

CURTIS'S
BOTANICAL MAGAZINE;
OR,
Flower-Garden Displayed:

IN WHICH

The most Ornamental FOREIGN PLANTS, cultivated in the
Open Ground, the Green-House, and the Stove, are
accurately represented in their natural Colours.

TO WHICH ARE ADDED,

Their Names, Class, Order, Generic and Specific Characters, according
to the celebrated LINNÆUS; their Places of Growth,
and Times of Flowering:

TOGETHER WITH

THE MOST APPROVED METHODS OF CULTURE.

A W O R K

Intended for the Use of such LADIES, GENTLEMEN, and GARDENERS, as
wish to become scientifically acquainted with the Plants they cultivate.

BY JOHN SIMS, M. D.

FELLOW OF THE ROYAL AND LINNEAN SOCIETIES.

VOL. XLI. □

The FLOWERS, which grace their native beds,
Awhile put forth their blushing heads,
But, e'er the close of parting day,
They wither, shrink, and die away :
But THESE, which mimic skill hath made,
Nor scorched by suns, nor killed by shade,
Shall blush with less inconstant hue,
Which ART at pleasure can renew. LLOYD.

L O N D O N :

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M DCCC XV.



CONVOLVULUS PURPUREUS (δ.) VARIUS.
STRIPED-FLOWERED BINDWEED.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata, plicata. *Stigm.* 2. *Caps.* 2-locularis: loculis dispermis.

Specific Character and Synonyms.

CONVOLVULUS *purpureus*; (volubilis) foliis cordatis indivisis, fructibus cernuis, pedicellis incrassatis. *Willd. Sp. Pl.* 1. p. 852. *Bot. Mag. Nis.* 113 et 1005.
(δ.) *varius*; *corollis albis cæruleo-striatis.*

PHILIP MILLER remarked that there were three or four permanent varieties of this species, which he had not found to change by cultivation. He enumerates one with white, another with red, and a third with pale blue flowers and white seeds. The variety figured at No. 1005 of this work is still more remarkable than any of these, and has been published by JACQUIN in his *Hortus Schoenbrunensis*, v. 3. pl. 261, as a distinct species, under the name of *IPOMŒA discolor*. WEINMANN, in his *Phytanthozaiconographia*, vol. 2. tab. 414 and 415, has figured four varieties, one of which has a considerable resemblance to our present plant, having blue and white flowers with five red bands; but the colours are not so neatly defined, being rather in blotches than stripes.

The Honourable WILLIAM HERBERT communicated the specimen from which our drawing was taken, with a remark that he had raised it from seeds for five generations, without observing any disposition in it to change its characters. We have however seen some flowers all white, and in a bed of them
at

at Mr. KNIGHT's exotic nursery, during the present summer, a flower of the usual purple colour upon the very same stem with others like our drawing. This observation is decisive with respect to its claim to be considered as a distinct species.

Mr. HERBERT informs us, that it ripens seeds freely in the greenhouse, but not so readily in the open ground. This gentleman received the seeds from Cadiz.

Requires the same treatment as the other varieties.



OXALIS VARIABILIS, *var.* ALBIFLORA. WHITE-
FLOWERED VARIABLE WOOD-SORREL.



Class and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5, unguibus connexa. *Stam.* inæqualia: 5 breviora exteriora, basi connata. *Caps.* angulis dehiscens, 5-gona.

Specific Character and Synonyms.

OXALIS *variabilis*; acaulis, scapo unifloro foliis longiore flaccido, foliis ternatis subrotundis, folio intermedio cuneiformi, stylis flaminibus exterioribus brevioribus. *Willd. Sp. Pl.* 2. p. 777. *Jacq. Oxal.* 89. t. 52 et 53.

(γ .) albiflora; scapis petiolorum longitudine, limbo corollæ magno albo.

OXALIS *purpurea* (β .) foliis totis viridibus, limbo albo. *Thunb. Oxal.* n. 8. p. 13.

OXALIS *grandiflora.* *Jacq. Oxal.* n. 68. t. 54. ?

In the colour and size of its flowers, our plant corresponds with the *grandiflora* of JACQUIN, which is probably only a variety of *variabilis*. The red colour on the under surface of the leaves, according to JACQUIN himself, is not constant.

We regret, that not having seen the individual plant from which our drawing was taken, we had no opportunity of examining the proportionate length of the styles and stamens, which JACQUIN considers as a very important and constant character. We received however two pots of OXALIS *variabilis*, one with red, the other with white and pale flowers, from Messrs. LODDIGES; many of the flowers of which we examined with care, but were much disappointed to find that the situation of the stigmas seemed to vary according to circumstances; sometimes they were placed below the lower series of anthers,
more

more frequently between the two series, and now and then in faded flowers above both.

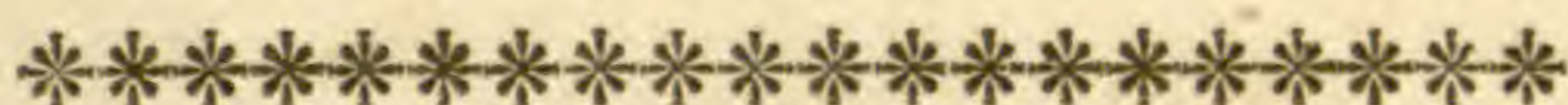
To us it appeared that, if examined in a very early state, the two series of anthers were packed close together one upon the other, and the stigmas were seen in the middle, even with the upper ones; but that in a little time the longer stamens shot above them, and the stigmas passed out between the filaments, and were then found above the lower and under the upper series of anthers, and when the days were cold, this seemed to be their permanent situation; but when the sun shone and the day was warm, or from some unknown circumstance, the shorter filaments likewise shot up above the stigmas, and these were found below both series of anthers. It seemed too that the styles sometimes began to grow after the filaments had ceased to do so, and shot up beyond the longest stamens; but it was only in faded flowers that we found the stigmas in this situation, and not often in these.

We had no reason whatever to suppose that there could be different species in the same pot; yet, when we find so experienced a Botanist as JACQUIN, asserting that he had paid the greatest attention to this subject for five successive years, and had examined a thousand individuals without finding the character vary, in the same species, in a single instance, we hesitate to put the same confidence in our few experiments, as we should otherwise have done, and must leave it to farther investigation.

Our drawing was made at Mr. WILLIAM GRIFFIN'S, South-Lambeth, in July last.



PITTOSPORUM VIRIDIFLORUM. GREEN-
FLOWERED PITTOSPORUM.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. deciduus. *Petala* 5, conniventia in tubum. *Caps.* 2—5-valvis, 2—5-locularis. *Sem.* tecta pulpa.

Specific Character.

PITTOSPORUM *viridiflorum*; foliis obovatis retusis nitidis subtus reticulatis, panicula subglobosa terminali.

DESC. *Stem* shrubby: branches tuberculated. *Leaves* alternate, obovate, very blunt, leathery, shining green on the upper side, pale and netted-veined on the under: *petioles* short, thickened at the base. *Inflorescence* terminal, in a more or less globular panicle. *Calyx* deciduous, five- (rarely four-) leaved: leaflets fleshy, ovate. *Corolla* five- (rarely four-) petaled: *petals* lanceolate, revolute, yellowish green. *Stamens* five (rarely four): *filaments* half the length of the petals, inserted into a fleshy receptacle: *anthers* arrow-shaped, acute, attached to the filament by the back. *Germen* oval, smooth: *style* erect: *stigma* capitate, spongy. *Flowers* very fragrant, the scent resembling that of a mixture of lemon and jasmine.

Native of the Cape of Good Hope. Flowers in July and August. Propagated by cuttings, or inarching on the more common species.

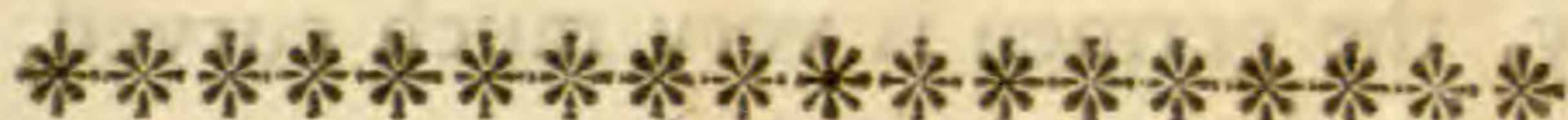
We find no mention of this shrub in any author that we have consulted. Communicated by Mr. SWEET, from Messrs. MALCOLM and SWEET'S Nursery, at Stockwell-Common.





DORYANTHES EXCELSA. GIGANTIC

DORYANTHES.

*Class and Order.*

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. supera, sexpartita decidua. *Filam.* basi laciniis adnata, iisque breviora. *Antheræ* erectæ, tetragonæ, basi cavæ extinctoriiformi affixæ. *Capsula.*

Specific Character and Synonyms.

DORYANTHES *excelsa*. Correa in Lin. Soc. Transf. v. 6. p. 211. tab. 23 et 24. Brown Prod. p. 298. Hort. Kew. ed. alt. 2. p. 303.

This magnificent plant, of the liliaceous tribe, flowered last summer in the greenhouse of the Right Hon. CHARLES LONG, at Bromley-Hill, in Kent; probably for the first time in Europe, except the single flower produced from a portion of the stem, without roots, which had been cut many months before in New-Holland, and from which chiefly M. CORREA established the genus.

From this plant we sketched the following brief description. *Radical leaves* about a hundred, four feet long, sword-shaped, smooth, quite entire, with a very narrow cartilaginous margin, lower ones recurved, the others erect. From the centre of these grew the *stem*, or *scape*, quite straight, ten or twelve feet high, clothed with linear-lanceolate acute *leaves* sheathing the stem at their base and spreading upwards. *Flowers* of a deep crimson or morone colour, collected in a roundish terminal *head*, surrounded at the base by large, ovate-acuminate, green *bractes*; within there were other lanceolate bractes, of the same colour with the flowers, and separating these into fascicles of two, three, or four; two still narrower bractes accompanied each individual flower the length of the germen and peduncle. *Laciniae* of the *corolla* six, tongue-shaped, obtuse with a nipped point. *Filaments* subulate, shorter than the corolla, to which they are adnate or folded.

folded at the lower part : *Antbers* the length of the free part of the filament, erect, four-cornered, hollowed at the base and affixed over the point of the filament like an extinguisher, covered with a dark green *pollen*. *Germen* straight, obscurely three-cornered : *Style* three-furrowed : *Stigma* three-lobed.

In the figure of the flower given in the Transactions of the Linnean Society, the germen is very much curved, which does not seem to be natural to the plant.

We were informed that the stem began to shoot the preceding summer, and reached to the height of three or four feet; that then, the winter coming on, it remained quiescent till the following spring, when it again resumed its growth, and the flowers began to expand by the end of July.



DELPHINIUM GRANDIFLORUM. GREAT- FLOWERED LARKSPUR.



Class and Order.

POLYANDRIA TRIGYNIA.

Generic Character.

Cal. 0. *Petala* 5. *Nectar.* 2—4-fidum, postice cornutum.
Siliquæ 3 seu 1.

Specific Character and Synonyms.

DELPHINIUM *grandiflorum*; (tricapfulare) nectariis tetraphyllis: labellis orbiculatis subbarbatis: unguibus appendiculatis, foliis lineari-multipartitis.

DELPHINIUM *grandiflorum*; nectariis diphyllis: labellis integris, floribus subfolitariis, foliis compositis lineari-multipartitis. *Sp. Pl.* 749. *Willd.* 2. p. 1228. *Miller. Ic.* 2. p. 167. t. 250. f. 1.

DELPHINIUM *lusitanicum* glabrum, aconitifolio. *Roloff Hort. Krausian.* 61. t. 3.

DESCR. *Root* perennial. *Stem* erect, smooth, somewhat angular, and dichotomously branched. *Radical leaves* multipartite: segments narrow, channelled, pale underneath; lower cauline leaves similar; floral 2—3-partite, or even simple. *Flowers* alternate on *peduncles* variously lengthened, distant, of a fine azure colour spotted with a dull red. *Petals* nine in two series: five outer ones ovate, four of them equal, the upper one larger and lengthened behind into a rugose spur with a bifid point: of the four inner petals (*nectarium*) two are very small, fleshy, upright, rigid, channelled: two are nearly orbicular, with an oblique claw, at the base of which is a small hooked appendix; these are reflected so as to cover completely the organs of fructification, and

and are ornamented near the claw with a yellow slightly bearded spot. *Stamens* many: filaments flat, narrowed upwards, and reflexed: *anthers* ovate, attached by the back, black with white pollen. *Germens* three, approximate, filky. *Capsules* three, erect, villous.

In the common Larkspur (*Delphinium Consolida*) the four petals of the nectarium are united into one and terminate behind in a spur sheathed by that of the upper petal: in all the species these parts vary materially in form and number. In this and the related genus *ACONITUM*, *JUSSIEU* considers the outer petals as calyx, and gives the name of petals to what *LINNÆUS* calls *nectaria*.

A double variety of this species is very common in our gardens, and much admired for the splendid blue colour of its flowers. But the plant in its natural single state has been a desideratum, and has been only lately introduced from Russia, by Messrs. *WHITLEY*, *BRAME*, and *MILNE*, of the Fulham Nursery. We have likewise seen it at the Exotic Nursery, King's-Road. Native of Siberia; a hardy perennial; propagated by parting its roots and by seed.



NARCISSUS VIRIDIFLORUS. GREEN
AUTUMNAL JONQUIL.



Generic Character.—Vide N^{is}. 924, 925.

Specific Character and Synonyms.

NARCISSUS *viridiflorus*; (*uni-pluriflorus*; *filam. adnata*; *anth.* 3 *tubo*, 3 *corona inclusæ*;) foliis uno-pluribusve, junceis, tereti-attenuatis, fistulosis, lævibus, scapo simili subisometro tardioribus; pedicellis inæqualibus, erectis, a brevioribus ad pluries tubo longiora; corolla geniculato-nutante; germine tubo pluries breviora; limbo stellato, laciniis divaricatis, æqualibus, linearibus, attenuatis, planis, tubo brevioribus; corona brevissima, cupulato-rotata, sexcrenato-incisa, segmentis obtusis, subemarginatis. G.

NARCISSUS *viridiflorus*; Schousboe. *Marok. in det danske videnskabers-selskabs skrifter*. 1800. 157. *tab.* 2. *Id. germanicè a Markussen*. 142. *tab.* 2. *Roth. neue beytr. zur Botan.* th. 1. 189. *Id. anglicè a Kænig & Sims, in Ann. Bot.* 2. 26.

NARCISSUS *juncifolius autumnalis flore viridi*. *Park. Parad.* p. 94. *tab.* 93. *fig.* 6.

DESCR. *Bulb* roundish with brown membranous coverings; *leaves* 1 to several, a foot or more long, as well as the *scape* nearly of the same size as in the common garden Jonquil; *spathe* lanceolately convolute, and (in specimens that have several flowers) shorter than the longer *peduncles*; *corolla* and *crown* of an uniform ash-green colour, segments about six lines long and one broad; *style* even with the longest *stamens*; *stigmas* 3; scent like that of the common Jonquil.

PARKINSON, by whom this rare and singular coloured species was cultivated amongst us nearly two centuries back, has been the first to record it. Subsequently to him, we do not find that it has been noticed, until enrolled under its present title in "The Observations on the Vegetables of Morocco" by Mr. SCHOUSBOE, a Danish Botanist, who found it growing spontaneously

spontaneously on the Coast of Barbary and on the "*neutral ground*," between Gibraltar and St. Roque, in 1791—3. Its natural season of flowering, like that of *NARCISSUS serotinus*, (a species from the same parts and of nearly similar œconomy) is the latter-end of autumn. In *serotinus* the *corolla* is white, *segments* elliptically lanceolate, *crown* orange-coloured, *leaves* linear, channelled, *scape* striate, and somewhat edged. Like *viridiflorus*, it has disappeared in our gardens, although it seems to have been the more generally known of the two, and was still in them in the time of MILLER. The specimen from which our present drawing was made, had been imported from Spain, by Dr. THOMPSON, and flowered this summer, for the first time, in Mr. GRIFFIN's collection, at South-Lambeth. G.

NOTE.

NARCISSUS TRILOBUS. Supra No. 945.

In the second edition of the Hortus Kewensis, this plant appears under the specific name of *nutans*, with a note that denies its being the *trilobus* of LINNÆUS. We shall not arraign the reasoning, on which the denial is founded; our friend, the excellent and learned writer of it, is now no more. We shall only state, that we know that he had never seen the plant; and that its identity with *trilobus* had been determined by comparison with the specimen of that species in the Linnean Herbarium. To any one who saw the plant, we are persuaded the description contained in the "*Species Plantarum*," would alone decide the point. Although LINNÆUS calls it *trilobus*; he says in the specific character, that the crown is "*subtrifid*," and in the appended note "*obscurely trifid and quite entire*." G.

ERRATUM.

No. 1301. *verf. fol.* We have omitted in the Enumeration of the Species of *NARCISSUS*: *N. Tazetta*, No. 925; which should be inserted. G.



SESAMUM INDICUM. INDIAN SESAMUM,
or OILY-GRAIN.



Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-partitus. *Cor.* campanulata, 5-fida: lobo infimo majore. Rudimentum filamenti quinti. *Stigma* lanceolatum. *Caps.* 4-ocularis.

Specific Character and Synonyms.

SESAMUM *indicum*; caule erecto, foliis ovato-lanceolatis integris vel lobatis, pedunculisque suboppositis.

SESAMUM *indicum*; foliis ovato-lanceolatis: inferioribus trilobis; superioribus indivisis, caule erecto. *Willd. Sp. Pl.* 3. p. 359. *Hort. Kew. ed. alt.* 4. p. 52. *Mart. Mill. Dict.* Synonyma tamen plura sub *orientale* petenda.

VANGLO or Oil Plant. *Brown Fam.* p. 270.

SESAMUM. *Matthiol in Diosc. lib.* 2. cap. 92. *Dod. Pempt.* 522. *Lob. Obs.* 514. *Ic.* 2. 63. *Ger. emac.* 1232. *Dalech. Hist.* 483.

SESAMUM *indicum*. *Rumph. Amb.* v. 5. p. 20. t. 76. f. 1.

SESAMUM foliis inferioribus trifidis dentatis, superioribus oblongis serratis. *Brown Fam.* 270.

SESAMUM alterum foliis trifidis orientale, semine obscuro. *Pluk. Alm.* 344. *Phyt. t.* 109. f. 4.

SESAMUM *indicum* and *orientale* appear to have their synonymy extremely confused. Of the older figures in wood, those which we have quoted are all copied from the original one of MATTHIOLUS; and appear to us properly to belong to this species, though generally referred to *orientale*, of which we know of no representation but that in the Hortus Malabaricus and the one in wood in CAMERARIUS's Hortus copied by PARKINSON, and diminutively by JOHN BAUHIN.

RUMPF describes the leaves to be three-lobed at the bottom of the plant, serrated in the middle, and quite entire or only sinuate at the upper part; but acknowledges that, in all these respects, they are subject to vary; their form seems therefore to be of little use in determining the species. The lower leaves of our plant were three-lobed. In the Hortus Malabaricus *SESAMUM orientale* is drawn with leaves and peduncles alternate; in all the figures which we have quoted, as synonyms of our plant, they are opposite, as they have been in all the genuine specimens that we have seen, except a little occasional deviation, and even then the disposition to remain opposite has been very evident.

Both this species and *orientale* are much cultivated in Egypt, and in the East and West-Indies, for the sake of the oil procured from the seeds, which is of the most extensive use, and is said to grow more mellow and agreeable with age.

Our drawing was made from a weak plant which flowered at Mr. VERE's, of Kensington-Gore, in August 1813. The sketch of the seed-vessels was added last summer from a much stronger plant which grew quite erect, the produce of the same seeds. It is a tender annual, requiring to be raised and invigorated by renewed hot-beds, to bring it to perfection in this country.

RUMPF mentions two varieties of *SESAMUM indicum*, one with white the other with black seeds; we are informed by Mr. ANDERSON, that the seeds of our plant are of a yellowish white colour, and were sent from Jamaica under the name of VANGALOSA.



COSMEA LUTEA. YELLOW-FLOWERED
COSMEA.

Class and Order.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Generic Character.

Recept. paleaceum. *Sem.* tetragona. *Pappus* 2- seu 4-aristatus.
Cal. duplex, uterque monophyllus octopartitus. *Cosmos.*
Cav. Ic.

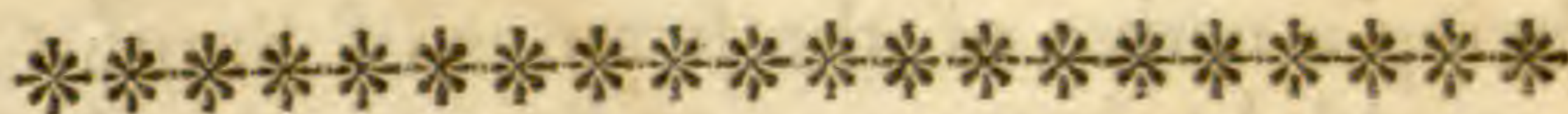
Specific Character.

COSMEA *lutea*; foliis pinnatis bipinnatifidisque: pinnis fer-
ratis subdecurrentibus, radio paucifloro neutro.

Our drawing of this undescribed species of COSMEA was taken at the garden of the Right Hon. Lord HOLLAND, in November 1812. His Lordship, we were informed, brought the seeds with him from the Botanic Garden at Madrid, under the name which we have adopted. A native of Mexico. A tender annual, requiring to be forced early in the spring to bring it into flower soon enough to mature its seeds before the winter; for want of which, it is probably already lost to this country.



THALIA DEALBATA. MEALY THALIA.



Class and Order.

MONANDRIA MONOGYNIA.

GYNANDRIA MONANDRIA. *Pursh.*

Generic Character.

Anthera simplex, ovata, filamentum proprio depresso inixa. Stylus brevis, ab anthera deflexus. Stigma perforatum ringens. Bacca monosperma. Semen evitellosum.

Specific Character and Synonyms.

THALIA *dealbata*; panicula albido-pulverulenta, spathis bifloris, foliis ovatis apice revolutis. *Pursh Fl. Amer. Sept. 584.*

THALIA *dealbata*; calyce bifloro, culmo arundinaceo pulverulento, foliis apice revolutis. *Roscoe in Lin. Soc. Transact. 8. p. 342. Hort. Kew. ed. alt. 1. p. 3.*

THALIA? *dealbata. Fraser, single plate.*

We received a very fine specimen of this beautiful plant in flower, several years ago, from our friend THOMAS FURLY FORSTER, Esq. but we could not make it expand any of the buds, though covered with a bell-glass and a bright sun; and consequently, from the fugitive nature of the blossom, we could not at that time get a drawing made of it. This specimen, however, afforded us the opportunity of observing that the *anther* burst, and discharged its globular *pollen*, before the expansion of the flower, and whilst it was closely embraced by the membranous stigma. This accounts for the circumstance, mentioned in the generic character, of the style being bent away from the anther; for this organ having already shed its pollen, could

could be of no further use. At every joint of the peduncle is a purplish-coloured concave bracte, which drops off before the flower is fully opened.

This elegant aquatic is generally considered as a stove plant, and may probably require that assistance to bring it into blossom; but, being a native of the swamps of South-Carolina, we presume it would be better to preserve it in the greenhouse through the winter, and remove it into the bark-stove at its season of flowering.

JUSSIEU includes THALIA in the natural order of *Scitamineæ*, which he calls *Cannæ*; but Mr. ROBERT BROWN has separated a small portion of these plants into a distinct order, under the name of *Cannæ*; retaining that of *Scitamineæ* for the rest. The *Cannæ* of BROWN, consist of the following genera; Canna, Maranta, Thalia, Phrynium, and perhaps Myrosma; and are distinguished from the true *Scitamineæ*, by their simple anther, by the defect of a *vitellum* in the seed, and by their possessing no aroma at all, or at most a very weak one.

Flowers in July and August. Our figure was taken from a plant communicated by Mr. KNIGHT, of the Exotic Nursery.



BRASSIA MACULATA. SPOTTED-FLOWERED
BRASSIA.



Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Labellum explanatum, indivisum. *Petala* patula, distincta. *Columna* aptera. *Massæ pollinis* 2, postice bilobæ; medio affixæ processu communi stigmatis. BROWN in Hort. Kew.

Specific Name.

BRASSIA *maculata*. Brown Mss. Hort. Kew. ed. alt. 5. p. 215.

The genus EPIDENDRUM, as originally constituted, through the discovery of a great number of additional species, had become not only too cumbersome, but contained so many plants, with the parts of fructification so differently framed, as to require being separated into distinct genera; a task undertaken, with considerable success, several years ago, by Prof. SWARTZ, and which has been farther elucidated by the labours of ROBERT BROWN, Esq. in the new edition of AITON'S Hortus Kewensis.

Our present plant is placed by Mr. BROWN between CYMBIDIUM and ONCIDIUM, and distinguished from both principally by the *columna*, with which in the former genus the labellum is articulated, and which, in the latter, is winged.

It was named in commemoration of Mr. BRASS, a man of considerable botanical knowledge, who went to Africa several years ago, to collect plants for Sir JOSEPH BANKS and Drs. FOTHERGILL and PITCAIRN.

Introduced to the Kew Garden, by the Right Hon. Sir JOSEPH BANKS, Bart. K. B. where it flowered in April last, and was brought to Sir JOSEPH'S, by Mr. AITON, who favoured us with permission to get our drawing taken from it.

LOBELIA VARIIFOLIA. VARIOUS-LEAVED
LOBELIA.



Class and Order.

PENTANDRIA MONOCYNIA.

(SYNGENESIA MONOGAMIA. *Linn.*)

Generic Character.

Cal. 5-fidus. *Cor.* 1-petala, irregularis. *Anth.* cohærentes.
Caps. infera 2- f. 3-locularis.

Specific Character.

LOBELIA *variifolia*; caulibus erectiusculis, foliis linearibus integerrimis dentatisque, floribus subsolitariis terminalibus.

The genus LOBELIA, as now constituted, contains so many species, several of which differ so materially in the parts of fructification, that they might with great advantage be separated. Our present plant is nearly related to LOBELIA *lutea*; see No. 1319, where the remarkable difference that exists between that plant and the rest of the genus is pointed out. We believe that Mr. SALISBURY has erected these two plants into a distinct genus, but we do not know that he has published any thing on the subject. We therefore leave them for the present under LOBELIA. It is much to be wished that some Botanist, who has sufficient opportunity, would go through the whole order.

LOBELIA *variifolia* differs from *lutea*, not only in foliage and habit, but in having a tripartite stigma, which in the latter is bipartite; but whether this distinction is constant must remain uncertain till an opportunity shall offer of examining a greater number of individuals.

Native of the Cape of Good Hope. Our drawing was taken at the superb collection of the Comtesse DE VANDER, at Bayes-Water, in July 1812.





MYOPORUM PARVIFOLIUM. SMALL-LEAVED
MYOPORUM.



Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-partitus. *Cor.* tubo brevi; limbo 5-fido, subæquali.
Stigma obtusum. *Drupa* baccata, 2—4-locularis. *Sem.* 1—2,
pendula.

Specific Character and Synonyms.

MYOPORUM *parvifolium*; foliis alternis clavato-linearibus
ramulisque glanduloso-tuberculatis, pedunculis subbipartitis,
folium subæquantibus.

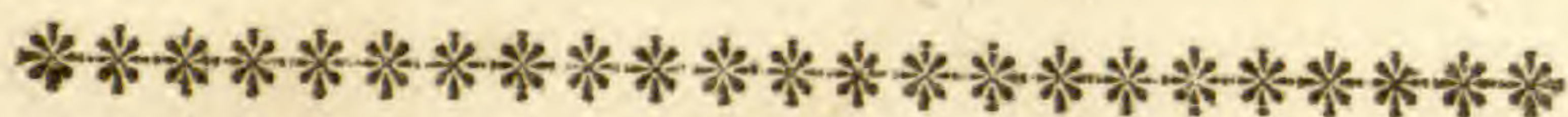
MYOPORUM *parvifolium*; foliis alternis linearibus obtusi-
usculis apice nunc dentatis basi attenuatis ramulisque glan-
dulosis, pedunculis passim bipartitis dimidio folio longiori-
bus, caule diffuso. *Brown Prod. Fl. Nov. Holl. p. 516. Hort.*
Kew. ed. alt. 4. p. 60.

POGONIA tuberculata, aspera vel scabra *Hortulanis.*

This is a very pretty little shrub, with sweetish honey-scented flowers; and flowering almost the whole of the year, is a valuable ornament to our greenhouses.

Being propagated by cuttings without difficulty, it is become pretty common, though no figure of it has, we believe, been hitherto published. We have received specimens of this plant from several quarters, under the names of POGONIA *tuberculata*, *aspera*, and *scabra*. Our drawing was taken from a plant communicated by Messrs. LODDIGES and SONS. Introduced in 1803, by Mr. PETER GOOD.

PROTEA ACUMINATA. SHARP-POINTED
PROTEA.



Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Petala 4, quorum 3 superne cohærentia. *Antheræ* apicibus concavis corollæ immersæ. *Nux* supera, undique barbata, stylo persistente coronata.

Specific Character.

PROTEA *acuminata*; foliis lineari-lanceolatis acutis planis supra venulosis, bracteis obtusis apice pubescente-concavo, ramis flexuosis coloratis.

This species of PROTEA, which we do not find described any where, has considerable affinity with *canaliculata*; but differs in having broader flat leaves, not hollowed on the upper surface, where they are slightly veined; bractes more obtuse, hollowed at the extremity, and bordered with a black pubescence. *Stem* upright: *branches* weak, twiggy, of a bright red colour on the side exposed to the light, and more thinly clothed with leaves than in *canaliculata*. *Flowers* always terminal.

Our drawing was taken at Messrs. LEE and KENNEDY's, in March 1812, where it is known by the name we have adopted.





COMMELINA TUBEROSA. TUBEROUS
COMMELINA.

*****.

Generic Character.—*Vide No. 1431.*

Specific Character and Synonyms.

COMMELINA *tuberosa*; (*flores involucrati*;) radice tuberoso-fasciculata; caule ramoso, futurâ villosâ striato; foliis oblongo v. ovato-lanceolatis, glabris, margine subciliato-scabris, vagina petiolari tomentoso-ciliatis, junioribus supremis involucroque subtus pubescentibus; racemis alternis, inclusis, paucifloris; pedunculis pubescentibus; rachide pedicellisque glabris; corollæ laciniis æqualibus, ovato-rotundis. G.

COMMELINA *tuberosa*. Linn. *Sp. Pl. ed. 2. 1. 61.* Willich. *Illustr. n. 18.* Mill. *Dict. ed. 8. n. 4.* Hort. Kew. 1. 76. ed. 2. 1. 124. Gærtn. *Sem. et Fr. 1. 49. t. 15.* Schmidel. *Ic. 192. tab. 49.* Bot. Rep. tab. 399. Lil. à Redoutè. tab. 108. Willd. *Sp. Pl. 1. 251.* Enum. 69. Vahl *Enum. 2. 171.*

COMMELINA *cælestis*. Willd. *Enum. 69.*

COMMELINA radice anacampserotis. Dillen. Hort. Elth. 94. tab. 70. fig. 90.

WILDENOW, in the last of his works above quoted, records the present plant under the name of *cælestis*, and has besides a species in the same as *tuberosa*. But, as our plant is undoubtedly his *cælestis*, and, as far as we can make out, the *tuberosa* of others; and since he has given no mark sufficient to distinguish them by, we suspect that this was the only one seen by him; and that being unable to satisfy himself of its identity with *tuberosa*, he has (as we so often see is done, to the injury of this science) recorded two species instead of one. We doubt whether the *C. fasciculata* of the Flora Peruviana is really distinct from this: it has the same root. Our drawing was made from a seedling specimen that flowered in its first year at Mr. VERE'S. The seed had been received from a botanic garden in the North of Germany. A native of Mexico; requires to be kept in the stove. Perennial. Cultivated in 1732 by Dr. SHERRARD at Eltham. G.

EUGENIA JAMBOS. NARROW-LEAVED
EUGENIA.

Class and Order.

ICOSANDRIA MONOGYNIA.

Generic Character.

Cal. 4-partitus, superus. *Petala* 4. *Bacca* 1-locularis, 1-sperma.

Specific Character and Synonyms.

EUGENIA *Jambos*; foliis integerrimis lanceolatis, pedunculis subquadrifloris terminalibus. *Willd. Sp. Pl.* 2. p. 959. *Hort. Kew. ed. alt.* 3. p. 186.

EUGENIA *Jambos*; foliis integerrimis, pedunculis ramosis terminalibus. *Sp. Pl.* 672. *Willd.* 2. p. 959. *Hort. Kew. ed. alt.* 3. p. 186. *Pl. Zeyl.* 188. *Lour. Fl. Coch.* 807. *Mart. Mill. Dict.* n. 2.

JAMBOSA *sylvestris alba*. *Rumpf Amb.* 1. p. 127. t. 39.

MALACCA-SCHAMBU. *Hort. Malab.* 1. p. 27. t. 17.

PRUNUS *malabarica* fructu umbilicato pyriformi *Jambos* dicta minor. *Raj. Hist.* 1478. n. 1.

In reading over the descriptions of the authors above quoted, there appears to be considerable contradiction existing in their accounts, which may be owing perhaps occasionally to the confounding this species with *E. malaccensis*; or there may be different varieties or species. RUMPF describes our plant as one of the wild sorts of JAMBOSA, distinguishing it from the domestic, or EUGENIA *malaccensis* of LINNÆUS by its smaller size, crooked growth of the stem, and austere, round-compressed fruit, which he says is seldom eaten in Amboyna, being less juicy, more insipid, and leaving a bitterish taste on the palate. From the crooked growth, the wood is chiefly used for the ribs of ships.

In the *Hortus Malabaricus*, the flowers are described as at first white and scentless, afterwards turning yellow and acquiring an acid or vinous smell; and the fruit is said to be sweet and grateful, with a very pleasant rose-like scent. By LOUREIRO the stamens are described to be red, the fruit sweetish acid, without smell.

Communicated by — BARRETT, Esq. of Ewel, at the latter-end of June. Flowers from February to July. Native of the East-Indies. Requires to be kept constantly in the bark stove.





PTERONIA PAUCIFLORA. FEW-FLOWERED
PTERONIA.

Class and Order.

SYNGENESIA POLYGAMIA ÆQUALIS.

Generic Character.

Recept. paleaceum : paleis multipartitis. *Pappus* subplumosus.
Cal. imbricatus, squamis carinatis.

PTERONIA *pauciflora*; suffrutex tomentoso-pilosus, ramis unifloris, foliis alternis lanceolatis, squamis calycinis glabris obtusis, capitulis cylindricis.

This little shrub, native of the Cape of Good-Hope, was communicated by the late Mr. NAPIER, from the Vauxhall Nursery, now CHANDLER and BUCKINGHAM'S. Having neglected at the time to examine it particularly, and not having met with it since, it is not without some hesitation that we give it as a species of PTERONIA.

OXALIS ROSACEA. ROSE-COLOURED
WOOD-SORREL.



Class and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* unguibus connexa. *Stam.* inæqualia : 5 breviora exteriora, basi connata. *Caps.* angulis dehiscens, 5-gona.

Specific Character and Synonyms.

OXALIS *rosacea* ; caule simplici folioso decumbente, foliis ternatis subsessilibus, pedunculis unifloris longissimis, petalis subtus discoloribus.

OXALIS *rosacea* ; caule folioso simplici decumbente, pedunculo unifloro foliis multoties longiore, foliis ternatis subsessilibus oblongo-cuneiformibus, corollis campanulatis acutiusculis, stylis flaminibus interioribus brevioribus. *Willd. Sp. Pl.* 2. p. 797. *Hort. Kew. ed. alt.* 3. p. 128.

OXALIS *rosacea* ; corollis campanulatis, stylis intermediis, filamentis gibbose denticulatis. *Jacq. Oxalis*, n. 30. p. 51. t. 17.

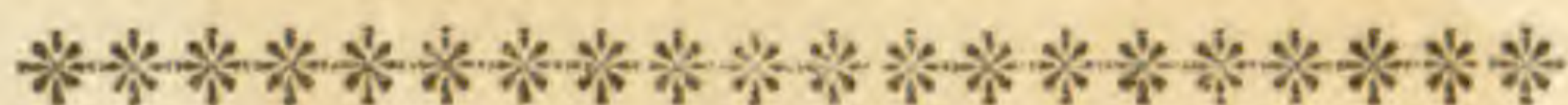
This beautiful species of OXALIS was communicated from the Bishop of London's garden in Fulham, in October 1812.

Native of the Cape of Good-Hope. Introduced by Mr. Masson. Flowers from September to November.





CROTALARIA PULCHELLA. LARGE-
FLOWERED CROTALARIA.



Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Legumen turgidum inflatum, pedicellatum. *Filam.* connata,
cum fissura dorsali.

Specific Character and Synonym.

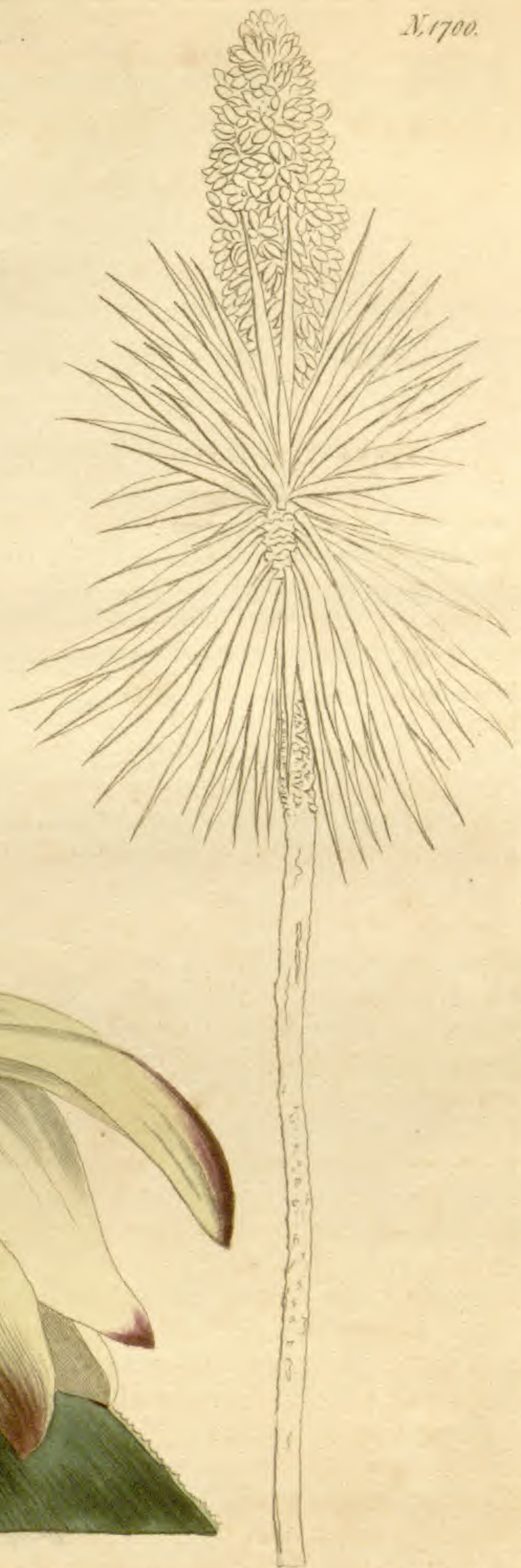
CROTALARIA *pulchella*; frutescens, ramulis teretibus sericeis, foliis ternatis: foliolis lineari lanceolatis acutis petiolis longioribus subtus subpilosis. *Bot. Repos.* 417. *Hort. Kew.* ed. alt. 4. p. 274.

The CROTALARIA *pulchella* is a handsome greenhouse shrub, with long, erect, slender, rounded branches, bearing large bunches of yellow flowers at their extremities. The whole plant is covered with a silky, close-adpressed pubescence.

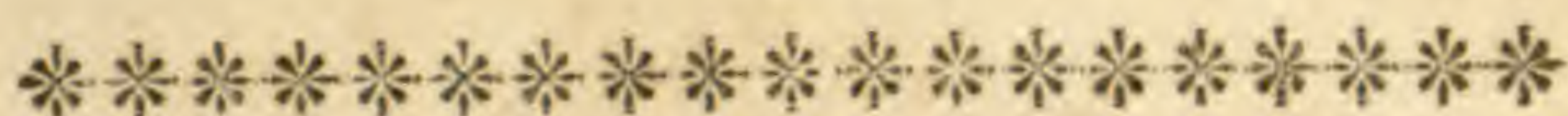
Our drawing was made several years ago, at Mr. COLVILLE'S Nursery, in the King's-Road, in the month of May.

Native of the Cape of Good-Hope.





YUCCA ALOIFOLIA. TALL-STEMMED
ADAM'S NEEDLE.



Generic Character.—*Vide No. 900.*

Specific Character and Synonyms.

YUCCA aloifolia; caudice arborescente, frugifero foliis aliquoties altiore; foliis numerosissimis, lapsu inferiorum excelsæ terminalibus, lanceolato-ligulatis, strictissimis, subtiliter denticulatis, juxta supra basin angustatis, interioribus erectius conniventibus; panicula racemosa, numerosa, subconferta, pyramidata, divaricata, ramulis laxis; corolla nutante. *G.*

YUCCA aloifolia. *Linn. Spec. Pl. ed. 2. 1. 457. Mill. Dict. ed. 8. n. 2. Hort. Kew. 1. 465. ed. 2. 2. 291. Decand. Pl. Gr. tab. 20. Desfont. Traité des Arbres. 1. 18. Lil. à Redouté. tab. 401, 402. Michx. Bor. Amer. 1. 196. Pursh Amer. Sept. 1. 228.*

YUCCA gloriosa. *Bot. Reposit. 473; (nec aliorum.)*

Y. arborescens foliis rigidioribus, rectis, serratis. *Dillen. Hort. Elth. 435. tab. 326. fig. 416.*

ALOE yuccæ foliis caulescens. *Pluk. Alm. 19. t. 256. f. 4.*

A. americana, *yuccæ* foliis arborescens. *Comm. Præhud. 64. tab. 14.*

The most lofty of its genus yet known to us; the stem rising sometimes to near eighteen feet high even in this country. The *leaves* are narrower and stiffer than in *gloriosa* (see above, No. 1260), and their edges finely ferrate and not entire as in that; the *panicle* much closer flowered, from two to three feet high; *flowers* suffused with purple on the outside. It does not bloom so freely as the two species already given in this work; and when it does the head decays, others sprouting out below. Usually kept in the greenhouse or conservatory, where we have seen vigorous plants, ten feet high and as thick as a man's arm, in garden-pots not more than a foot deep. It is said to thrive better in the open ground,

ground, and to flower there much stronger, when the seasons are favourable. We had not the opportunity of seeing the present plant, which flowered last October in the garden of Mrs. WALKER, at Stockwell. Native of both North and South America. Cultivated in 1696, in the King's Garden, at Hampton-Court. G.

ERRATUM.

No. 744, l. 13, a pede pag. pro "*præter habitum non bulbosum aliundeque diversum,*" lege "*habitu præterea non bulbofo aliundeque diverso.*"



SESUVIUM PORTULACASTRUM (β) REVOLUTUM.
PURSLANE-LEAVED SESUVIUM.



Class and Order.

ICOSANDRIA TRIGYNIA.

Generic Character.

Cal. 5-partitus, coloratus. *Petala* 0. *Caps.* ovata, 3—5-locularis, circumscissa, polysperma.

Specific Character and Synonyms.

SESUVIUM *Portulacastrum*; floribus subsessilibus.

SESUVIUM *Portulacastrum*. Hort. Kew. ed. alt. 3. p. 203. Willd.

Sp. Pl. 2. p. 1009. Decand. Pl. Grasses 9. Lamarck Illustr.

t. 434. *f.* 2. Swartz Obs. p. 204. Jacq. Amer. 155. *t.* 95.

SESUVIUM *sessile et revolutum*. Persoon Syn. 2. p. 39. n. 2. et 3.

AIZOON *canariense*. Bot. Repos. 201.

PORTULACA *aizoides maritima procumbens*, flore purpureo.

Sloane Hist. 1. p. 204.

AIZOON *repens*, foliis oblongis turgidis, floribus sessilibus singularibus ad alas. Brown Fam. p. 241.

CRITHMUS *indicus*. Rumpf Amb. 6. p. 165. *t.* 72. *f.* 1. ?

(β.) *revolutum*; foliis ovato-oblongis margine revolutis. Persoon Syn.

2. p. 39.

SESUVIUM *revolutifolium*. Ortega Decad. p. 19.

PERSOON makes three species of SESUVIUM, viz. *pedunculatum*, *sessile*, and *revolutum*; and quotes the figures of DECANDOLLE'S *Plantes Grasses*, at that time unpublished, for all of them. But as this Botanist has as yet published only one species, and that under the name of *Portulacastrum*, we cannot absolutely determine on the propriety of PERSOON'S division. Our plant, however, differs so little from DECANDOLLE'S figure, that we can consider it

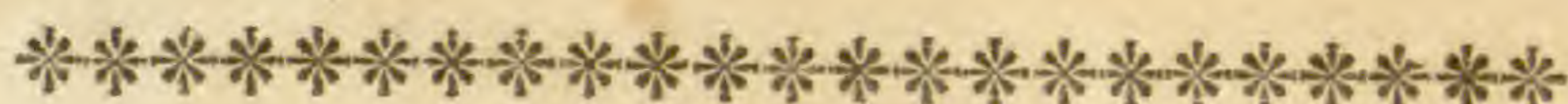
it only as a variety. At the same time we are inclined to think that those plants which have flowers on long peduncles, reflected as the fruit ripens, may form a species distinct from those with nearly sessile flowers, as in the two figures in LAMARCK's Illustrations. Judging, however, from the figures given by different authors, none of their plants seem to have had entirely sessile flowers; and in some, the length of this part is such as to make it doubtful to which species they ought to be referred: perhaps, therefore, they may be all merely varieties of the same.

The species is said to occur in maritime places both in the East and West-Indies. Our variety is a native of Cuba.

Communicated by Mr. KNIGHT, of the Exotic Nursery, King's-Road, flowering in July.



HIBISCUS MANIHOT. PALMATED-LEAVED HIBISCUS.



Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Cal. duplex : exterior polyphyllus. *Stigmata* 5. *Caps.* 5-locularis polysperma.

Specific Character and Synonyms.

HIBISCUS *Manihot* ; foliis palmato-digitatis septempartitis, caule petiolisque inermibus. *Sp. Pl.* 980. *Willd.* 3. p. 825. *Hort. Kew. ed. alt.* 4. p. 229. *Mart. Mill. Dict. n.* 29. *Sabbat. Hort.* 1. t. 56. *Kniph. Cent.* 9. n. 47. *Cav. Diff.* 3. p. 172. t. 63. f. 2. *Thunb. Jap.* 272.

KETMIA folio manihot ferrato, flore amplo sulphureo. *Dill. Elth.* 189. t. 156. f. 189.

ALCEA finica manihot stellato folio, capsula longa pilosa pyramidata quinquefariam divisa. *Pluk. Amalth.* 7. t. 355. f. 2.

This beautiful flower is a native of China and Japan, and has at times been cultivated in this country since the year 1712, at which period it was sent to the Royal Society as one of the fifty specimens annually delivered from the Apothecaries Garden at Chelsea.

The genus HIBISCUS contains many plants so differently organized, that they might be advantageously divided into several genera. Our friend Mr. BROWN has separated this species with some related ones, having an internal deciduous calyx bursting on one side, and a long pyramidal capsule, and formed them into a distinct genus, under the name of BAMIA ; but has not, as yet, published on the subject.

Communicated by Mr. SWEET, of the Stockwell Nursery. Flowers in August and September. Is treated as a stove shrub ; but is probably more hardy than is supposed, as has been found to be the case with most Japan plants.

HELONIAS BRACTEATA. LEAFY-FLOWERED HELONIAS.



Class and Order.

HEXANDRIA TRIGYNIA.

Generic Character.—*Vide No. 985.*

Specific Character.

HELONIAS *bracteata*; (hermaphrodita) rhizomate horizontali, foliis lanceolatis erectis, bracteis flore longioribus, petalorum glandulis distinctis.

HELONIAS *bracteata* has a near affinity to *glaberrima* (No. 1680). From which it differs in having yellowish green, not glaucous leaves; flowers larger, sessile, in a dense spike, with large ovate-acuminate bractes, longer than the corolla, the glands of the petals, which in the former species are confluent, in this are quite distinct; the root in the former is bulbous, in this fleshy, running horizontally along the surface of the ground, as in *Iris*.

Native of North-America. Introduced by Messrs. FRASER, of Sloane-Square, who communicated the plant from which our drawing was made. Flowers in September and October. Seems to be a hardy perennial, and may no doubt be propagated by cuttings of its fleshy roots.







LACHENALIA QUADRICOLOR (γ .) LUTEA.
SPOTTED-LEAVED YELLOW LACHENALIA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.—*Vide No. 993.*

Specific Character and Synonyms.

LACHENALIA *quadricolor*; foliis binis lineari-lanceolatis canaliculatis sursum explanatis, floribus distantibus pedunculatis pendulis: petalis exterioribus fere dimidio brevioribus. *Synonyma petenda, No. 588 et 1097.*

(α .) foliis omni macula expertibus. *Supra No. 588.*

(β .) foliis maculatis, floribus quadricoloratis. *Supra No. 1097.*

(γ .) foliis maculatis, floribus concoloribus luteis.

LACHENALIA *luteola*. *Jacq. Ic. rar. 2. t. 395.* quoad figuram fine foliis.

Our LACHENALIA *quadricolor*, though shewn by Mr. KER, at No. 1097 of the Magazine, to be in reality the original *tricolor* of the first edition of AITON'S Hortus Kewensis, is still referred to in the last edition of that work as a variety of *pendula*.

We remarked on the publication of variety (α) of this species, that it came nearer to *tricolor* than to *pendula*, and to the former, perhaps, all our three varieties might be properly referred. Having, however, hitherto retained JACQUIN'S name of *quadricolor*, we think it best to continue it, especially as it is doubtful whether our LACHENALIA *tricolor* (No. 82), and its variety (No. 1020) be not really a distinct species from our varieties of *quadricolor*.

JACQUIN appears to have figured our plant as a mere variety of his *luteola*; but as he has not added the leaves, we cannot say how far they may have agreed in this respect. He observes, that out of a hundred specimens, only two had spotted leaves; if the figure in question belonged to one of these, there would be no doubt.

Our drawing was made at Mr. GRIFFIN'S, South-Lambeth, in August last.

Native of the Cape of Good-Hope. Propagated by its bulbs. Requires the same treatment as for other Cape bulbs.

HÆMANTHUS TIGRINUS. TIGER-SPOTTED
BLOOD-FLOWER.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.—Vide No. 1075.

Specific Character and Synonyms.

HÆMANTHUS *tigrinus*; foliis linguiformibus planis glabris margine ciliatis depreffis, umbella coarctata, limbo flaminibusque erectis. *Willd. Sp. Pl.* 2. p. 25. *Hort. Kew. ed. alt.* 2. p. 207. *Persoon Syn.* 1. p. 348. n. 5.

HÆMAN'THUS *tigrinus*; foliis oblongis ciliatis subtus maculatis, scapo maculato umbella coarctata. *Jacq. Hort. Schoenb.* 1. p. 29. t. 56.

The *leaves* of the HÆMANTHUS *tigrinus* appear after the flowering is past, are two, broad-tongue-shaped, fleshy, smooth, ciliated at the margin, lying nearly flat on the ground; they are marked, especially towards the base, on the under side, with irregular dark iron-coloured spots, from whence the specific name. The *tube* of the *corolla* is short, somewhat dilated at the top and white: the *limb* erect, pale red.

The specimen figured by JACQUIN was not nearly so large as the one from which our drawing was taken, which flowered in August last, in the most extensive collection of Cape bulbs of Mr. GRIFFIN, in South-Lambeth.





DONIA SQUARROSA. SNAKE-HEADED
DONIA.



Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA,

Generic Character.

Recept. nudum. Pappus setaceus caducus. Calyx imbricatus, hemisphæricus. BROWN.

Specific Character and Synonyms.

DONIA *squarrosa*; herbacea; foliis oblongis amplexicaulibus ferratis, calycinis squamis apice filiformibus revolutosquarrosis. *Pursh Fl. Am. Sept. 559.*

This genus was named by Mr. BROWN, in honour of the late Mr. GEORGE DON, a celebrated Scottish Botanist, whose discoveries have made so many additions to the British Flora. It was taken up from the *ASTER glutinosus* of Prof. CAVANILLES, a native of Mexico, with a shrubby stem, and some other unpublished species.

DONIA *squarrosa* is a herbaceous perennial, native of open meadows on the banks of the Missouri; and, as we learn from Mr. LAMBERT'S Herbarium, was first discovered in the camp, near the old Maha village, by Mr. LEWIS, on the 17th of August 1804. We believe it was first introduced to this country by Mr. NUTTAL.

Mr. PURSH says, that the whole plant is viscous, and has a strong resinous or balsamic scent; to us these qualities seemed to be confined chiefly, if not altogether, to the calyx and corolla, and more especially to the latter.

Our drawing was taken at Messrs. FRASER'S American Nursery, Sloane-Square. We were favoured with other specimens by Mr. ANDERSON, from the garden of JAMES VERE, Esq. and also from Boyton, the seat of A. B. LAMBERT, Esq. Flowers from August to November. Propagated by seeds or parting its roots.



PETALOSTEMUM VIOLACEUM. PURPLE-
FLOWERED PETALOSTEMON.

Class and Order.

DIADELPHIA PENTANDRIA.

Generic Character.

Cor. nulla, ejus loco filamenta 5, sterilia, petaliformia, fertilibus alternantia. *Legumen* calyce tectum, 1-spermum.

Specific Character and Synonyms.

PETALOSTEMUM *violaceum*; capitulis ovato-oblongis, calycibus pilosis, bracteis deciduis, foliis subbijugis linearibus.

PETALOSTEMUM *violaceum*; spica cylindrica pedunculata, bracteis calycem subæquantibus, bracteolis spathulatis deciduis, calycibus sericeis, foliis bijugis linearibus. *Pursh Fl. Amer. Sept. p. 461.*

PETALOSTEMUM *violaceum*; pubens; foliolis linearibus: bracteis brevioribus; bracteolis spathulatis deciduis: petalis rosaceo-violaceis. *Michaux Fl. Bor. Amer. 2. p. 50. 1. 37. f. 2.*

DALEA *violacea*. *Willd. Sp. Pl. 3. p. 1337.*

The purple PETALOSTEMUM, as an ornamental flower, is by no means despicable, but is more remarkable for its singular structure: being a diadelphous plant without any proper *corolla*, having nine united and one detached *filament*, as is most usual in the class. But the alternate filaments are barren, coloured, and expanded at top into a petal-like appendix. The solitary filament is longer than the rest, channelled on the upper side, coloured, and expanded into a boat-shaped extremity; which as it occupies the place of, so it seems a sort of attempt towards, the formation of a vexillum. The *fertile filaments* are longer than the others and farther detached than is usual: the *anthers* are nearly globular, and abound with a bright orange-coloured
pollen.

pollen. The unripe *germen* certainly contains two ovula, but one seed only probably comes to perfection. The *calyx* is inflated, white, five-toothed: teeth hairy.

That this plant has no real corolla was remarked by THOMAS NUTTAL, Esq. who first introduced it to this country. We received living specimens from this gentleman in the autumn of 1813, which flowered in the open ground, near Liverpool, but from the absence of our draughtsman could not get it drawn at that time. We are informed by Mr. NUTTAL, that this plant forms one of the principal decorations of the vast plains of the Illinois, Tennesseé, and Louisiana, but its native country appears to be particularly in the upper part of this last state, to the base of the rocky mountains or Northern Cordillera, from whence it has been propagated eastward by the great rivers that meander through these regions.

Collected by Mr. NUTTAL, in the vicinity of St. Louis, lat. $38^{\circ} 43''$.

Our drawing was taken at Messrs. FRASER's American Nursery, Sloane-Square, last October. It is a tolerably hardy perennial, but requires to be protected from frost.



BAUHINIA PORRECTA. SMOOTH-LEAVED MOUNTAIN EBONY.



Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus deciduus. *Petala* patula, oblonga unguiculata : superiore magis distante ; omnia calyci inferta. *Legumen.*

Specific Character and Synonyms.

BAUHINIA *porrecta* ; floribus monandris, pedunculis laxeracemosis, petalis lanceolatis : unguibus filiformibus, foliis cordatis : lobis trinerviis.

BAUHINIA *porrecta* ; foliis cordatis : lobis porrectis acutis trinerviis, petalis lanceolatis. *Hort. Kew. ed. 1. 2. p. 48. ed. alt. 3. p. 23. Willd. Sp. Pl. 2. p. 510. Swartz Prod. 66. cui flores subdecandri.*

BAUHINIA *porrecta* ; floribus diadelphis subdecandris, foliis cordatis, lobis semiovatis acutis subquadrinerviis, petalis lanceolatis. *Jacq. Hort. Schoenb. 1. p. 52. t. 100.*

BAUHINIA foliis bilobis spicis laxis terminalibus. *Brown Fam. 286.*

BAUHINIA non aculeata, folio ampliori et bicorni. *Plum. Gen. 23. Ic. 44. f. 2. ?*

SENNÆ spuria aut Aspalatho affinis arbor filiquosa, foliis binis. *Sloane Fam. 150. Hist. 1. p. 51.*

The genus BAUHINIA was named by PLUMIER, in honour of JOHN and CASPAR BAUHIN, the most celebrated Botanists of their day ; and LINNÆUS has ingeniously connected the plant with the name, by comparing the two lobed leaves, or as it were two leaves issuing from the same base, with the above-named

above-named pair of noble brothers. Such allusions serve at least to rivet the name in the memory.

This species and *divaricata* are both monandrous, or have in general only one fertile stamen, which is distinct, and much stouter and longer than the other nine connected filaments without anthers, or with only imperfect ones. It happens, however, that now and then one or another filament grows longer than the rest, and has a small polliniferous anther.

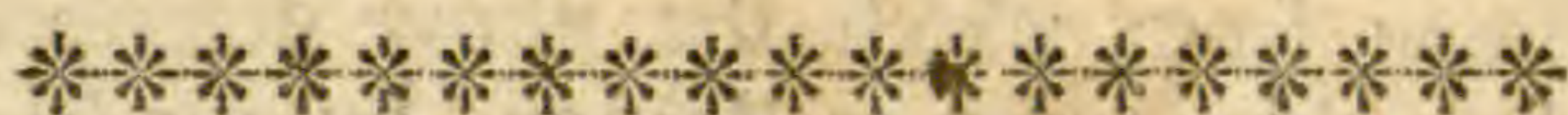
Native of the West-Indies. The leaves appear to vary considerably. One specimen in the Bankian Herbarium, from the Island of St. Kitts, has leaves with obtuse lobes exactly resembling those of our plant, others are sharper and more lengthened at the point.

Communicated by our friend JOHN WALKER, Esq. of Arno's-Grove, in October last.

Varies, according to Sir HANS SLOANE, with red and with variegated flowers. The wood is very hard and veined with black, hence the name of Ebony.



LIATRIS SCARIOSA. SCARIOUS-CUPPED
LIATRIS.



Class and Order.

SYNGENESIA POLYGAMIA ÆQUALIS.

Generic Character.

Recept. nudum. Cal. oblongus, imbricatus. Pappus plumosus.

Specific Character and Synonyms.

LIATRIS *scariosa*; foliis lanceolatis integerrimis glabris, calycibus globosis inferne squarrosis distinctis: squamis rotundatis membranaceo-marginatis.

LIATRIS *scariosa*; caule simplici subpubescente, foliis lanceolatis utrinque attenuatis glabris margine scabris, calycibus racemosis alternis distantibus inferne squarrosis; squamis spathulatis margine membranaceo-coloratis. *Pursh Fl. Amer. Sept. 509.*

LIATRIS *scariosa*. *Willd. Sp. Pl. 3. p. 1635. Hort. Kew. ed. alt. 4. p. 503.*

LIATRIS *squarrulosa*; *Michaux Fl. Bor. Amer. 2. p. 92.*

SERRATULA *scariosa*; foliis lanceolatis integerrimis calycibus squarrosis pedunculatis obtusis. *Linn. Sp. Pl. 1147.*

EUPATORIO affinis americana bulbosa, floribus scariosis calyculis contectis. *Pluk. Alm. 142. t. 177. f. 4.*

DESCR. *Stem* four-feet high, upright, simple, pubescent. *Leaves* narrow-lanceolate, quite entire, dotted with pellucid glands, smooth, except at the edge, which is roughened by a row of stiff hairs hardly visible to the naked eye. *Braëtes* like the leaves but narrowed from the base to the point. *Flowers* distinct, but near together, in a long raceme on short *peduncles*, sometimes without and sometimes with one or two squamous *braëtes*. *Calyx*, before the flower appears globular, afterwards oval: the lower *scales* reflexed, upper ones erect, rounded at the

the point with a membranaceous border. *Receptacle* naked; but in the circumference appears as if chaffy from abortive florets. *Tube* of *corolla* inflated in the middle: *limb* 5-cleft, erect, acute. *Anthers* dark purple. *Germen* hairy, crowned with a toothed *pappus*: *style* oblique: *stigmas* clubshaped, far exceeding the *corolla* in length.

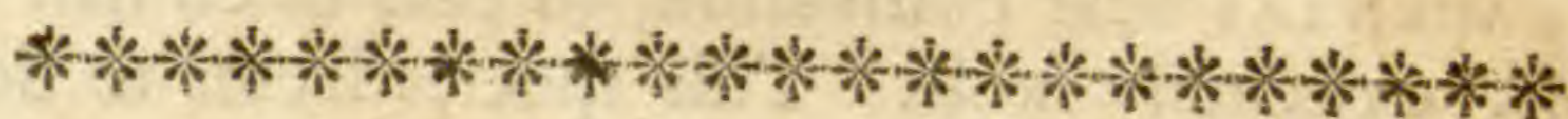
The specimen from which the above description was taken was sent us from his garden at Boyton, by our friend AYLMER BOURKE LAMBERT, Esq. The spike of flowers was a foot and a half long, the upper ones blossoming first and gradually descending, but nearly the whole were expanded before any began to fade. Upon the whole it is among the handsomest of the syngenefious plants. It is particularly adapted to the flower pot, as it will live and continue to blow in water for weeks together.

Our drawing was taken at Mr. KNIGHT's Exotic Nursery, in the King's-Road, Little Chelsea, in October 1813.

Native of the mountain pastures in Virginia and Carolina. A hardy perennial. Propagated by parting its roots or by seed.



SARRACENIA VARIOLARIS. HOOK-LEAVED
SIDE-SADDLE-FLOWER.



Class and Order.

POLYANDRIA MONOGYNIA.

Generic Character.

Cal. duplex, 3-phyllus et 5-phyllus. *Caps.* 5-locularis. *Stylus* stigmatē clypeatus.

Specific Character and Synonyms.

SARRACENIA *variolaris*; foliis tubulatis longitudine pedunculi: valva subrotunda inflexa: tubi dorso superne maculato.

SARRACENIA *variolaris*; foliis elongatis, tubo superne dorso maculato, in appendicem fornicatim incurvatum brevem desinente, ala ventrali lineari-lanceolata. *Michaux Flor. Bor. Amer.* 1. p. 310. *Pursh Fl. Amer. Sept.* 367. *Perfoon Synops.* 2. p. 62.

SARRACENIA *adunca*; foliis tubulatis longitudine pedunculi: valva subrotunda inflexa. *Smith Exot. Bot.* 1. p. 103. t. 53. *Hort. Kew. ed. alt.* p. 291.

SARRACENIA *minor*. *Walter Fl. Carol.* 153. *Willd. Sp. Pl.* 1150. 2. p. 6. *Perfoon Syn.* 2. p. 62.

The SARRACENIA *variolaris* is at once distinguished from *flava*, by its smaller size; spreading, not dependent petals; and the diaphanous spotting at the upper part of the back of the tube of the leaf.

Our friend, Sir JAMES E. SMITH, seemingly not aware that this species had been previously described by MICHAUX, in his *Exotic Botany*, gave it the name of *adunca*; whence it has been inserted

inserted in the Hortus Kewensis. Willdenow continues Walter's name of *minor*; and Persoon has given both *minor* and *variolaris* as two species.

Native of Carolina. Flowers at different seasons. Our drawing was taken last March, at Messrs. Lee and Kennedy's, by whom it was first introduced in 1803. Mr. Pursh says, the *Sarracénias* bear cultivation, in pots filled half way with Bog-Moss, extremely well. This species seems to flower best in an airy part of the stove.



MATTHIOLA ODORATISSIMA. PERSIAN STOCK.



Class and Order.

TETRADYNAMIA SILIQUOSA.

Generic Character.

Siliqua (teres v. compressa) coronata *stigmat*e conniventi bilobo, lobis vel dorso incrassatis tuncque cotyledonibus incumbentibus; vel basi cuspidate stipatis. *Calyx* clausus. *Filamenta* longiora dilatata. BROWN.

Specific Character and Synonyms.

MATTHIOLA *odoratissima*; (*stigmat*e subsimplici) foliis tomentosis lyrato-sinuatis, filiquis compressis, tomentosis lævibus. *Hort. Kew. ed. alt.* 4. p. 120.

CHEIRANTHUS *odoratissimus*. *Willd. Sp. Pl.* 3. p. 524. *EjUSD.* *Enum.* 682. *Pallas Ind. Taur. in Nov. Act. Petrop.* 10. p. 314.

CHEIRANTHUS *odoratissimus*; foliis runcinatis tomentosis, filiquis linearibus compressis, *stigmat*e bilobo terminatis, caule suffruticoso. *Marschall ab Bieb. Fl. Taur-Caucas.* p. 122.

Mr. BROWN, in the new edition of the Hortus Kewensis, has divided the old genus CHEIRANTHUS into several genera, devoting a part thereof to the commemoration of the celebrated commentator on Dioscorides, PETER AND. MATTHIOLUS; the former genus, assigned to him by PLUMIER, having been proved to be the same with GUETTARDA. This genus contains, besides the present plant, CHEIRANTHUS *incana*; *fene-stralis*; *sinuata*; *tricuspidata*; *parviflora*; &c.

The leaves of the PERSIAN STOCK, are extremely variable in their figure, being sometimes quite entire, sometimes only slightly

slightly toothed, but more frequently sinuately pinnatifid, and always much the broadest towards the point. The whole plant is tomentose.

This species has great affinity with *MATTHIOLA* (*CHEIRANTHUS*) *tristis*, 729 of this work; and, like it, does better treated as a greenhouse plant, than exposed to our winters in the open ground. The flowers are much larger and of a brighter colour than those of *tristis*; and have the same fragrant smell after sun-set.

Our drawing was taken from a plant communicated by Mr. SALISBURY, from the Botanic Garden, in Sloane-Street, in May last. We were favoured with fine specimens the year before, by Mr. WHITLEY, from the Fulham Nursery.

Introduced to the Kew Garden, by the Right Hon. Sir JOSEPH BANKS, Bart. K. B. in 1797.



OXALIS VARIABILIS, *var.* RUBRA. RED-
FLOWERED VARIABLE WOOD-SORREL.

Glass and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5, unguibus connexa. *Stam.* inæqualia; 5 breviora exteriora basi connata. *Caps.* angulis dehiscens, 5-gona.

Specific Character and Synonyms.

OXALIS *variabilis*; acaulis, scapo unifloro foliis longiore flaccido, foliis ternatis subrotundis: foliolo intermedio cuneiformi, stylis staminibus exterioribus brevioribus. *Willd. Sp. Pl.* 2. p. 777. *Hort. Kew. ed. alt.* 3. p. 120.

OXALIS *variabilis*. *Jacq. Oxal.* 89. t. 52 et 53.

(α .) albiflora. *Vide supra* No. 1683.

(β .) rubra. *Scapis petiolo longioribus, limbo corollæ rubro.*

OXALIS *variabilis*. β . flore rubro. *Jacq. Oxal.* 89. t. 53.

OXALIS *purpurea*. *Thunb. Diff.* No. 8. p. 12. v. α . *Jacq. Oxal. n.* 70. t. 56? *Sp. Pl.* 621.

OXALIS *speciosa*. *Jacq. Oxal. n.* 74. t. 60?

OXALIS *fugillata*. *Jacq. Oxal. n.* 75. t. 61?

OXYI affinis planta bulbosa africana, flore purpureo magno. *Breyn. Cent.* p. 102. t. 46.

OXYS bulbosa africana rotundifolia caulibus et floribus purpureis amplis. *Commel. Hort.* 1. p. 41. t. 21.

It appears to us that JACQUIN, in his elaborate and excellent Monograph on this genus, has multiplied the species beyond what nature warrants. We suspect, that all that we have quoted in the present article are only varieties. And the

the synonyms quoted from BREYNE and COMMELIN undoubtedly belong to our species.

Native of the Cape of Good-Hope. Flowers from September to November. Communicated by Messrs. LODDIGES and SONS.

ERRATUM.

No. 1683, l. 14, pro (γ) lege (α).



PROTEA FORMOSA. CROWN-FLOWERED
PROTEA.

Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Petala 4, quorum 3 superne cohærentia. *Antheræ* apicibus concavis corollæ immersæ. *Nux* supera undique barbata, stylo persistente coronata. BROWN.

Specific Character and Synonyms.

PROTEA *formosa*; foliis oblongo-ellipticis marginatis, involucri bracteis spathulatis externe sericeis, corollis tomentosis, stylo apice curvato, stigmate apice incrassato.

PROTEA *formosa*; foliis angusto-oblongis venosis obliquis: basi simplici; marginibus ramisque tomentosis, involucri bracteis ciliatis: intimis lingulatis imberbibus, corollis aristisque tomentosis, stylo glabro apice curvato, stigmate apice incrassato. *Brown in Linn. Soc. Transact. v. 10. p. 79. Hort. Kew. ed. alt. 1. p. 189.*

PROTEA *coronata*. *Bot. Repos. 469.*

ERODENDRUM *formosum*; foliis ellipticis margine crasso, tenellis tomentosis: bracteis involucri fimbriatis, inferioribus inter se liberis: corolla extus tomentosa, apice valde attenuata: antheris perangustis: stigmatis apice crasso. *Parad. Lond. 76.*

Our drawing of this beautiful Protea was taken at Messrs. LEE and KENNEDY's, Hammer-smith, where there are varieties with red, white, and bluish flowers. Flowers in May. Native of the Cape of Good-Hope, growing in the mountains of Hot-tentots-Holland, from whence it was introduced in 1789, by Mr. FRANCIS MASSON.



POLYGALA MIXTA. HEATH-LEAVED
MILK-WORT.

Class and Order.

DIADELPHIA OCTANDRIA.

Generic Character.

Cal. 5-phyllus : foliolis 2 alæformibus coloratis. *Legumen* obcordatum biloculare.

Specific Character and Synonyms.

POLYGALA *mixta* ; floribus imberbibus solitariis sessilibus, foliis fasciculatis teretibus mucronulatis.

POLYGALA *mixta* ; floribus imberbibus sessilibus, foliis teretibus mucronatis confertissimis. *Linn. Suppl. Pl.* 316. *Willd. Sp. Pl.* 3. p. 891. *Hort. Kew. ed. alt.* 4. p. 245. *Bot. Repos.* 455.

POLYGALA *mixta* ; floribus imberbibus lateralibus, foliis fasciculatis trigonis erectis mucronato spinosis. *Thunb. Prod.* 121.

DESCR. *Stem* shrubby, with long flexile branches. *Leaves* subulate, rigid, smooth, terminated with a minute oblique mucro, collected in fascicles of five or six growing from the same point. These fascicles are crowded together, opposite at the lower part of the branch, giving a verticillate appearance ; but nearer the extremity they are alternate. *Flowers* solitary, sessile, or on very short pedicles, in the axils of the leaves. *Calyx* small, the lateral segments larger than the rest, but seldom, if ever, coloured. *Corolla* semipapilionaceous, having no vexillum ; alæ rigid, erect, subulate, white. *Carina* deeply channelled, of a saturated purple within : sides folded together, so as

to include and firmly embrace the *style* and *stamens*, which, when arrived at maturity, upon being moved, escape elastically from their confinement, and strike against the two erect petals or *alæ*, by which the pollen is dispersed. The apex of the carina is expanded into a two-lobed, plain *petal*, the *lobes* of which are emarginate. This appendix is of a bright rose colour, and forms the principal part of the flower; and, dispersed amongst the green foliage in every part of the shrub, gives it a pretty lively appearance. It continues in blossom almost throughout the year.

The specific name was probably given it from its mixed resemblance of *POLYGALA alopecuroides* and *Heisteria*; not, as has been said, from the manner in which the flowers and leaves are mixed together.

Native of the Cape of Good-Hope. Requires the protection of the greenhouse. Introduced by Mr. F. Masson, in 1789. Communicated by Messrs. Loddiges and Sons.



[1715]

POLYGALA STIPULACEA. STIPULED
MILK-WORT.

Class and Order.

DIADELPHIA OCTANDRIA.

Generic Character.

Cal. 5-phyllus : foliolis duobus alæformibus, coloratis.
Legumen obcordatum, biloculare.

Specific Character and Synonyms.

POLYGALA *stipulacea* ; floribus imberbibus axillaribus sub-
folitariis foliis fasciculatis teretibus mucronulatis subternis,
stipula concava obtusissima.

POLYGALA *stipulacea* ; floribus imberbibus lateralibus, caule
suffruticoso, foliis ternis linearibus acutis. *Linn. Mant.* 260.
Burm. Prod. 20. *Willd. Sp. Pl.* 3. p. 892. *Hort. Kew. ed.*
alt. 4. p. 246.

POLYGALA *stipulacea* ; floribus imberbibus lateralibus, foliis
solitariis filiformibus mucronatis glabris. *Thunb. Prod.* 121 ?

HEISTERIA *mitior.* *Berg. Cap.* 187.

SPARTIUM *africanum frutescens, ericæfolio.* *Com. Hort.* 2.
p. 193. *t.* 97.

SUFFRUTEX *ericæ forma, flore rubro elegantissimo.* *Seb.*
Mus. 2. p. 63. *t.* 62. *f.* 8.

DESCR. *Stem* shrubby : *branches* short, rigid. *Leaves* in
fascicles, more usually four together than three, rounded,
thickened upwards, blunt-pointed with a minute oblique mucro.
Each fascicle is supported by a short, thick, blunt, hollowed
stipule. *Calyx* five-leaved : *leaflets* lanceolate, involving one
another without any lateral petal-like expansion. *Flowers*
axillary, growing singly or two together, of the brightest purple
colour

colour variegated with white. *Corolla* very like that of *mixta*, but the *alæ* are tipped with purple, and the appendices of the carina are much more brilliant. The germen in this species, in *mixta*, in *Heisteria*, and probably in the whole section, except *P. Chamæbuxus*, is terminated with four tooth-like processes. This character, together with the want of the petal-like expansion of the calyx, seem to us to have been sufficient to restore LINNÆUS's original genus of HEISTERIA.

The synonym always quoted from THUNBERG is rendered doubtful, by his describing the leaves as being solitary, filiform, and acute; which terms are in no respect applicable to our plant.

A hardy greenhouse shrub; native of the Cape of Good-Hope. Flowers almost throughout the year. Introduced in 1791. Communicated by Messrs. Loddiges and Son.



VERBESINA ALATA. WING-STALKED
VERBESINA.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. paleaceum. *Pappus* aristatus. *Cal.* duplici ordine.
Flosculi radii circiter 5.

Specific Character and Synonyms.

VERBESINA *alata*; foliis alternis decurrentibus undulatis obtusis. *Willd. Sp. Pl.* 3. p. 2221. *Enum.* 917. *Hort. Kew.* ed. alt. 5. p. 120. *Schkuhr handb.* 3. p. 145. t. 256. *Mart. Mil. Dict.* n. 1. *Gært. Fruet.* 2. 457. t. 171. *Swartz Obs.* 313. *Kniph. Cent.* 4. No. 93.

VERBESINA foliis oblongo-ovatis subdentatis recurrentibus, floribus remotis terminalibus. *Brown Fam.* 319.

CANNABIS indica, foliis integris, alato caule. *Magn. Hort.* 40. ic.

CHRYSANTHEMUM cannabinum americanum alatum, flore aphylo globofo aurantio, baccharidis folio. *Sloane Hist.* 1. 261. *Commel. Hort.* 1. p. 5. t. 3.

CHRYSANTHEMUM curassavicum alato caule floribus aurantiis. *Herm. Parad.* 125. ic. *Morif. Hist.* 3. p. 25. n. 87.

CHRYSANTHEMUM americanum bidens alatum, flore parvo aurantiaco. *Pluk. Alm.* 100. t. 84. f. 3.

CHRYSANTHEMUM conyzoides curassavicum, abrotani feminae flore aurantio. *Volk. Norib.* 106. ic.

VERBESINA *alata* differs from the rest of the genus not only in habit, but in having numerous florets in the radius, although these are so short that at first sight the flower appears to have no radius at all; and also in having the seeds margined with a white

white membrane, with one arista, hooked at the point and longer than the other.

When first raised from seeds, the whole plant is hoary; but on the second year, the hoariness is deposited, and the colour of the leaves becomes of a fine dark green, which, contrasted with the brilliant orange-coloured flowers, adds much to the pleasing effect. So that those who treat it as an annual plant, never see it in its most perfect state.

Native of South-America and the West-Indies. Requires to be kept in the stove. Flowers most part of the summer. Cultivated, as we learn from MORISON, in the Botanic Garden at Oxford, in 1699. Our drawing was taken at the Right Hon. Lord HOLLAND's, in August 1812.

Very rare. A few different forms of the genus are only in habit, but in having numerous forms in the genus, although these are so that at first sight the flower appears to have no colour at all; and also in having the leaves marked with a white



PROTEA LATIFOLIA. RAYED-FLOWERED
PROTEA.



Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.—*Vide No. 1713.*

Specific Character and Synonyms.

PROTEA *latifolia*; foliis late-ovatis semicordatis sessilibus, involucro fericeo tomentoso; bracteis interioribus angustatis apice dilatato barbato, corolla tomentosa: aristis hirsutis longitudine laminarum, stylo pubescenti. *Brown in Transl. Linn. Soc. v. 10. p. 75.*

PROTEA *radiata*. *Bot. Repos. 646.*

ERODENDRUM *eximium*. *Salisb. et Knight Prot. 41?*

Our drawing of this beautiful species of PROTEA was taken at Mr. KNIGHT's Exotic Nursery, in the King's-Road, Little Chelsea, in August 1811.

A variety, with greenish white flowers, is cultivated at the Hammersmith Nursery, Messrs. LEE and KENNEDY.

The Proteas are much admired for the variety, singularity, and frequently the splendour of their flowers; the beauty of which consists chiefly in the involucre.

These plants have generally been considered as very difficult of propagation, and not less so of preservation. But our modern cultivators have arrived at a better mode of treatment than was known in the days of PHILIP MILLER. Mr. JOSEPH KNIGHT, in an Essay on the Cultivation of the Natural Order of Proteæ, has given very full directions for their management; and still more ample details may be found in the second edition of the Exotic Gardener, by J. CUSHING, foreman to Messrs. LEE and KENNEDY. We are obliged for the following satisfactory

factory mode of managing them, to Mr. R. SWEET, late of the Stockwell Nursery, where we have observed these plants to look remarkably well.

Cultivation of the Natural Order of PROTEACEÆ.

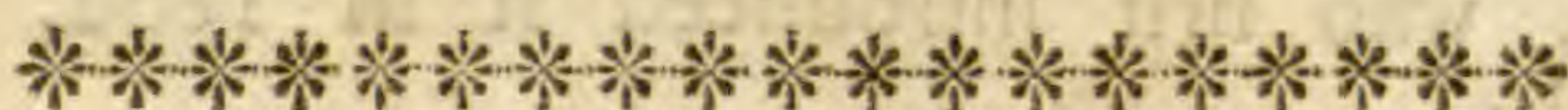
In the first place, it is necessary that the pots should be well drained; for which purpose, place over the hole in the bottom a piece of potsherd, then place another piece against it, so as to leave a hollow; after that put in a handful of potsherd, broken into pieces not larger than peas, and over these pieces still smaller, till the pot is nearly one third-part full. This is applicable to the management of plants of almost every family; for, by these means, the water soaks gradually off, and the mould is not allowed to get sodden.

In the next place, for the genera *Protea*, *Leucadendron*, *Leucospermum*, *Spatalla*, *Sorocephalus*, and *Aulax*; (vide BROWN'S *Proteaceæ* in the *Transactions of the Linnean Society*, vol. 10.) all the species delight in a composition of rather more than one-third sand, and the rest light loam without any peat. The genera *Serruria*, *Nivenia*, *Grevillea*, *Hakea*, *Petrophila*, *Iso-pogon*, *Bankia*, *Dryandra*, *Lomatia*, and *Telopea*, succeed best in three parts of peat, two parts loam, and one part sand. When potted, they do not require any particular care more than other greenhouse plants, except to let them have plenty of air, to avoid letting them flag for want of water, and never to water them over the leaves in cloudy weather.

With regard to their propagation, let the wood be first ripened, then take off the cuttings as nearly as possible between the last and present year's shoot, pare them smooth, and plant them in a pot of sand, not too close together, as they are apt to get the damp amongst them, which readily spreads from one to another. Let the pots be then placed in the propagation-house, watering them whenever they want it, but not over the leaves. In this way Mr. SWEET has never found any of the supposed difficulty in striking any of this natural order; and even *Telopea*, the *Embothrium speciosissimum* of the Botanical Magazine, he finds to strike as readily as any.



PELARGONIUM RADICATUM. FLESHY
FRINGED-LEAVED CRANE'S-BILL.



Class and Order.

MONADELPHIA PENTANDRIA.

Generic Character.

Cal. 5-partitus : lacinia suprema desinente in tubulum capillarem, nectariferum, secus pedunculum decurrentem. *Cor.* 5-petala, irregularis. *Filam.* 10, inæqualia, quorum 3—6 castrata. *Arilli* 5, monospermi, aristati, ad basin receptaculi rostrati aristis spiralibus introrsum barbatis.

Specific Character and Synonyms.

PELARGONIUM *radicatum* ; (acaulis radice rapacea) umbella simplici, foliis ellipticis integerrimis ciliatis, petalis superioribus basi macula duplici interrupte lineari notatis. *Hort. Kew. ed. alt. 4. p. 160. Epit. 209.*

PELARGONIUM *radicatum* ; umbellis simplicibus, foliis ovali-oblongis, integerrimis, glabris, margine ciliatis, floribus pentandris ; petalis retusis. *Vent. Hort. Malm. 65.*

GERANIUM *ciliatum.* *And. Repos. 247.*

MONS. VENTENAT, who has given an excellent figure of this plant in the Jardin de Malmaison, considers it to be distinct from the PELARGONIUM *ciliatum* of L'HERETIER, and has been followed by Mr. DRYANDER in the new edition of the Hortus Kewensis. The *ciliatum* of CAVANILLES and of JACQUIN, are also supposed by VENTENAT to be at the same time different from our plant and from one another. The latter differs remarkably in the strong hairiness of the leaves over both surfaces.

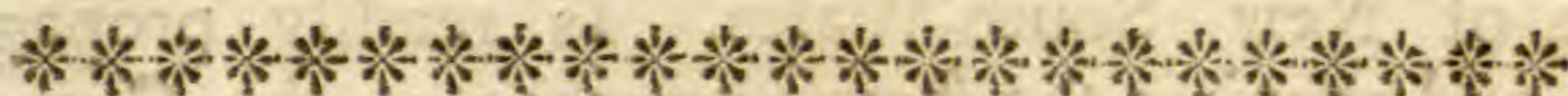
This species, as is the case with most, if not with all in the turnip-rooted divisions, has only five fertile stamens, and the pedicles

pedicles are erect while the flowers are in bud as well as when expanded: characters which, we have before remarked, seem sufficient to separate them into a distinct genus.

A tender greenhouse plant. Native of the Cape of Good Hope. Communicated by Mr. KNIGHT, of the Exotic Nursery, and also by Messrs. COLVILLE and SON, of the King's-Road, who first introduced it in 1802. Flowers in June and July.



SPRENGELIA INCARNATA. FLESH-COLOURED
SPRENGELIA.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus, persistens. *Cor.* 5-partita. *Stam.* receptaculo inserta. *Caps.* 5-locularis, 5-valvis: dissepimentis e medio valvularum, placentis columnæ centrali adnatis.

Specific Name and Synonyms.

SPRENGELIA *incarnata*; antheris connatis barbatis, calycibus coloratis, foliis longe acuminatis. *Brown Prod.* p. 555.

SPRENGELIA *incarnata*. *Smith's Tracts*, 272. t. 2. et in *Act. Stockh.* anno 1794, p. 260. t. 8. *Bot. Repos.* 2. *Willd. Sp. Pl.* 1. p. 833. *Hort. Kew. ed. alt.* 1. p. 320. *Epit.* 45.

The SPRENGELIA *incarnata* is a very ornamental flowering shrub of small stature, first described and figured by Sir JAMES ED. SMITH, in the Transactions of the Royal Academy of Sciences at Stockholm, and afterwards in English, with a figure from a living specimen, in a volume of tracts relating to natural history, naming it in honour of CHRISTIAN CONRAD SPRENGEL, Professor of Botany at Halle.

The flowers, which are very numerous, are produced at the extremities of the short branches, and are of long continuance. The calyx and corolla being much alike, and the laciniae of the latter, which are nearly white, with a pink tinge, exactly alternating with the segments of the calyx, of a deeper rose colour, give a brilliancy to what might otherwise be considered as rather an insignificant flower.

This

This plant is well described by SMITH; but, according to BROWN, the corolla is at first monopetalous, with a very short tube, though it is finally divided to the base. The latter author has described two species, in the first of which only, our present plant, the anthers are coherent; a circumstance which entirely destroys the value of this character.

Native of New South-Wales. Is readily propagated by cuttings; and requires the same treatment as the Cape Heaths. Introduced in 1793, by Messrs. LEE and KENNEDY. Communicated by Mr. R. SWEET.

The flower is a very ornamental flowering
shrub of small stature, first described and figured by Sir James
Smith, in the Transactions of the Royal Academy of
Sciences at Stockholm, and afterwards in English, with a figure
from a living specimen, in a volume of notes relating to natural
history, namely in the Journal of Captain James Cook and
Sir, President of Society at Halifax.
The flower, which are very numerous, are produced at the
extremities of the leafy branches, and are of long continuance.
The calyx and corolla being much alike, and the lacinae of
the latter, which are nearly white, with a pink tinge, exactly
resembling with the lacinae of the calyx, of a deeper red
colour, give a brilliancy to what might otherwise be considered
as but an insipid flower.



ERICA LAWSONI. LAWSON'S HEATH.

*Class and Order.*

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-phyllus. *Cor.* persistens: limbo 4-fido. *Antheræ* ante anthesin per foramina 2 lateralia connexæ. *Caps.* 4—8-locularis, 4—8-valvis.

Specific Character and Synonyms.

Seet. III. *Conifloræ grandes.* *Corollæ inferne dilatatæ semuncia longiores.* *B.* *Antheræ muticæ Flores terminales.*

ERICA Lawsoni; bracteis calyci proximis, foliolis calycinis subulatis, stigmate exserto, foliis ciliatis floribusque quaternis.

DESCR. *Stem* a low, upright, pyramidal, branched shrub. *Leaves* four together, oblong, ciliated at the edge with stiff short hairs, which are branched at the point of the leaf only, as far as we have observed, and there barely visible to the naked eye. *Flowers*, which are of a bright rose colour, grow at the extremities of the branches, either singly, or more generally four together; but on the leading branches, the shoot growing out beyond them, the flowers become in consequence axillary. *Calyx* of four subulate leaflets, ciliated at the edge and coloured at the tip; bractes two, close to and like the calyx, but only half the length; there is a third at the base of the very short peduncle, but this we rather regard as the terminal leaf, from the axil of which the peduncle grows; nor is it coloured like the other two. *Corolla* urceolate: tube about an inch long, dilated and somewhat diaphanous at the base, contracted upwards: laciniae of the limb ovate-acute with the margins more or less rolled

rolled inwards. *Filaments* almost as fine as a spider's thread: *anthers* beardless, within the tube. *Germen* oblong, without glands at the base: *stigma* dark purple, nearly globular, without the tube.

This plant has very near affinity with *ERICA tenuiflora* of the Hortus Kewensis, from which it differs, not only in the colour of its flowers, but in having ciliated leaves and an exserted stigma. In many respects it corresponds also with *ERICA ferrulata*, though the form of the corolla removes it into a different section.

Our drawing was made from a plant communicated by Mr. R. SWEET. We have been favoured also with a specimen of the same, from Messrs. LEE and KENNEDY, under the name that we have adopted, and from which our description was taken.

Native of the Cape of Good Hope. Flowers in May, June, and July.



AZALEA CALENDULACEA (β .) CROCEA.

ORANGE-COLOURED AZALEA.

*Class and Order.*

PENTANDRIA MONOGYNIA.

*Generic Character.**Cor.* campanulata. *Stam.* receptaculo inserta. *Caps.* 5-locularis.*Specific Character and Synonyms.*

AZALEA *calendulacea*; (subnudiflora) foliis oblongo-ovalibus ciliatis: adultis hirsutis, corollæ tubo laciniis brevioris piloso subviscido, calyce villosa.

AZALEA *calendulacea*; (subnudiflora) foliis oblongis utrinque pubescentibus: adultis hirsutis, floribus amplis non viscosis, calycis dentibus oblongis, corollæ tubo hirsuto laciniis brevioris. *Pursh Fl. Am. Sept.* 151. *Michaux Fl. Am. Bor.* 1. p. 151.

(α .) flammea floribus flammeo-calendulaceis.

(β .) crocea; floribus croceis.

AZALEA *calendulacea*. *Hort. Kew. Epit. inter addenda.*

The flowers of this variety resemble very much those of *AZALEA pontica*, but are without scent. They are considerably larger than any of the varieties of *AZALEA nudiflora*; and the plant itself forms a loftier shrub. In a genus which is numerous and so exceedingly disposed to run into varieties, it is extremely difficult to find good specific characters; the hairy calyx and tube shorter than the border of the corolla, distinguish it from *coccinea*, (No. 180.) to which in foliage it is most nearly allied. The flower is not entirely free from clamminess. The flame-coloured variety is said by Mr. PURSH to be, without exception, the

the handsomest shrub in North-America. This author refers to BARTRAM'S Travels, p. 321, where we find a shrub spoken of with flowers like a RHODODENDRON, but in fruit more resembling an AZALEA. But this would appear to be very different from either of the above varieties, as the corolla is said to be white with narrow segments. Mr. WILLIAM BARTRAM, however, and probably with justice, claims the first discovery of this plant, as appears by a specimen in possession of Sir JOSEPH BANKS, collected by that traveller, about the year 1774, accompanied with remarks; in which, in his usual florid style, he observes, that "it is the most brilliant, shewy, and gay flowering shrub, perhaps, in the world; it grows four, six, or eight feet high, increases greatly by suckers, and the flowers make a most splendid show in the vast plains, and on the sides of the hills, in West-Georgia and lower Cherokee country, in the months of April and May. The flowers are of all shades, from a pale cream colour to a splendid golden yellow, orange, and most perfect scarlet or flame colour; and all these colours are sometimes seen on different branches of the same plant, as well as on separate plants, but a rose-blush or purple tint never occurs in the flowers of this species."

Our drawing was made in the beginning of June 1812, from a plant brought over by Mr. LYONS; we received specimens also from Messrs. FRASER'S American Nursery, and from Messrs. LODDIGES and SONS.

HEDYSARUM BUPLEURIFOLIUM. HARES-
EAR-LEAVED HEDYSARUM.



Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 5-fidus. *Cor.* carina transverse obtusa. *Lomentum* articulis
1-spermis, compressis.

Specific Character and Synonyms.

HEDYSARUM *bupleurifolium*; foliis simplicibus lanceolatis
acutis, caule inermi, stipulis scariosis. *Sp. Pl.* 1051.
Willd. 3. p. 1171. *Hort. Kew. ed. alt.* 4. p. 339. *Roxb.*
Corom. 2. p. 50. t. 194.

ORNITHOPODIUM *madaraspatanum*, *bupleurifolio*. *Petiv.*
Gaz. 18. t. 11. f. 12.

HEDYSARUM *gramineum*. *Willd. Sp. Pl.* 3. 1172 ? *Retz.*
Obs. 5. p. 26. *Wendl. Hort. Herrenbus.* 1. p. 7. t. 5.

WILLDENOW has expressed a doubt whether the figures of PETIVER and PLUKENET do not belong to *gramineum* rather than to *bupleurifolium*. The latter was probably intended for neither, but is too bad to be referred with certainty to any thing; but PETIVER's is really good, for a mere outline, and undoubtedly represents our plant. HEDYSARUM *gramineum* in Hortus Herrenhusen, does not appear to be different; and RETZIUS's description of the same accords both with ROXBURGH's and our figure of *bupleurifolium*. We cannot but conclude therefore that these plants in reality make but one species, and that *gramineum* ought to be expunged from the system.

A small perennial woody species. Native of the East-Indies; where it grows, according to ROXBURGH, among long grass in dry ground; flowering during the wet and cold seasons. With us it requires the heat of the bark stove. Propagated by seeds.





CAMPANULA PUNCTATA. SPOTTED BELL-FLOWER.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata, fundo clauso valvis staminiferis. *Stigma* trifidum. *Caps.* infera, poris lateralibus dehiscens.

Specific Character and Synonyms.

CAMPANULA *punctata*; capsulis trilocularibus obtectis, caule simplici erecto folioso, foliis subpetiolatis, floribus nutantibus. *Willd. Sp. Pl.* 1. p. 907.

CAMPANULA *punctata*; hirsuta, foliis radicalibus petiolatis ovatis acutis serratis, floribus cernuis interne punctatis villosis. *Lamarck Encyc.* 1. 579.

CAMPANULA calycibus e tergo lamellis quinque notatis, pedunculis unifloris. *Gmel. Sib.* 3. p. 155. t. 30.

The CAMPANULA *punctata* is well represented by GMELIN, in the third volume of the Flora Sibirica; but was never taken up by LINNÆUS, nor, we believe, did it ever appear in any general system, till LAMARCK inserted it in the Encyclopedie Botanique.

The spotting of the corolla, being on the inside, shews through rather faintly, but more evidently, when dried, than in the recent flower.

We were favoured with a living specimen of this very rare plant, the latter-end of February, by our friend A. B. LAMBERT, Esq. who raised it from Siberian seeds, at his seat at Boyton. A hardy perennial. Native of Siberia; growing in the mountainous open country.

SILENE REGIA. SPLENDID CATCH-FLY.

*Class and Order.*

DECANDRIA TRIGYNIA.

Generic Character.

Cal. monophyllus, ventricosus. *Petala* 5, unguiculata. *Caps.* supera, semitrilocularis, apice dehiscens, polysperma.

Specific Character and Synonyms.

SILENE *regia*, (erecta, viscoso-pubescens) calycibus floris cylindricis, petalis lanceolatis indivisis, genitalibus exertis.

SILENE *virginica*; var. *illinoensis*. Michaux Fl. Bor. Am. 1. p. 272. ?

MUSCIPULA *regia*, Bannisterii. Petiv. Herb. Virg. ?

The SILENE *regia*, though nearly related to *virginica*, must, we apprehend, be considered as a distinct species; for the latter is described as being decumbent, and having bifid petals. It may perhaps be the variety found by MICHAUX in the Illinois country; and possibly it may have been the same that BANNISTER sent a design of to the Bishop of London. Whether it be so or not, his name of *regia* cannot be badly applied to the most splendid plant of the genus. The flowers are represented to us as rivalling in brilliancy the LOBELIA *fulgens*, a colour scarcely to be imitated by art.

We had not the opportunity of seeing this plant whilst living, but upon examining the dried specimens in Mr. LAMBERT'S herbarium, we find that the petals are sometimes emarginate.

Native of North-America. Found by Mr. NUTTAL, growing spontaneously in great abundance, in the environs of St. Louis, on the Mississippi; from whose seeds our plant was raised in the garden of A. B. LAMBERT, Esq. at Boyton, where it grew to the height of between two and three feet.





SWAINSONA CORONILLIFOLIA. PURPLE-
FLOWERED SWAINSONA.



Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 5-dentatus. *Vexillum* explanatum, majus *Carina* obtusa. *Stigma* terminale. *Stylus* postice longitudinaliter barbatus; antice imberbis. *Legumen* turgidum (non vesicarium) BROWN.—Swainsona, SALISB.—Loxidium, VENTEN. *dec. gen. nov.*

Specific Character and Synonyms.

SWAINSONA *coronillifolia*; vexillo bicalloso, caule suffruticoso erecto, pedicello leguminis filamentis persistentibus (parum) brevior. *Brown in Hort. Kew. ed. alt. 4. p. 327.*

SWAINSONA *coronillæfolia*. *Salisb. Parad. Lond. 28.*

As this plant is a native of New South-Wales in Australasia, this circumstance, in itself, leads to a suspicion that it ought to be considered as a genus distinct from COLUTEA, otherwise we own that we should hardly have been satisfied with the characters by which the two genera are attempted to be distinguished. The only contrasted points given in the Hortus Kewensis are, that the stigma in SWAINSONA is terminal, in COLUTEA lateral; and the slight difference in the consistence of the Legumen, which appears to us not very remarkable after maturity.

It was undoubtedly impossible to separate SWAINSONA from COLUTEA, whilst *fruticosa* and *herbacea*, which swerve much more remarkably from the European species, remained attached to the latter. These are consequently raised into distinct genera by Mr. BROWN.

The other species of this genus has been already figured in the Botanical Magazine, under the name of COLUTEA (now SWAINSONA) *galegifolia* (vide N^m. 792.) Both species, the only ones known in our gardens, though easily distinguished by the colour of their flowers, are botanically characterized, only by the difference of length of the pedicle of the seed-pod.

An ornamental low greenhouse shrub, with herbaceous branches. Communicated by Messrs. WHITLEY, BRAME, and MILNE. Introduced in 1802, by the Right Hon. Sir JOSEPH BANKS, Bart. K. B. Flowers most part of the year. Propagated both by seeds and cuttings.

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 1691 *Brassia maculata*.
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 1695 *Commelina tuberosa*.
 1682 *Convolvulus purpureus*, var. (δ.) *varius*.
 1689 *Cosmea lutea*.
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 1685 *Doryanthes excelsa*.
 1720 *Erica Lawsoni*.
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