obtuse, and indeed by authors have been described as such, they are in reality two-cleft—this is obvious to every examiner who views them with a microscope, particularly at the time of impregnation.* 1, the Stigma; 2, the Seed, yet immature.

G. A Stamen; the Anthera discharging the Pollen or Farina, which is of a yellow colour.

H. The form of the Farina, deeply magnified,

This Plant grows naturally on the Alps in Austria, and Switzerland, and its unusual hardiness recommends it to the attention of the Florist, as it for a considerable time braves the frost, and will grace the Garden at a time when but few others can sustain the severity of weather,

Mr. P. Miller advises sowing the Seeds in Autumn, from which young Plants may be expected the ensuing Spring; but if sown in the Spring it rarely comes to perfection. It will thrive in almost any soil, and requires a shady situation.

It flowers in May, and is not unfrequently met with (in the same state) till December or January.

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ASTER GRANDIFLORUS, SUPERB FLOWER, STARWORT.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept., nudum. *Pappus*, simplex. *Cor.* radii plures 10.
Cal. inbricati squamæ inferiores patulæ.

Specific Character.

ASTER-*Grandiflorus*, foliis linearibus integerrimis subam-
plexicaulibus hispidis ciliatis; ramorum calycisque reflexis.
Hortus Kewensis.

ASTER-*Grandiflorus*. *Sp. Pl.* p. 1231.

Explanation of the FIGURES.

- A. An hermaphrodite Floret.
B. The same, laid open, which shews its five Stamens and one Style, the Stigma of which is two-cleft.
C. The Style and Stamens magnified.—Fig. 1, the rough outside of the Stigma; 2, the inside, which appears smooth: down the Style runs two tubes, which, when magnified, being transparent, is very plain.—Fig. 3, shews an Anthera before it is opened; 4, the front, when discharging the Farina; 5, the back view of the same.—These Antheras consist only of one cell, which, when unfolded, shews the Farina adhering to the sides within.—The five Antheras are connected, and form a tube which surround the Style.
D. The form of the Farina: though this is yellow, as well as the Farina of the *Geum Montanum*, when magnified they bear not the least resemblance to each other.

This

This Specie of ASTER, trivially known by the name of Catesby's Starwort, is a native of America; has long been innured to our climate, flourishes in the open grounds, and is in flower from August sometimes till Christmas.

Miller, speaking of the mode of culture requisite, says—
 “It doth not multiply fast by its roots, but may be propa-
 “gated in plenty by cuttings made from the young shoots
 “in May, which, if planted in a bed of light earth, and
 “shaded from the sun, will take root.”

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LIMODORUM TANKERVILLIÆ, CHINESE LIMODORUM.

Class and Order.

GYNANDRIA DIANDRIA.*

Generic Character.

Nectarium monophyllum, concavum, pedicellatum, intra petalum infimum.

Specific Character.

LIMODORUM *Tankervilliae*. Floribus racemosis imberbibus. *Hortus Kewensis*, Pl. 3, P. 302, Vol. III.

THIS beautiful exotic, entitled the *Limodorum Tankervilliae*, grows naturally in and near the country of China:---We learn, about the year 1778, *John Fothergill*, M. D. introduced it into this kingdom; from which time to the present it has been chiefly confined to the stove of the curious---where, in order to nourish and render it healthy, they set it in a composition of bog and loam in the most commodious place for light, heat, &c. the hot-house affords. In this situation we have seen them three or four feet in height.

The Author of the *Hortus Kewensis* mentions March and April as the time of its flowering---this must be in its native climate; in this country it is precarious, flowering at any time and season of the year.

It is propagated by young bulbs taken from the root.

It is at present the unanimous opinion of Botanists that this Plant hath only two *Stamina*---the ingenious Author of the *Hortus Kewensis* has particularly signified the same: we are aware of the arduous task of withstanding such a popular opinion, and equally so of the folly attendant even on the idea of consigning to oblivion that which, upon investigation, might prove the Order a popular error---with all possible care
D and

and attention, and with every power of a microscope, we have examined the parts of *fructification*; we find not *two* but *eight distinct Stamina*, and how, to the scandal of every branch of the science, such an opinion could be formed, is difficult to determine.---We cannot too strongly recommend to every Professor of Botany an impartial examination of points whereon their estimation dependeth, and this error, not improperly, may be laid to their charge.

Result of our microscopic observations, for general information.---
Each Flower hath two sets of *Stamina*---two short and two longer *Stamina* constitute each set;---the base of the four *Filaments* are enclosed within a very fine membrane, by which each set is connected to the inside of its respective cell;---the *Filaments*, at first sight, are scarcely distinguishable, being formed of a jointed substance, contracted in a very small compass, but so exquisitely elastic that it may be drawn out to ten times the length it at first appeared of; and in this situation we may perceive the just proportion of the *Filaments*---the *Antheræ* are eight also: each are divided (by a substance resembling the *Cotyledons* of a Seed) into three cells, wherein the *Farina* is prepared.

In order to prove what is here advanced, lay, on the object glass of a microscope, one of the supposed *Stamina*; hold under the finger nail one of the *Antheræ*, and with a blunt point laid carefully on either of the three others, the *Filaments* may be drawn out to the length above-mentioned, but, on being let loose, will spring back to its first form. The *Stigma* being immediately under the *Stamina*, no exertion of nature is required to extend the *Filaments*; it is plain, the male, if at a greater distance, would reach the female organs.

Explanation of the FIGURES.

- A. The Plant, drawn on a scale.
- B. The parts of *fructification*.
- C. The *Stamina*.
- D. The *Stigma*, magnified; *short points cover the same*.*
- E. One of the sets of *Stamina*, as it appears under a microscope. Fig. 1, the contracted elastic *Filaments*.
- F. The same when the *Filaments* are extended.---This figure, in its present appearance, cannot surely be considered as one *Stamina*.
- G. A transverse section of an *Antheræ*, shewing the three cells.
- H. Construction of the *Farina*; those are rarely found distinctly formed, owing probably to climate.

* *Vide our Essay,*

ERICA CILIARIS, CILIATED HEATH.

Class and Order:

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-phyllus. Cor. 4-fida. Filamenta receptaculo inserta,
Antheræ bifida. Caps. 4-locularis.

Specific Character.

ERICA Ciliaris, Antheris muticis inclusis, corollis ovatis
grossis, Stylo exserto, foliis ternis, racemosis secundis.
Syst. Veget. p. 368.

Explanation of the FIGURES.

- A. The parts of fructification:
B. Form of the Farina, magnified.*
C. A leaf magnified. The leaves are surrounded with fine
hairs.

About the year 1773 this curious Specie of Heath was brought into this country.---It is a native of Spain and Portugal, rarely if ever known to produce Seeds in this climate, but so hardy that during winter it requires only a greenhouse shelter.

Is propagated, like most foreigners of the same Genus, by cuttings, and is in flower from July to September.

* Vide Essay on the minute Parts of Plants.

CANNA INDICA, INDIAN FLOWERING REED, or CANE.

Class and Order.

MONANDRIA MONOGYNIA.

Generic Character.

Corollæ 6 partita, erecta: labio bipartito, revoluta, *Stylus* lanceolatus, corollæ adnatus, *Calyx* 3-phyllus.

Specific Character.

CANNA *Indica*, foliis ovatis utrinque acuminatis nervosis;
Sp. Pl. 1.

Explanation of the FIGURES.

A. B. The lance-shaped Style and Stamen.

C. Construction of the Farina, *deeply magnified.*

The Indian flowering Cane grows naturally in the warmer parts of America, &c. From the appearance of the Seeds, which are round, hard, black and shining, it is called by the inhabitants of the British islands in the Indies, Indian shot. Though it has been long cultivated in this country, its delicate constitution is by no means inured to the severity of winter, or even a green-house situation.

Mr. P. Miller, in the Gard. Dict. writes to this intent---
“All the sorts (of *Canna*) are propagated by Seeds, which should be sown on a hot-bed in spring, and when the Plants are fit to be removed, they should be transplanted into separate small pots and plunged into a moderate hot-bed of tanners bark, observing to shade them till they have taken root, after which a larger share of free air should be admitted to them every day in warm weather.”---They must be afterwards
E shifted

shifted into larger pots, and part of them put into the hot-bed again---the others placed abroad in June in a warm situation. Those in the hot-bed will be strong enough to flower well the winter following, but those in open air will not till the next summer; they may remain therefore till the beginning of October, be then put into the stove and treated as other hot-house Plants.

CISTUS

CISTUS HELIANTHEMUM, DWARF CISTUS or ROCK ROSE.

Class and Order:

POLYANDRIA MONOGYNIA.

Generic Character.

Cor. 5-petala, *Cal.* 5-phyllus, foliolis duobus minoribus.

Specific Character.

CISTUS *Helianthemum*, suffruticosus procumbens, stipulis lanceolatis, foliis oblongis revolutis subpilosis, *Flo. Lon.*

Explanation of the FIGURES.

- A. The Stamina.
- B. The Pistil and Stamina.
- C. One of the Stamina, *magnified.*
- D. The Seed Vessel.
- E. The same, as it (*when ripe*) naturally divides to discharge the Seeds.
- F. Form of the particles of Farina.

A native of the south of France, Spain and Portugal, and of some parts of England. There are three Varieties of this Specie, one bearing a pale red, the second a white, and the third a yellow Flower. They are all hardy Plants, and may be propagated by Cuttings or by Seeds---though Seeds, as of most Plants, are by far the most successful. It most usually delights in a dry soil, or in springing up amongst rocky fragments; its figure, though not luxuriantly beautiful, is pleasant and neat, and deservedly is cultivated in many gardens.

The Flowers are of short duration, but are immediately succeeded by others, so that, if a favourable season, they may be met with from June till the latter end of October or beginning of November.

CYCLAMEN PERSICUM, PERSIAN CYCLAMEN.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Corolla rotata, reflexa, tube brevissimo: fauce prominente.
Bacca tecta capsula.

Specific Character.

CYCLAMEN *Persicum*, foliis cordatis ferratis. *Miller's*
Dict. 4to. ed. p. 6.

Explanation of the FIGURES.

A. The Pistil, magnified.

B. The Farina, magnified.---*Note*, they are very small in proportion to those of the Cistus.

The Figure is half the natural size.

This Cyclamen is of late introduction, and being a native of the eastern climes, require a green and not unfrequently a hot-house shelter.---They are sometimes propagated by young bulbs, but those being in general of little account, they are mostly raised from Seeds, which should, soon after ripe, be put into pots of light undunged earth, about half an inch deep, and thence into a mixture of lime rubbish, and loam, placed so as to receive the morning sun, till the latter end of October, and then removed to a warmer situation.

They flower about December, and continue through the spring.

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STATICE SUFFRUTICOSA, NARROW-LEAVED
SHRUBBY THRIFT.

Class and Order.

PENTANDRIA PENTAGYNIA.

Generic Character.

Cal. 1-phyllus, integer, plicatus, scariosus. *Pet.* 5, *Sem.* 1,
superum.

Specific Character.

STATICE *Suffruticosa*, caule fruticoso: superne nudo ramo-
so, capitulis, sessilibus, foliis lanceolatis viginan-
tibus. *Sp. Pl.* 396.

On credible authority, this Species was introduced from
Siberia in 1781, by Messrs. Lee and Kennedy.

It is a hardy Plant, will grow in the soil chiefly applied to
foreigners, bog and loam, and may be propagated by cut-
tings, which should enjoy an airy situation.

Flowers early in February, and continues the same
throughout the warm seasons, to the beginning of Oc-
tober.

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ERYTHRONIUM DENS CANIS, DOG'S TOOTH VIOLET.

Class and Order;

HEXANDRIA MONOGYNIA,

Generic Character.

Cor. 6-petala, campanulata; *Nectario* tuberculis 2, petalorum alternorum *Casi* adnatis.

Explanation of the FIGURE.

A. The Farina.

Linnæus makes two Species of the *Erythronium*, but Miller and others have thought the foundation too superficial to complete a Specific distinction.

It is a native of Siberia, Italy, and Virginia; has been long cultivated in this country, thrives well in the open grounds, and in the month of March enriches the beauty of a pleasure-garden in a delightful manner, especially where set in patches, amongst other Flowers of the spring.

There is one circumstance which, though trifling, may be noticed; the *Antheræ* of three *Stamina* open before the Flower, after the *Farina* is shed: the other three, which are
con-

considerably longer, open also; so that this Plant may be said to receive a double impregnation.*

They are readily cultivated by young bulbs taken from the root and set into beds of loam.

Class and Order.

HEXANDRIA MONOGYNIA.

Genus Character.

Cor. 6-petala, campanulata; Nectare tuberculis 2, petalo-
formis alternantibus Can. adnatis.

Explanation of the FIGURE.

A. The Petal.

* *Vide* our ESSAY.
Linnæus makes two species of the *Hyacinthus*, but Mill.
ser and others have thought the distinction too superficial to
complete a specific distinction.

It is a native of Sicily, Italy, and Virginia; has been
long cultivated in this country, thrives well in the open
grounds, and in the month of March enriches the beauty of
a pleasure-garden in a delightful manner, especially when
set in patches, amongst other flowers of the spring.

There is one circumstance which, though trifling, may
be noticed; the leaves of these flowers open before the
flower, after the fashion of the other three, which are

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STRELITZIA REGINÆ, CANNA-LEAVED STRELITZIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Spathæ. Cal. 0. *Cor.* 3-petala; *Nectar.* 2-phyllus, genitalia involvens; *Peric.* 3-loculare, polyspermum.

A. The Plant, on a scale, B. the natural size.

Lately, a Friend of ours, in a voyage to China, touched at the Cape of Good Hope, and thence transmitted, among other drawings and remarks, a figure of the *Strelitzia Regina*, copied from the best specimen he could procure. We have seen the Plant at the Royal Garden at Kew, the Physic Garden at Chelsea, and in the stoves of several private Gentlemen, whence, allowing for the imperfections of art and the method of cultivating it, we conceive is sufficiently accurate to convey an idea of the original.

To the unwearied researches, expensive undertakings, and laudable intentions of SIR JOSEPH BANKS, Bart. the friends of the science stand indebted (among a numerous collection) for the Plant which is at present held in universal estimation, and whose extreme scarcity adds strongly to the obligation.

It was introduced in 1773, but we do not understand it has yet produced Seeds sufficiently perfect to furnish healthy flowering Plants. The specimen at Chelsea, by the swelling of the *Spatha*, &c. bears a favourable indication of the Seeds ripening.

G

Whilst

Whilst confined to Kew, Chelsea, and the stoves of individuals, the curious cannot gratify themselves with a critical examination of its parts, it is therefore to be wished for that Seeds will be produced which may render the Species more plentiful.

It flowers in April, May, and June. The *Petals* (which to each are three) are of an orange colour, in some inclining more to yellow than in others; the *Nectarium*, which is of a deepish blue, admits of equal variation, even in its native soil, and emits, at the time of flowering, a vast quantity of Nectar.

The Author of the *Hort. Kew.* thinks the *Nectarium* consists of three wings or leaves, but, on near inspection, the supposition proves erroneous; the supposed two wherein the *Stamina* and *Style* is enclosed being undivided.

In some, the undulation on one side of the leaves is not so considerable as in others; this difference prevailed even between the specimens at Kew and Chelsea.

The Plant, if healthy, will grow three, four, or five feet high, and will bear from three to ten, or more, flowers on each *Spatha*; in the stove it requires a light and warm situation, and is propagated by Seeds, in white loam and a small quantity of bog earth.

Explana-

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Explanation of the FIGURES in PLATE 13.

A. The *Nectarium*.

B. The same opened, to shew the five *Stamina* and *Style*;— the *Antheræ* are connected to the inside of the *Nectarium*, to five thread-like ribs, which strengthen the *Nect.* to bear the enclosed fructification erect: the *Style* is contained in the *Nect.* the *Stigma* only appearing above it.

C. The *Stigma* (*mag.*) It is naturally trifid, but being covered with a mucilaginous moisture, is not discernible unless divided.

D. Two of the *Stamina*, (*mag.*) shewing the connection with the *Nect.*

E. The *Farina* (*deeply mag.*) the Particles are fastened to each other by Fibres, &c.*

F. The under side of the leaves have a beautiful pearl-coloured appearance, which is taken off with a touch of the finger. It adds a great degree of delicacy to the original, and therefore worthy investigation. The Figure here given shews it magnified: the pearl colour is formed of tufts of fine hairs, ranged in regular order over the whole surface of the leaf, but so exquisitely delicate that the points are destroyed by a touch.

G. The same, magnified by a deeper power.

* An Account more at large in our Essay.

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ANTHOLYZA CUNONIA, SCARLET-FLOWER'D ANTHOLYZA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. tubulosa, irregularis, recurvata, *Caps.* infera.

Specific Character.

ANTHOLYZA *Cunonia*, Corollis rectis: labii quinquepartiti lobis duobus extimis latioribus adscendentibus. *Sp. Pl.* 54.

Is a native of the Cape of Good Hope, and though not to be considered equally scarce or beautiful as some of its vegetable productions (the *Strelitzia Reginae*) makes a very pretty appearance. Was it to flower in December or January, instead of May and June, we should view it with partiality to its beauty; but displaying its Flowers when "The face of Nature glitters in her glory," it is seen only among numbers equally attractive.

It is said to have been cultivated by Mr. P. Miller in 1756. It is propagated by Seeds, or parting its roots, and sown or planted in pots of bog and loam earth. If raised from seeds it will be no unnecessary precaution to plunge the pots in a bed of tanner's bark for a short time, and afterwards to remove them into the green house: it will require no warmer situation, unless the weather is severely cold; but may be set out of the house in the shade during the finest of the summer months.

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IRIS CRISTATA, CRESTED IRIS.

Class and Order.

TRIANDRIA MONOGYNIA.

*Generic Character.**Cor.* 6-partita: *Petalis* alternis reflexis *Stigmata* petaliformia.*Specific Character.**IRIS Cristata*; *Corollis* barbatis: barba cristata, caule sub-unifloro longitudine foliorum, germinibus trigonis, *petalis* subæqualibus. *Hort. Kew.*

Few of the many tribes of Plants afford a more beautiful or nobler appearance than that of the *Iris*; among them are two species which in the aspect of their Flowers bear a near resemblance, the *Iris Persica* and *Cristata*; the former, it must be confessed, has in its *Petals* a more variegated appearance, but the latter, on that account, labours under no disadvantage, since a delicate and graceful foliage makes ample compensation.

Grows naturally in North America; was introduced in 1756 by Peter Collinson, Esq. encreases by the multiplicity of its roots, and thrives well, treated as a green house Plant.

Flowers in May, and is usually propagated by parting its roots.

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VACCINIUM MACROCARPON, AMERICAN CRANBERRY.

Class and Order:

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. superus, *Cor.* 1-petala; *Filamenta* receptaculo inserta, *Bacca.* 4-locularis, polysperma.

Specific Character.

VACCINIUM *Macrocarpon*, foliis integerrimis ovali-oblongis obtusis planis, caulibus repentibus filiformibus. *Hort. Kewen.*

Flowers May, June, and July; and though its blossoms possess not a distinguished luxuriance of color, a portion of delicacy amply makes amends, and certainly entitles it to a place in the border.

It is not a plant which generally brings its fruit to perfection in this country; though it sometimes does; when it fails, it may proceed from the ill health of the plant, from injudicious management, from soil, or from season.

Is increased by seeds, or by layering, which, as it creeps on the Ground, is very easily managed.

The naturalist, among the profusion of singularly constructed objects seen by the assistance of the microscope, will find the stamens, &c. of this plant, no way unworthy his notice.

“ Is a native of North America, and was cultivated in 1763, by Mr. JAMES GORDON.” *Hort. Kewen.*

SISYRINCHIUM BERMUDIANA, small
SISYRINCHIUM.

Class and Order.

GYNANDRIA TRIANDRIA.

Generic Character.

Monogyna. *Spatha* 2-phylla; *Pet.* 6, plana. *Caps.* 3-locu-
laris.

Specific Character.

SISYRINCHIUM, *Bermudiana*, foliis ensiformibus enerviis.
Syst. Vegt. 820.

The introduction of this plant is ascribed to Mr. JACOB BOBART, 1693, and though since that time it might be supposed to have increased considerably, it has not happened in a proportion to many plants; if raised from good seeds, it soon becomes vigorous enough to decorate the border, and will produce ripe seeds, by which it may be propagated.

Nor will the stamens and pistil of this plant refuse an attentive examiner, an instance of the fallibility of a superficial survey, even of the greatest naturalist.

Is a native of North America, &c.—Flowers May and June, and often April and July.

Ex. h. Pl. by E. O. Dominica

DAPHNE CNEORUM, TRAILING DAPHNE.

Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. o. *Cor.* 4-fida, corollacea, marcescens, Stamina includens; *Bacca* 1-sperma.

Specific Character.

DAPHNE *Cneorum*. Floribus congestis terminalibus sessilibus, foliis lanceolatis nudis mucronatis. *Syst. Veget.* 371.

A native of Switzerland and of Austria; has been some years in this country, but is not, nor is at present, likely to be procured in profusion, though enough may be had for the curious. Its beauty is attractive and its smell aromatic, and therefore entirely calculated for those who wish to decorate their apartments with the productions of the vegetable creation.

Usually grows two or more feet high, with its branches regularly spread, and beautifully decorated with flowers and foliage.—Flowers in April and September.

ERICA AUSTRALIS, SPANISH HEATH.

Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-phyllus, *Cor.* 4-fida, filamenta receptaculo inserta, antheræ bifida, *Caps.* 4-locularis.

Specific Character.

ERICA *Australis*, Antheris cristatis, corollis cylindricis, stylo exserto, foliis ternis patentibus. *Syst. Vegt.* 366.

Those who, in the cultivation of their garden, are not too strictly attached to plants of showy colours, need never object to any of this genus; few plants can boast of a more delicate appearance, or more harmony in the arrangement of their parts: contrary to most others, after the plant has flowered, the flowers do not drop off, but dry and change to a brown cast; the pistil and stamens remain as when in full flower, and the old leaves will remain so long on the branches as to be crumbled off by a touch.

“ The Erica Australis is a native of Spain and Portugal;
 “ was introduced in 1769, by G. W. Earl of Coventry,
 “ and flowers April and May.” *Hort. Kewen.*

Executed & Published by E.O. Dorrance, as the 1st direct October 1799.

FUCHSIA COCCINEA. Scarlet-flowered FUCHSIA,

Class and Order.

OCTANDRIA MONOGYNIA,

*Generic Character.**Cal.* 1-phyllus, coloratus, corollifer, maximus. *Petala.* 4, parva. *Bacca* infera, 4-locularis, polysperma.*Specific Character.*FUSCHIA *Coccinea*, foliis oppositis ovatis denticulatis, petalis abovatis obtusis. *Hort. Kewen.*

Of the numerous addition of new plants to our former store, none can be more delicately beautiful than this; nor is it likely, any, will in a short time become more plentiful, as it most readily multiplies by seeds or by cuttings.—Though introduced so lately as 1788, from the extensive increase made by its cuttings, it is now in the possession of many curious persons; and it is very far from improbability, that a short time hence, it will be sufficiently plentiful to supply the wishes of those who at present cannot be gratified with it.

It was introduced by Captain Firth, and is a native of Chili. *Hort. Kewen.*

It has been by some considered as a plant whose delicate constitution always required the heat of a stove; but this, like many similar errors, time proves unnecessary; when it has once attained vigour and strength, the green house will be sufficiently warm, if the weather proves fine.

From May to July is signified for the time of its flowering; but cultivation, &c. has rendered it more hardy: many fine plants of it are at this period in full bloom, and from one of them this draught was taken.

The flowers vary in color from almost a scarlet, to a blood red.

Dictamnus

Executed & Published by E. A. Dorrance on the 1st of October 1790

PICTAMNUS ALBUS, *flore Rubro*, Red-flowered
FRAXINELLA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5, patula. *Filamenta* punctis glandulosis adspersa. *Caps.* 5, coalitæ.

DICTAMANUS *Albus*, *flore rubro* Jacqu, Austr. 5. p. 13.
t. 428.

In this species two varieties occur, at least varieties only they are at present considered, and are distinguished by the red flowered and the white flowered Fraxinella; the species is a natives of Germany, France, and Italy, and flowers from May to July.

The most baneful poisons, and most healing antidotes, are the product of vegetables; the most dangerous consequences, to the human or animal frame, may be derived from many plants, whilst the best and most successful remedies are derived from others.

Among those plants, which are or may be injurious, we may rank the Fraxinella; but such are the consequences of its ill influence, that it may be avoided with less caution than many others

“ The Fraxinella in the still evenings of dry seasons, emits
“ inflammable air of gas, and flashes at the approach of a
“ candle. There are instances of human creatures who have
taken

“ taken fire spontaneously, and been totally consumed.”
Phil. Trans.

The stem and its branches are covered with glands, or small protuberances; the filaments of the stamens have many on them also;* and though the leaves have no protuberances on them, they have many very visible punctures throughout their surface.—Upon the whole, we cannot possibly but consider that those are transpiring vessels; agreeable to which we may suppose the transpired particles (as they have a very powerful smell) constitutes a part of, or is, the matter so dangerous in its effect.

* Explanation of Plate 12 of *The Minutiae of Vegetables*, will more particularly illustrate the structure, &c. of those protuberances, or glands.

Executed & Pub.^d as the Act directs by E.O. Donovan Nov^r. 1790.

TRADESCANTIA VIRGINICA, VIRGINIAN
SPIDER-WORT.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Calyx triphyllus, *Petala* 3, *Filamenta* villis articulatis. *Capsu-*
la 3 locularis.

Specific Character.

TRADESCANTIA *Virginica* erecta lævis, floribus congestis. *Linn. Syst. Veget. Edit. 14, p. 314.*

The soon-fading Spiderwort of Virginia, or Tradescant his Spiderwort. *Park. Parad. 152, 5. t. 151. f. 4.*

Parkinson informs us, that for this ornament to the flower-garden, we are indebted to John Tradescant, who first received it of a friend that brought it from Virginia.

It bears the extremity of heat and cold uninjured, continuing in flower throughout the summer, till the latter end of the year; which, together with its being perennial, and requiring no other attention to propagate it, than parting its roots in autumn—or sowing seeds for its varieties (the pale purple, and white-flowered) renders it more generally cultivated than many other plants.

Antient Botanists by, the name of Spider-wort distinguished several plants of very different genera, supposing them to be an antidote, for the bite of a particular spider,

der, then called Phalangium, but since altered; the Phalangium of Linneus being well known to be harmless.

Each flower lasts but a day, but the number of buds which are ready to open as the preceding flower droops, scarcely ever suffer it, through the whole summer, to appear without blossoms—and from this circumstance, Tournefort called it *Ephemerum*, but Linneus altered it to *Tradescantia*.

One particular which relates to its generic character, is *filamenta villis articulatis*, expressive of the hairs on the filament being composed of joints, but as the microscope, or microscopical figures only can represent this small and singular object, we beg leave to refer our readers to the *Minutiae of Vegetables*.

VINCA

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VINCA ROSEA flore carneo, MADAGASCAR RED
PERIWINKLE.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Contorta. Folliculi 2, erecti. Semina nuda.

Specific Character.

VINCA *Rosea*. Caule frutescente erecto floribus geminis sessilibus, foliis ovato-oblongis, petiolis basi bidentatis. *Syst. Veget.* 252.

A native of the East Indies, was cultivated in 1757, by Mr. P. Miller, and bears blossoms through the greatest part of the summer.

There is a variety of this species with white blossoms, (flore alba umbone carneo) which, with the red-flowered, makes a pleasing diversity in the stove, among other scarce exotics.

Few plants maintain a greater succession of flowers, during the summer, for, like the *Tradescantia*, it always has a profusion in store, and as one falls or dies away, another succeeds it—when it blows the flowers are not so large as towards the middle of the course of its flowering, and after they have attained a proper size, they again dwindle till they are not above half the size they were in the more vigorous state of flowering.

It is propagated by cuttings or by seeds, raised and cultivated in a stove, few plants more readily increasing, but notwithstanding of a tender constitution and unable to bear the severity of climate.

WITCHAMORE. *Canis floridensis* and *Canis peninsularis*.
Canis floridensis, petals red, *Canis peninsularis*, petals white.

A native of the East Indies, was introduced in 1787, by Mr. P. Miller, and bears blossom through the greatest part of the summer.

There is a variety of this species with white blossoms, (those also unknown) which, with the red flowered, makes a pleasing diversity in the house, among other scarce exotics.

Few plants maintain a greater succession of flowers, during the summer, for, like the *Stradecaria*, it always has a profusion in flower, and as one falls or dies away, another succeeds it. When it shows the flowers are not so large as towards the middle of the course of its flowering, and after they have attained a proper size, they again diminish till they are not above half the size they were in the more vigorous state of flowering.