Vol. V.

of the

Botanists Repository

Comprising,

Colour'd Engravings

of

New and Rare Plants

ONLY

With Botanical Descriptions &c.

in

Latin and English,

after the

Linnæan System

by

H. Andrews

Botanical Painter Engraver &c.

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ERRATA.

Plate 297, Clafs. Pro Poliandria, lege, *Polyandria.*
299, Sp. Ch. lin. 2. pro eqalis, lege, *æqualis.*
301, Sp.Ch. lin. ntt. pro criftitatæ, lege, *cristatæ.*
309, Eff Gen. Ch. lin. 1, pro quinquedentatis, lege, *quinquedentatus.*
310, Plate, for Stæches, read, Stachys. Calyx lin 3, pro dentriculis, lege, *denticulis.*
315, Pointal. lin. 1, put (.) after top-fhaped.
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316, Title, for Petal-lefs, read, *Petalless*
323, Sp. Ch. lin. 1, poft, inequaliter, dele (,)
325, Calyx, lin. 2, pro duodecem, lege, *duodecim.* Defcription, lin. 2, for, vegetating, read, vegitating.
326, Sp. Ch. pro inequalibus, lege, *inæqualibus.*
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331, Gen. Ch. Pointal, lin. 2, after *three*, for, fhort, read, *spreading, two-cleft.*
337, Sp. Ch. lin. 3, pro bracteis, lege, *bracteatis.*
341, Plate, for Phafeolis, read, *Phaseolus.*
342, Defcrip. lin. 4, for, Eaft Indies, read, *Chili, South America.*
345, Plate, for, Corymbofa, read, *Corymbosus.*
346, Defcrip. lin. 8, for, has, like this, read, *have like this.*
347, Chives, lin. 2, after, length of, leave out (,)
350, Effen. Ch. lin. 1, dele, *petalis tribus infera.*
353, Title, pro craffifolius, lege, *crassifolia.*

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ERRATA ET CORRIGENDA IN VOL. VI.

Plate 361, line 20, for brevioribus, read *breviora.*
——— 21, for antheris, read *antheras.*
362, — 7, after longissimo add *partim*, and after long add *and partly.*
——— 11, after cochleariformibus, add *circumscissis.*
——— 16, for antheris, read *antheras.*
——— after line 21, add 4. *The Seed-bud and Pointal.*
365, — 21, for antheris, read *antheras.*
375, — 19, for the Pointal, &c. read *one of the Scales of the Empalement.*
——— 10, for prinnate, read *pinnate.*
378, — 3, from the bottom, for Erodium, read *Pelangonium.*
383, After the Specific Character, add *P. undulatum, Vent. Pl. nouv.* 76.
389, line 25, for retuse, read *undulatim retusa.*
390, — 20, after tubulosi, add *ante anthesin inflati.*
395, — 18, after is, read *a new species.*
396, — 24, for and, read *it.*
397, — 13, strike out the letter *l.*
399, — 4, from the bottom, for double, read *but half.*
404, — 9, for Monadelphia, read *Monadelpha.*
——— 22, for east, read *least.*
405, — 22, for affords, read *afford.*
410, — 11, after waved, add *and.*
——— 27, for known, read *unknown.*
415, — 22, for 4 read 3.
417, — 10, strike out the *two hyphens* and the *comma* between them.
418, — 7, from bottom, for purple read *blue.*
420, — 19, for Erodium, read *Pelangonium.*
424, — 27, for compensates, read *compensate.*
426, — 16, after plant, add 5.

PLATE CCLXXXIX.

PROTEA CORDATA.

Heart-ſhape-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx, proprius, nullus. Semina ſolitaria.

BLOSSOM four-cleft or four petals. Tips linear, inſerted into the petals below the ends. Cup, proper, none. Seeds ſolitary.
See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis cordatis.

Protea with heart-ſhaped leaves.

REFERENCE TO THE PLATE.

1. A Floret before the petals have ſeparated, natural ſize.
2. The ſame, magnified, after the burſting of the petals.
2. The Pointal and Seed-bud, natural ſize.

THE Heart-ſhape-leaved Protea was introduced to Britain in the year 1792, from the Cape of Good Hope, by Meſſrs. Lee and Kennedy; at whoſe nurſery it is now, this preſent month of March, 1803, in flower for the firſt time in this country. The plant is only found on the mountains of that part of the Cape called Hottentots Holland; the ſtem, in its native ſtate, laying on the ground, ſeldom more than a foot in length, and the flowers proceeding from it near its baſe. It is rather delicate, ſhould be kept in a very airy part of the green-houſe, and planted in a light loamy ſoil. It is propagated by cuttings, made in the month of April, and kept under a common hand-glaſs, the pot being plunged in a ſhady border.

Of this Protea there is a good figure in Thunberg's *Diſſertatio de Protea,* Upsal, quarto edition, 1781, Plate 5, fig. 1.

Protea cordata

PLATE CCXC.

APONOGETON DISTACHYON.

Broad-leaved Aponogeton.

CLASS XI. ORDER IV.

DODECANDRIA TETRAGYNIA. Twelve Chives. Four Pointals.

GENERIC CHARACTER.

CALYX nullus, nisi squama spathacea externum latus floris cingens, simplex, sessilis, ovata, obtusa, integra, erecta, glabra, colorata.

COROLLA nulla.

STAMINA. Filamenta undecim ad novemdecim, superioribus floribus pauciora, intra spatham et capsulas inserta, subulata, glabra, alba, spatha multoties breviora. Antheræ erectæ, bifidæ.

PISTILLA. Germina plerumque quatuor, raro tria seu quinque. Styli nulli. Stigmata subulata, incurvata.

PERICARPIUM. Capsulæ quatuor, rarius tres seu quinque, ovatæ, subulato-acutæ, exteriore latere gibbæ, interiore planæ, glabræ, unilocularis.

SEMINA, in quacumque capsula tria, basi capsula affixa, sessilia, obovata, obtusissima, sub-compressa, glabra.

EMPALEMENT none, except a sheathing scale surrounding the outer side of the flower, simple, sitting close, egg shaped, obtuse, intire, upright, smooth, coloured.

BLOSSOM none.

CHIVES. Threads eleven to nineteen, in the upper flowers fewer, inserted between the spathe and the capsules, awl-shaped, smooth, white, much shorter than the spathe. Tips upright, two-cleft.

POINTALS. Seed-buds often four, seldom three or five. Shafts none. Summits awl-shaped, turned inwards.

SEED-VESSEL. Capsules four, seldom three or five, egg-shaped, pointed, awl-shaped, unequally swelled on the outside, flat on the inner, smoothed, one-celled.

SEEDS in each capsule three, fixed to the base of it, sitting close, inversely egg-shaped, very blunt, rather flattish, smooth.

SPECIFIC CHARACTER.

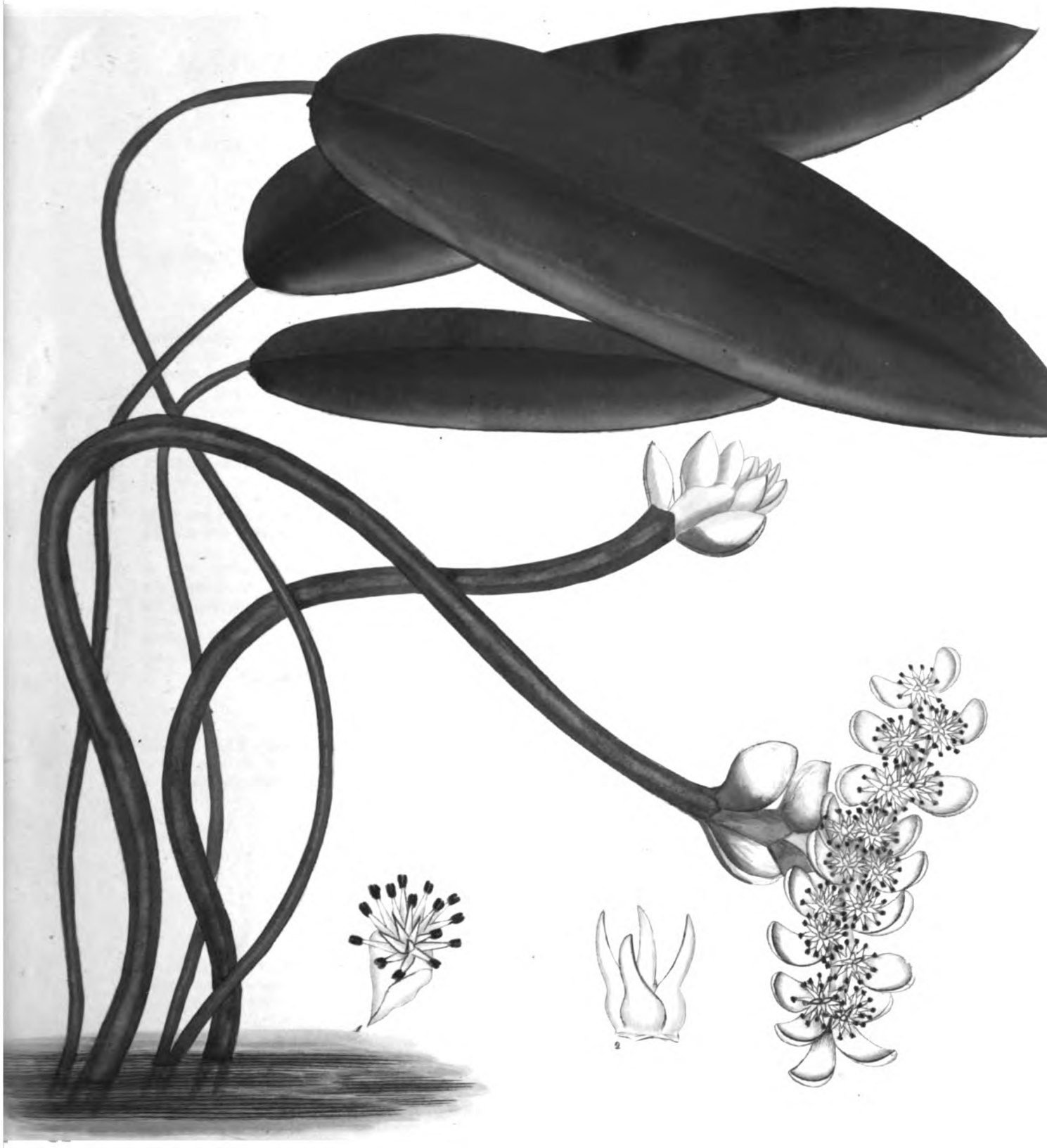
Aponogeton spica bifida; foliis eliptico-lanceolatis, natantibus; bracteis integris; floribus polyandris.

Aponogeton with a two-branched spike; leaves eliptically lance-shaped, floating; floral leaves entire; flowers with many chives.

REFERENCE TO THE PLATE.

1. A Floret, with its floral leaf, magnified.
2. The Seed-buds and Summits, magnified.

THIS Genus of Plants in the Catalogue of the Kew Garden, is placed to the Class Heptandria, and perhaps, with as much propriety as where it now stands in Thunberg, Schreber, &c. for the number of chives in almost every floret differs in this, and all the other species, from six to twenty. It is there said to have been introduced to us in 1788 from the Cape of Good Hope by Mr. F. Masson. It is found near Cape Town in most of the brooks; is very sweet scented, and flowers from April till November. As an aquatic it is very desirable for those who cultivate those plants, the fragrance of the flowers being nearly equal to our Nymphæa alba, or White Water Lily; and this, added to the contrasted effect of the deep brown antheræ upon the pure white floral leaves, which indeed have the appearance of blossoms, give the whole an indescribable trait of beauty, peculiar to itself. Our figure was taken from a plant in the Hibbertian collection.



Aponogeton distachyon

PLATE CCXCI.

SENECIO PSEUDO-CHINA.

China-root Groundſel.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis calyculatus, conicus, truncatus; ſquamis ſubulatis, plurimis, in cylindrum ſuperne contractum, parallelis, contiguis, æqualibus, paucioribus baſin imbricatim tegentibus, apicibus emortuis.

COROLLA. Compoſita, calyce altior; Corullulæ hermaphroditæ tubuloſæ, numeroſæ in diſco; Femineæ ligulatæ in radio (ſi quæ adſint).
Propria hermaphroditi infundibuliformis; limbo reflexo, quinquefido.
Femineis (ſi quæ) oblonga, obſolete tridentata.

STAMINA. Hermaphroditis; filamenta quinque, capillaria, minima. Anthera cylindracea, tubuloſa.

PISTILLUM utriſque; germen ovatum. Stylus filiformis, longitudine ſtaminum. Stigmata duo, oblonga, revoluta.

PERICARPIUM nullum. Calyx conico-connivens.

SEMINA hermaphroditis solitaria, ovata. Pappus crinitus, longus. Femineis ſimilima hermaphroditis.

RECEPTACULUM nudum, planum.

EMPALEMENT. Common, double, conical, appearing cut off; ſcales awl-ſhaped, numerous, contracted above into a cylinder, parallel, contiguous, equal, the baſe tiled by a few scales, dead at the ends.

BLOSSOM. Compound, taller than the cup; Hermaphrodite florets tubular, numerous in the diſk; Female florets (if there are any) tongue-ſhaped in the circumference.
Hermaphrodite florets funnel ſhaped, border reflexed, five-cleft.
Female florets (if any) oblong, obſcurely three-toothed.

CHIVES. Of the hermaphrodite florets; five threads, hair-like, very ſmall. Tips forming a tubular cylinder.

POINTAL in either; Seed-bud egg ſhaped. Shaft thread-ſhaped, the length of the chives. Summits two, oblong, rolled back.

SEED-VESSEL none. Empalement clofing into a cone.

SEEDS of hermaphrodite florets ſolitary, egg-ſhaped. Feather hairy, long. Females like the hermaphrodites.

RECEPTACLE naked, flat.

SPECIFIC CHARACTER.

Senecio foliis ſinuatis, integris, diſcoloribus; corollis purpureis; radice tuberoſa.

Groundſel with obtuſely indented leaves entire and two-coloured; bloſſoms purple; root tuberous.

REFERENCE TO THE PLATE.

1. The Cup.
2. A Female floret, of the ray or circumference.
3. A Pointal of the female floret magnified.
4. An Hermaphrodite floret of the diſk or centre.
5. The Chives and Pointal of an Hermaphrodite floret, magnified.

THE roots of this plant were received at the ſame time with the double Camellias, China Roſes, &c. from China, by the late J. Slater, Eſq. of Laytonſtone, Eſſex; we have, nevertheleſs, good reaſon to believe it was known formerly in our gardens; but has been certainly loſt, for many years, to us. It is ſaid to have been cultivated by James Sherrard, M. D. in 1732, as copied from Dellinens's Hortus Elthamenſis, into the Kew Catalogue. Miller speaks of it as flowering freely, and perfecting its ſeeds; whereas, in the Hort. Kew. they omit its time of flowering, which, had it ever flowered there, would certainly have been noted. Our drawing was taken in the month of July laſt year, 1802, from a plant in the Hibbertian Collection, the firſt and only time we have ever ſeen it flower in England. It is propagated by the roots, which are large and fleſhy; the plant is herbaceous, and ſhould have but little water during the winter months, as the roots are very ſubject to rot; they are imported from India as a drug, under the name of China-root. Muſt be kept in the hot-houſe, and planted in rich earth.

Senecio Pseudo-China

PLATE CCXCII.

GERANIUM UNDULATUM.

Waved-flowered Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rostratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furnished with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis lanceolatis ciliatis, sub-integris; petalis sub-æqualibus, sub-linearibus, undulatis; floribus umbellatis, pentandris; radice tuberosa.	Geranium with lance-shaped flowers, fringed nearly intire; petals almost equal, nearly linear, waved; flowers grow in umbels, five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to shew its tubular structure.
2. The Chives and Pointal, natural size.
3. The Chives, magnified and cut open.
4. The Pointal and Seed-bud, magnified.

THIS tuberous rooted Geranium, from the Cape of Good Hope, has some affinity with the G. spathulatum, as to the shape of the leaves; but the whole habit of the plant is so totally different, that we could not, with any degree of propriety, consider it as a variety of that species. Our figure was taken from a plant in the Hibbertian collection, to which it was introduced in the year 1800, by Mr. Niven. It flowers in June, and may be propagated by the root. The treatment is the same as that required for the rest, of this division, of the Genus.

Geranium Undulatum

PLATE CCXCIII.

LACHNÆA PURPUREA.

Purple-flowered Lachnæa.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Corolla quadrifida; limbo inæquali. Semen unum, ſub-baccatum.	CUP none. Bloſſom four-cleft; border unequal. One ſeed, like a berry. See LACHNÆA ERIOCEPHALA, Pl. CIV. Vol. II.

SPECIFIC CHARACTER.

Lachnæa capitulis ſolitariis; corollis glabris, purpureis; foliis trigonis, obtuſis, quadrifariam imbricatis.	Lachnæa with ſolitary heads of flowers; bloſſoms ſmooth, purple; leaves three-ſided, obtuſe, tiled in four-rows.

REFERENCE TO THE PLATE.

1. One of the floral Leaves, which ſurround the head of flowers at the baſe.
2. A Flower complete.
3. A Bloſſom cut open, the lower part cut off, to ſhew the inſertion of the Chives at the mouth.
4. The Pointal, natural ſize.
5. The ſame magnified.

THIS moſt ſingular genus of plants, in external appearance ſo reſembling paſſerina, yet ſo perfectly diſtinct in the parts of fructification, is certainly amongſt the handſomeſt of the natural order in which it ranks. The long ſlender chives which extend nearly to the length of the border of the bloſſom, independent of the ſingular retrofraction of one of its ſegments, give it a character, we think, decidedly ſufficient on which to have formed the Genus. This is the third ſpecies known; it was introduced to the Hibbertian collection, in 1800, by Mr. Niven, from the Cape of Good Hope. It is a very delicate plant, ſubject to be deſtroyed by damps, flowers in July, and may be increaſed by cuttings. It thrives beſt in a mixture of light ſand and loam.

Thunberg, in his Prod. Plant. Cap. has referred the whole genus to Passerina.

Lachnaea purpurea

PLATE CCXCIV.

PROTEA CANDICANS.

Hoary-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius, nullus. Semina ſolitaria.	BLOSSOM 4-cleft, or 4 petals. Tips linear, inſerted into the petals below the point. Cup, proper, none. Seeds solitary. See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis apicibus tridentatis, eliptico-lanceolatis, obliquis, candidiſſimis; capitulis terminalibus; calyx imbricatus, ſquamis acutis; corollis luteis.	Protea with leaves three-toothed at the ends, eliptically-lance-ſhaped, oblique and very hoary; heads of flowers terminal; cup tiled, ſcales pointed, bloſſoms yellow.

REFERENCE TO THE PLATE.

1. A Floret, the petals ſeparated, natural ſize.
2. One of the Petals magnified.
3. The Pointal, and Seed-bud, natural ſize, the Summit detached, magnified.
4. The Empalement, natural ſize.

OUR preſent plant is one of the rareſt Proteas at this time in England; as, we believe, there has never been but one importation of the ſeeds from the Cape, and no one species of this numerous genus is with more difficulty propagated by cuttings. Its lower leaves are apt to ſuffer much from damps in winter; in conſequence, the ſtem becomes bare till near the top; the plant grows about three feet high, and flowers in Auguſt, or September. Our figure was taken from the Hibbertian collection, where it flowered, in 1802, for the firſt time in Britain. We owe its introduction to Meſſrs. Lee and Kennedy, Hammerſmith, about the year 1790. We have our doubts of this plant being the P. tomentoſa of Thunberg; for although he, in his deſcription of that ſpecies, comes nigh many of the characters of P. candicans, yet his determining the leaves to be linear, and downy, and our having drawings, taken from two other ſpecies, approaching this in habit, yet nigher affined to P. tomentoſa, we have retained his ſpecific title for one of them, the other yet unnamed; which will both be given in due courſe.

Protea candicans

PLATE CCXCV.

PASSIFLORA AURANTIA.

Norfolk Iſland Paſſion-Flower.

CLASS XX. ORDER IV.

GYNANDRIA PENTANDRIA. Chives on the Pointal. Five Chives.

ESSENTIAL GENERIC CHARACTER.

TRIGYNA. Calyx 5-phyllus. Petala 5. Nectarium corona. Bacca pedicellata.	THREE ſtyles. Cup 5-leaved. Petals 5. Honey-cup forming a crown. Berry ſtanding on a foot-ſtalk.

See Pl. CCVII. PASSIFLORA MALIFORMIS. Vol. IV.

SPECIFIC CHARACTER.

Paſſiflora foliis trilobis, lobis oblongis obtuſis, medio longiore; petiolis biglandulofis; nectario cylindraceo, denticulato; corolla aurantia.	Paſſion-Flower with three-lobed leaves; lobes oblong, obtuſe, the middle one the longeſt; foot-ſtalks with two glands; honey-cup cylindrical and toothletted; bloſſom orange-coloured.

REFERENCE TO THE PLATE.

1. Exhibits the half of a flower as cut perpendicularly through the middle, with the whole of the Pointal and Chives in their place.

THIS ſpecies of Paſſion Flower, from Norfolk Iſland, was introduced to Britain in the year 1792, and was firſt raiſed, from ſeeds, at the Hammerſmith Nurſery. It is a greenhouſe plant, loving heat and drought, thrives in a light ſandy ſoil, and is readily increaſed by cuttings; which ſhould be placed in the heat of the bark-bed in the hothouſe, or cucumber hot-bed, in the month of April.

In the young ſtate of the plant, the leaves are leſs harſh, appear rather ſcolloped than lobed, and much reſemble in ſhape thoſe of the Maiden-hair Fern, or Adiantum Capillus-veneris; whence the trivial name, *adiantifolia*, which it bears in moſt collections. But, as there can be no doubt of our preſent plant being that deſigned by Forſter, in his Prod. flor. inſul. auſtral. No. 326; of Cavanilles in his Diſſertationes claſſis Monadelphiæ, Diſſ. 10. p. 457; and as laſtly quoted by Willdenow, in his new Sp. Plant. Tom. 3, Part 1, p. 620; we have, without heſitation, adopted the ſpecific title it there bears. As an addition to the very few handſome climbing plants fit to decorate the trelliswork of our modern greenhouſes, or conſervatories, this plant muſt be conſidered as a great acquiſition; as the growth is rapid, the foliage of a fine green, and the flowering abundant.

Our figure was taken from a plant in the conſervatory of the Hibbertian collection, Clapham common.

llora aurantia

PLATE CCXCVI.

LACHENALIA ROSEA.

Rose-coloured Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, infera; petalis tribus interioribus longioribus. Stamina erecta. Capsula subovata, trialata. Semina globosa.	BLOSSOM 6-divided, beneath; the three inner petals the longest. Chives erect. Capsule nearly egg-shaped, three-winged. Seeds globular.

See LACHENALIA PENDULA, Pl. XLI. Vol. I.

SPECIFIC CHARACTER.

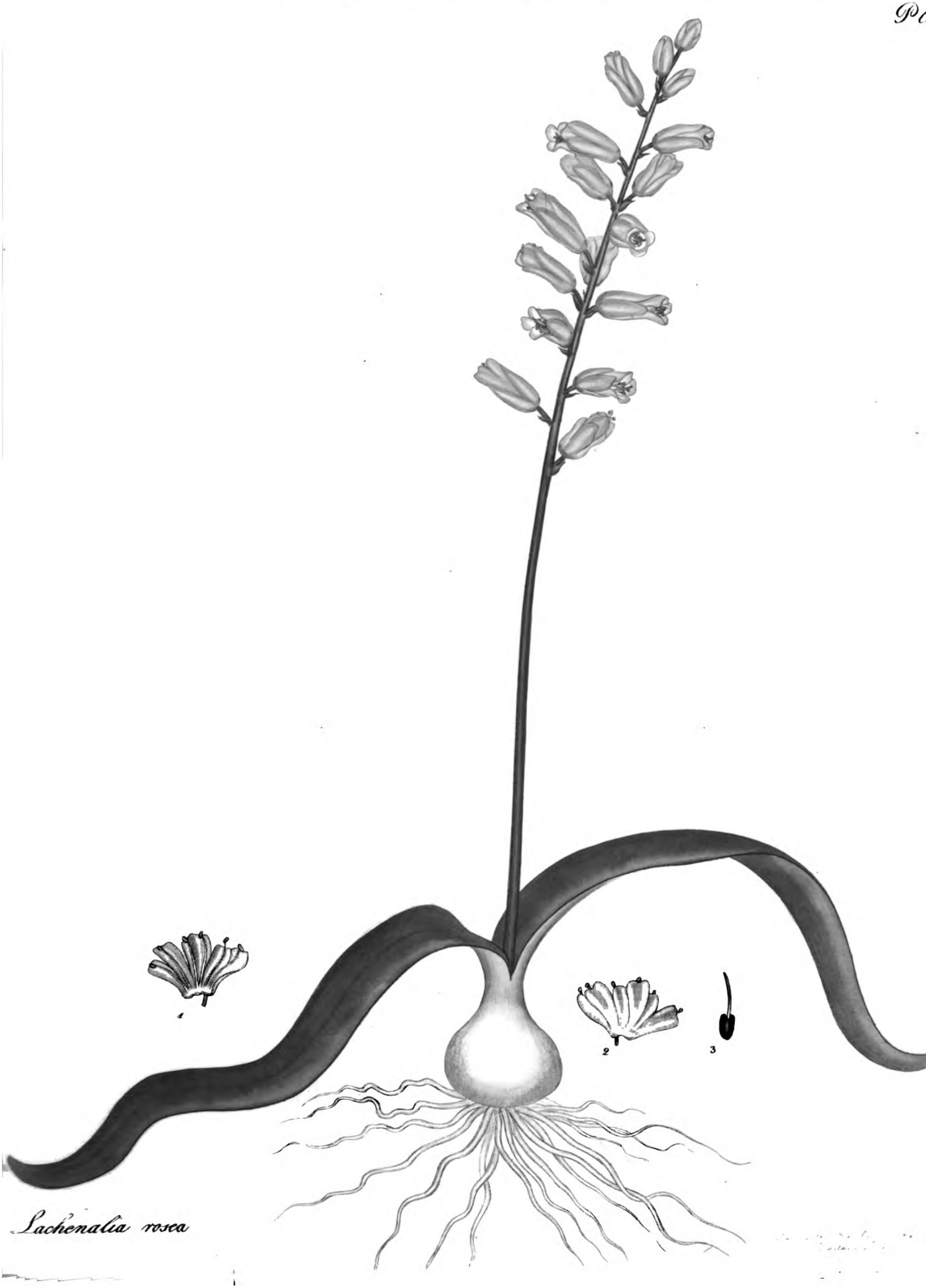
Lachenalia foliis binis, lanceolato-linearibus, obtusis; petalis interioribus longioribus; scapo lævi filiforme; corollis roseis.	Lachenalia with two leaves between, lance and linear-shaped, obtuse; the inner petals the longest; flower-stem smooth and thread-shaped; blossoms rose-coloured.

REFERENCE TO THE PLATE.

1. A Blossom cut open, shewn from the inside, the Chives in their place.
2. The same, shewn from the outside.
3. The Seed-bud and Pointal, natural size.

THIS plant we believe to be perfectly new to Britain, and in no other collection, at present, than that of G. Hibbert, Esq. Clapham; where the drawing of our figure was taken in May, 1802; and to which it had been added, the preceding year, by Mr. Niven, from the Cape of Good Hope.

It is a tender bulb, and rather impatient of moisture; increases by the bulb; should not be removed from its pot but to give it fresh earth, and is fond of a light, loamy soil. It is without scent.



Lachenalia rosea

PLATE CCXCVII.

NYMPHÆA ODORATA.

Sweet-ſcented Water-Lily.

CLASS XIII. ORDER I.

POLIANDRIA MONOGYNIA. Many Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX 4, 5, ſeu 6-phyllus. Corolla polypetala. Bacca multi-locularis, truncata.

Cup 4, 5, or 6-leaved. Bloſſom many petals. Berry many-celled, appearing cut off at top. See NYMPHÆA CÆRULEA, Pl. CXCVII. Vol. III.

SPECIFIC CHARACTER.

Nymphæa foliis ſubrotundis, integris emarginatis, lobis divaricatis, obtuſiſſimis, margine parum incurvatis; calyce tetraphyllo; flore albo.

Water Lily with almoſt round leaves, entire, and notched at the end; lobes ſtraddling, very obtuſe, and turned up ſlightly at the edge; cup four-leaved; flower white.

REFERENCE TO THE PLATE.

1. A Chive.
2. The Seed-bud and Summits.
3. The Seed-bud cut tranſverſely.

THIS ſpecies of Water-Lily we ſhould conſider rather as a variety, than as a diſtinct ſpecies; it has every character of our common white Water-Lily, except the ſize and hardineſs; it has the ſame powerful fragrance, but will not ſtand the ſeverity of our winters. It is a native of Carolina and Virginia, North America; was introduced to us in the year 1786, by William Hamilton, Eſq. of Philadelphia, and flowers during the ſummer months, if kept in the hot-houſe. Requires the ſame treatment as the blue ſpecies from the Cape of Good Hope. May be increaſed from the ſeed, or from the root. Our drawing was taken from a plant in the Clapham collection.

Nymphæa odorata

PLATE CCXCVIII.

ANTHERICUM COSTATUM.

Ribbed-leaved Anthericum.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.
COROLLA. Petala ſex, oblonga, obtuſa, patentiſſima.
STAMINA. Filamenta ſex, ſubulata, erecta. Antheræ parvæ, incumbentes, quadriſulcæ.
PISTILLUM. Germen obſolete trigonum. Stylus ſimplex, longitudine ſtaminum. Stigma obtuſum, trigonum.
PERICARPIUM. Capſula ovata, glabra, triſulca, trilocularis, trivalvis.
SEMINA numeroſa, angulata.

EMPALEMENT, none.
BLOSSOM. Six petals, oblong, blunt, ſpreading very much.
CHIVES. Six threads, awl-ſhaped, upright. Tips ſmall, laying on the threads, four-furrowed.
POINTAL. Seed-bud bluntly three-ſided. Shaft ſimple, the length of the chives. Summit blunt, and three-cornered.
SEED-VESSEL. Capſule egg-ſhaped, ſmooth, three-furrowed, three-valved.
SEEDS numerous, angulated.

SPECIFIC CHARACTER.

Anthericum foliis hirſutis, planis, coſtatis, lineari-enſiformibus, ſupra medium reflexis; ſcapo ſimplici, glabro; floribus albis; radice bulboſo.

Anthericum with hairy, flat, leaves, ribbed, linearly ſword-ſhaped, turned back from the middle; flower-ſtem ſimple, ſmooth; flowers white, root bulbous.

REFERENCE TO THE PLATE.

1. The Chives and Pointal, magnified.
2. The Seed-bud, Shaft, and Summit, magnified.
3. The half of the Seed-bud cut tranſverſely, magnified.

It is much to be lamented that we, as yet, have not diſcovered a mode of treatment by which many of the ſpecies of Albuca, Ornithogalum, Anthericum, &c. from the Cape, might be induced to flower with us, after the firſt year from their importation; ſince many of them never produce more than a few leaves afterwards; and this plant, we fear, is amongſt the number. It makes a very handſome and ſweet bunch of flowers, which have conſiderable duration, not leſs than a month from their firſt expanſion. We can ſay little as to the propagation and culture; as it has not as yet increaſed, nor has it produced any flowers ſince our drawing was made, in Auguſt 1801. We think it is only in the Hibbertian Collection, to which it was introduced by Mr. Niven, in 1800, from the Cape of Good Hope.

Anthericum costatum

PLATE CCXCIX.

LACHENALIA REFLEXA.

Reflexed-flowered Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, infera; petalis tribus interioribus longioribus. Stamina erecta. Capsula subovata, trialata. Semina globosa.

BLOSSOM 6-divided, beneath; the three inner petals the longest. Chives erect. Capsule nearly egg-shaped, three-winged. Seeds globular.

See LACHENALIA PENDULA, Pl. XLI. Vol. I.

SPECIFIC CHARACTER.

Lachenalia foliis ovato-lanceolatis, plurimis; petalis equalibus, acutis, reflexis, rubro punctatis; germine pedicillato, subgloboso.

Lachenalia with leaves between egg and lance-shaped, numerous; petals equal, pointed, reflexed, and dotted with red spots; seed-bud with a foot-stalk, and roundish.

REFERENCE TO THE PLATE.

1. One of the Petals, which are divided to the base, with its chive.
2. The Seed-bud, Shaft, and Summit, natural size.
3. The same, magnified.

THIS curious Lachenalia, for such it must be considered, though in many parts widely different from its congeners, is a native of the Cape of Good Hope, and was received from thence in the year 1798, by J. Vere, Esq. of Kensington Gore; in whose collection, we believe, it is only to be found, and where our drawing was taken in the month of June 1801. It is a tender bulb, and requires a considerable degree of heat to make it flower, and does not appear to have any tendency to increase, although, Mr. Anderson informs us, he has tried it in various situations and soils to that end.

Lachenalia reflexa

Pub. 1st Nov. 1812

PLATE CCC.

GERANIUM OXALIDIFOLIUM.

Wood-Sorrel-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.

ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis ternatis, foliolis ovatis, obtuſis, ciliatis; floribus pentandris; radice tuberoſa.

Geranium with leaves compoſed of three leaflets, which are egg-ſhaped, obtuſe, and fringed; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement of a flower cut open, to ſhew its tubular ſtructure.
2. The Chives and Pointal, natural ſize.
3. The Chives ſpread open, magnified.
4. The Pointal, natural ſize.
5. The ſame, magnified.

THE ſpecies of Geranium here figured, is of the ſame character, in all points of view, as moſt of the tuberous ſpecies lately introduced from the Cape by G. Hibbert, Eſq. in whoſe collection, at Clapham, it is only to be found, at preſent; and where our drawing was taken, in July 1802.

Geranium oxalidifolium

Published as the Act ... by J.C. and Sowerby ...

PLATE CCCI.

PROTEA GRANDIFLORA. *Var. foliis undulatis.*

Large-flowered Protea. *Waved-leaved Var.*

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius nullus. Semina ſolitaria.	BLOSSOM 4-cleft, or 4 petals. Tips linear, inſerted into the petals below the end. Cup proper, none. Seeds ſolitary. See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis lanceolatis glaberrimis, utrinque acuminatis, marginibus ſubcallofis, parum undulatis; ſquamæ calycinæ lanceolatæ erectæ, interiores pilis longiſſimis nigris criſtitatæ.	Protea with lance-ſhaped leaves, ſmooth, tapered to both ends, rather thickened at the edges, and a little waved; the ſcales of the empalement are lance-ſhaped and upright, the inner ones creſted, with very long black hairs.

REFERENCE TO THE PLATE.

1. A Flower complete, as it ſtands on the receptacle of the common cup.
2. The ſame, with one of the petals detached, to ſhew the ſituation of the chives near the ends.
3. The Pointal, complete.

THE round tufts of long hair which terminate the inner ſcales of the cup, in this Protea, and its varieties, conſtitute its principal, diſtinguiſhing ſpecific character from P. ſpecioſa; whoſe ſcales are fringed at the ſummits, and to which our preſent plant is neareſt allied. It is, without doubt, one of the handſomeſt of this fine tribe of plants; not only in the beauty of the bloſſom, but for its general habit; as it does not grow above three feet high, very buſhy, and producing its flowers at the age of three or four years. It is increaſed by cuttings only, as are moſt of the ſpecies of this extenſive genus, none of them perfecting their ſeeds in this climate, or producing roots by laying the branches. Our drawing was made from a plant in the Hibbertian collection, to which it was introduced in 1800, by Mr. Niven, from the Cape of Good Hope, in the month of May, 1802.

Protea grandiflora, Var. foliis undulatis

PLATE CCCII.

LACHENALIA FRAGRANS.

Sweet-ſcented Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, infera; petalis tribus interioribus longioribus. Stamina erecta. Capſula ſubovata trialata. Semina globoſa.

BLOSSOM ſix petals, beneath; the three inner petals the longeſt. Chives erect. Capſule nearly egg-ſhaped, three-winged. Seeds globular.

SPECIFIC CHARACTER.

Lachenalia foliis geminis, ovato-oblongis, humi adpreſſis; corollis campanulatis pedunculatis horizontalibus; petalis ſub-æqualibus; ſcapo erecto.

Lachenalia with one pair of leaves, oblong-egg-ſhaped, laying on the ground; bloſſoms bell-ſhaped with foot-ſtalks, growing horizontally; petals nearly equal; flower-ſtem upright.

REFERENCE TO THE PLATE.

1. A Bloſſom with the Chives in their place, one of the tips detached and magnified.
2. The Seed-bud, Shaft and Summit.
3. The ſame, magnified.
4. The Seed-bud, cut tranſverſely, magnified.

THE extreme fragrance of this plant, amply compenſates for its want of beauty; it retains its ſweetneſs through the whole period of its flowering, which is of near a month's continuance. There is a ſpecies of this genus, much reſembling our plant in flower, but nothing in the leaf; it is known by the name of L. patens, and has been frequently ſold for this, but its ſcent is quite different, and it flowers much earlier; that is to ſay, in the month of March, but the L. fragrans does not produce its bloſſoms till May. It is a very hardy greenhouſe bulb, and requires no particular management to make it flower; this, however, it does not do, but once in two years; not even appearing in foliage, but in the ſecond year from its flowering. Our figure was made at the Hammerſmith-Nurſery, to which it was introduced, from the Cape of Good Hope, in the year 1798.

Lachenalia fragrans

PLATE CCCIII.

GERANIUM BARBATUM.

Bearded-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Chives united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis pinnatis; foliolis inequaliter dentatis barbatis; floribus umbellatis; ſtaminibus quinque fertilibus, binis longioribus reflexis; ſcapo polyſtachio; radice tuberoſa.	Geranium with winged leaves; leaflets unequally toothed and bearded; flowers grow in umbels; five fertile chives, the two longeſt reflexed; flower-ſtem branched; root tuberous.

REFERENCE TO THE PLATE.

1. The cup, natural ſize, cut open.
2. The Chives and Pointal, natural ſize.
3. The Chives cut and ſpread open, magnified.
4. The Pointal and Seed-bud, magnified.

THE ſingular bearded termination, on each tooth, of the leaflets of this ſpecies of Geranium, has induced us to give it a diſtinct ſpecific title; although, in many other reſpects, it approaches very near two or three others, already figured, by us, of this long genus. It is from the ſame country with the other tuberous ſpecies, and introduced to the Hibbertian collection in 1800, where our drawing was made in July 1802.

Geranium barbatum

PLATE CCCIV.

DAVIESIA ULICIFOLIA.

Furze-leaved Daviesia.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum quinquedentatum; laciniis equalibus erectis.	EMPALEMENT. Cup one-leaf, bell-shaped, five-toothed; segments equal, upright.
COROLLA papillionacea, pentapetala. *Vexillum* cordatum erectum. *Alæ* oblongæ, vexillo duplo breviores. *Carina* dipetala, alis paulo longiora.	BLOSSOM butterfly-shaped, five-petalled. *Standard* heart-shaped, upright. *Wings* oblong, half the length of the standard. *Keel* two petals, a little shorter than the wings.
STAMINA. Filamenta decem, distincta, assurgentia, longitudine carinæ. Antheræ simplices minimæ.	CHIVES. Threads ten, distinct, turned upwards, the length of the keel. Tips simple, very small.
PISTILLUM. Germen ovato-oblongum. Stylus subulatus, magnitudine et situ staminum. Stigma acutum.	POINTAL. Seed-bud oblong egg-shaped. Shaft awl-shaped, of the same size and station as the chives. Summit pointed.
PERICARPIUM. Capsula triangularis, compressa, acuta, unilocularis, bivalvis.	SEED-VESSEL. Capsule triangular, flat, sharp pointed, one cell, two valves.
SEMEN unum, reniforme.	SEED one, kidney-shape.

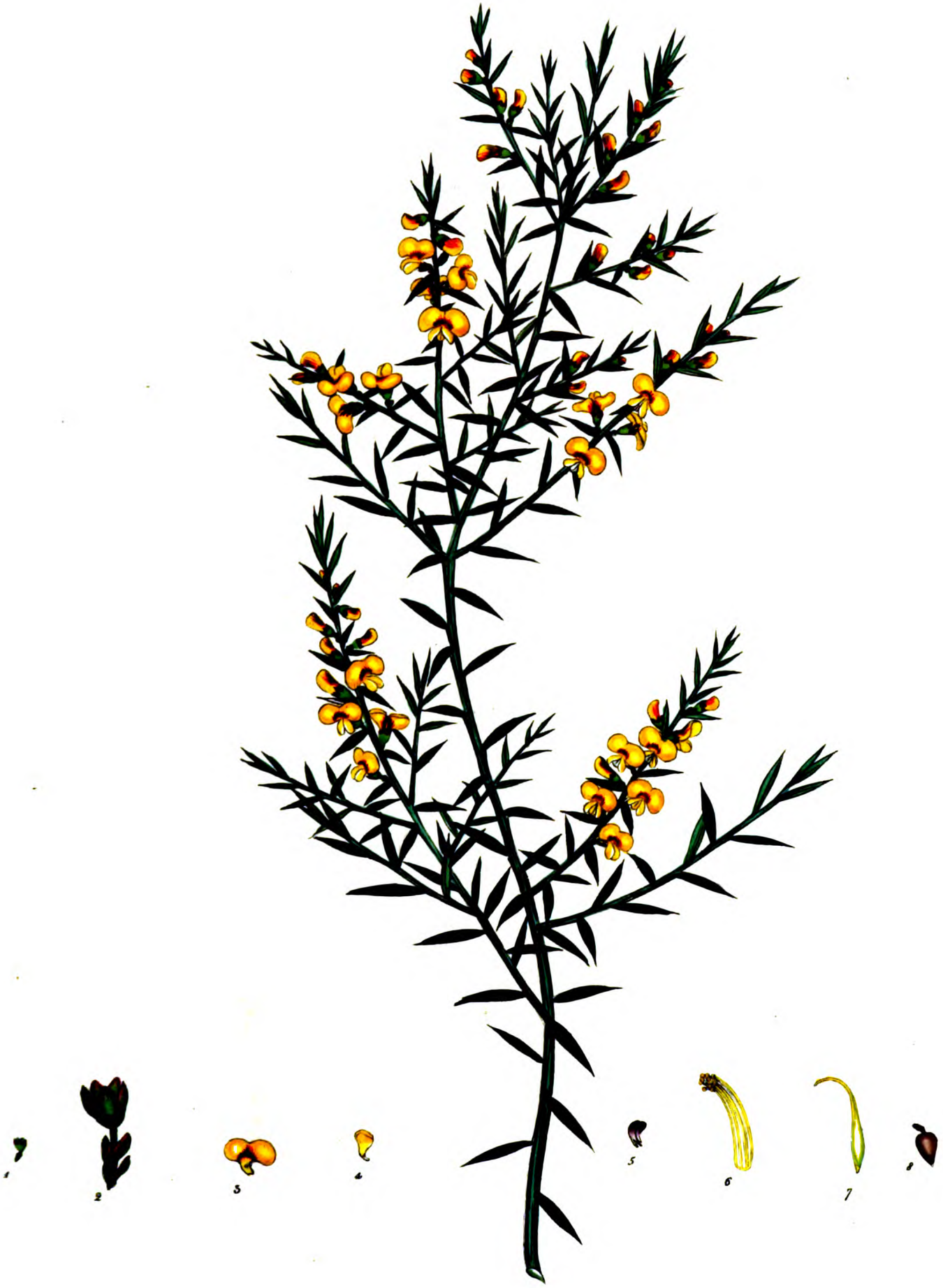
SPECIFIC CHARACTER.

Daviesia foliis lanceolatis, rigidis pungentibus; floribus axillaribus spicatis.	Daviesia with lance-shaped leaves, harsh and pricking; flowers grow from the insertion of the leaves in spikes.

REFERENCE TO THE PLATE.

1. The Empalement of the flower, natural size.
2. The Empalement magnified.
3. The Standard, or upper petal of the blossom.
4. One of the Wings of the blossom.
5. The two petals of the Keel.
6. The Chives, magnified.
7. The Pointal.
8. A ripe Seed-vessel.

THIS division of the butterfly flowered plants, from New Holland, was among the first genera which were raised from the seeds of that country, in Britain. And though we have possessed the plants so long, and both species, or rather the two varieties, perfect their seeds with us; yet are the plants very scarce, few of them are to be met with, and seldom more than a plant, or two, is to be found in any collection. The Daviesias grow about a foot and a half high, and when in flower make a very pretty appearance, as nearly the whole bush is covered with blossoms. They are rather tender, and are impatient of wet, which is, perhaps, the greatest enemy many of the plants from that country have to encounter with us. It flowers about April or May; is increased by seeds, or cuttings; should be kept in a small pot, comparatively with what may be used for the same sized plants, and planted in sandy peat. Our drawing was made from the Hibbertian collection, in the month of May 1802.



Daviesia ulicifolia

PLATE CCCV.

GERANIUM CORONILLÆFOLIUM.

Coronilla-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis impari pinnatis, bijugis; foliolis obovatis glabris; floribus umbellatis pentandris; radice tuberoſa.	Geranium with leaves that are winged, with an odd one and two yoked; leaflets inverſely egg-ſhaped, and ſmooth; flowers grow in umbels, with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Cup cut open, to ſhew its tubular ſtructure.
2. The Chives and Pointal, natural ſize.
3. The Chives cut and ſpread open, magnified.
4. The Pointal and Seed-bud, magnified.

THE drawing of this Geranium was taken at Clapham in the month of July, 1802, from a plant in the Hibbertian collection, where, we believe, it is only to be met with, and to which it was introduced, in 1801, from the Cape of Good Hope. It has no particular character, in its appearance, from which we might be led to think any other treatment or mode of culture was neceſſary for this plant, different from the reſt of its congeners.

Geranium coronellæfolium

PLATE CCCVI.

ALETRIS FRAGRANS.

Sweet-ſcented Aletris.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA infundibuliformis, rugoſa. Stamina inſerta laciniarum baſi. Capſula trilocularis.	BLOSSOM funnel-ſhaped, wrinkled. Chives inſerted into the baſe of the ſegments. Capſule three-celled.

See ALETRIS SARMENTOSA, Pl. LIV.

SPECIFIC CHARACTER.

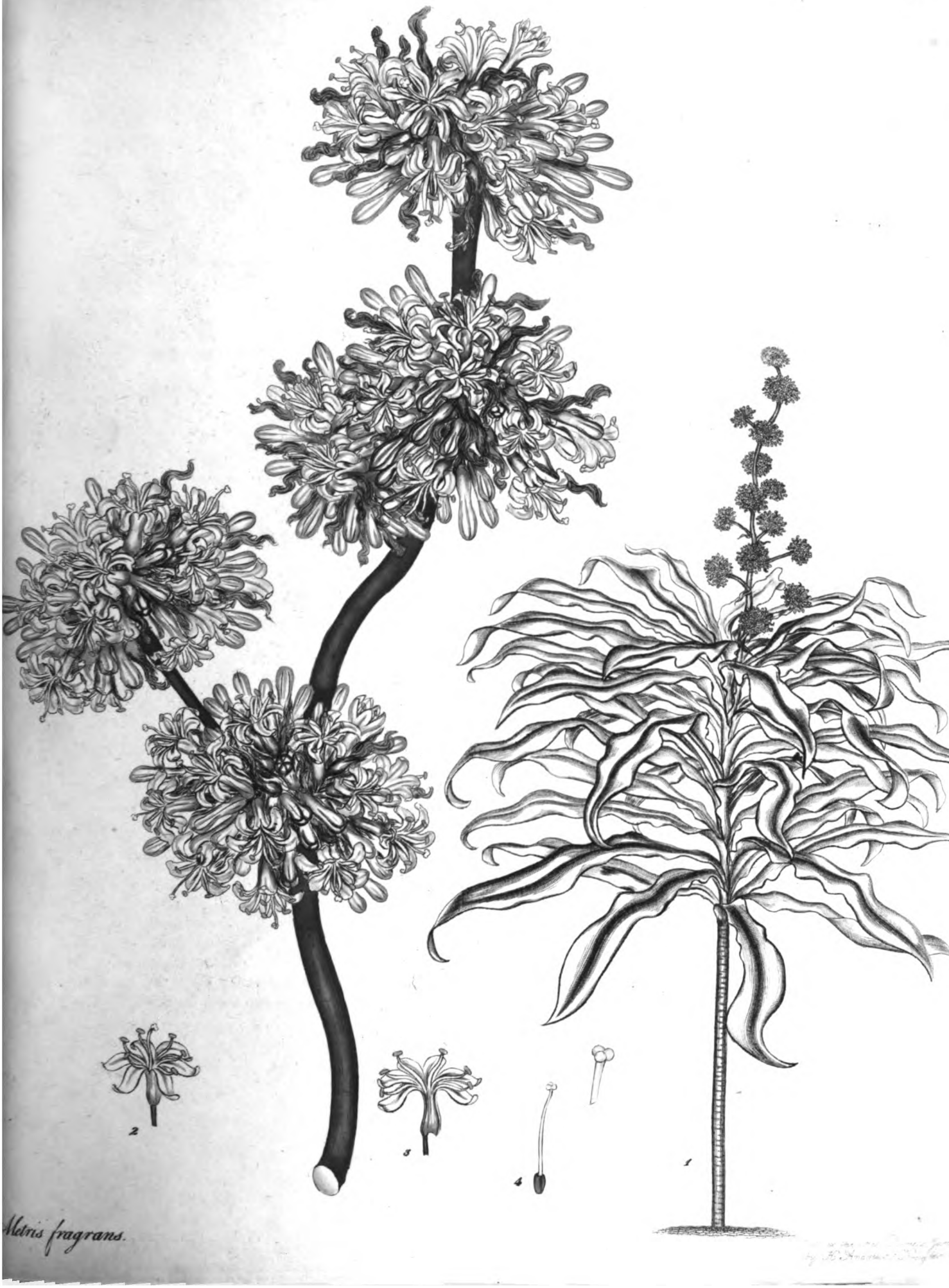
Aletris cauleſcens; foliis lanceolatis, laxis; floribus albicantibus, fragrantiſſimis.	Aletris with a woody ſtem; leaves lance-ſhaped, looſe; flowers whitiſh, very ſweet-ſcented.

REFERENCE TO THE PLATE.

1. A miniature repreſentation of the whole plant.
2. A flower complete, natural ſize.
3. The bloſſom cut open, with the Chives in their place.
4. The Seed-bud, Shaft and Pointal; the ſummit detached, magnified.

THE Sweet-ſcented Aletris, from the great height it attains before it flowers, which is, from 9 to 12 feet, and nearly two-thirds of the length of the ſtem, without leaves; takes off much from the merit of this grand plant as cultivated in our colder regions. It is a native of Africa, and muſt be kept in the hot-houſe, in the bark-bed, to have it bloſſom. The flowers are extremely fragrant, open in the evening and cloſe again with the firſt rays of the morning ſun. It is propagated either by ſuckers, which it ſometimes produces, or by cutting off ſmall portions from the roots; which will become plants in about three months, if placed in the heat of a ſtrong hot-bed; theſe are likewiſe very ſweet-ſcented, having the flavour of orris-root, or violets. Our figure was taken from a plant in the collection of J. Vere, Eſq. Kenſington Gore, this preſent month of May, 1803.

A ſchiſm has ariſen on the ſubject of this genus among modern botaniſts; from whom we muſt, however, exclude the celebrated author of Miller's New Gardeners' Dictionary; who, in this inſtance, has preſerved the genus entire. Three genera have, as uſual, been made out of one; the Cape ſpecies are denominated Veltheimias; thoſe known under the names of A. zeylanica and A. guineenſis, are termed Sanſevieras; A. farinoſa and A. fragrans being the only remnants of the original genus. Such are the happy effects, of modern ſcrutiny, upon the works of the antiquated Linnæus! and ſuch might be the anſwer of theſe illuminati, which poor Gradus, in the farce of *Who's the Dupe*, gives to his miſtreſs, when queſtioned upon the utility of his labours; alas, how elſe ſhould *our* merit be diſcovered, but by elancing from the old track of plain ſenſe and nature.



Aletris fragrans.

PLATE CCCVII.

PROTEA GLOBOSA.

Globe-flowered Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius nullus. Semina ſolitaria.

BLOSSOM 4-cleft, or 4 petals. Tips linear, inſerted into the petals below the end. Cup proper, none. Seeds ſolitary.

See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis eliptico-lanceolatis, apicibus calloſis; capitulo globoſo, terminali; foliolis calycinis ovatis, reflexis; floribus luteis.

Protea with eliptically-lance-ſhaped leaves, callous at the ends; head of flowers globular and terminal; leaflets of the cup egg-ſhaped, turned back; flowers yellow.

REFERENCE TO THE PLATE.

1. A Flower complete, natural ſize.
2. One of the Petals of a bloſſom, with its chive, magnified.
3. The Pointal, and Seed-bud, natural ſize.
4. The ſame, magnified.
5. The common Empalement.

THIS ſpecies of Protea, though it does not ſtand among the foremoſt of its congeners in competition for beauty; yet, has its merits, and thoſe of no ſmall moment, as a hardy green-houſe plant; for it rarely miſſes flowering, in the month of May, annually, and its bloſſoms continue in perfection at leaſt two months. It is ſeldom hurt by cold or wet, if not expoſed to either in the extreme. Is eaſily propagated from cuttings, made in the month of May, or June; by the ſame mode as has been deſcribed for the increaſing the preceding ſpecies of the Genus, already figured in this work. We owe the firſt introduction of this plant to Meſſrs. Lee and Kennedy, Hammerſmith, who raiſed it from ſeeds, in the year 1786, received from the Cape of Good Hope. Our figure was made from a plant in the Hibbertian collection.

Protea globosa

PLATE CCCVIII.

CROTOLARIA VERRUCOSA.

Blue-flowered Crotolaria.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium tripartitum, magnum, corolla paulo brevius; laciniis duabus superioribus lanceolatis, vexillo incumbentibus; tertia lanceolata, concava, carinam fulciente, trifida.

COROLLA papillionacea.
Vexillum cordatum, acutum, magnum, lateribus depressum.
Alæ ovatæ, vexillo dimidio breviores.

Carina acuminata, longitudine alarum.

STAMINA. Filamenta decem, connata, assurgentia, linea dorsali fissa basique hiante. Antheræ simplices.

PISTILLUM. Germen oblongum, reflexum, hirsutum. Stylus simplex, infractus, assurgens. Stigma obtusum.

PERICARPIUM. Legumen breve, turgidum, uniloculare, bivalve, pedicillatum.

SEMEN aliquot, globosa-reniformia.

EMPALEMENT. Cup three-parted, large, rather shorter than the blossom; the two superior segments lance-shaped, laying on the standard; the third lance-shaped, concave, supporting the keel, three-cleft.

BLOSSOM butterfly-shaped.
Standard heart-shaped, acute, large, depressed on the sides.
Wings egg-shaped, half the length of the standard.
Keel tapered, the length of the wings.

CHIVES. Ten threads, united, turned upwards, with a split line on the back, and gaping at the base. Tips simple.

POINTAL. Seed-bud oblong, reflexed, hairy. Shaft simple, bent inwards at an angle, turned upwards. Summit obtuse.

SEED-VESSEL. Pod short, turgid, one-celled, two valved, with a fruit-stalk.

SEEDS a few of a rounded kidney-shape.

SPECIFIC CHARACTER.

Crotolaria foliis simplicibus, ovatis, retusis; stipulis lunatis, declinatis; racemo terminali; ramis tetragonis.

Crotolaria with simple leaves, egg-shaped, dented at the ends; leaf-props half-moon-shaped, turned downwards; bunch of flowers terminal; branches four-sided.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Standard.
3. One of the Wings.
4. The two petals of the Keel.
5. The Chives.
6. The Pointal and Seed-bud, the Summit detached, magnified.
7. A half ripe Seed-vessel.
8. The same laid open.

THIS handsome annual is an old inhabitant of our hot-houses, for it has been cultivated so long ago as the year 1731, by Mr. Miller; but from its character as an annual, our summers not proving always congenial to the perfecting its seeds, it has at intervals been lost to us. It is a native of the East Indies, and, in general, good seed may be procured by keeping the plants constantly in a hot-bed or hot-house; but the best method is to raise them on a strong hot-bed, keeping them there till in flower, and then transferring them to the hot-house or dry-stove, to perfect their seeds. Our drawing was taken from a fine specimen, communicated by the Hon. W. H. Irby, from his select collection at the Parsonage, Farnham Royal, Bucks. Flowers in May or June, and ripens its seeds in August or September.

Crotolaria verrucosa

PLATE CCCIX.

PULTENÆA VILLOSA.

Hairy Pultenæa.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquedentatis, utrinque appendiculatus. Corolla papilionacea, alis vexillo brevioribus. Legumen uniloculare, dispernum.

CUP five-toothed, with a hanging prop on each side. Blossom butterfly-shaped, the wings shorter than the standard. A one-celled pod, two seeded.

SPECIFIC CHARACTER.

Pultenæa foliis oblongis, villosis; floribus axillaribus, solitariis, spicatis; caule villoso; calycibus inappendiculatis.

Pultenæa with oblong, hairy leaves; flowers grow from the insertion of the leaves, solitary, and in spikes; stem hairy; cup without props.

REFERENCE TO THE PLATE.

1. A Leaf.
2. The Cup, natural size.
3. The Standard of the blossom.
4. One of the Wings of the blossom.
5. The two Leaves of the keel.
6. The Empalement, Chives, and Pointal, magnified.
7. The Seed-bud, Shaft, and Summit, magnified.

WHERE to place the limits to the various new genera of this very extended natural order of plants, with butterfly blossoms, from New Holland, appears a task of some difficulty with our modern botanists; for, no sooner have we formed an essential character for a genus, than immediately we are struck with the appearance of new plants, whose whole habits assimilate with our newly constructed family, but in the principal and pointed essential character. In such predicament stands our present subject, it wants the appendicula to the cup, yet has it been placed, by Willdenow, &c. to Pultenæa; and with good reason, we presume, for if every difference of this nature was taken up, on which to form new genera, nearly every plant from that country would furnish grounds for new names; and, to say the truth, we think they are, already, sufficiently extended. The Pultenæas are all rather impatient of wet, and although they are not frequently killed by too much moisture, yet they become unsightly, by losing all their lower leaves. This species grows to the height of about three feet; and, when in flower, makes a very handsome appearance. It perfects its seeds, and may be increased by cuttings, which should be put in about the beginning of April. A mixture of sandy peat three parts, and one fourth part of loam, is the best soil to grow it in. It was amongst the first plants which were raised from Botany Bay seeds in this country. Our figure was made at the Hammersmith nursery, in 1801.

Pultenea villosa

PLATE CCCX.

STACHYS COCCINEA.

Scarlet Clownheal.

CLASS XIV. ORDER I.

DIDYNAMIA GYMNOSPERMIA. Two Chives longer. Seed naked.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, angulatum, ſemiquinquefidum, acuminatum, perſiſters; dentriculis acuminatis, ſubulatis, ſubinæquale.

COROLLA monopetala, ringens; tubus breviſſimus; faux oblonga, ad baſin deorſum gibba; *labium ſuperius* erectum, ſubovatum, fornicatum, ſæpe emarginatum; *labium inferius* majus, trifidum lateribus reflexum; *lacinula intermedia* maxima, emarginata, replicata.

STAMINA. Filamenta quatuor, quorum duo breviora, ſubulata, ad latera faucis recurvata. Antheræ ſimplices.

PISTILLUM. Germen quadripartitum. Stylus filiformis, ſitu et longitudine ſtaminum. Stigma bifidum, acutum.

PERICARPIUM nullum. Calyx vix mutatus.

SEMINA quatuor, ovata, angulata.

EMPALEMENT. Cup one-leaf, tubular, angular, five ſhallow clefts, taper, permanent; toothlets taper, awl-ſhaped, nearly equal.

BLOSSOM one petal, gaping; tube very ſhort; mouth oblong, hunched downwards towards the baſe; *upper lip* upright, rather egg-ſhaped, arched, often notched at the end; *lower lip* large, three-cleft, ſide ones reflexed; the *middle ſegment*, which is the largeſt, notched at the end, and folded back.

CHIVES. Four threads, of which two are ſhorter, awl-ſhaped, bent to the ſides of the mouth. Tips ſimple.

POINTAL. Seed-bud with four diviſions. Shaft thread-ſhaped, of the length and ſituation of the chives. Summit cloven, ſharp-pointed.

SEED-VESSEL none. The cup ſcarce changed.

SEEDS four, egg-ſhaped, angular.

SPECIFIC CHARACTER.

Stachys verticillis ſexfloris; foliis ovato-oblongis, baſi cordatis, crenatis; floribus coccineis.

Clownheal with ſix flowered whorls; leaves oblong-egg-ſhaped, heart-ſhaped at the baſe, ſcolloped; flowers ſcarlet.

REFERENCE TO THE PLATE.

1. The Cup, natural ſize.
2. The Bloſſom cut open, with the chives in their place.
3. The Seed-buds and Pointal, the ſummit detached, magnified.
4. The Seed-buds, magnified.

ALTHOUGH this ſpecies of Stachys muſt be conſidered as an herbaceous plant, yet the ſtem, if kept in the green-houſe, may be preſerved; and therefore, as it is too tender to bear our winters, in the open ground, we muſt conſign it to that ſtation. It is a native of South America; is eaſily propagated by cuttings; flowers in the month of July, or Auguſt, and thrives in rich mould. The figure was taken from a plant in the collection of J. Vere, Eſq. Kenſington Gore, where, we believe, it flowered for the firſt time in Britain.

Stachas cocainea

PLATE CCCXI.

GERANIUM PINNATUM.

Winged-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis pinnatis; foliolis ſubrotundo-ovatis, hirſutis; floribus flavis, ſtaminibus quinque fertilibus; ſcapo polyſtachio; radice tuberoſa.	Geranium with winged leaves; leaflets rather round-egg-ſhaped, and hairy; flowers yellow; five fertile chives; flower-ſtem branched; root tuberous.

REFERENCE TO THE PLATE.

1. A Flower-cup, natural ſize, cut open.
2. The Chives and Pointal, natural ſize.
3. The Chives cut and ſpread open, magnified.
4. The Pointal and Seed-bud, magnified.

THE ſpecific title of this plant, originally, belonged to a ſpecies which is, now, confounded amongſt the numerous varieties of Geranium lacerum. And, indeed, the preſent plant is taken as a ſynonim, by Willdenow, with G. aſtragalifolium, of which we have given a figure in a preceding number. This was among the firſt of the tuberous kind of Geraniums known to our gardens. Mr. F. Maſſon, according to the Kew Catalogue, firſt introduced it to the Kew Gardens in 1788. It has nothing particular in its character to require a different treatment from the reſt of the tuberous ſpecies. Our drawing was made from a plant in the Hammerſmith Collection, in March 1801.

Geranium pinnatum

PLATE CCCXII.

STYPHELIA VIRIDIS.

Green-flowered Styphelia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus. Corolla tubulosa. Stamina fauci inserta. Drupa quinque-locularis. Semina bina.	CUP tiled. Blossom tubular. Chives inserted into the mouth of the blossom. A pulpy berry with five cells. Seeds by twos. See STYPHELIA TRIFLORA. Pl. LXXII. Vol. I.

SPECIFIC CHARACTER.

Styphelia foliis utrinque acuminatis, obliquis, acutis, glaberrimis; floribus axillaribus, solitariis, viridibus.	Styphelia with leaves tapered to both ends, oblique, pointed, very smooth; flowers grow from the insertion of the leaves, solitary and green.

REFERENCE TO THE PLATE.

1. The Cup of a flower, natural size.
2. A Blossom, with the Chives in their place, cut open.
3. The Seed-bud, Shaft, and Summit, the Summit magnified.

FEW of the plants from New Holland have excited more admiration than the Styphelias; the S. tubiflora figured in the New Holland botany of Dr. Smith, the S. triflora given in the first Vol. of this work, our present plant, together with the numerous other species already known from dried specimens, lead us to conjecture that the genus is as copious as any, Bankfia not excepted, from that country. This plant grows to the height of two feet, or more; the flowers nearly covering the branches. It is rather delicate, requiring but little water, in the winter months; as it is certain to perish, if kept wet any considerable time. Is propagated by cuttings, and must be kept in a small pot, proportional to the size of the plant, in very sandy peat earth. Our figure was taken from a plant in the Hibbertian collection, in the month of April, 1803. All the plants, at present in Britain, of this species of Styphelia, are the offspring of one solitary seed, received by Messrs. Lee and Kennedy from New Holland, in the year 1791.

Styphelia viridis.

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by H. Andrews 5 Hampstead Rd.

PLATE CCCXIII.

JUSTICIA LUCIDA.

Shining-leaved Justicia.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, minimum, quinquepartitum, acutum, erectum, anguſtum.

COROLLA monopetala, ringens; tubus gibbus; limbus bilabiatus, labium ſuperius oblongum, emarginatum, labium inferius ejuſdem longitudinis, reflexum, trifidum.

STAMINA. Filamenta duo, ſubulata, ſub labio ſuperiore recondita. Antheræ erectæ, ad baſin bifidæ.

PISTILLUM. Germen turbinatum. Stylus filiformis, longitudine et ſitu ſtaminum. Stigma ſimplex.

PERICARPIUM. Capſula oblonga, obtuſa, baſi anguſtata, bilocularis, bivalvis; diſſepimento valvulis contrario, ungue elaſtico dehiſcens.

SEMINA ſubrotunda.

EMPALEMENT. Cup one-leaf, very ſmall, five-divided, pointed, erect, narrow.

BLOSSOM one petal, gaping; tube hunched; border two-lipped; the upper lip oblong, notched at the end; the under lip of the ſame length, reflexed, and three-cleft.

CHIVES. Two threads, awl-ſhaped, hid under the upper lip. Tips upright, two-cleft at the baſe.

POINTAL. Seed-bud top-ſhaped Shaft thread-ſhaped, the length and ſituation of the chives. Summit ſimple.

SEED-VESSEL. Capſule oblong, obtuſe, narrowed at the baſe, two-celled, two valved; the partition oppoſite to the valves ſplitting from an elaſtic claw.

SEEDS roundiſh.

SPECIFIC CHARACTER.

Juſticia ſpicis terminalibus; floribus ſubcapitatis; foliis elipticis, nervoſis, bullatis, lucidis; corollis bilabiatis, labio ſuperiore lanceolato; caule fruticoſo, glabro.

Juſticia with terminal ſpikes; flowers grow nearly in heads; leaves eliptic, nerved, bliſtered, and ſhining; bloſſoms two-lipped, the upper lip lance-ſhaped; ſtem ſhrubby, ſmooth.

REFERENCE TO THE PLATE.

1. A Bloſſom cut open, with the Chives in their place.
2. The Cup and Pointal.
3. An unripe Seed.

MOST of the ſpecies of this genus of plants have hitherto been conſidered of little value in our collections, as few of them have woody ſtems, and from that character have a weedy appearance. This plant however is an exception, and is well worthy a place in collections where ornament only, not variety, is ſtudied. It grows to the height of three feet, flowers in the month of Auguſt, is eaſily increaſed from cuttings, and may be kept in the hot-houſe, out of the bark-bed. The Juſticia coccinea and this plant approach in the appearance of their flowers and habit; but the leaves differ much as well as many other minuter parts. It is a native of the Eaſt Indies, and was introduced about the year 1794. Our figure was taken from a plant in the Collection of G. Hibbert, Eſq. Clapham Common.

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Justicia lucida

PLATE CCCXIV.

ITEA SPINOSA.

Thorny Itea.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, erectum, acuminatum, minimum, perfiftens, laciniis acutis, coloratis.	EMPALEMENT. Cup one-leaf, five-cleft, upright, tapered, very fmall, remaining, fegments pointed, coloured.
COROLLA. Petala quinque, lanceolata, longa, calyci inferta.	BLOSSOM. Petals five, lance-fhaped, long, inferted into the cup.
STAMINA. Filamenta quinque, fubulata, erecta, longitudine corollæ, calyci inferta. Antheræ fubrotundæ, incumbentes.	CHIVES. Five threads, awl-fhaped, upright, the length of the bloffom, inferted into the cup. Tips roundifh, laying on the threads.
PISTILLUM. Germen ovatum. Stylus cylindraceus, perfiftens, longitudine ftaminum. Stigma obtufum.	POINTAL. Seed-bud egg-fhaped. Shaft cylindrical, permanent, the length of the chives. Summit obtufe.
PERICARPIUM. Capfula ovata calyce multoties longior, ftylo muconato, unilocularis, bivalvis ex duabus coalita apice dehifcens.	SEED-VESSEL. Capfule egg-fhaped, much longer than the cup, tapering into the fhaft, one-celled, two-valved of two joined, fplitting at top.
SEMINA numerofa, minima, oblonga, nitida.	SEEDS numerous, very fmall, oblong, fhining.

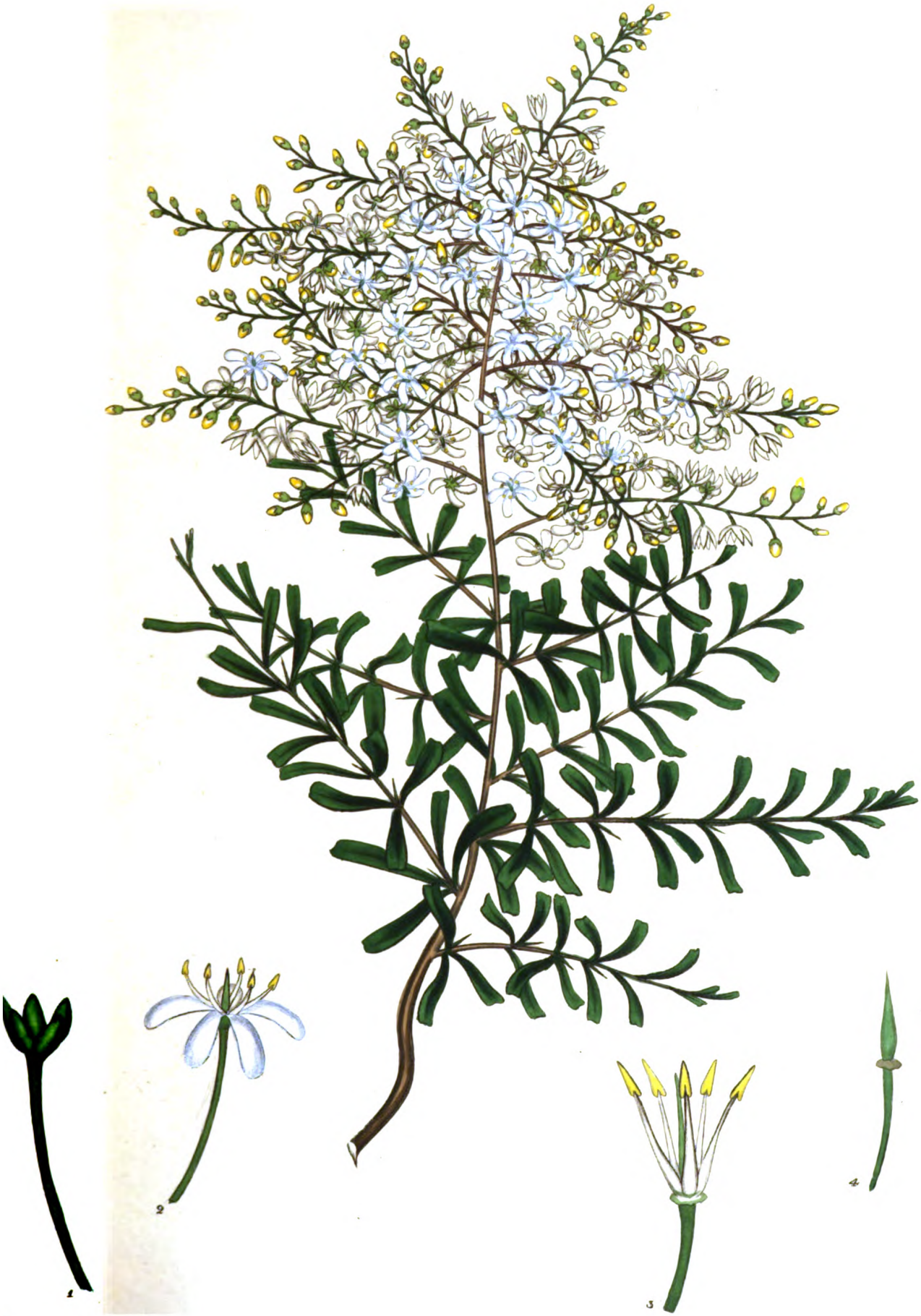
SPECIFIC CHARACTER.

Itea foliis cuneiformibus, emarginatis; fpinis axillaribus.	Itea with wedge-fhaped leaves, notched at the end; fpines grow at the infertion of the leaves.

REFERENCE TO THE PLATE.

1. The Empalement, magnified.
2. A Flower complete, magnified.
3. The Chives and Pointal, magnified; part of the cup and the petals taken away, to fhew the infertion of the Chives into the cup.
4. The Pointal, magnified.

THIS plant is a native of New Holland, and was introduced from thence by the Right Honourable the Marchionefs of Rockingham, at the fame time with the Bauera rubioides of this work; and from a fpecimen communicated by her Ladyfhip in September, 1801, our drawing was taken. It is a hardy green-houfe plant, continuing in flower from Auguft till December; makes a very bufhy handfome fhrub, efpecially when planted in a confervatory. Is eafily propagated by cuttings, made in the month of April, and kept on a gentle heat until they are rooted. It thrives moft in fandy peat, with a fmall mixture of fandy loam.



lea spinosa

PLATE CCCXV.

ORCHIS BICORNIS.

Two-horned Orchis.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

NECTARIUM corniforme pone florem.	HONEY-CUP like a horn behind the flower. See ORCHIS CILIARIS, Pl. XLII. Vol. I.

SPECIFIC CHARACTER.

Orchis bulbis indivisis; corollis galea bicalcarata; labio quinque-partito.	Orchis with undivided bulbs; helmet of the blossom two-spurred, lip five-parted.

REFERENCE TO THE PLATE.

1. A Flower, natural size.
2. The same, magnified, with the front petals cut away to expose the parts of fructification, one of the chives being liberated from its cell.

THIS singular little Orchis was first introduced to us, from the Cape of Good Hope, by Mr. F. Masson, in 1787, but has been lost to our gardens since near that time till last year, when we had the pleasure of seeing it again in the collection of T. Evans, Esq. Stepney; but we much fear, without a fresh supply of roots, it will again soon stand but as a name in our catalogues. It is a very tender and delicate plant; and, like nearly the whole of this natural order, difficult to propagate or preserve in a cultivated state; wherefore we cannot pretend to recommend any particular method. The bulb which flowered at Stepney was planted in sandy peat, and appeared in good health. It flowers in September, loses its leaves soon after flowering, and is extremely fragrant.

Orchis bicornis

PLATE CCCXVI.

OLEA APETALA.

Petal-leſs Olive.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, parvum; ore quadridentato, erecto, deciduum.	EMPALEMENT. Cup one-leafed, tubular, ſmall; mouth four-toothed, erect, deciduous.
COROLLA monopetala, infundibuliformis; tubus cylindraceus, longitudine calycis; limbus quadripartitus, planus; laciniis ſubovatis.	BLOSSOM one petal, funnel-ſhaped; tube cylindrical, the length of the cup; border four-divided, flat; ſegments nearly egg-ſhaped.
STAMINA. Filamenta duo, oppoſita, ſubulata, brevia. Antheræ erectæ.	CHIVES. Two threads, oppoſite, awl-ſhaped, ſhort. Tips upright.
PISTILLUM. Germen ſubrotundum. Stylus ſimplex, breviſſimus. Stigma bifidum, craſſiuſculum; laciniis emarginatis.	POINTAL. Seed-bud roundiſh. Shaft ſimple, very ſhort. Summit two-cleft, thickiſh; clefts notched at the ends.
PERICARPIUM. Drupa ſubovata, glabra, unilocularis.	SEED-VESSEL. A pulpy berry, rather egg-ſhaped, ſmooth, one-celled.
SEMEN. Nux ovato-oblonga, rugoſa.	SEED. A nut oblong-egg-ſhaped, rough.

SPECIFIC CHARACTER.

Olea foliis elipticis, floribus racemoſis, apetalis.	Olive, with eliptically-ſhaped leaves, flowers in long bunches without petals.

REFERENCE TO THE PLATE.

1. A Flower expanded, magnified.
2. The ſame with the Chives expoſed, magnified.
3. The Seed-bud, Shaft, and Summit, magnified.
4. A half ripe Berry.
5. The ſame cut tranſverſely.

OUR preſent figure repreſents a plant a native of New Holland and New Zealand, in the Pacific Ocean; but, we have great reaſon to think, it has been referred, rather raſhly, to the genus under which it is here named; and that it poſſeſſes a diſtinctive character ſufficient on which to have formed a new one. We have, nevertheleſs, as uſual, taken it up under the title it is in general known by, as publiſhed by Vahl, in his Symbolæ Botanicæ, Part III. p. 3, and quoted from him into Willdenow's Sp. Plant. p. 46, and thence into Profeſſor Martyn's ed. of Miller's Dict. article Olea, 5. Whether the fruit of this plant will ever turn to account, when cultivated, as an article of food, time muſt evince; but, certainly, it bears an appearance of much hope. It is a ſtrong woody growing ſhrub, forming itſelf into a handſome round-headed plant; and, when in full flower, has a very pretty appearance, having all the neceſſary qualities of ſuch plants as are fit for planting out in a conſervatory. It is propagated by cuttings; ſhould be planted in ſandy peat earth, mixed with a ſmall portion of loam; producing its flowers about February or March. Our drawing was made from a plant in the Hammerſmith Collection, to which it was firſt added in the year 1791; having been raiſed from ſeeds communicated to Meſſrs. Lee and Kennedy by Colonel Paterſon.

Ilex apetala

Pub. as the Act directs [illegible]
by H. Aurou [illegible]

PLATE CCCXVII.

GERANIUM UNDULATUM. *Var. Minor.*

Waved-flowered Geranium. *Leſſer Var.*

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.

ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.
See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis radicalibus lanceolatis, integerrimis, petiolis longitudine foliorum; petalis cuneiformibus, equalibus, undulatis; floribus pentandris; radice tuberoſa.

Geranium with the root leaves lance-ſhaped, quite entire; foot-ſtalks the length of the leaves; petals wedge-ſhaped, equal, waved; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, natural ſize.
2. The Chives cut and ſpread open, magnified.
3. The Seed-bud, Shaft, and Summits.

THIS very handſome tuberous Geranium, and which we have rather placed as a variety than a ſpecies, might perhaps by ſome have been conſidered as ſufficiently diſtinct to have formed a ſpecies; but, indeed, much difficulty ariſes in the determining, amongſt this variable tribe, where to fix determinate ſpecific character. Our preſent figure was taken from the Hibbertian Collection, where as yet the plant is only to be ſeen in Britain. It flowers in June or July; does not perfect its ſeeds, nor has the appearance of eaſily propagating from the root; the uſual method with this link of the Geranium family. It thrives in ſandy peat and leaf mould.

Geranium undulatum. Var. minor

PLATE CCCXVIII.

HÆMANTHUS MULTIFLORUS.

Many-flowered Blood-Flower.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum hexaphyllum, maximum, umbelluliferum; foliolis erectis, oblongis, persistentibus.

COROLLA monopetala, erecta, sexpartita; laciniis erectis, linearibus; tubo brevissimo, angulato.

STAMINA. Filamenta sex, subulata, tubo corollæ inserta, corolla longiora. Antheræ incumbentes, oblongæ.

PISTILLUM. Germen inferum. Stylus simplex, longitudine staminum. Stigma simplex.

PERICARPIUM. Bacca subrotunda, trilocularis.

SEMINA solitaria, triquetra.

EMPALEMENT. Fence six-leaved, large, bearing a small umbel; leaflets upright, oblong, permanent.

BLOSSOM one petal, upright, six-parted; segments upright, linear; tube very short, angular.

CHIVES. Threads six, awl-shaped, inserted into the tube of the blossom, longer than the blossom. Tips laying on the threads, oblong.

POINTAL. Seed-bud beneath. Shaft simple, the length of the chives. Summit simple.

SEED-VESSEL. Berry roundish, three-celled.

SEEDS solitary, three-sided.

SPECIFIC CHARACTER.

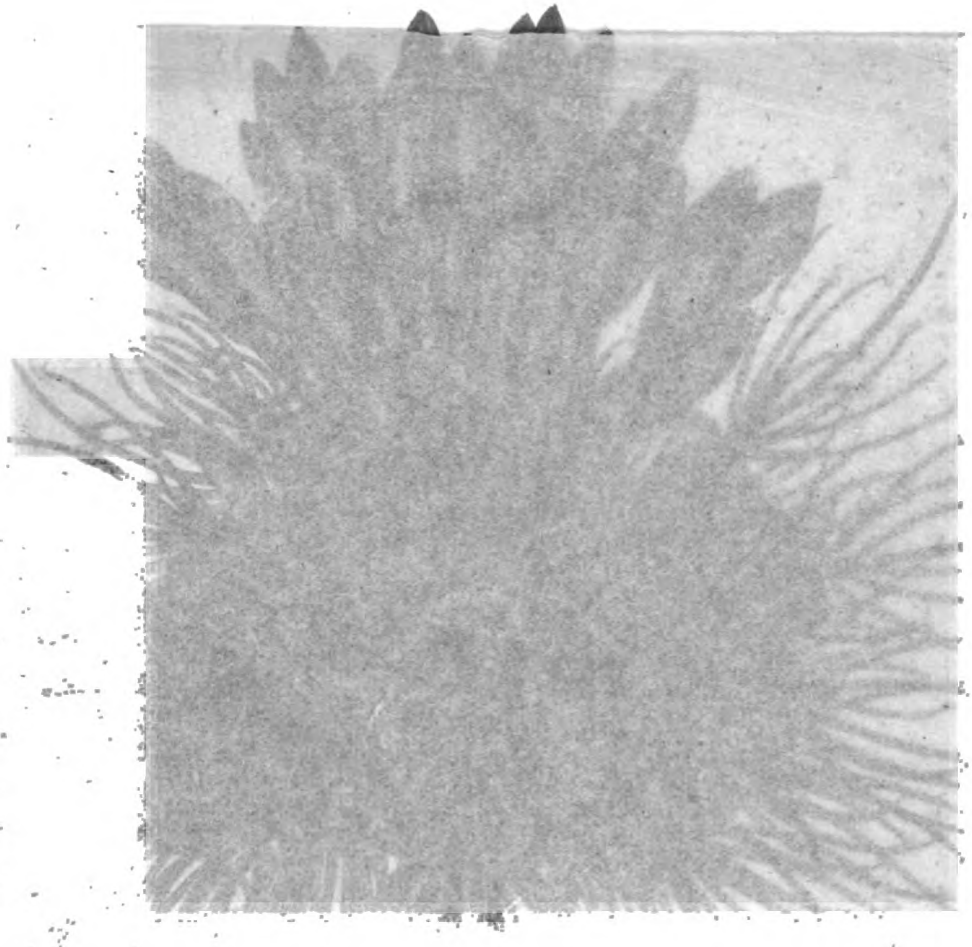
Hæmanthus foliis plicatis, undulatis, erectis, lato-lanceolatis; umbella globosa; floribus confertis; petalis patentibus; scapo ad basin maculato.

Blood flower with plaited leaves, waved, upright and broad-lance shaped; umbel globular; flowers crowded; petals spreading; flower-stem spotted at the base.

REFERENCE TO THE PLATE.

1. The Leaves and part of the Flower-Stem, in miniature.
2. A Flower, complete, natural size.
3. The Seed-bud, Shaft, and Summit.
4. A Seed-bud, cut transversely.
5. The embryo of a Seed.

THIS plant is said to have been in our European gardens so long ago as the year 1603: having, at that time, been sent to Paris by the younger Robin from Guinea. But however this may be, as yet there is no figure of the plant by which it may be known from many of this beautiful tribe, except the one by the late Mr. Nodder. We are indebted for its last introduction to the honourable the Sierra Leone Company, who received, in 1792, the roots of this plant, amongst many others, from that settlement; which were by them presented to Messrs. Lee and Kennedy, at Hammersmith. Our figure was taken in June from a plant in flower this present year, 1803, in the collection of J. Vere, Esq. Kensington Gore, where, from the particular management of Mr. Anderson, the same root has flowered several times; a circumstance that but rarely happens with these bulbs after the first year from importation. As a native of so hot a clime it must be kept in the bark bed of the hot-house; and, when the plant is not in flower, should be watered but sparingly. We as yet are unacquainted with any mode by which it may be propagated. It flourishes most in rich mould. Our figure represents the plant in a small specimen, as the head of flowers is frequently, in this country, of three times the size.



Hæmanthus multiflorus

Hæmanthus multiflorus

PLATE CCCXIX.

VICIA GALEGIFOLIA.

Goat's-Rue-leaved Vetch.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, erectum, ſemi-quinquefidum, acutum; dentibus ſuperioribus brevioribus, conniventibus; omnibus æqualis latitudinis.

COROLLA papillionacea.

Vexillum ovale, ungue lato oblongo, apice emarginatum cum acumine, lateribus reflexum, linea longitudinali compreſſa elevata.

Alæ duæ, oblongæ, erectæ, ſemicordatæ, ungue oblongo, vexillo breviores.

Carina ungue oblongo bipartito, ventriculo compreſſo, ſemiorbiculato, alis breviore.

STAMINA. Filamenta diadelphia (ſimplex et novemfidum). Antheræ erectæ, ſubrotundæ, quadriſulcæ.

Nectarii glandulæ intra ſtamen compoſitum et germen e receptaculo oritur, brevis, acuminata.

PISTILLUM. Germen lineare, compreſſum, longum. Stylus filiformis, brevior, ad angulum erectum adſcendens. Stigma obtuſum, ſub apice tranſverſe barbatum.

PERICARPIUM. Legumen longum, coriaceum, uniloculare, bivalve, acumine terminatum.

SEMINA plura, ſubrotunda.

EMPALEMENT. Cup one-leaf, tubular, upright, half five-cleft ſharp; the upper teeth the ſhorteſt, approaching; all the teeth of equal breadth.

BLOSSOM butterfly-ſhaped.

Standard oval, with a broad oblong claw, notched at the top, with a point in the middle, ſides reflexed, compreſſed and raiſed in a line running lengthways.

Wings two, oblong, erect, half-heart ſhaped, with an oblong claw, ſhorter than the ſtandard.

Keel, with an oblong two-parted claw, the hollow part compreſſed like a half circle ſhorter than the wings.

CHIVES. Threads in two ſets, (one alone, the other nine-cleft.) Tips upright, roundiſh four-furrowed.

Honey-cup, gland ariſing from the receptacle between the united threads and the ſeed-bud; ſhort and tapered.

POINTAL. Seed-bud linear, compreſſed and long. Shaft thread-ſhaped, ſhorter, turned upwards from an angle. Summit blunt, bearded tranſverſely on the upper part at the end.

SEED-VESSEL. Pod long, tough, one-celled, two-valved terminated by a point.

SEEDS many, rather round.

SPECIFIC CHARACTER.

Vicia pedunculis multifloris erectis: floribus ſtriatis; foliolis ovalibus, ſubtruncatis, reflexis.

Vetch with many-flowered, upright fruit-ſtalks; flowers ſtreaked; leaflets oval, rather appearing cut off at the points, reflexed.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard, or upper Petal of the Flower, ſhewn in front.
3. The ſame, ſhewn from the back-ſide.
4. One of the Wings of the Bloſſom.
5. The Keel of the ſame.
6. The Chives, natural ſize.
7. The Pointal, natural ſize.
8. The Chives, magnified, ſhewn from the front ſide.
9. A half-ripe Pod.

THIS pretty plant is a native of New Holland, and was firſt received in ſeeds from thence under the name of Indigofera coccinea, in the year 1800, by Meſſrs. Lee and Kennedy, Hammerſmith. It grows into a buſhy plant, making a number of branches from the root, but is rather a woody than herbaceous plant; yet the branches have all the character of moſt of the ſpecies of this genus. It has not as yet been increaſed by cuttings, but from every appearance the ſeeds will ripen in this country; and there is little doubt but the roots may be divided with ſafety. It flouriſhes in a mixture of ſandy peat and loam. Our figure was taken from a plant in the Collection of Meſſrs. Colvilles, King's Road, Chelſea; where it has likewiſe flowered this preſent Auguſt, 1803.

Vicia galegifolia

Published as the Act ... 1803

PLATE CCCXX.

PULTENÆA ILICIFOLIA.

Holly-leaved Pultenæa.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX quinque-dentatus, utrinque appendiculatus. Corolla papillionacea, alis vexillo brevioribus. Legumen uniloculare, dispermum.

CUP five-toothed, with an appendage on each side. Blossom butterfly-shaped, wings shorter than the standard. Pod one-celled, two seeded.

See PULTENÆA DAPHNOIDES, Pl. XCVIII. Vol. II.

SPECIFIC CHARACTER.

Pultenæa foliis hastatis, serratis, rigidis; floribus axillaribus, racemosis.

Pultenæa with halbert-shaped leaves, swawed and harsh; flowers grow from the insertion of the leaves in long bunches.

REFERENCE TO THE PLATE.

1. The Cup, natural size.
2. The same, magnified.
3. The Standard, or upper petal of the blossom.
4. One of the Wings of the same.
5. The two petals of the keel of the same.
6. The Chives and Pointal.
7. The Chives, magnified.
8. The Seed-bud, Shaft and Summit, magnified.

THIS species of Pultenæa was introduced, from New Holland, about the year 1792, by Messrs. Lee and Kennedy, Hammersmith, and is undoubtedly one of the handsomest of the genus. It is difficult to increase as the seeds do not mature, and it is very rarely propagated by cuttings. It grows to the height of three or four feet; and, when in flower, makes a very brilliant appearance. It is not a long-liv'd plant; is very impatient of wet, and is easily hurt by the cold, so should be kept in a dry and warm part of the green-house, or even on a shelf in the hot-house, during the winter months. It thrives in very sandy peat earth without any mixture. Our drawing was made from a plant in the Hibbertian Collection, in the month of June, 1801.

Pultenæa iliciifolia

PLATE CCCXXI.

ARETHUSA PLICATA.

Plaited-leaved Arethusa.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spatha foliacea. Perianthium nullum.

COROLLA ringens; petala quinque, oblonga, subæqualia, duo exteriora, omnia conniventia in galeam.

Nectarium monophyllum, basi tubulosum, intra corollæ fundum, bipartitum; labio inferiore reflexo, lato, rugoso, longitudine petalorum, propendente; labio superiore lineari, tenerrimo, stylo adnato, apice lobato.

STAMINA. Filamenta duo, brevissima, pistilli apici insidentia. Antheræ ovatæ, compressæ, tectæ duplicatura labii interioris nectarii.

PISTILLUM. Germen oblongum, inferum. Stylus oblongus, incurvus, labio interiore nectarii vestitus. Stigma infundibuliforme.

PERICARPIUM. Capsula oblongo-ovata, unilocularis, tri-valvis, angulis dehiscens.

SEMINA numerosa, acerosa.

EMPALEMENT. Sheath leafy. Cup none.

BLOSSOM gaping. Five petals, oblong, nearly equal, two outer, all converging into a helmet.

Honey-cup one-leafed, tubular at the base, within the bottom of the blossom, two-parted; lower lip reflexed, broad, wrinkled, the length of the petals, hanging down forwards; upper lip linear, very delicate, fixed to the shaft, lobed at top.

CHIVES. Two threads, very short, sitting on the top of the pointal. Tips egg-shaped, flattened, covered by the folding of the inner lip of the honey-cup.

POINTAL. Seed-bud oblong, beneath. Shaft oblong, incurved, cloathed by the inner lip of the honey-cup. Summit funnel-shaped.

SEED-VESSEL. Capsule oblong egg-shaped, one-celled, three valved, splitting at the angles.

SEEDS numerous, chaffy.

SPECIFIC CHARACTER.

Arethusa radice globosa; folio cordato, plicato, hirsuto.

Arethusa with a globular root; leaf heart-shaped, plaited and hairy.

REFERENCE TO THE PLATE.

1. The Plant, after the Flower has disappeared.
2. The Petals of the Flower, spread open.
3. The Honey-cup, spread open.
4. The Chives and Pointal.
5. The same, magnified; the hood, to which the chives are attached, lifted up.

THIS singular little bulbous rooted plant was received this year, 1803, in the month of April, amongst a number of other curious new seeds and bulbs, from the East-Indies, by Aylmer Bourke Lambert, Esq. by whom they have been communicated to different collections. Although the plant has considerable affinity with Arethusa, yet we entertain doubts whether it should not be placed to Limodorum, as it wants many of the generic characters of the former genus, and but few, and those but trivial in its correspondence, to the latter. We have, notwithstanding, given it the title under which it was sent, submitting our judgment to what we conceive better authority. There is little doubt but the plant will soon be lost in our collections, as but few of this natural order are either to be propagated or kept by any cultivation we are at present acquainted with. Our figure was taken from a plant which flowered in the hot-house of J. Vere, Esquire, Kensington Gore, in the month of July, before there was any appearance of either root or leaf from the bulb. It was in flower at the same time in the Collection of Sir Abraham Hume, Bart. Wormley-Bury, Herts.

Arethusa plicata

PLATE CCCXXII.

PITCAIRNIA LATIFOLIA.

Broad-leaved Pitcairnia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX triphyllus, ſemiſuperus. Petala 3. Squama nectarifera ad baſin petalorum. Stigmata tria contorta. Capſula tria, introrſum dehiſcentes. Semina alata.	EMPALEMENT three-leaved, half ſuperior. Petals three; with a ſcaly honey-cup at the baſe of the petals. Three ſummits twiſted. Three capſules, ſplitting from the inſide. Seeds winged.

SPECIFIC CHARACTER.

Pitcairnia foliis integerrimis, baſi ſubſpinoſis.	Pitcairnia with leaves quite entire, rather ſpiney at the baſe.

REFERENCE TO THE PLATE.

1. The Empalement.
2. One of the Petals, with its ſcale at the baſe.
3. The Chives and Pointal, cleared from the Petals.
4. The Pointal, the Summits detached, magnified.
5. The Seed-bud, cut tranſverſely.

THE ſpecies of Pitcairnia here figured is a native of Jamaica, and was firſt introduced to Britain by Mr. A. Anderſon, in the year 1785. It does not flower ſo readily as ſome of the other ſpecies, but is equally eaſy to increaſe; flouriſhes in rich earth, and may be kept on a ſhelf of the hot-houſe until its flower-ſtem appears; when, to encourage its flowering, it ſhould be plunged in the bark-bed.—Our drawing was made, in the month of July, from a plant in the Collection of J. Vere, Eſquire, Kenſington Gore.

Pitcairnia latifolia

PLATE CCCXXIII.

GERANIUM BARBATUM. *Var. Minor.*

Bearded-leaved Geranium. *Leſſer Var.*

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNIA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis pinnatis; foliolis inequaliter, dentatis, apice barbatis; floribus umbellatis; petalis linearibus, recurvatis; ſtaminibus quinque fertilibus, binis longioribus; ſcapo polyſtachio; radice tuberoſa.	Geranium with winged leaves, leaflets unequally toothed, and bearded at the point; flowers grow in umbels, petals linear, recurved; five fertile chives, two longer; flower-ſtem branched; root tuberous.

REFERENCE TO THE PLATE.

1. The Cup cut open, to ſhew its tubular ſtructure.
2. The Chives and Pointal, natural ſize.
3. The Chives cut open, magnified.
4. The Pointal, natural ſize.
5. The ſame, magnified.

OUR preſent figure is taken from a plant in the Hibbertian Collection, Clapham; and is a very ſtrong variety of the Bearded-leaved Geranium of a former number, taken from the ſame ſource. It is, as far as appearances lead, no way differing in character from the reſt of the tuberous ſpecies of this genus, to require any other treatment. Flowers in June or July.

Geranium barbatum Var. minor

Drawn by the Lady Parker
by H. Andrews & Daughter

PLATE CCCXXIV.

MAGNOLIA PURPUREA.

Purple-flowered Magnolia.

CLASS XIII. ORDER VII. *of Schreb. Gen. Plants.*

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 3-phyllus. Petala 6-12. Capſulæ 2-valves, imbricatæ. Semina baccata, pendula.	CUP 3-leaved. Petals 6-12. Capſules 2-valved, tiled. Seeds, berries, pendulous. See MAGNOLIA PUMILA, Pl. CCXXVI. Vol. IV.

SPECIFIC CHARACTER.

Magnolia foliis obovatis, flaccidis; floribus purpureis; petalis obovatis, divaricatis.	Magnolia with inverſely egg-ſhaped, flaccid leaves; flowers purple; petals inverſely egg-ſhaped and ſtraddling,

REFERENCE TO THE PLATE.

1. The Chives and Pointals.
2. A Chive, magnified.
3. The Pointals.

THIS fine ſpecies of Magnolia is a native of China and Japan, was introduced to us by the late Mr. Slater of Laytonſtone, to whom we are ſo much indebted for the greateſt number of beautiful plants which have been imported from thence by any individual. It is a very free growing plant; will reſiſt the ſeverity of our winters, if planted in a warm ſituation, and is deciduous; but if kept in the conſervatory, it retains its leaves the whole year, and flowers about June. It is propagated with eaſe by laying, or by cuttings, and thrives in peat earth, with a ſmall mixture of loam. The plant from which our figure was taken is in the magnificent Conſervatory of the Right Honourable the Marquis of Blandford, White Knights, near Reading, Berks; and, we believe, the fineſt ſpecimen of this ſpecies of Magnolia in Britain.

[illegible]

[illegible]

[illegible]

[illegible] ORDER VII. *[illegible]*

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[illegible]

[illegible] partially [illegible]

[illegible]

[illegible]

[illegible] and [illegible] the [illegible] for the greatest [illegible] of beauty [illegible] is a very [illegible] and [illegible], but it [illegible] in [illegible]. It is propagated [illegible] with a small mixture of [illegible] the Right [illegible] the [illegible] Reading [illegible], we believe, the finest specimen of [illegible]

Magnolia purpurea

Published by the Ch. & Dimetis Lond.

PLATE CCCXXV.

CODON ROYENI.

Prickly Codon.

CLASS XI. ORDER I.

DODECANDRIA MONOGYNIA. Twelve Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, duodecempartitum; foliolis ſubulatis, perſiſtentibus, erectis, alternis brevioribus.

COROLLA monopetala, campanulata, baſi toruloſa; limbo duodecimpartito, aquali. *Nectarium* duodecim loculare ex ſquamis 12, unguibus ſtaminum inſertis, conniventibus, receptaculum tegentibus.

STAMINA. Filamenta duodecim, longitudine corollæ. Antheræ craſſæ.

PISTILLUM. Germen ſuperum, conicum. Stylus ſimplex, longitudine ſtaminum. Stigmata duo, longa, ſetacea, divergentia.

PERICARPIUM. Capſula bilocularis.

SEMINA plurima, ſubrotunda, nigra.

EMPALEMENT. Cup one-leaf, twelve-divided; leaflets awl-ſhaped, remaining, upright, the alternate ones ſhorter.

BLOSSOM one petal, bell-ſhaped, rather ſwelled at the baſe; border twelve-divided, equal. *Honey-cup* twelve-celled, confiſting of 12 ſcales, inſerted into the claws of the chives, approaching, covering the receptacle.

CHIVES. Twelve threads, the length of the bloſſom. Tips thick.

POINTAL. Seed-bud above, conical. Shaft ſimple, the length of the chives. Summits two, long, like briſtles, ſtraddling.

SEED VESSEL. Capſule two-celled.

SEEDS numerous, roundiſh, black.

SPECIFIC CHARACTER.

Codon foliis alternis, cordato-ovatis, acuminatis, ſetaceo-ſpinoſis; floribus ſubcapitatis, terminalibus.

Codon with alternate leaves, between heart-ſhaped and oval, tapered to the point, with ſpine-like briſtles; flowers grow nearly in heads, terminating the branches.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom ſpread open, with the chives in their place.
3. The ſame ſhewn from the outſide.
4. The Seed-bud, Shaft and Summits.
5. The Seed-bud, cut tranſverſely.

As an intereſting deſideratum, this plant has ſtood long amongſt botanical collectors; but till the year 1801, it was never ſeen, in a vegetating ſtate, in Britain; at which period, it was introduced to our gardens, by Mr. Niven, from the Cape of Hope. It is not, we believe, (although conſidered hitherto as ſuch,) an annual; but rather, a half woody ſhrub, eaſily deſtroyed by moiſture. As the ſeed appears to ripen freely, although there ſeems no other mode of perpetuating the plant, we ſhall ſtand in no danger of loſing it; its attractions are, indeed, not great as to beauty, but much ſo as to ſingularity; ſince we have no plant to which it affines in general habit. The ſeeds ſhould be ſown on a gentle hot-bed, in March, and tranſplanted when about two inches high, into pots, to flower, which they will do about September. Our drawing was made at the Hammerſmith Nurſery. Having had the opportunity of examining the flowers, of more than twenty plants; we are convinced it has been wrong placed by Van Royen to decandria; for although many flowers may be found, even on the ſame plant, ſome with eight, others with ten chives, yet at leaſt 90 out of 100 have twelve; wherefore we have, without ſcruple, placed it to dodecandria.

Sodon Royeni

PLATE CCCXXVI.

PHARNACEUM LINEARE.

Linear-leaved Pharnaceum.

CLASS V. ORDER III.

PENTANDRIA TRIGYNIA. Five Chives. Three Pointal.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum; foliolis ſubovatis, concavis, patentibus, æqualibus, perſiſtentibus, intus coloratus, margine tenui.	EMPALEMENT. Cup five-leaved; leaflets nearly egg-ſhaped, concave, ſpreading, equal, permanent, coloured within, with a thin edge.
COROLLA nulla; hinc calycis margo tenuis et calyx interne coloratus.	BLOSSOM none; hence the edge of the cup is thin and the inſide of it is coloured.
STAMINA. Filamenta quinque, ſubulata, longitudine calycis. Antheræ baſi bifidæ.	CHIVES. Five-threads, awl-ſhaped, the length of the cup. Tips cleft at the baſe.
PISTILLA. Germen ovatum, trigonum. Styli tres, filiformes, longitudine ſtaminum. Stigmata obtuſa.	POINTALS. Seed-bud egg-ſhaped, three-ſided. Shafts three, thread-ſhaped, the length of the chives. Summits blunt.
PERICARPIUM. Capſula ovata, obſoletè trigona, tecta, trilocularis, trivalvis.	SEED-VESSEL. Capſule egg-ſhaped, bluntly three-cornered, covered, three-celled, three valves.
SEMINA numeroſa, nitida, orbiculata, depreſſa, margine acuto cincta.	SEEDS numerous, ſhining, orbicular, flattened, ſurrounded by a ſharp rim.

SPECIFIC CHARACTER.

Pharnaceum foliis linearibus, verticillatis; umbellis inequalibus; calycibus aurantiis; caule decumbente.	Pharnaceum with linear leaves, growing in whorls; umbels unequal; cups orange coloured; ſtem bending downwards.

REFERENCE TO THE PLATE.

1. The Cup, ſhewn from the front, with the chives.
2. The ſame, ſhewn from the hind part attached to the fruit-ſtalk.
3. The Seed-bud and Pointals, natural ſize.
4. The ſame, magnified.
5. The Seed-bud, cut tranſverſely, magnified.

THIS little plant much reſembles our Corn Spurry, or Spergula arvenſis, at firſt ſight. It is a native of the Cape of Good Hope, ſeldom grows more than ſix inches high, and is very apt to be deſtroyed by the damps of our winters. It ſhould be placed in the airyeſt part of the greenhouſe, and kept in light ſandy loam. To propagate it, the cuttings ſhould be put in, about the month of March, in the heat of a gentle hot-bed, or the bark-bed of the hot-houſe; the ſeeds are ſometimes perfected. It has been often introduced to us, but as often loſt; as it is not a plant of much ſhew, no great deal of pains has, hitherto, been taken for its preſervation. Our drawing was taken from a plant in the Hibbertian Collection, in the month of July, 1802.

Pharnaceum lineare

PLATE CCCXXVII.

XERANTHEMUM ARGENTEUM.

Silvery Everlasting-Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. **Tips united. Superfluous Pointals.**

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum. Pappus ſetaceus. Calyx imbricatus, radiatus; radio colorato.	RECEPTACLE chaffy. Feather briſtly. Cup tiled, rayed; ray coloured. See XERANTHEMUM SPECIOCISSIMUM, V.I. Pl.LI.

SPECIFIC CHARACTER.

Xeranthemum fruticoſum; foliis lanceolatis, carinatis, ſericeis; floribus paniculatis, argenteis.	Everlaſting-flower with a ſhrubby ſtem; leaves lance-ſhaped, keeled, and ſilky; flowers grow in panicles, and ſilvery.

REFERENCE TO THE PLATE.

1. An hermaphrodite Floret, natural ſize.
2. The ſame, magnified.
3. An inner ſcale of the Empalement.
4. The Receptacle, cleared of the ſcales and florets.
5. A female Floret, magnified.
6. The Pointal of the above, natural ſize.
7. The ſame magnified.

THIS new ſpecies of Everlaſting-flower was introduced to us, at the ſame time, with the X. ſpirale of this work, Pl. CCLXII. by Montague Burgoyne, Esq. of Mark Hall, Eſſex, in the year 1801. It is a quick growing plant, and has flowered for the firſt time laſt April, when our drawing was taken. The flower ſtems grow to the length of eighteen inches, or more; and the buds, upon their firſt appearance, have a fine tint of fleſh colour, which, however, totally diſappears upon the expanſion of the flower. It is propagated by cuttings, ſeeds, (which ripen in this country,) or by parting the branches at the root, as it makes many from one baſe, which are eaſily ſeparated by paſſing a knife between them. It thrives beſt in ſandy peat with a ſmall portion of loam, and muſt be kept in an airy, dry part of the greenhouſe.

Xeranthemum argenteum

PLATE CCCXXVIII.

GERANIUM BUBONIFOLIUM.

Macedonian-Parſley-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, pentacoccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis pinnatis, pinnis oppoſitis, lobatis, diſtantibus, lobis inciſo-dentatis, glabris; petalis emarginatis, albis; ſtaminibus quinque fertilibus; radice tuberoſa.	Geranium with winged leaves, wings oppoſite, lobed, diſtant, lobes deep cut and toothed, ſmooth; petals notched at the end, white, five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Cup cut and ſpread open.
2. The Chives and Pointal.
3. The Chives cut and ſpread open, magnified.
4. The Pointal, magnified.

THIS Geranium, from the Cape of Good Hope, is quite diſtinct in its habit, from moſt of the tuberous ſpecies; the leaflets or wings of the leaves being more hand-ſhaped, and at a greater diſtance from each other, than in any which has come under our obſervation; having much the appearance of thoſe of the plant from which we have derived its ſpecific title. The plant was introduced by Mr. Niven, to the Clapham Collection, in 1800; where our drawing was taken in the month of June, 1802. The cultivation as uſual, for the plants of this branch of the Geranium family.

Geranium bubonifolium

PLATE CCCXXIX.

PHARNACEUM LINEARE. *Var. flo. albo.*

Linear-leaved Pharnaceum. *White Var.*

CLASS V. ORDER III.

PENTANDRIA TRIGYNIA. Five Chives. Three Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-phyllus. Corolla nulla. CAPSULA 3-locularis, polyſperma.	CUP 5-leaved. Bloſſom none. CAPSULE 3-celled, many-ſeeded. See PHARNACEUM LINEARE. Pl. CCCXXVI. V. V.

SPECIFIC CHARACTER.

Pharnaceum foliis linearibus, verticillatis; umbellis inequalibus; calycibus albo-virentibus; caule decumbente.	Pharnaceum with linear leaves, growing in whorls; umbels unequal; cups whitiſh green; ſtem bending downwards.

REFERENCE TO THE PLATE.

1. A Flower.
2. The Cup and Chives.
3. The Seed-bud and Pointals, natural ſize.
4. The ſame, magnified.
5. The Seed-bud, cut tranſverſely, magnified.

WE have given this variety of the linear-leaved Pharnaceum, at the ſame time with the orange-coloured, as being the only two Cape ſpecies, at preſent, in our gardens. It is equally tender and delicate with its fellow, is equally difficult to propagate; and was introduced, this laſt time, to the Hibbertian Collection in 1800, by Mr. Niven, with it.

Pharnaceum lineare Var: *flore albo*

Pub. as the Act directs 1st
by H. Andrews 5 Knightsb

PLATE CCCXXX.

NYMPHÆA STELLATA.

Starr'd Water-Lily.

CLASS XIII. ORDER I.

POLYANDRIA MONOGYNIA. Many Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX 4, 5, ſeu 6-phyllus. Cor. polypetala. Bacca multilocularis, truncata.	CUP 4, 5 or 6-leaved. Bloſſ. many petals. Berry many-celled, appearing cut off at top. See NYMPHÆA CŒRULEA, Pl. CXCVII. Vol. III.

SPECIFIC CHARACTER.

Nymphæa foliis ſubrotundis, ſinuatis, ſubtus purpuraſcentibus; lobis divaricatis, acutis; calyce tetraphyllo, petalis acutis cœruleis longiore.	Water-lily with nearly round leaves, ſcollopped and purpliſh underneath; lobes ſtraddling and pointed; cup four-leaved, longer than the pointed, blue petals.

REFERENCE TO THE PLATE.

1. The Cup diveſted of the petals.
2. A Chive, natural ſize.
3. The ſeed-veſſel, nearly arrived to maturity.
4. The ſame, cut tranſverſely.

THIS fine ſpecies of Water-lily is a native of the Eaſt Indies, on the Malabar coaſt; and has been given by Rheed, in his Hortus Malabaricus, Vol. II. p. 53. fig. 27. At firſt ſight, it has much the appearance of N. cœrulea, but upon cloſer inſpection it is found to poſſeſs many ſtrongly differing characters, viz. In this, the under part of the leaves are purpliſh, the lobes ſtraddle; in that, they are tiled, or lay upon each other; in N. ſtellata the petals or chives ſeldom exceed ten; whereas, the N. cœrulea has an indefinite number of both. The roots, likewiſe, are perfectly diſtinct; in N. cœrulea the diverging roots proceed from the lower part of the bulb, from whence the leaves iſſue, but in N. ſtellata from the top, leaving below them a ſmooth top-ſhaped bulb. The parts which compoſe the ſummit, or rather the ſummits, (for indeed we ſhould conſider them, if it lay with us, as diſtinct pointals,) are expanded horizontally when the flower is in its perfect ſtate, forming a ſtar like appearance, whence its ſpecific name. It is much tenderer than N. cœrulea, and will not flower but in ſtrong heat. Mr. Anderſon informs us that the plants which have produced perfect ſeeds, this year, were from ſeeds, received by A. B. Lambert, Eſq. (communicated by Dr. Roxburgh from India) in the month of March, and raiſed by him for the collection of J. Vere, Eſq. Kenſington Gore, where our drawing was made in August.

PLATE MCXXX.

NYMPHÆA STELLATA.

Star-Leaf.

CLASS XIII. ORDER I.

POLYANDRIA. Many Males. One Female.

GENERIC CHARACTER.

[illegible]

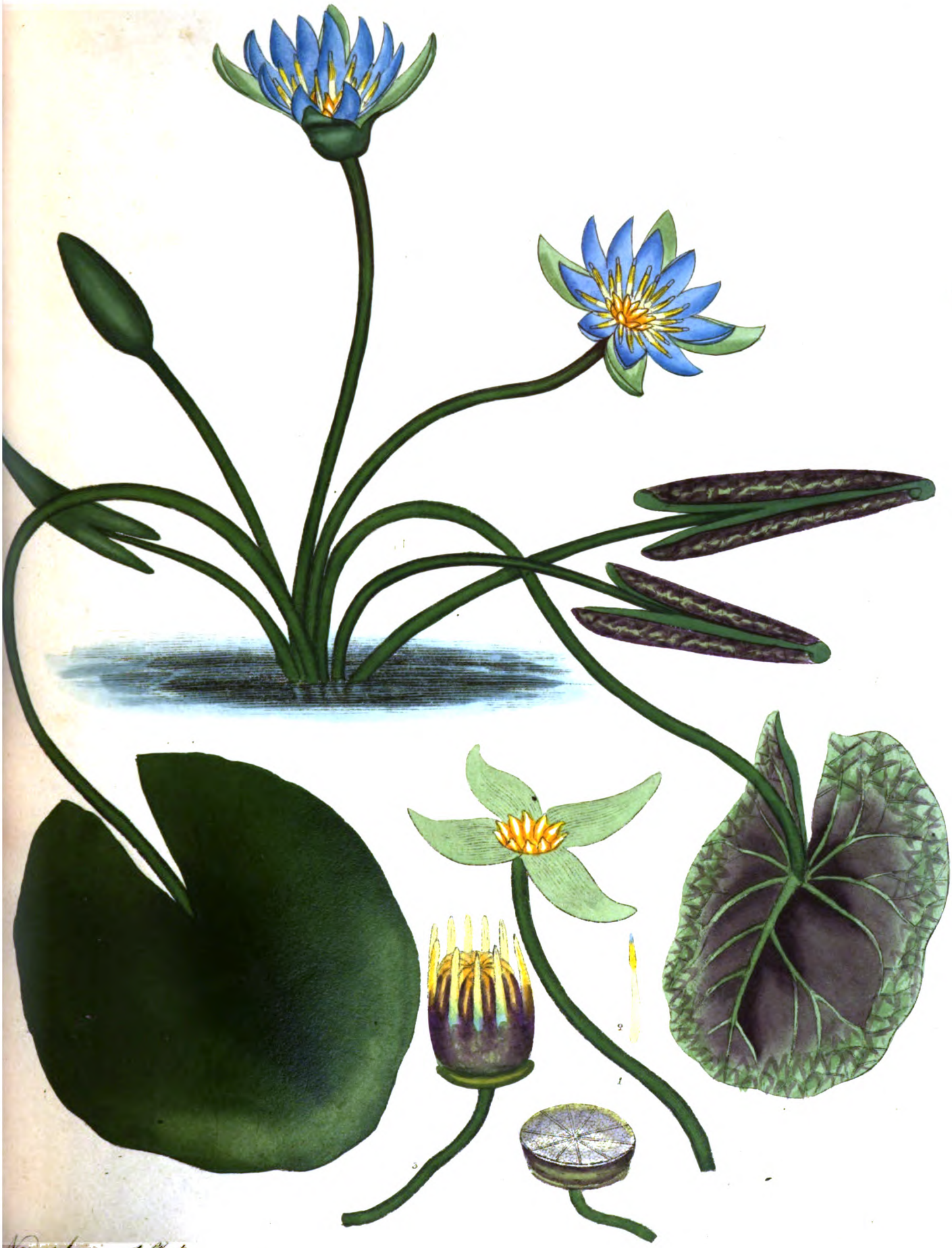
SPECIFIC CHARACTER.

[illegible]

REFERENCE TO THE PLATE.

[illegible]

[illegible] Indian Water-lilies; and has [illegible] Hortus Malabaricus, Vol. I. p. 53. pl. 27. At first sight, it has [illegible] The [illegible] Nymphæa [illegible] inspection it is found to possess many strongly [illegible] leaves are peltate, the [illegible] in that they [illegible] Nymphæa [illegible] are peltate elements; as Nymphæa [illegible] part of the [illegible] from whence the leaves issue, but [illegible] peltate-shaped [illegible]. The parts which [illegible] or [illegible] if it lay with us, [illegible] flowers, [illegible] flat; but [illegible] Nymphæa, and will not flower but [illegible] which have produced perfect seeds this year, [illegible] Lambert, [illegible] by Dr. Roxburgh from India) in [illegible] March and sowed by him, [illegible] J. Vere, Esq. Kensington Gore, where [illegible] in August.



Nymphæa stellata

PLATE CCCXXXI.

XYLOPHYLLA FALCATA.

Cymitar-ſhaped-leaved Xylophylla.

CLASS XXI. ORDER III.

MONŒCIA TRIANDRIA. Chives and Pointals separate. Three Chives.

GENERIC CHARACTER.

* *Masculi flores.*

CALYX. Perianthium monophyllum, tripartitum, coloratum; laciniis ovatis, patulis, ovatis.

COROLLA. Petala tria, ovata, concava.

STAMINA. Filamenta tria, breviſſima, baſi approximata. Antheræ ſubrotundæ, didymæ.

* *Feminei flores* in eodem faſciculo cum maſculis.

CALYX. Perianthium ut in mare.

COROLLA ut in mare.

Nectarium corpuſculis glandulofis germen ambientibus.

PISTILLUM. Germen ſubrotundum, triſulcatum. Styli tres, patuli, bifidi. Stigmata obtuſa.

PERICARPIUM. Capſula trigona, triſulca, trilocularis; loculis bivalvibus.

SEMINA ſolitaria.

* *Male flowers.*

EMPALEMENT. Cup one leaf, three divided, coloured; ſegments egg-ſhaped, ſpreading, oval.

BLOSSOM. Petals three, egg-ſhaped, concave.

CHIVES. Threads three, very ſhort, and approaching at the baſe. Tips roundiſh, double.

* *Female flowers* in the ſame tuft with the males.

EMPALEMENT. Cup as in the male.

BLOSSOM as in the male.

Honey-cup is formed of ſmall glandular bodies ſurrounding the ſeed-bud.

POINTAL. Seed-bud roundiſh, three-furrowed. Shafts three, ſhort. Summits blunt.

SEED-VESSEL. Capſule three-ſided, three-furrowed, three cells; cells two-valved.

SEEDS ſolitary.

SPECIFIC CHARACTER.

Xylophylla foliis ſparſis, integris, falcatis, crenatis; crenis remotis, floriferis; floribus rubris.

Xylophylla with leaves ſcattered on the ſtem, entire, cymitar-ſhaped and ſcolloped; the ſcollops diſtant, and having the flowers on them; flowers red.

REFERENCE TO THE PLATE.

1. A male flower, magnified.
2. The bloſſom of male flowers, ſpread open, with the honey-cups.
3. A Female flower, magnified.
4. The Germ from a female flower, cut tranſverſely, magnified.

IT ſhould ſeem that this Genus has not been obſerved with ſufficient accuracy, at leaſt thoſe plants known to us, and which have been treated of as belonging to the claſs Pentandria. The preſent one, for inſtance, which is unqueſtionably the plant deſigned by Swartz, Commelin, Seba, &c. and is acknowledged by Swartz to be triandrous and monœcious, yet that it ſhould be continued in the Kew Catalogue and by Willdenow, &c to Pentandria, is aſtoniſhing. We have no heſitation in declaring our opinion that the whole genus as it now ſtands ought to be thrown to Phyllanthus. But, as the title Xylophylla is ſo well known for theſe plants; we have thought it more ſafe to give the Genus thoſe characters the plants bear under their true Claſs and Order, than make any alteration in it. The Xylophylla falcata is a native of the Weſt India Iſlands, and has been long cultivated in our hothouſes; ſo long ago as the year 1739. It is a tender plant, and will not flower without the aſſiſtance of the bark-bed; is eaſily propagated by cuttings; grows beſt in ſandy peat, and flowers in Auguſt. Our drawing was made at the Hammerſmith Nurſery.

Xylophylla falcata

Published as the Act directs 1st July 1809 by Mr Andrews 5 Knightsbridge

PLATE CCCXXXII.

PROTEA ANEMONIFOLIA.

Anemony-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida ſeu 4 petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius nullus. Semina ſolitaria.

BLOSSOM 4-cleft or 4 petals. Tips linear, inſerted into the petals below the point. Empalement proper, none. Seeds ſolitary.
See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis pinnatis, pinnis planis, cuneiformibus, ſub apice inciſo-dentatis; capitalis terminalibus; ſquamis calycinis lanceolatis, glabris; floribus luteis.

Protea with winged leaves, wings flat, wedge-ſhaped, deeply toothed at the point; flower heads terminal; ſcales of the cup lance-ſhaped, ſmooth; flowers yellow.

REFERENCE TO THE PLATE.

1. Flower complete, with its Seed-bud attached.
2. One of the petals of the flower, magnified.
3. Seed-bud, Shaft and Summit, the Summit detached and magnified.

THE Protea Anemonifolia is one of the only three ſpecies of the Genus, we have, yet, received from New Holland. It was introduced to us, from thence, in the year 1792, by Meſſrs. Lee and Kennedy, Hammerſmith; is a hardy green-houſe plant; grows to the height of three, or four feet; may be propagated by cuttings, and flowers in Auguſt. It thrives beſt in a mixture of light ſandy loam, and peat earth, of each an equal quantity.


1
2
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PLATE CCCXXXIII.

SAGITTARIA LANCIFOLIA.

Lance-leaved Arrowhead.

CLASS XXI. ORDER VII.

MONŒCIA POLYANDRIA. Chives and Pointals ſeparate. Many Chives.

GENERIC CHARACTER.

* *Masculi flores* plures.

CALYX. Perianthium triphyllum; foliolis ovatis, concavis, perſiſtentibus.

COROLLA. Petala tria, ſubrotunda, obtuſa, plana, patientia, calyci triplo majora.

STAMINA. Filamenta plurima (viginti quatuor ſæpe), ſubulata, in capitulum congeſta. Antheræ erectæ, longitudine calycis.

* *Feminei flores* pauciores, infra maſculos.

CALYX. Perianthium ut in mare.

COROLLA. Petala tria, ut in mare.

PISTILLA. Germina numeroſa, compreſſa, in capitulum congeſta, extrorſum gibba, deſinentia in ſtylos breviſſimos. Stigmata acuta, perſiſtentia.

PERICARPIUM nullum. Receptaculum globoſum, ſemina in globum colligens.

SEMINA numeroſa, oblonga, compreſſa, cincta longitudinaliter margine membranaceo, lato, hinc gibbo, utrinque acuminato.

* *Male flowers* many.

EMPALEMENT. Cup three leaves; leaflets egg-ſhaped, concave, remaining.

BLOSSOM. Three petals, roundiſh, blunt, flat, ſpreading, three times the ſize of the cup.

CHIVES. Threads many (often twenty-four), awl-ſhaped, collected into a little head. Tips upright, the length of the cup.

* *Female flowers* fewer, beneath the males.

EMPALEMENT. Cup as in the male.

BLOSSOM. Three petals, as in the male.

POINTALS. Seed-buds numerous, flattened, forming a little head, hunched on the outerſide, ending in very ſhort ſhafts. Summits pointed, remaining.

SEED-VESSEL none. Receptacle globular, ſupporting the ſeeds in the form of a globe.

SEEDS numerous, oblong, flattened, ſurrounded lengthways by a broad ſkinny border, hunched on one ſide, tapering to each end.

SPECIFIC CHARACTER.

Sagittaria foliis lanceolato-ovatis.

Arrowhead with leaves between lance and egg-ſhaped.

REFERENCE TO THE PLATE.

1. The whole plant in miniature.
2. A male flower diveſted of the petals.
3. One of the Chives, magnified.
4. A female flower without its petals.
5. The receptacle with its pointals, cut perpendicularly, magnified.

ALL the ſpecies of this Genus of plants are aquatic, or water plants, and differ but little from each other, in their ſpecific characters. Our preſent ſubject is a native of the Weſt India Iſlands, and requires the atmoſphere of a hot-houſe to induce it to flower. The bloſſoms, on the lower part of the flower-ſtem, are all females; and thoſe on the upper part, males; they are all exceedingly delicate, as either wind, or wet, deſtroys them. It increaſes by offsets from the root; but the ſeeds do not ripen in this country. It muſt be kept in a pan or tub half filled with earth, and the other half with water, but does not require to be plunged in the tan-bed.

Our figure was taken from a plant which flowered this year 1803 (and, for the firſt time in Britain, as we are informed by Mr. Anderſon), in the month of July, in the Collection of J. Vere, Eſq. Kenſington Gore.

Sagittaria lancifolia

PLATE CCCXXXIV.

STRUTHIOLA TOMENTOSA.

Downy-leaved Struthiola.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PERIANTHIUM diphyllum. Corolla tubulosa, 4-fida. Nectarium glandulæ octo fauci circumpositæ. Semen unum subbaccatum.	CUP two leaved. Blossom tubular, 4 cleft. Honey-cup 8 glands, placed round the mouth of the blossom. One seed like a berry. See STRUTHIOLA IMBRICATA, Pl. CXIII. Vol. II.

SPECIFIC CHARACTER.

Struthiola foliis ovatis, concavis, callosis, tomentosis, imbricatis; nectario duodecim partito.	Struthiola with egg-shaped leaves, concave, callous, downy and tiled; honey-cup with twelve divisions.

REFERENCE TO THE PLATE.

1. The two leaves of the Empalement, magnified.
2. A Flower complete, magnified.
3. A Blossom cut open, to shew the situation of the chives, magnified.
4. A Seed-bud, with the Shaft and Summit, a little magnified.

THE Clapham Collection is the only one in which this curious species of Struthiola is, at present, to be seen. It was sent by Mr. Niven, from the Cape, in 1799, and flowered, for the first time, last year 1802, in the month of August, when our drawing was made. It is a tender Green-house plant, as are most of this natural order, from that country; being susceptible of too great moisture, either when exposed to the open air during heavy rains in summer, or from over watering in winter. Wherefore they are best preserved by sheltering them in an airy situation during summer, and giving them but little water in winter. It is encreased by cuttings, taken off in the month of May, planted in a pot, filled to the margin with sandy loam, and plunged under a hand-glass, in a shady border, without watering the loam. It grows most flourishing in a mixture of sandy peat and loam; the peat about one third part.

Anthiola tomentosa

PLATE CCCXXXV.

GLADIOLUS PYRAMIDATUS.

Pyramidal-ſpiked Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA ſexpartita, ringens. Stamina adſcendentia.	BLOSSOM ſix-divided, gaping. Chives aſcending. See GLADIOLUS ROSEUS, Pl. XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis enſiformibus, utrinque attenuatis, glabris; ſpathis præmorſis; ſpicis pyramidatis; floribus imbricatis, ſubringentibus.	Gladiolus with ſword-ſhaped leaves, tapered to both ends, and ſmooth; ſheaths appear bitten at the ends; ſpikes pyramid-ſhaped; flowers tiled, a little gaping.

REFERENCE TO THE PLATE.

1. Part of a leaf.
2. The two Valves of the Sheath.
3. A Bloſſom cut open, to ſhew the inſertion of the Chives.
4. The Seed-bud, Shaft and Summits.

THIS fine Gladiolus from the Cape of Good Hope, we believe, has not flowered, or is to be found, in any other collection than that of the Dowager Lady De Clifford, Paddington; where our drawing was taken in Auguſt, this year, 1803. It grows to the height of three feet; and the flowers continue to blow, from four to ſix at a time in ſucceſſion, from the baſe of the ſpike. It is a hardy bulb, and has every appearance of being a free blower.

Gladiolus pyramidatus.

Published by the Ser. Horticultural Club
by H. Anderson & Newgate bridge

PLATE CCCXXXVI.

ANCHUSA CAPENSIS.

Cape Alkanet.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum oblongum, teres, acutum, perſiſtens.

COROLLA monopetala, infundibuliformis: tubus cylindricus, longitudine calycis; limbus ſemiquinquefidus, obtuſus, erecto-patens; faux clauſa ſquamulis quinque, convexis, prominentibus, oblongis, conniventibus.

STAMINA. Filamenta quinque, breviſſima, in fauce corollæ. Antheræ oblongæ, incumbentes, tectæ.

PISTILLUM. Germina quatuor. Stylus filiformis, longitudine ſtaminum. Stigma obtuſum, emarginatum.

PERICARPIUM nullum; Calyx major, erectus, in ſinu continens ſemina.

SEMINA quatuor, oblongiuſcula, obtuſa, gibba.

EMPALEMENT. Cup five-parted, oblong, cylindrical, pointed, remaining.

BLOSSOM one petal, funnel-ſhape; tube cylindric, the length of the cup; border half-five-cleft, obtuſe, from erect ſpreading; throat cloſed with five ſmall ſcales, convex, prominent, oblong, converging.

CHIVES. Five very ſhort threads in the throat of the bloſſom. Tips oblong, incumbent, covered.

POINTALS. Seed-buds four. Shaft thread-ſhaped, the length of the chives. Summit blunt, notched at the end.

SEED-VESSEL none; the Cup larger and erect, containing the ſeeds in its boſom.

SEEDS four, ſomewhat oblong, blunt, hunched.

SPECIFIC CHARACTER.

Anchuſa foliis lanceolatis, villoſis, calloſis; floribus racemoſo-paniculatis, cœruleis.

Alkanet with lance-ſhaped leaves, hairy, and callous; flowers grow in bunches nearly panicled, blue.

REFERENCE TO THE PLATE.

1. The Empalement, natural ſize.
2. The ſame, magnified.
3. The Seed-buds and pointal, natural ſize.
4. The ſame magnified.
5. A Bloſſom cut open, magnified, to ſhew the ſcales upon the mouth, with the ſituation of the chives.

THIS is the only ſpecies of the Genus we have yet ſeen from the Cape of Good Hope; and, as it appears that Thunberg diſcovered but this ſolitary inſtance, which he has given in his Prodromus Plantarum Capenſium, under the ſpecific title we have here adopted, from him; he, perhaps, thought himſelf warranted in ſo naming it; although naming plants from the country where they are firſt found requires but little reaſoning to ſhew its impropriety. It is a hardy green-houſe plant, but from all appearance, like the moſt of this natural order, rather ſhort-lived. It grows freely in a mixture of loam and ſandy peat; and there is every appearance that the ſeeds will ripen, the only method by which there is any likelihood of its being perpetuated.

The plant, before flowering, does not grow above ſix inches high; but the flower-ſtem riſes near eighteen inches. Our figure was taken from a plant in the Hibbertian Collection; where it flowered for the firſt time in England in the month of July 1803; having been ſent home, by Mr. Niven, from the Cape, in 1800.

Anchusa capensis

PLATE CCCXXXVII.

PROTEA TRITERNATA.

Cluſter-headed Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA quadrifida ſeu quadripetala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius nullus.

SEMINA ſolitaria.

BLOSSOM four-cleft or four petals. Tips linear, inſerted into the petals below the point. Empalement proper, none.

SEEDS ſolitary.

See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis bipinnatis, brevibus, filiformibus, confertis, glabris; floribus terminalibus, umbellatis; pedunculis bracteis, capitulis longioribus; ſquamis calycinis ſubulatis, hirtis.

Protea with doubly winged leaves, ſhort, thread-ſhaped, crowded and ſmooth; flowers terminate the branches in umbels; fruit-ſtalks with floral leaves, and longer than the ſmall heads; ſcales of the cup awl-ſhaped and hairy.

REFERENCE TO THE PLATE.

1. A Leaf.
2. A Flower.
3. One of the Petals of the flower, magnified.
4. The Seedbud, Shaft and Summit, the Summit detached, magnified.
5. The common Cup of one of the ſmall heads of flowers.

THIS beautiful divided leaved Protea has been named, as above, by Thunberg, in his Diſſertatio de Protea, n. 7, and in his Prodromus plantarum capenſium 25. It is rather a delicate plant, and ſubject to loſe the lower leaves from the ſtem, which takes ſomething from the beauty of it's habit. The young leaves, when they firſt appear, have a downy character, which diſappears as they grow firm. The ſtem has likewiſe, in its young ſtate, a tendency to downineſs, which is not diſcovered on the old wood; and is, where the leaves are extant, quite covered by them. It grows to the height of three feet, is propagated by cuttings, and flowers in the month of July. Our figure was taken from a plant in the Hibbertian Collection, which was raiſed from Cape ſeeds in 1800, ſent from thence by Mr. Niven.

Protea triternata

PLATE CCCXXXVIII.

GERANIUM CORONOPIFOLIUM.

Buck's-horn-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.

ONE POINTAL. Five ſummits. Fruit furniſhed with long awns, five dry berries.
See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis ſubcuneatis, apice inciſo-dentatis, caneſcentibus, petiolis longiſſimis; pedunculis ſubtrifloris; corollis pallidè violaceis; caulê ſuffruticoſo; ſtaminibus quinque fertilibus.

Geranium with nearly wedge-ſhaped leaves, deeply toothed at the end, whitiſh and very long foot-ſtalks; flower ſtems moſtly three-flowered; bloſſoms pale purple; ſtem rather woody; five fertile chives.

REFERENCE TO THE PLATE.

1. A Flower and a Bud from a ſeedling variety of this plant, by an intermixture of the farina of Geranium tricolor.
2. The Cup, which is ſolid and five-leaved.
3. The Chives and Pointal, magnified.
4. The ſame cut open, magnified.
4. The Seed-bud, Shaft and Summits, magnified.

THE Geranium coronopifolium is one of thoſe ſpecies we may fairly denominate biennial; for ſuch is certainly the G. tricolor, G. Oenothera, G. tomentoſum, &c. and as ſuch muſt be propagated every year to have a ſucceſſion of them. It is readily increaſed by putting the cuttings into ſmall pots, and plunging them in the heat of a hot-bed or hot houſe, early in the month of March; which plants will flower in September. It was firſt introduced to the Kew Gardens by Mr. Maſſon in 1792. The plant is very delicate, and ſhould be kept in a dry part of the green-houſe, in a mixture of ſandy peat and rich earth. Our figure is from a plant in the Hibbertian Collection; where, likewise, we found the variety of which a flower is given on the plate. Mr. Allen informs us, he procured the Var. by approximating a plant of this ſpecies to the G. tricolor; firſt impregnating the ſummits of the flower of G. coronopifolium, with the pollen from the tips of the G. tricolor, a method much practiſed of late for the production of varieties, in many genera.

ranium coronopifolium

PLATE CCCXXXIX.

LOBELIA CORONOPIFOLIA.

Buck's-horn-leaved Lobelia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers ſimple.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-fidus. Corolla 1-petala, irregularis. Capſula infera, 2-ſeu 3-locularis.

CUP 5-cleft. Bloſſom 1-petal, irregular. Capſule beneath, 2 or 3-celled.

See LOBELIA PINIFOLIA, Pl. CCLXXIII. Vol. IV.

SPECIFIC CHARACTER.

Lobelia foliis lanceolatis, dentatis, glabris; floribus ſolitariis, axillaribus; pedunculis elongatis; ſtigmatibus obtuſis, piloſis.

Lobelia with lance-ſhaped leaves, toothed and ſmooth; flowers ſolitary, from the baſe of the leaves; foot-ſtalks lengthened; ſummits blunt, hairy.

REFERENCE TO THE PLATE.

1. The Chives magnified.
2. The Cup, Chives, and Pointal, the Summit detached, magnified.

THE character of moſt of the Lobelias from the Cape, and elſewhere, is, that they are either annual or biennial, and can ſcarcely be conſidered as ſhrubs. Our preſent ſubject is a biennial from the Cape of Good Hope, flowers the firſt year from the ſeed, if ſown in March, and may be preſerved a ſecond year; but, as it ſeeds ſo abundantly, it is ſcarce worth the pains to preſerve it, as the plants of one year's growth are ſo much handſomer than thoſe preſerved through the winter. It flowers from July till October, and ſhould be kept in ſandy peat earth.

The L. coronopifolia was introduced to the Kew Collection in 1787, by Mr. F. Maſſon, and is now in moſt collections.

Lobelia coronopifolia

PLATE CCCXL.

LOBELIA GRACILIS.

Slender-ſtemed Lobelia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers simple.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-fidus. Corolla monopetala, irregularis. Capſula infera, 2-ſeu 3-locularis.

CUP 5-cleft. Bloſſom one petal, irregular. Capſule beneath, 2 or 3-celled.

See LOBELIA FINIFOLIA, Pl. CCLXXIII. Vol. IV.

SPECIFIC CHARACTER.

Lobelia foliis inferioribus ovatis, ſinuatis, ſuperioribus lanceolatis, dentatis; petalis duobus minoribus barbatis; floribus ſpicatis; ſtigmatibus bifidis.

Lobelia with the lower leaves egg-ſhaped and ſcollopped, the upper ones lance-ſhaped and toothed; the two ſmaller petals bearded; flowers grow in ſpikes; ſummits two-cleft.

REFERENCE TO THE PLATE.

1. A Bloſſom cut open, with the chives in their place, magnified.
2. The Cup, Seed-bud, Shaft and Summit; the Summit detached and magnified.

THIS moſt delicate little plant, of which our figure repreſents the whole, was raiſed in 1801, from Cape ſeeds, ſent by Mr. Niven from thence, for the Clapham gardens; where our drawing was made this year, 1803, in the month of Auguſt. It is an annual plant, producing its ſeeds freely, as do moſt ſpecies of this genus, which ſhould be ſown in the month of March, in light ſandy peat, and tranſplanted about May.

Lobelia gracilis

PLATE CCCXLI.

PHASEOLUS CARACALLA.

Snail-Flower Kidney-Bean.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, bilabiatum; labio ſuperiori emarginato, inferiore tridentato.

COROLLA papillionacea.
Vexillum, cordatum, obtuſum, emarginatum, reclinatum, lateribus reflexis.
Alæ, ovatæ, longitudine vexilli, unguibus longis infidentes.
Carina, anguſta, ſpiraliter contra ſolem revoluta.

STAMINA. Filamenta diadelpha, (ſimplex et novemfidum) intra carinam, ſpiralia. Antheræ decem, ſimplices.

PISTILLUM. Germen oblongum, compreſſum villoſum. Stylus filiformis, ſpiraliter inflexus, ſuperne pubeſcens. Stigma obtuſum, craſſiuſculum, villoſum.

PERICARPIUM. Legumen longum, rectum, coriaceum, obtuſum cum acumine.

SEMINA reniformia, oblonga, compreſſa.

EMPALEMENT. Cup one leaf, two-lipped, upper lip notched at the end, lower three-toothed.

BLOSSOM butterfly-ſhaped.
Standard, heart-ſhaped, blunt, notched at the top, reclined, reflexed at the the ſides.
Wings, egg-ſhaped, the length of the Standard, terminating in long claws.
Keel, narrow, twiſted ſpirally contrary to the ſun.

CHIVES. Threads in two ſets, (ſimple and nine-cleft,) within the keel, ſpiral. Tips ten, ſimple.

POINTAL. Seed-bud oblong, flattened, hairy. Shaft thread-ſhaped, ſpirally bent inwards, downy above. Summit blunt, thickiſh, hairy.

SEED-VESSEL. A long pod, ſtraight, leathery, blunt with a point.

SEEDS kidney-ſhaped, oblong, flattened.

SPECIFIC CHARACTER.

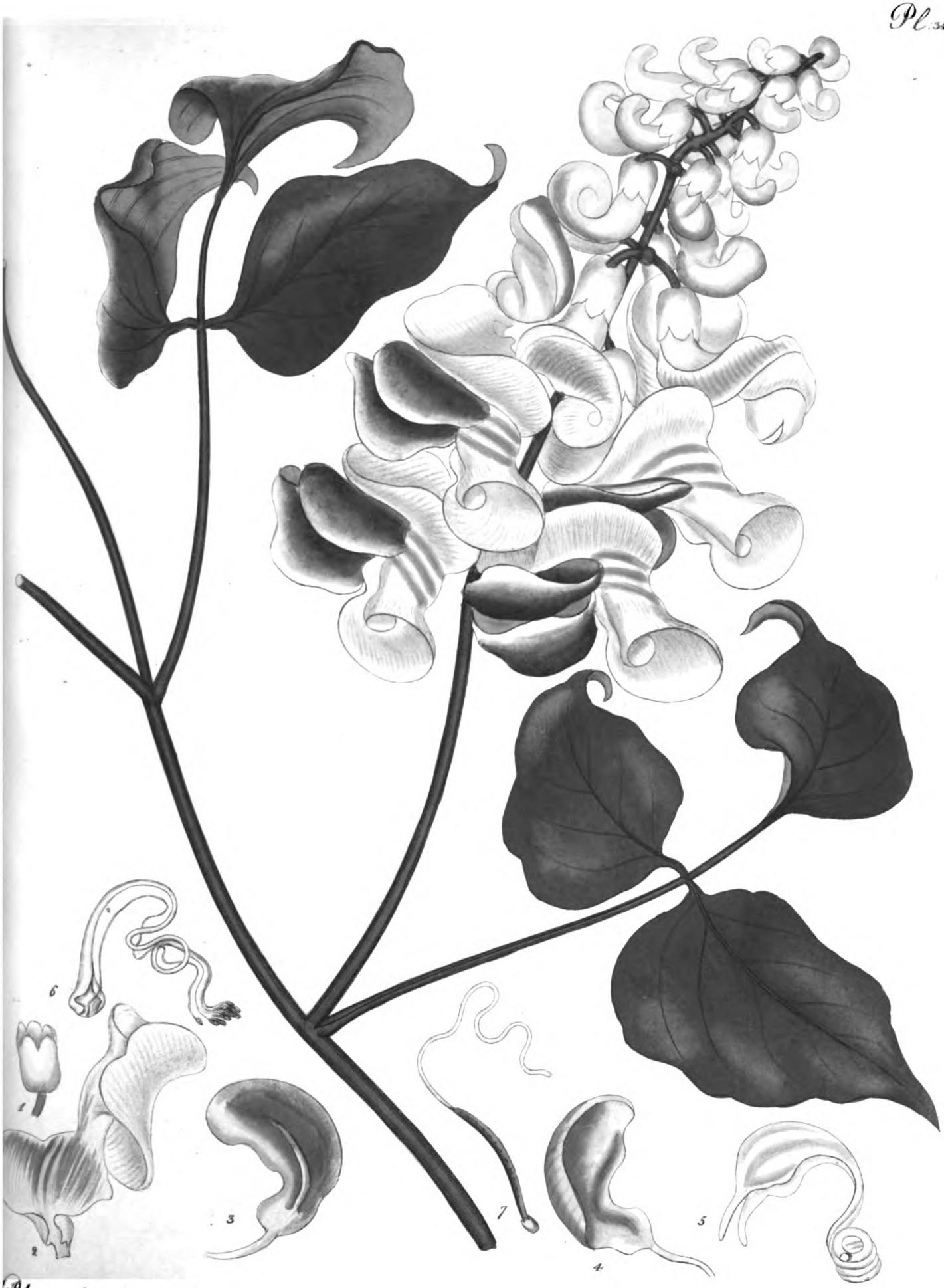
Phaſeolus caule volubili; vexillis, carinaque ſpiraliter convolutis.

Kidney-bean with a twining ſtem; ſtandards and keel ſpirally twiſted from the left to the right.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard.
3. One of the wings, ſhewn from the outſide.
4. One of the wings, ſhewn from the inſide.
5. The Keel.
6. The Chives.
7. The Pointal.

As a ſingular vegetable production, we have given a ſpecimen of this moſt curious flower, but not as a novelty, as it is, certainly, rather common, the ſeeds having frequently been brought to us from Portugal, (to which country it was first introduced from Braſil in South America), ever ſince the year 1690. It is a climbing plant and muſt be kept in the hothouſe, is propagated by ſeeds or cuttings, grows to the height of 12 or 14 feet, and ſhould be planted in rich earth. The flowers are produced about Auguſt; they are very fragrant, but have not much duration, and the plant has much the reſemblance of the common ſcarlet kidney-bean.



Phaseolus Caracalla

PLATE CCCXLII.

COBBEA SCANDENS.

Climbing Cobbea.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ſemiquinquefidum; laciniis cordatis, mucronatis, patentibus, perſiſtens.

COROLLA monopetala, campanulata, verſus baſin arctata, quinquefida; laciniis concavis, trilobis, ciliatis; ſquamulæ quinque lanatæ, ad baſin ſinus tubi, conniventes.

Nectarium, corpus carnoſum, quinquangulare, decem ſulcatum, germen cingens.

STAMINA. Filamenta quinque, ſquamulis corollæ orta, declinata. Antheræ incumbentes.

PISTILLUM. Germen ovatum, ſulcatum. Stylus filiformis, declinatus, ſtaminibus longior. Stigmata tria, plana, recurvata.

PERICARPIUM. Capſula oblonga, trilocularis, trivalvis.

SEMINA plurima, valvulis affixa, compreſſa, imbricata.

EMPALEMENT. Cup one-leaf, half five-cleft; ſegments heart-ſhaped, ending in a point, ſpreading, perſiſtent.

BLOSSOM one-petal, bell ſhaped, narrowed towards the baſe, five-cleft; ſegments concave, three-lobed, fringed; five woolly ſcales at the baſe of the boſom of the tube cloſing upon each other.

Honey-cup, a fleſhy body, five-angled, ten-furrowed, embracing the ſeed-bud.

CHIVES. Five threads, ariſing from the ſcales of the bloſſom, declined. Tips lying upon the threads.

POINTAL. Seed-bud egg-ſhaped, furrowed. Shaft thread-ſhaped, declined, longer than the threads. Summits three, flat, turned back.

SEED-VESSEL. Capſule oblong, three cells, three valves.

SEEDS many, fixed to the valves, flat, tiled.

SPECIFIC CHARACTER.

Cobbea foliis conjugatis, cirrhoſis; floribus ſolitariis, pedunculis longiſſimis; caule ſcandenti.

Cobbea with conjugate leaves terminating in a tendril; flowers ſolitary, foot-ſtalks very long; ſtem climbing.

REFERENCE TO THE PLATE.

1. A Bloſſom cut and ſpread open, with the Chives in their place.
2. The Empalement, Honey-cup, Seed-bud, Shaft and Summits.

THE ſpecimen, from which our drawing was taken, was communicated by Mrs Long, from the Collection of the Honourable Charles Long, of Bromley Hill, Kent; where, we believe, the only plant of this fine Genus is at preſent to be found in Britain; and where it has flowered, for the firſt time, this year, in the month of September, 1803. It is a native of the Eaſt Indies, and muſt be kept as a hot-houſe plant; is propagated by cuttings, and thrives in rich earth; will grow, if permitted, to the height of twenty feet or more, and is ſtill in flower this preſent month of November.

Robbea scandens

Pub. as the Act. Directs Dec. 1.1810
by J. Andrews & J. Annesley

PLATE CCCXLIII.
BLANDFORDIA CORDATA.
Heart-ſhape-leaved Blandfordia.

CLASS V. ORDER I.
PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ſemiquinquefidum; laciniis concavis, ovatis, obtuſis, erectis; perſiſtens.

COROLLA. Petala quinque, oblongo-linearia, ſubtruncata, patentia, calyci inſerta. *Nectarium* urceolatum, membranaceum, germen cingens; limbo quinque-lobo, laciniis clavatis, capitatis.

STAMINA. Filamenta nulla. Antheræ quinque, ſubrotundæ, didymæ; nectarii margini, inter lacinias limbi, affixæ.

PISTILLUM. Germen ſubrotundum. Stylus breviſſimus, erectus. Stigma obſoletum.

PERICARPIUM. Capſula oblonga, unilocularis, bivalvis.

SEMINA plurima, minuta, glabra.

EMPALEMENT. Cup one leaf, half-five-cleft; ſegments concave, egg-ſhaped, blunt, upright; remaining.

BLOSSOM. Five petals, oblong-linear, appearing rather cut off at the ends, ſpreading, inſerted into the cup. *Honey-cup* pitcher-ſhaped, ſkinny, ſurrounding the ſeed-bud; border five-lobed, ſegments club-ſhaped, and headed.

CHIVES. Threads none. Tips five, roundiſh, double; fixed, between the ſegments of the border, upon the margin of the honey-cup.

POINTAL. Seed-bud roundiſh. Shaft very ſhort, upright. Summit obſolete.

SEED-VESSEL. Capſule oblong, one cell, two valves.

SEEDS many, ſmall, ſmooth.

SPECIFIC CHARACTER.

Blandfordia foliis cordatis, reticulatis, crenato-dentatis, floribus ſpicatis.

Blandfordia with leaves heart-ſhaped, netted, and between ſcolloped and toothed; flowers grow in ſpikes.

REFERENCE TO THE PLATE.

1. The Cup, natural ſize.
2. The ſame, magnified.
3. A Petal, magnified.
4. The Honey-cup, with the Chives, magnified.
5. The ſame, ſpread open, ſhewn from the outſide.
6. The ſame, ſhewn from the inſide.
7. The Seed-bud, natural ſize.
8. The ſame, magnified.

THE Blandfordia cordata was firſt obſerved by Mr. J. Fraſer, in the year 1786, on the banks of the Savannah river, near its ſource, in Georgia, North America; but was not introduced to us until the year 1800, when it was brought to England, amongſt many other novelties, by that gentleman. It is, as are moſt of the plants of that country, rather too tender to reſiſt the ſeverity of our winters; and ſhould be protected, either in the green-houſe, or in the cooleſt and ſhadieſt part of the hot-houſe; where, if it is kept the year through, it will flouriſh, and flower about the month of June. It is increaſed by parting the roots about April; delights in moiſture and ſhade; thriving moſt in a light peat ſoil, with a ſmall mixture of ſandy loam. This plant, from its general habit, would at firſt ſight be taken for a ſpecies of Tiarella, or Heuchera, to both which it bears great reſemblance, being all, likewiſe, natives of the ſame clime; but the ſtrongly differing characters, in the parts of fructification, prevent its being placed to either of thoſe genera. The honey-cup, it is true, might, perhaps, with reason, be conſidered as the connected threads of ten chives, and what we take to be the ſegments of its border, ſet down as ſo many ſterile ones to make up this number. Thus, the plant would be tranſmuted to the XVI claſs; but, from our beſt judgment, we have placed it, as above, in the V.

Our figure is from a ſpecimen communicated by the Right Hon. the Marquis of Blandford, from his magnificent gardens at White Knights, near Reading, Berks. Little need be urged for the propriety of our naming a plant from the Marquis of Blandford; and thus, dedicating this ſmall part of our labours to his lordſhip; as few, at preſent, patronize the ſcience, through all its branches, with ſo much vigour and liberality, or who have equal knowledge in its theory and practice.

Blandfordia cordata

PLATE CCCXLIV.

EPIDENDRUM ENSIFOLIUM.

Sword-ſhaped-leaved Epidendrum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

NECTARIUM turbinatum, obliquum, reflexum.	HONEY-CUP top-ſhaped, oblique and reflexed. See Pl. XIII. Vol. I. EPIDENDRUM COCHLEATUM.

SPECIFIC CHARACTER.

Epidendrum ſcapo tereti, lævi; foliis enſiformibus; petalis lanceolatis glabris; labio lanceolato, recurvato, maculato.	Epidendrum with a round ſmooth ſtem; leaves ſword-ſhaped; petals lance-ſhaped, ſmooth; lip lance-ſhaped, recurved and ſpotted.

REFERENCE TO THE PLATE.

1. The lip, detached from the flower.
2. A Flower from which the lip has been ſeparated.

THE Sword-ſhaped-leaved Epidendrum is a native of China and Japan, was cultivated, before 1792, in the gardens of the Marchioneſs of Rockingham, at Hillindon, Middleſex. It has more the habit and character of Limodorum than Epidendrum, to which genus it was firſt placed; and, like the Epidendrum ſinense of this work, Plate CCXVI. Vol. III. requires but little heat to keep it in health; preferring a ſandy loam to any other matter, for its nouriſhment. It, like the forenamed, and ſeveral other ſpecies of this genus, or rather of the genus Limodorum, not being thick-leaved, or paraſitic, where indigenous, are of conſequence much eaſier preſerved and increaſed than thoſe of that deſcription. Its flowers, which are produced in September or October, are very fragrant, particularly in the evening, continue in perfection above a month. It is propagated by parting the roots in the month of May.

Our drawing was made from a plant in the Hibbertian Collection.

idendrum ensifolium

Pub. as the Act. Directs for 1. 9. 1824
by F. Andrews 5, Kniightsbridge

PLATE CCCXLV.

HYACINTHUS CORYMBOSUS.

Linear-leaved Cape Hyacinth.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.	EMPALEMENT none.
COROLLA monopetala, campanulata; limbus ſexfidus, reflexus. *Nectarium*; pori tres melliferi ad apicem germinis.	BLOSSOM one petal, bell-ſhaped; border ſix-cleft, reflexed. *Honey-cup*, three honied pores at the tip of the ſeed-bud.
STAMINA. Filamenta ſex, ſubulata, breviora. Antheræ conniventes.	CHIVES. Six threads awl-ſhaped, ſhorter. Tips converging.
PISTILLUM. Germen ſuperum, rotundo-trigonum, triſulcum. Stylus ſimplex, corolla brevior. Stigma obtuſum.	POINTAL. Seed-bud above, round-three-cornered, three-furrowed. Shaft ſimple, ſhorter than the bloſſom. Summit blunt.
PERICARPIUM. Capſula ſubrotunda, triquetra, trilocularis, trivalvis.	SEED-VESSEL. Capſula roundiſh, three-ſided, three-celled, three-valved.
SEMINA bina (ſæpius,) ſubrotunda.	SEEDS in pairs (often,) roundiſh.

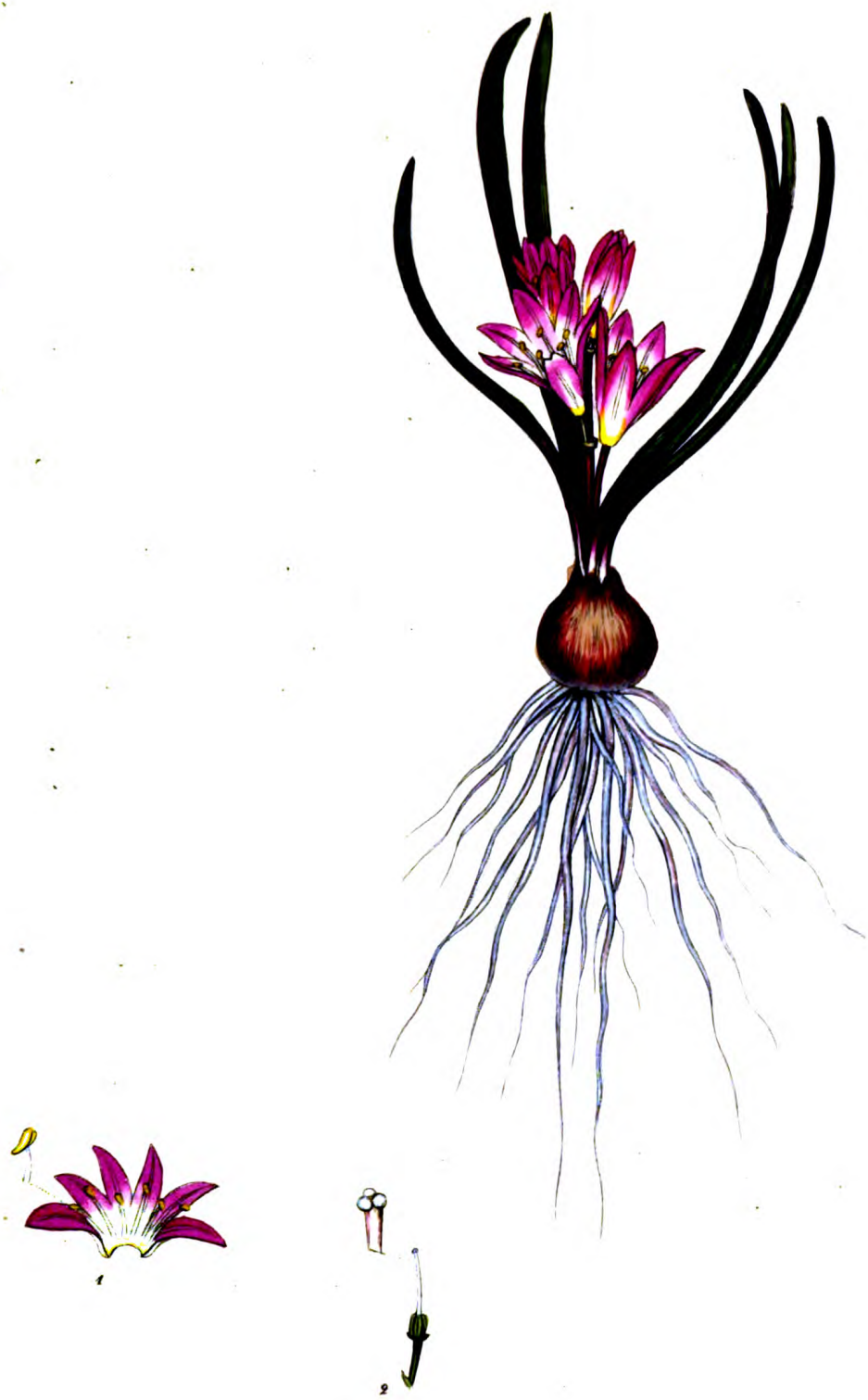
SPECIFIC CHARACTER.

Hyacinthus corollis infundibuliformibus, corymboſis, erectis; ſcapo foliis linearibus breviore.	Hyacinth with funnel-ſhaped bloſſoms, growing in a broad topped ſpike, upright; flower-ſtem ſhorter than the leaves, which are linear.

REFERENCE TO THE PLATE.

1. A Bloſſom, with the Chives in their place, one Chive detached, magnified.
2. The Seed-bud, Shaft and Summit, the Summit detached, magnified.

AMONGST the plants, of this natural order, from the Cape of Good Hope, we find ſuch an intermixture of character, in the different parts of fructification; that, if ſome latitude is not taken in referring them to ſome of the old genera, almoſt every freſh ſubject, we diſcover, would require a new one. This plant, although we have placed it to Hyacinthus, with thoſe that have gone before us, has juſter claims to Drimia, Polyanthes or Scilla; for it is wanting in the eſſential characters of Hyacinthus, being unfurniſhed with the honied pores, and having the chives inſerted into the tube of the bloſſom, three of which are, alternately, double the length of the others. To Drimia, a new genus of Profeſſor Jacquin, and a mutilation of Hyacinthus, it is moſt allied; but, we have not thought fit to alter its known ſtation, as, without doubt, the multiplication of genera, or altering the place of known plants, adds but to the difficulties of a moſt intricate, though pleaſing ſtudy. It is a hardy green-houſe bulb; delights in a mixture of peat earth and ſandy loam; increaſes by offsets, and flowers in October or November. Our figure was made from a plant in the Nurſery of Mr. Williams of Turnham Green, who firſt imported it in 1800. It is ſaid, by Koenig, to grow in paſture lands near the Cape town, and was firſt noticed there by him.



Hyacinthus corymbosa.

PLATE CCCXLVI.

CASUARINA STRICTA.

Upright Casuarina.

CLASS XXI. ORDER I.

MONOECIA MONANDRIA. Chives and Pointal separate. One Chive.

GENERIC CHARACTER.

* *Masculi flores.*

CALYX. Amentum filiforme, imbricatum, squamis minutis, unifloris.

COROLLA. Squamulæ bipartitæ, ovatæ, minutæ.

STAMINA. Filamentum unicum, capillare, squama amenti longius. Anthera didyma.

* *Feminei flores* in eadem arbore.

CALYX. Amentum ovato-cylindricum; squamis ovatis, acutis, carinatis, ciliatis.

COROLLA nulla.

PISTILLUM. Germen minutum. Stylus filiformis, longus, exsertus, bifidus. Stigmata duo.

PERICARPIUM. Strobilus squamis bivalvibus, perpendiculariter dehiscentibus.

SEMINA solitaria, conica, margine membranacea.

* *Male flowers.*

EMPALEMENT. Catkin thread-shape, tiled with small one-flowered scales.

BLOSSOM. Scales two-parted, ovate, minute.

CHIVES. Thread one, hair-like, longer than the scale of the catkin. Tip double.

* *Female flowers* on the same plant.

EMPALEMENT. Catkin ovate-cylindric, with egg-shaped, acute, keeled, tiled scales.

BLOSSOM none.

POINTAL. Seed-bud minute. Shaft thread-shaped, long, without, two-cleft. Summits two.

SEED VESSEL. Cone with two-valved scales, splitting perpendicularly.

SEEDS solitary, conical, with a skinny edge.

SPECIFIC CHARACTER.

Casuarina dioica ramulellis erectis; strobilorum squamis inermibus; vaginis masculis multifidis, glabris.

Casuarina with chives and pointals distinct, and upright branchlets; scales of the cones naked, male sheaths many-parted, smooth.

REFERENCE TO THE PLATE.

1. The Catkin, or terminal part of a male branchlet, magnified slightly.
2. The Shaft and Summit of a female floret.
3. The Cone, whilst yet in flower.
4. The same magnified.

THE Casuarina stricta is a native of New South Wales, and was introduced, by Messrs. Kennedy and Lee, in the year 1775. It is a hardy green-house plant, grows to the height of ten or twelve feet before it flowers, which is in November. It is perfectly dioicous; the male and female blossoms, never coming on the same plant, and either have little to recommend them for beauty; their singularity is what should sooner attract our notice. The two figures, on the plate, which are the male and female, were taken from two plants, in flower, at the same time, in the collection of the Dowager Lady de Clifford, Paddington. All the species, hitherto discovered, since the first, upon which the genus was formed, the C. equisetifolia has, like this, the male and female parts of fructification on different plants; that only, being monoicous, or with the male and female parts on the same plant.

Casuerina stricta.

PLATE CCCXLVII.
SOPHORA CAPENSIS.
Vetch-leaved Sophora.

CLASS X. ORDER I.
DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, breve, campanulatum, basi superne gibbum; ore quinque-dentato, obliquo, obtuso.

COROLLA papillionacea, pentapetala.
Vexillum oblongum, sensim latius, rectum, lateribus reflexis.
Alæ duæ, oblongæ, basi appendiculatæ, longitudine vexilli.
Carina dipetala; petalis alis conformibus, marginibus inferioribus approximatis, navicularibus.

STAMINA. Filamenta decem, distincta, parallela, subulata, longitudine corollæ, intra carina recondita. Antheræ minimæ, assurgentes.

PISTILLUM. Germen oblongum, teres. Stylus magnitudine et situ staminum. Stigma obtusum.

PERICARPIUM. Legumen longissimum, tenue, uniloculare, ad semina nodosum.

SEMINA plurima, subrotunda.

EMPALEMENT. Cup one-leaf, short, bell-shaped, hunched at the base on the upper side; mouth five-toothed, oblique, obtuse.

BLOSSOM butterfly-shaped, five petalled.
Standard oblong, gradually wider, straight, reflexed at the sides.
Wings two, oblong, appendicled at the base, the length of the standard.
Keel two petalled with the petals conformable to the wings, the lower margins approaching and boat-shaped.

CHIVES. Ten threads, distinct, parallel, and shaped, the length of, the blossom, within the keel. Tips very small, turned upwards.

POINTAL. Seed-bud oblong, cylindrical. Shaft the size and situation of the chives. Summit blunt.

SEED-VESSEL. Pod very long, slender, one-celled, knobbed at the seeds.

SEEDS many, roundish.

SPECIFIC CHARACTER.

Sophora foliis pinnatis; foliolis lanceolatis, mucronatis, subtus tomentosis; caule fruticoso.

Sophora with winged leaves; leaflets lance-shaped, pointed, downy beneath; stem shrubby.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard, or upper Petal.
3. One side Petal, or Wing of the Blossom.
4. One of the Petals of the Keel.
5. The Chives and Pointal, natural size.
6. One of the Chives, magnified.
7. The Pointal, natural size.

THIS is a plant of considerable size at the Cape of Good Hope, so much so, as to be looked upon there rather as a tree, than shrub. It was first sent to England, in the year 1773, by Mr. F. Masson; is a hardy green-house plant; thrives in a mixture of loam and peat, and flowers in August, or September. There is no method, yet discovered, to propagate it in this country; but, as seeds are so common of this plant, near Cape town, there is scarce a parcel arrives, from thence, which does not contain some of them.

Among the new modern vagaries in botany, this genus has been thought, by the French botanists, (those admirable perplexers of natural order,) to be better divided in two, as some of the species happen to have the joints of the pods a little more swelled than others. How so trifling a variation, and that in a part of the plant which is known to vary, in almost every genus, through most of the species, where they are numerous; should have been deemed of sufficient moment to alter the names of so many established plants, and those determined by such authority as Linnæus, we are at a loss to determine; and are equally astonished that Willdenow should have followed them. The new genus is termed Podalyria, and to which, this plant is attached in the new system.

thora capensis

PLATE CCCXLVIII.
SCHOTIA SPECIOSA.
Lentiſcus-leaved Schotia.

CLASS X. ORDER I.
DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, coloratum; tubus turbinatus, ſubcompreſſus, carnoſus; perſiſtens; limbus ſemiquinquefidus; laciniis ovatis, concavis, obtuſis, erectis, æqualibus.

COROLLA. Petala quinque, tubo calycis impoſita, oblonga, concava, obtuſa, erecta, æqualia, lateribus mutuò incumbentia, ſeſſilia, laciniis calycinis duplo longiora.

STAMINA. Filamenta decem, ſubulata, erecta, petalis paulo longiora, tubo calycis in orbem inſerta. Antheræ oblongæ, incumbentes.

PISTILLUM. Germen oblongum, compreſſum, pedicellatum. Stylus filiformis, longitudine ſtaminum. Stigma ſimplex, obtuſum.

PERICARPIUM. Legumen pedicellatum.

SEMINA bina, oſſea, ſubovata, magna.

EMPALEMENT. Cup one leaf, coloured; tube top-ſhaped, rather flattened, fleſhy; permanent; border half five-cleft; ſegments egg-ſhaped, concave, blunt, upright, equal.

BLOSSOM. Five petals, placed on the tube of the cup, oblong, concave, blunt, upright, equal, lying over each other at the ſides, fitting, twice as long as the ſegments of the cup.

CHIVES. Ten threads, awl-ſhaped, upright, a little longer than the petals, inſerted in a ring into the tube of the cup. Tips oblong, laying on the threads.

POINTAL. Seed-bud oblong; flattened, with a foot-ſtalk. Shaft thread-ſhaped, the length of the chives. Summit ſimple, blunt.

SEED-VESSEL. A pod with a foot-ſtalk.

SEEDS two, bony, a little egg-ſhaped, large.

SPECIFIC CHARACTER.

Schotia foliis pinnatis; foliolis ovatis, mucronatis; floribus cymoſis, profundé carneis.

Schotia with winged leaves; leaflets egg-ſhaped, terminating in a point; flowers in tufts and of a deep fleſh colour.

REFERENCE TO THE PLATE.

1. A Flower cut and ſpread open, ſhewn from the outſide.
2. The ſame, ſhewn from the inſide.
3. A Flower, with the petals, and border of the Cup removed, to ſhew the inſertion of the Chives into the tube of the Cup.
4. The Seed-bud, Shaft and Summit, with the tube of the Cup cut in halves.

OUR preſent ſubject ſtood formerly attached to the genus Guaiacum, under the title of G. affrum, and has been long cultivated in Britain and Holland, perhaps more than a century. Profeſſor Jacquin, in his *Collectanea ad Bot.* &c. Vol. I. p. 93, thought fit to conſtitute it a new genus, naming it after his companion R. van der Schot. About the ſame time, the year 1786, a monograph on this plant was publiſhed at Manheim, by Fred. Caſim. Medikus, under the name of Theodora Speciosa; but Jacquin's title has univerſally obtained. To preſerve this plant in good health, it ſhould be kept in the cooleſt part of the hot-houſe, or in a dry ſtove, the warmth of a common green houſe being inſufficient to preſerve its foliage through the winter months. It is a native of all that extent of the African coaſt from Senegal river, to the Cape of Good Hope, where it grows to the height of twenty feet and upwards. The ſeeds, which are frequently imported, keep many years in a vegetative ſtate, and is, almoſt, the only method by which it can be propagated; for little ſucceſs can be hoped, either from layers, or cuttings. It flowers from October till December, delighting in a light ſandy loam. Perhaps, no plant which has been as long in cultivation with us, has ſo ſeldom been ſeen to flower; for, although the plants in the Kew gardens and elſewhere, are of a conſiderable ſize, yet have we few inſtances of its flowering, no mention being made of its time of inflorescence in the catalogue of that collection.

From a plant, ſtill in flower, this preſent December 1803, which was literally covered with bloſſoms above two feet from its top, our drawing was taken; it is in the valuable and extenſive collection of Iſaac Swainſon, Eſq. Twickenham; which for ſcientific arrangement and richneſs in hardy ſhrubs and herbaceous plants, in particular, yields to no private or public collection we know of; and which, from the extreme urbanity of the liberal proprietor, is at all times open, to every botaniſt or collector.

Chotia speciosa

PLATE CCCXLIX.

PROTEA DECUMBENS.

Slender-ſtemed Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem.	BLOSSOM 4-cleft or 4-petalled. Tips linear, inſerted into the petals below the point.
CALYX proprius nullus. Semina ſolitaria.	CUP, proper, none. Seeds ſolitary.

See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis bi-pinnatis, filiformibus; capitulis terminalibus, ſeſſilibus; floribus incarnatis, bracteolatis; caule tenue, decumbente.	Protea with doubly winged leaves, thread-ſhaped; ſmall heads of flowers ſitting cloſe on the ends of the branches; flowers fleſh-coloured with ſmall floral leaves; ſtem ſlender and bending downwards.

REFERENCE TO THE PLATE.

1. A Leaf.
2. One of the Floral Leaves, magnified.
3. A Floret, complete.
4. One of the Petals, with its Chive at the point, magnified.
5. The Pointal, with the Summit detached and magnified.

FROM the great number of new ſpecies of the divided leaved Proteas, we are led to conjecture, that they are as numerous as thoſe with entire leaves. The P. decumbens, from the different ſpecimens we have ſeen, appears to branch into many varieties; ſome with hairy leaves and ſtems, ſome with very cloſe thick ſet leaves, and ſome, with both ſtems and leaves, quite ſmooth. They are all, nevertheleſs, very ſlender ſtemed; and, there is little doubt but, in their natural ſtate, they reſt on the ground; although in the faſhion we train them here, they have the appearance of being erect. This ſpecies is found at a conſiderable diſtance from the Cape Town, on the ſummits of dry ſandy hills; wherefore, it muſt be kept in the moſt airy part of the green-houſe, and watered but ſeldom. The ſtem does not grow more than eighteen inches long, and frequently flowers, as was the caſe in the preſent inſtance, when not more than twelve. It is propagated, readily, from cuttings made in the month of May, if treated in the method already directed for the increaſe of theſe plants. The earth in which it ſhould be planted is, a light ſandy bright loam. Our drawing was taken in the month of July, 1802, from a plant in the Hibbertian Collection, to which it was introduced by Mr. Niven, in the year 1800.

Protea decumbens

PLATE CCCL.

LACHENALIA PUSTULATA.

Rough-leaved Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA ſexpetala, infera; petalis tribus infera; petalis tribus interioribus longioribus. Stamina erecta. Capſula ſub-ovata, trialata. Semina globoſa.

BLOSSOM 6-petals, beneath; the three inner petals the longeſt. Chives erect. Capſule nearly egg-ſhaped, three-winged. Seeds globular.

See LACHENALIA PENDULA, Pl. XLI. Vol. I.

SPECIFIC CHARACTER.

Lachenalia foliis geminis, lanceolato-linearibus, denſe facie puſtulatis; ſcapo reclinato; floribus ſub-campanulatis, albo-virentibus.

Lachenalia with leaves in pairs, linearly-lance-ſhaped, thickly covered with puſtules on the face; ſtem bent downwards; flowers rather bell-ſhaped, of a whitiſh green.

REFERENCE TO THE PLATE.

1. A Flower.
2. The ſame, cut open, with the Chives in their place.
3. The Pointal.

THE drawing, from which our figure of this ſpecies of Lachenalia was taken, was made from a plant communicated by Iſaac Swainſon, Eſq. from his Botanic Gardens, Twickenham, Middleſex; where it is ſtill in flower, this preſent month of January, 1804; and where we believe it is only to be met with at preſent in this kingdom. It is one of the largeſt growing plants of the genus, the leaves when in a ſoil it approves attaining the length of eighteen inches, or more. It is as hardy as any of the tribe, very fragrant, eaſily preſerved, increaſing freely by the root, and flowering with certainty when the bulb has become of a ſufficient ſize. It grows beſt in a mixture of light loam and peat, about two-thirds loam, and one of peat.

Lachenalia pustulata.

Pub.d as the Act. Directs Feb.y 1.1804
by F. Andrews 5 Knightsbridge

PLATE CCCLI.

PULTENÆA RUBIÆFOLIA.

Madder-leaved Pultenæa.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX quinque-dentatus, utrinque appendiculatus. Corolla papillionacea, alis vexillo brevioribus. Legumen uniloculare, dispermum.

CUP five-toothed, with an appendage on each side. Blossom butterfly-shaped, with the wings shorter than the standard. Pod of one cell with two seeds.

See PULTENÆA DAPHNOIDES, Pl. XCVIII. Vol. II.

SPECIFIC CHARACTER.

Pultenæa foliis ternis, verticillatis, lanceolatis, serratis, rigidis; floribus capitatis, cæruleo-purpureis.

Pultenæa with leaves growing by threes in whorls, lance-shaped, sawed and harsh; flowers grow in heads, and of a bluish purple.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard.
3. One of the Wings.
4. The two Petals of the Keel.
5. The Chives and Pointal.
6. The same, magnified.
7. The Pointal.
8. A ripe Seed-pod, open.
9. One of the Seeds, of its natural size when ripe.

HERE we find another hiatus to fill up, or pass over; either a new genus is to be formed for this plant, or we must not boggle at trifles, and skip over one of the essential characters of Dr. Smith's Pultenæas, the appendicles or props at the side of the cup, which are wanting in this plant, though agreeing in every other. We have, however, until the Doctor shall think fit to regulate these new, numerous and intricate genera and species from New Holland, made no scruple to add this plant, as another species, to the genus Pultenæa. It is a low growing bushy shrub, seldom attaining more than a foot in height; is very apt to be destroyed by damp in winter, and is not to be propagated but by seeds, which, however, it perfects in this country. The blossoms begin to appear in May, and continue in succession through the summer months of June, July, and August. It should be kept warm and dry in winter, growing with most luxuriance in light sandy peat earth, and flowering the second year from the seed. This plant was first raised in 1792, by Messrs. Lee and Kennedy, at their nursery, Hammersmith, where our drawing was taken.

Pultenæa rubiæfolia

PLATE CCCLII.

HELONIAS BULLATA.

Spear-leaved Helonias.

CLASS VI. ORDER III.

HEXANDRIA TRIGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.	EMPALEMENT, none.
COROLLA. Petala ſex, oblonga, æqualia, decidua.	BLOSSOM. Six petals, oblong, equal, deciduous.
STAMINA. Filamenta ſex, ſubulata, corolla paulo longiora. Antheræ incumbentes.	CHIVES. Six threads, awl-ſhaped, a little longer than the bloſſom. Tips lying on the threads.
PISTILLUM. Germen ſubrotundum, trigonum. Styli tres, breves, reflexi. Stigmata obtuſa.	POINTAL. Seed-bud roundiſh, three-ſided. Shafts three, ſhort and reflexed. Summits obtuſe.
PERICARPIUM. Capſula ſubrotunda, trilocularis.	SEED-VESSEL. Capſule roundiſh, three-celled.
SEMINA numeroſa, angulata, minima.	SEEDS numerous, angulated, very ſmall.

SPECIFIC CHARACTER.

Helonias foliis lanceolatis, nervoſis; bracteis cordato-lanceolatis.	Helonias with lance-ſhaped, nerved leaves; floral leaves between lance and heart-ſhaped.

REFERENCE TO THE PLATE.

1. Flower, complete.
2. The Chives and Pointal, natural ſize.
3. The ſame, magnified.

ALL the ſpecies of this genus, yet diſcovered, are natives of North America, and are conſidered as hardy herbaceous plants; the winters of this country not being too ſevere for them; although they are found as far ſouth as Carolina, yet they are more plentiful in Penſylvania, about Philadelphia. They flouriſh moſt in a ſhady, moiſt ſituation; and increase, freely, by parting the roots in the month of March. The flowers are produced in May, the flower-ſtem increaſing in length, till the flowers are entirely decayed. The Helonias bullata has been an inhabitant of our gardens ever ſince the year 1758, when it was introduced by Mr. Ph. Miller, and cultivated by him at Chelſea. See Mill. ic. 181. t. 272.

Our drawing was made at the Nurſery, Hammerſmith, in June 1801.

Helonias bullata.

PLATE CCCLIII.

ASPALATHUS CRASSIFOLIUS.

Thick-leaved Aſpalathus.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ſemiquinquefidum; laciniis acuminatis, æqualibus, ſuperiore longiore.

COROLLA papillionacea.

Vexillum compreſſum, adſcendens, obovatum, externe ſæpius hirſutum, obtuſum cum acumine.

Alæ lunulatæ, obtuſæ, patulæ, vexillo breviores.

Carina bifida, alis conformis.

STAMINA. Filamenta decem, connata in vaginam, ſuperne dehiſcentem longitudinaliter, adſcendentia. Antheræ oblongæ.

PISTILLUM. Germen ovatum. Stylus ſimplex, adſcendens. Stigma acutum.

PERICARPIUM. Legumen ovatum, muticum.

SEMINA ſæpius duo, reniformia.

OBS. *Singulare huic sunt folia ex eadem gemma plura in planta frutescente.*

EMPALEMENT. Cup one leaf, half-five-cleft; ſegments tapered, equal, the upper one longer.

BLOSSOM butterfly-ſhape.

Standard compreſſed, aſcending, inverſely egg-ſhaped, often hairy on the outſide, obtuſe with a point.

Wings half-moon-ſhaped, obtuſe, ſpreading, ſhorter than the ſtandard.

Keel two-cleft, like the wing.

CHIVES. Ten threads, united into a ſheath, gaping longitudinally at top, aſcending. Tips oblong.

POINTAL. Seed-bud egg-ſhaped. Shaft ſimple, aſcending. Summit pointed.

SEED-VESSEL. Pod egg-ſhaped, beardleſs.

SEEDS frequently two, kidney-ſhaped.

OBS. *This genus is singular in having several leaves from the same bud, on a shrubby plant.*

SPECIFIC CHARACTER.

Aſpalathus foliis faſciculatis, carnoſis, teretibus, glabris, apicibus ſetaceis; floribus capitatis, terminalibus; calycibus bracteatis.

Aſpalathus with leaves bundled, fleſhy, cylindrical, ſmooth and briſtled at the point; flowers grow in heads at the end of the branches; cups with floral leaves.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard.
3. One of the Wings.
4. The Keel.
5. The Chives and Pointal.
6. The Chives, ſpread open and magnified.
7. The Pointal.

FROM the number of ſpecimens in the herbarium of G. Hibbert, Eſq. which we ſhould refer to this genus; it ſtands fair to rival, in number of ſpecies, every other, natives of the Cape of Good Hope; with the exception of Erica, Geranium, and Protea. This ſpecies has many varieties, and we are in doubt whether this is not one from the A. carnoſa, or A. pinguis of Thunberg; for although, the cup, in the one, may differ, in having the ſegments deſcribed as pointed; and in the other, the leaves may be rather three-ſided; yet, may our plant be no more than a ſlight variation from either of them: but this we cannot decide without living plants of each, for dried ſpecimens would not determine the fact.

This plant was introduced to the Hibbertian Collection, in 1800, by Mr. Niven, from the Cape. It is a tender green-houſe plant, grows to the height of eighteen inches, very buſhy, and covers itſelf with flowers about July; in which month, 1803, our drawing was taken. It has hitherto put the ability of Mr. Allen, which is not often the caſe, to a ſtand for a method to propagate it; but we have hopes, as moſt of the ſpecies do, that it will ripen its ſeeds in this country.

Aspalathus crassifolius

PLATE CCCLIV.

GERANIUM REVOLUTUM.

Reflex floral-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus; pentacoccus.

ONE POINTAL. Five Summits. Fruit furniſhed with long awns; five dry berries.

SPECIFIC CHARACTER.

Geranium foliis cordatis, obtuſis, nervoſis, ſæpe auriculatis; pedunculis multifloris; involucris polyphyllis, foliolis revolutis; floribus pentandris; radice tuberoſa.

Geranium with heart-ſhaped leaves, obtuſe, nerved and often eared; flower-ſtems many-flowered; fence many-leaved, leaflets rolled back; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open to ſhew its tubular ſtructure.
2. The Chives and Pointal.
3. The Chives, ſpread open, magnified.
4. The Pointal, magnified.

THIS very fine Geranium is, as yet, only in the Clapham Collection; it has no properties, which regard its culture or propagation, differing from the reſt of its congeners; was ſent from the Cape, by Mr. Niven, in 1800. Flowers in July. The leaves of this ſpecies have moſt affinity, in appearance, to thoſe of G. melananthum, particularly in being like them frequently eared, and even ſometimes winged. We have named it, ſpecifically, from the ſingular revolute character of the involucrum, at the baſe of each bunch of flowers.

Geranium revolutum

PLATE CCCLV.

LEEA PINNATA.

Winged-leaved Leea.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum, coriaceum, quinquedentatum, persistens.	EMPALEMENT. Cup one leaf, bell-shaped, leathery, five-toothed, remaining.
COROLLA monopetala; tubus longitudine calycis; limbus quinquefidus, æqualis; laciniis saccatis.	BLOSSOM one petal; tube the length of the cup; border five-cleft, equal; segments bagged.
Nectarium basi interioris corollæ adnatum, corolla dimidio brevius, erectum, urceolatum, quinquefidum; lobis emarginatis.	*Honey-cup* fixed to the base of the inside of the blossom, by the half shorter than the blossom, erect, pitcher-shaped, five-cleft; lobes notched at the end.
STAMINA. Filamenta quinque, inserta basi exteriori nectarii. Antheræ ovatæ, versatiles.	CHIVES. Five threads inserted into the outside of the base of the honey-cup. Tips egg-shaped, versatile.
PISTILLUM. Germen subglobosum. Stylus simplex, nectario brevior. Stigma obtusum.	POINTAL. Seed-bud almost globular. Shaft simple, shorter than the honey-cup. Summit blunt.
PERICARPIUM. Bacca orbiculata, depressa, quinquelocularis.	SEED-VESSEL. Berry orbicular, flattened, five-celled.
SEMINA quinque, solitaria.	SEEDS five, solitary.

SPECIFIC CHARACTER.

Leea foliis impari-pinnatis, oppositis; caule tereti, glabro; racemis angulatis, angulis undulatis.	Leea with winged leaves terminated by an odd one and opposite; stem round and smooth; branches angled; angles waved.

REFERENCE TO THE PLATE.

1. The Cup, natural size.
2. A Blossom.
3. A Flower complete, magnified.
4. The Honey-cup, shewn from the inside, cut open, a little magnified.
5. A Blossom, with the Honey-cup and Chives, magnified.
6. The Honey-cup and Chives shewn from the outside, magnified.
7. The Pointal, magnified.

LEEA and Aquilicia have, of late, been considered as not possessing sufficient essentially differing characters to constitute two genera, and Aquilicia has been lost in Leea. Our present subject is a species of the former Aquilicias, is mentioned by Gaertner, who says, it approaches A. sambucina, now Leea sambucina; to which indeed it has much resemblance, but differs in having opposite, not alternate branches, being scentless, having the leaves rather rough and the stem smooth. It is a native of the East Indies, requiring the tan-bed to make it flower; is half shrubby, and is increased by cuttings. Flowers in August. Our figure is from a specimen communicated to us by Aylmer Bourke Lambert, Esq. who raised it from seeds received from Dr. Roxburg, in 1801, under the name of Leea crispa: which is a native of Africa, and has been long in most of our collections of hot-house plants, but is in the highest state of cultivation, under the care of Mr. Hoy, in that of his Grace the Duke of Northumberland, Sion House, near Brentford.

Leea pinnata

PLATE CCCLVI.

ARUM ORIXENSIS.

Orixian Cuckow-pint.

CLASS XX. ORDER XI.

GYNANDRIA POLYANDRIA. Chives on the Pointal. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX. Spatha monophylla, maxima, oblonga, basi convoluta, apice connivens, ventre compressa, interne colorata.

Spadix clavatus, simplicissimus, spatha paulo brevior, coloratus, inferne germinibus obvallatus, marcescens supra germina.

COROLLA nulla.

STAMINA. Filamenta nulla, nisi nectaria basi crassa, desinentia in cirros filiformes, duorum ordinum e medio spadice egredientes. Antheræ plurimæ, sessiles, tetragonæ, cirrhorum duplici ordine interjectæ, spadici adnatæ.

PISTILLA. Germina plurima, basin spadicis vestientia, infra stamina collocata, obovata. Styli nulli. Stigmata villis barbata.

PERICARPIA. Baccæ totidem, globosæ, uniloculares.

SEMINA plura, subrotunda.

EMPALEMENT. Sheath one leaf, very large, oblong, convolute at the base, converging at the top, the belly compressed, coloured within.

Sheathed-Fruit-stalk club shaped quite simple, a little shorter than the sheath, coloured, set round with seed-buds on the lower part, withering above the seed-buds.

BLOSSOM none.

CHIVES. Threads none except the honey-cups, which are thick at the base and terminated in thread shaped tendrils, issuing in two rows from the middle of the sheathed fruit-stalk. Tips many, sitting, four sided, fixed to the fruit-stalk, and disposed between the two rows of tendrils.

POINTALS. Seed-buds many, cloathing the base of the fruit-stalk, set below the chives, inversely egg-shaped. Shafts none. Summits bearded with soft hairs.

SEED-VESSELS. As many berries, globular, and one-celled.

SEEDS. Many, roundish.

SPECIFIC CHARACTER.

Arum, acule; foliis ternatis, venosis, discoloribus; spatha declinata; flore atro-purpureo.

Cuckow-pint, stemless; leaves threefold, full of veins, two-coloured; sheath bent downward; flower of a deep purple.

REFERENCE TO THE PLATE.

1. The whole flower, shewn from the front with the sheath opened, to expose the parts of fructification.

THIS pretty plant is a native of the East Indies, in that country from which it derives its specific title. It has much affinity with many others of the Genus, which at first sight appear rather as varieties, than meriting to be treated as species; but, in this instance, we submit our judgment to that of Dr. Roxburg, by whom it has been introduced to us under the name it here bears, in the year 1802. Our figure was taken, in the month of October 1803, from a plant in the collection of J. Vere, Esq. Kensington Gore. The flower is scentless.

Arum oriaensis

PLATE CCCLVII.
ARCTOTIS PARADOXA.
Chamomile-leaved Arctotis.

CLASS XIX. ORDER IV.
SYNGENESIA POLYGAMIA NECESSARIA. Tips united. Necessary Pointals.

GENERIC CHARACTER.

CALYX *communis* ſubrotundus, imbricatus; ſquamis inferioribus laxioribus, ſubulatis; mediis ovatis; intimis oblongis; apice ſcarioſo, rotundato, concavo.

COROLLA *composita* radiata; corollulæ hermaphroditæ plurimæ in diſco. Femininæ ligulatæ, fere viginti, diſci diametro longiores.

Propria hermaphroditis infundibuliformis; limbo quinquefido, apicibus reflexis, æqualibus.

Femineis ligulata, lanceolata, tenuiſſime tridentata, tubo breviſſimo.

STAMINA hermaphroditis; filamenta quinque, capillaria, breviſſima. Anthera cylindracea, quinquedentata, longitudine corollulæ.

PISTILLUM *Hermaphroditis*; germen vix. manifeſtum. Stylus cylindraceus, corolla paulo longior. Stigma ſimplex.

Femineis germen ovato-tetragonum, villoſum, coronatum calyculo proprio. Stylus filiformis. Stigmata duo, ovata-oblonga, craſſiuſcula, erecta.

PERICARPIUM nullum. Calyx immutatus. Semina *Hermaphroditis* nulla.

Femineis ſolitaria, ſubrotunda, villoſa. *Pappus* perianthium proprium pentaphyllum; foliolis ovatis, patentibus, coronatus perianthii proprii foliolis ovatis in orbem poſitis.

RECEPTACULUM piloſum ſeu paleaceum, planiuſculum.

EMPALEMENT *common* roundiſh, tiled; lower ſcales more looſe, awl ſhaped; middle ones egg-ſhaped; innermoſt oblong; harſh, rounded, concave at the point.

BLOSSOM *compound* raied; hermaphrodite florets numerous in the center. Of the Females tongue-ſhaped, nearly twenty, longer than the diameter of the center.

Proper of the *hermaphrodites* funnel-ſhaped; border five-cleft, ends reflexed, equal.

Of the *Females* tongue-ſhaped, lance-ſhaped, ſlightly three-toothed; tube very ſhort.

CHIVES of the Hermaphrodites; five threads hair-like, very ſhort. Tip cylindric five-toothed, the length of the floret.

POINTAL of the *Hermaphrodites*; ſeed-bud ſcarce viſible. Shaft cylindric, a little longer than the bloſſom. Summit ſimple.

Of the *Females* ſeed-bud egg-ſhaped four-cornered, hairy, crowned by its proper cup. Shaft thread-ſhaped. Summits two, oblong-egg-ſhaped, thickiſh, upright.

SEED-VESSEL none. Empalement unchanged. Seeds in the *Hermaphrodites* none.

In the *Females* ſolitary roundiſh, hairy. *Feather*, proper cup five-leaved; leaflets, egg-ſhaped, ſpreading, crowned by the proper cup with the leaflets placed in a round.

RECEPTACLE hairy or chaffy, flattiſh.

SPECIFIC CHARACTER.

Arctotis floſculis radiantibus ſterilibus; paleis diſco longioribus coloratis; foliis bipinnatis, linearibus.

Arctotis with the florets of the circumference ſterile; chaffs coloured and longer than the florets of the center; leaves doubly winged; linear.

REFERENCE TO THE PLATE.

1. An inner Scale of the cup.
2. An outer Scale of the cup.
3. A Petal of the circumference, with its tubular baſe, which is ſterile.
4. A chaffy diviſion of the florets of the center, magnified.
5. A Female floret of the center, magnified.
6. The Chives of an Hermaphrodite floret, ſpread open and magnified.
7. The Pointal of an Hermaphrodite floret, natural ſize.
8. The ſame, magnified.
9. The Seed-bud of a female floret, natural ſize, with its feather.
10. The ſame, magnified.

OF all the plants, numerous as they are, compoſing this natural Claſs, we know of no one, the Virgilia (a native of Peru, and introduced to us from the Paris gardens by Monſ. Thoin, about twenty years ago, but ſince loſt to Europe,) excepted, which can rival our preſent ſubject. It is a native of the Cape of Good Hope, and is ſaid, in the Kew Catalogue, to have been introduced to that collection, in 1774, by Mr. Maſſon. Whether this is the A. paradoxa of Linn. Sp. 1307. Vol. II, we are not certain, as the chaff, dividing the florets, is there deſcribed as of nearly the length of the ray, giving the flower an appearance of doubleneſs, and is there likewiſe marked as an annual. But, there is little doubt of its being the plant intended in the Kew Catalogue, under our title; it is there made biennial, which is its true character, as it does not flower the firſt year from ſeeds. It may be propagated by cuttings of the firſt year's growth; delights in a light ſandy loam, and flowers in July or Auguſt. Our drawing was made in 1802, from a plant in the Hibertian Collection; which had been raiſed from ſeeds, ſent the preceding year, from the Cape, by Mr. Niven.

Arctotis paradoxa.

PLATE CCCLVIII.

AMARYLLIS BRASILIENSIS.

Brasilian Lily-Daffodil.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, campanulata. Stigma trifidum.	BLOSSOM 6-petalled, bell-ſhaped. Summit three-cleft. See AMARYLLIS RADIATA, Pl. XCV. Vol. II.

SPECIFIC CHARACTER.

Amaryllis, ſpatha bi-ſeu-triflora; petalis ovato-acuminatis, æqualibus, coſtatis, ad baſin albidis, patentibus; genitalibus declinatis; foliis lineari-lanceolatis, acutis.	Lily-Daffodil, ſheath two or three flowered; petals egg-ſhape tapered, equal, ribbed, white at the baſe and ſpreading; parts of fructification bent downwards; leaves linear-lance-ſhaped, pointed.

REFERENCE TO THE PLATE.

1. A petal with its Chive.
2. The Seed-bud, with part of the tube of the Bloſſom and partial Fruit-ſtalk.

THIS fine Lily, from the Brazils, can ſcarcely be thought more than a variety of A. Reginæ; to which plant, both this, and the A. equeſtris of Mr. Curtis, may be referred without much flexion of the original ſpecies. We have, however, preſerved the title under which it has been known ſince its introduction; which was, in the year 1798, by the late Marchioneſs of Bute, from Spain. Our drawing was taken from a plant in the collection of J. Vere, Eſq. Kenſington Gore, in the month of October, 1803. It has all the merits of the moſt eaſily cultivated ſpecies of the genus; increaſing freely by the bulb, growing with luxuriance in almoſt any earth, and requiring but little heat to make it flower.

ryllis brasiliensis

PLATE CCCLIX.

TAGETES LUCIDA.

Sweet Chili Marygold.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX *communis* ſimpliciſſimus, monophyllus, tubuloſus, oblongus, pentagonus, quinquedentatus.	EMPALEMENT *common*, quite ſimple, one leaf, tubular, oblong, five-ſided, five-toothed.
COROLLA *composita* radiata; corollulæ hermaphroditæ tubuloſæ, plures in diſco elevato; femineæ ligulatæ quinque in radio.	BLOSSOM, *compound* raiſed; hermaphrodite florets tubular, numerous in an elevated center; females tongue-ſhaped five in the circumference.
Propria hermaphroditis tubuloſa, ſemiquinquefida, erecta, calyce longior; laciniis linearibus, introrſum villoſis.	*Proper* of the *Hermaphrodites*, tubular, half five-cleft, upright, longer than the cup; ſegments linear, hairy within.
Femineis ligulata, hermaphrodites longior, longitudine et latitudine fere æqualis, obtuſiſſima, verſus tubum anguſtior, tomentoſa perſiſtens.	Of the *Females* tongue-ſhaped longer than the hermaphrodites, of nearly the ſame length and breadth, very blunt, narrower towards the tube, downy, remaining.
STAMINA Hermaphroditis; filamenta quinque, capillaria, breviſſima. Anthera cylindracea, tubuloſa.	CHIVES of the Hermaphrodites; five threads, hair-like, very ſhort. Tip cylindric, tubular.
PISTILLUM *Hermaphroditis*; Germen oblongum. Stylus filiformis, longitudine ſtaminum. Stigma bifidum, tenue, reflexum.	POINTAL of the *Hermaphrodites*; ſeed-bud oblong. Shaft thread-ſhaped, the length of the chives. Summit two-cleft, ſlender, reflexed.
Femineis; germen oblongum. Stylus filiformis, longitudine hermaphroditis. Stigma bifidum, tenue, reflexum,	Of the *Females*; ſeed-bud oblong. Shaft thread-ſhaped, the length of the hermaphrodite. Summit two-cleft, ſlender, reflexed.
PERICARPIUM nullum. Calyx immutatus.	SEED-VESSEL none. Cup unchanged.
SEMINA Hermaphroditis ſolitaria, linearia, compreſſa, calyce paulo breviora. Pappus ariſtis quinque, erectis, acuminatis, inæqualibus.	SEEDS of the Hermaphrodites ſolitary, linear, flat, a little ſhorter than the cup. Feather five awns, upright, tapered, unequal.
Femineis ſimilima hermaphroditis.	Of the *Females* like the hermaphrodites.
RECEPTACULUM nudum, planum.	RECEPTACLE naked, flat.

SPECIFIC CHARACTER.

Tagetes caule herbaceo, erecto, floribus cymoſis, parvis, luteis, odoratiſſimis.	Marygold with an upright, herbaceous ſtem; flowers in tufts, ſmall, yellow, and very ſweet ſcented.

REFERENCE TO THE PLATE.

1. The common Empalement.
2. A Floret of the circumference, with its ſeed-bud and pointal.
3. The ſame, magnified.
4. A Floret of the center, natural ſize.
5. The ſame, magnified.
6. A ripe seed, magnified.

THIS plant is a native of Chili, South America, and was ſent to England by Dr. Ortega, from the Royal Gardens, Madrid, to the late Marchioneſs of Bute; who firſt raiſed it from ſeeds in the year 1798. It is perfectly herbaceous, but will flower the firſt year from the ſeed; will endure moderate froſt, and may be conſidered as a hardy herbaceous plant. Is increaſed either by ſeeds, or by parting the roots; delights in a moderately ſtiff ſoil; flowering from July till November. If kept in a pot, the flowers, which are very fragrant, will continue in ſucceſſion through the whole winter.

Tagetes minuta of Linnæus's Sp. Plant. Vol. II. p, 1250, quoted from his Hortus Cliffortianus, and Dillenius's Hortus Elthamenſis, ſeems much affined to this plant; but, as that is annual, this cannot be conſidered as a variety of it.

Our drawing was taken at the Hammerſmith Nurſery.

agetes lucida

PLATE CCCLX.

RENEALMIA NUTANS.

Drooping-flowered Renealmia.

CLASS I. ORDER I.

MONANDRIA MONOGYNIA. One Chive. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium ſuperum, monophyllum, apice rumpens in duo ſeu tres dentes irregulares.	EMPALEMENT. Cup above, one-leafed, breaking open into two or three irregular teeth.
COROLLA monopetala. Tubus rectus, cylindricus; limbus trifidus; laciniis duabus ſuperioribus oblongis, rotundatis, æqualibus; inferiore ſuperioribus vix longiore, canaliculata, oblonga.	BLOSSOM on petal. Tube ſtraight, cylindrical; border three-cleft; the two upper ſegments oblong, rounded, equal; the lower one, ſcarcely longer than the upper ones, channelled, oblong.
Nectarium tubo corrollæ adnatum, ſub laciniis ſuperioribus adſcendens, rectum, longitudine corollæ, oblongum, baſi utrinque unidentatum, tum ſinu excavato, apice dilatatum et obtuſe trilobatum.	*Honey cup* fixed to the tube of the bloſſom, aſcending beneath the upper ſegment ſtraight the length of the bloſſom, oblong one-toothed on each ſide of the baſe, then with a hollow boſom widening at the end and obtuſely three-lobed.
STAMEN. Filamentum nullum. Anthera unica, fauci tubi inſerta, in ſinu laciniæ inferioris corollæ, nectario oppoſita, libera, recta, linearis, emarginata, interius ſulco exarata, longitudine et latitudine laciniæ corollæ.	CHIVE. Thread, none. Tip one inſerted into the throat of the tube, in the boſom of the lower ſegment of the bloſſom, oppoſite to the honey-cup, free, ſtraight, linear, notched at the end, grooved on the inſide, of the ſame length and breadth as the ſegment of the bloſſom.
PISTILLUM. Germen inferum, oblongum, obſolete triquetrum, glabrum. Stylus filiformis, glaberrimus, erectus, longitudine corollæ. Stigma peltatum; capitulo plano; latere ad nectarium vergente truncato, perforato, foramine in ſtylum decurrente.	POINTAL. Seed-bud beneath, oblong, obſcurely three-ſided, ſmooth. Shaft thread-ſhaped, very ſmooth, upright the length of the bloſſom. Summit ſhield-ſhaped; with a flat head, the ſide fronting the honey-cup appearing cut off, perforated by a hole running into the ſhaft.
PERICARPIUM. Bacca oblonga, triſulca, teres, glabra, umbilico terminata; carnoſa, in medio trilocularis. Loculamenta mollia, membranacea.	SEED VESSEL. Berry oblong, three-furrowed, cylindrical, ſmooth, terminated by a navel, fleſhy in the middle, three-celled. Cells ſoft, ſkinny.
SEMINA plurima, oblonga, truncata, tetragona, glaberrima.	SEEDS numerous, oblong, appearing cut off, four-cornered, very ſmooth.

SPECIFIC CHARACTER.

Renealmia foliis vaginantibus; floribus racemoſis terminalibus pendulis; fructu piloſo.	Renealmia with ſheathing leaves; flowers in bunches terminating the branches, hanging down, fruit hairy.

REFERENCE TO THE PLATE.

1. A miniature repreſentation of the plant.
2. The outer ſheath of the bloſſom.
3. A flower complete.
4. The Honey-cup.
5. The Chive, Pointal, and Seed-bud.
6. The Pointal and Seed-bud cleared of the ſmall inner ſheath which ſurrounds the baſe of the chive and ſhaft; with the ſummit detached and magnified.
7. One of the ſmall corpuſculæ which embrace the baſe of the ſhaft, magnified.
8. The ſmall ſheath which crowns the ſeed-bud, magnified.
9. The Seed-bud, cut tranſverſely, magnified.

AMONGST the numerous new plants introduced from China by the late Mr. Slater, of Laytonſtone, in the year 1793, this is certainly to be conſidered as amongſt the moſt beautiful. The only drawback to its general merit, as a hot-houſe plant, is the great height to which it might attain before it flowers; being in common fourteen or fifteen feet. It propagates by offsets, and is kept with little trouble; as it will flouriſh in almoſt any ſoil, and will flower, if ſet in any part of the hot-houſe, ſo as not to interrupt its growth, the bloſſoms being produced only from the ſummit. Although with us the ſtem is permanent, as with ſome others of the ſame natural habit, yet it cannot, we think, with propriety be conſidered as either a tree or ſhrub, but rather herbaceous. Some contention, at firſt, aroſe whether this plant ſhould be referred to the preſent Genus; which was formed, by the younger Linnæus, from a plant a native of Surinam, S. America, ſome of the parts not exactly correſponding, eſpecially the fruit; we have nevertheleſs made no ſcruple in placing it to that Genus, with which, upon an inſpection of the diſſections, it will be found very well to accord. Our figure was taken from a plant which flowers, annually, in the month of July, in the Collection of J. Vere, Eſq. Kenſington Gore.

nealmia nutans.

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Sansivieria carnea

PLATE CCCLX.

RENEALMIA NUTANS.

Drooping-flowered Renealmia.

CLASS I. ORDER I.

MONANDRIA MONOGYNIA. One Chive. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium ſuperum, monophyllum, apice rumpens in duo ſeu tres dentes irregulares.	EMPALEMENT. Cup above, one-leafed, breaking open into two or three irregular teeth.
COROLLA monopetala. Tubus rectus, cylindricus; limbus trifidus; laciniis duabus ſuperioribus oblongis, rotundatis, æqualibus; inferiore ſuperioribus vix longiore, canaliculata, oblonga.	BLOSSOM on petal. Tube ſtraight, cylindrical; border three-cleft; the two upper ſegments oblong, rounded, equal; the lower one, ſcarcely longer than the upper ones, channelled, oblong.
Nectarium tubo corrollæ adnatum, ſub laciniis ſuperioribus adſcendens, rectum, longitudine corollæ, oblongum, baſi utrinque unidentatum, tum ſinu excavato, apice dilatatum et obtuſe trilobatum.	*Honey cup* fixed to the tube of the bloſſom, aſcending beneath the upper ſegment ſtraight the length of the bloſſom, oblong one-toothed on each ſide of the baſe, then with a hollow boſom widening at the end and obtuſely three-lobed.
STAMEN. Filamentum nullum. Anthera unica, fauci tubi inſerta, in ſinu laciniæ inferioris corollæ, nectario oppoſita, libera, recta, linearis, emarginata, interius ſulco exarata, longitudine et latitudine laciniæ corollæ.	CHIVE. Thread, none. Tip one inſerted into the throat of the tube, in the boſom of the lower ſegment of the bloſſom, oppoſite to the honey-cup, free, ſtraight, linear, notched at the end, grooved on the inſide, of the ſame length and breadth as the ſegment of the bloſſom.
PISTILLUM. Germen inferum, oblongum, obſolete triquetrum, glabrum. Stylus filiformis, glaberrimus, erectus, longitudine corollæ. Stigma peltatum; capitulo plano; latere ad nectarium vergente truncato, perforato, foramine in ſtylum decurrente.	POINTAL. Seed-bud beneath, oblong, obſcurely three-ſided, ſmooth. Shaft thread-ſhaped, very ſmooth, upright the length of the bloſſom. Summit ſhield-ſhaped; with a flat head, the ſide fronting the honey-cup appearing cut off, perforated by a hole running into the ſhaft.
PERICARPIUM. Bacca oblonga, triſulca, teres, glabra, umbilico terminata; carnoſa, in medio trilocularis. Loculamenta mollia, membranacea.	SEED VESSEL. Berry oblong, three-furrowed, cylindrical, ſmooth, terminated by a navel, fleſhy in the middle, three-celled. Cells ſoft, ſkinny.
SEMINA plurima, oblonga, truncata, tetragona, glaberrima.	SEEDS numerous, oblong, appearing cut off, four-cornered, very ſmooth.

SPECIFIC CHARACTER.

Renealmia foliis vaginantibus; floribus racemoſis terminalibus pendulis; fructu piloſo.	Renealmia with ſheathing leaves; flowers in bunches terminating the branches, hanging down, fruit hairy.

REFERENCE TO THE PLATE.

1. A miniature repreſentation of the plant.
2. The outer ſheath of the bloſſom.
3. A flower complete.
4. The Honey-cup.
5. The Chive, Pointal, and Seed-bud.
6. The Pointal and Seed-bud cleared of the ſmall inner ſheath which ſurrounds the baſe of the chive and ſhaft; with the ſummit detached and magnified.
7. One of the ſmall corpuſculæ which embrace the baſe of the ſhaft, magnified.
8. The ſmall ſheath which crowns the ſeed-bud, magnified.
9. The Seed-bud, cut tranſverſely, magnified.

AMONGST the numerous new plants introduced from China by the late Mr. Slater, of Laytonſtone, in the year 1793, this is certainly to be conſidered as amongſt the moſt beautiful. The only drawback to its general merit, as a hot-houſe plant, is the great height to which it might attain before it flowers; being in common fourteen or fifteen feet. It propagates by offsets, and is kept with little trouble; as it will flouriſh in almoſt any ſoil, and will flower, if ſet in any part of the hot-houſe, ſo as not to interrupt its growth, the bloſſoms being produced only from the ſummit. Although with us the ſtem is permanent, as with ſome others of the ſame natural habit, yet it cannot, we think, with propriety be conſidered as either a tree or ſhrub, but rather herbaceous. Some contention, at firſt, aroſe whether this plant ſhould be referred to the preſent Genus; which was formed, by the younger Linnæus, from a plant a native of Surinam, S. America, ſome of the parts not exactly correſponding, eſpecially the fruit; we have nevertheleſs made no ſcruple in placing it to that Genus, with which, upon an inſpection of the diſſections, it will be found very well to accord. Our figure was taken from a plant which flowers, annually, in the month of July, in the Collection of J. Vere, Eſq. Kenſington Gore.

Vealmia nutans.

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PLATE CCCLXI.

SANSEVIERA CARNEA.

Flesh-coloured Sanseviera.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA infera monopetala, tubo filiformi, limbo, 6-partito, revoluto. Stamina limbo inserta. Bacca 1-sperma.	COROLLA beneath of one petal, with a thread-shaped tube, and 6-parted revolute limb. Threads inserted into the limb. Berry one seeded.

SPECIFIC CHARACTER, &c.

Sanseviera. Foliis distichis, lanceolato-ensiformibus, carinatis, floribus solitariis sessilibus.	Sanseviera. With leaves two-ranked, lance-sword shaped, keeled, flowers solitary, sessile.

DESCRIPTIO. Herba perennis, habitu Hemerocallidis. *Radix* subcarnosus, fibris longissimis subsimplicibus. *Folia* radicalia, subdisticha, effusa, lanceolato-ensiformia, fere pedalia, trinervia, (nervo medio carinæformi) basin imbricata et profunde caniliculata, marginibus apices versus asperiusculis. *Scapus* radicalis, et quasi lateralis, palmaris, suberectus, angulatus, superne carneus. *Flores* spicati, ascendentes, sessiles, alterni, carnei, intus pallidiores. *Bracteæ* ovato-acuminatæ, concavæ, carneæ, flores amplectentes. *Corolla* 6-partita, tubo angulato longitudine bractearum; laciniis revolutis sublanceolatis, tubo aliquo longioribus, supremâ paulo majore. *Filamenta* 6 æqualia, alba, basi laciniarum inserta, laciniis aliquo brevioribus. *Antheræ* erectæ, utrinque emarginatæ, sulphureæ. *Stylus* carneus, paulo declinatus, antheris vix superans. *Stigma* obtusum album, obsoletissime trilobatum.

REFERENCE TO THE PLATE.

1. A floral leaf.
2. The flower cut open, with one of the tips magnified.
3. The Pointal and Seed-bud, and the summit magnified.

THIS new species, of Thunberg's new genus Sanseviera, which is a branch of the Linnæan genus Aletris; was introduced into this country from China, by T. Evans, Esq. of Stepney; in the year 1792: but is still very rare. Our drawing was made from a fine plant in the collection of J. Vere, Esq. of Kensington Gore, in the month of March *. Mr. Anderson, his botanic gardener, informs us, he has treated it as a hothouse plant; but it will probably be found to succeed better in the greenhouse, like other Chinese plants. It is propagated by parting the roots. In habit it resembles Hemerocallis more than Sanseviera, but agrees with the generical characters of Sanseviera zeylanica. With Aletris fragrans it also agrees in many particulars; but with Aletris farinosa is quite at variance.

* A root of it, (lately parted from the individual here figured,) flowered at Messrs. Grimwood and Wykes's, in February.

Transverse

Sansiviera carnea

PLATE CCCLXII.

CROCUS BIFLORUS.

Yellow-bottomed White Crocus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA, supera, 6-partita, ſubæqualis, erecto-patula, tubo longiſſimo ſubterraneo.

COROLLA, above, 6-parted, nearly equal, erect-expanding, with a very long ſubterraneous tube.

SPECIFIC CHARACTER, &c.

Crocus, foliis anguſtiſſimis effuſis floribus ſemper longe ſuperantibus.

Crocus, with very narrow diffuſed leaves, which are always much higher than the flowers.

DESCRIPTIO. *Radix* tunicis glabris cochleariformibus. *Folia,* tempore florendi, longiſſima omnium, magiſque effuſa. *Spathæ* ſæpe 2-floræ, ut in plurimis. *Flores* vernales, albæ, magnæ; fundo intus ſordide flavo, extus aliquo olivaceo; tubo pergracili, depilato; petalis 3 exterioribus, extus tincturâ flavedinis, et purpureo elegantiſſime plumoſo-ſtriatis. *Filamenta antheræque* erectæ, luteæ. *Stylus* percroceus. *Stigmata* itidem percrocea, antheris vix ſuperantia. *Haworth's Crocus inedit.*

REFERENCE TO THE PLATE.

1. The outer ſheath of the flower.
2. The inner.
3. The flower cut open.

THIS beautiful Crocus is unqueſtionably diſtinct as a ſpecies, and has never been noticed by any ſyſtematic writer except Miller; who has deſcribed it accurately under the name of *biflorus,* in the 8th edition of his celebrated Dictionary. It is very hardy, flowers early in February, and may be readily diſtinguiſhed from other Crocuſes by its leaves being much longer than the flowers, at the time of flowering. When the ſun ſhines ſtrong, the flowers have a juſt perceptible fragrant ſcent; a circumſtance very unuſual in this genus; all the other ſpecies, (one we call *fragrans* excepted) having more or leſs of an unpleaſant ſmell. It ſeldom produces ſeeds in this country, or varies in colour; but increaſes by the root.

Crocus biflorus

Pub as the Act directs 1st Jan. 1808 by W. Curtis, Stanley Grove, Battersea

PLATE CCCLXIII.

POLYGALA STIPULACEA.

Stipuled Milkwort.

CLASS XVII. ORDER III.

DIADELPHIA OCTANDRIA. Two Brotherhoods. Eight Chives.

ESSENTIAL GENERIC CHARACTER.

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

CUP 5-leaved, with two of the leaves like wings, coloured. Pod inverſe heart-ſhaped, two-celled.

SPECIFIC CHARACTER, &c.

Polygala. Floribus imberbibus lateralibus, caule ſuffruticoſo, foliis ternis linearibus acutis. *Willd. Sp. pl.* 892.

Polygala. With beardleſs lateral flowers, a ſhrubby ſtem, and ternate, linear, acute leaves.

DESCRIPTIO. *Suffrutex*, ramulis ſubdivaricatis, filiformibus, elongatis, pubeſcentibus. *Folia* faſciculata, linearia, obſolete mucronata, 3-6 in ſingulo faſciculo; infimo latiore, breviore, ſtipuliforme. *Flores* P. Heiſteriæ, at minores, axillares, ſolitarii, vel ſubinde binati; ſeſſiles.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The ſame magnified.
3. The Keel magnified.
4. One of the wings.
5. The ſame magnified.
6. The Chives.
7. The ſame magnified.
8. The Pointal magnified.

A RARE Cape ſpecies recently introduced to the Hibbertian Collection, where our drawing was taken laſt ſummer. It is a greenhouse ſhrub of the more delicate kind; and is propagated, but not very readily, by cuttings.

In the ſtructure of the flowers this ſpecies agrees exactly with the common Polygala Heiſteria, which Linnæus originally made a diſtinct genus from Polygala; but afterwards united them. In keeping them diſtinct we think he did right; but wrong in uniting them. Our readers will have an opportunity of judging for themſelves in our next number, in which will be figured a true Polygala, and another of the Heisteria family; with proper diſſections of each.

Heisteria was named by Linnæus in honour of the celebrated German ſurgeon Heiſter.

Polygala stipulacea

PLATE CCCLXIV.

IRIS PAVONIA.

The Peacock-Iris.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita: laciniis alternis reflexis. Stigmata petaliformia.	COROLLA 6-parted: with the alternate ſegments reflexed. The ſtigmas petal-ſhaped.

SPECIFIC CHARACTER, &c.

Iris. Imberbis, folio lineari glabro, ſcapo ſub-unifloro.	Iris. Beardleſs, with a linear ſmooth leaf, and a uſually one-flowered ſtem.

IRIS *Pavonia* Willd. Sp. Pl. I. 238.

Jacq. Coll. Sup. p. 8, *Deſcriptione optimâ.*

REFERENCE TO THE PLATE.

1. The outer Sheath of the Flower.
2. The inner one.
3 The Seed-bud, Chives and Pointal as they ſtand in the Flower.
4. The Chives ſpread open.
5. The Pointal.

THIS ſplendid but fugitive plant, is ſtrikingly emblematic of the ſhort duration of ſuperior beauty: its flower is but the tranſient object of a day; and its whole life in Europe ſeldom exceeds a ſingle year!

The Peacock-Iris, notwithſtanding its attractions, is but imperfectly underſtood by the Botaniſts and Horticulturiſts of this country; for while the latter have been unſucceſsful in cultivating it: ſome of the former have privately conſidered it as a new Genus: ſome have referred it to Iris, Morea, or Ferraria; others with more propriety to De la Roche's Genus Vieuſſeuxia; and the uſually accurate Curtis miſtook and figured the widely-different Iris tricuſpis for it.

The Engliſh Gardens have ſeveral times poſſeſſed this charming ſpecies, but we are afraid it is at preſent entirely loſt to them. Our figure therefore, taken from the Hibbertian collection ſome time ſince, cannot fail to be highly acceptable to all lovers of plants.

In root Iris Pavonia reſembles other Cape Irides; but the varying luſtres of its brilliant flowers are ſeldom equalled; and not much excelled by any plant we ever ſaw. It is a native of the Cape, flowers early in Spring; and muſt be treated like the other bulbous ſpecies from that country.

Iris pavonia

PLATE CCCLXV.

SCILLA SIBERICA.

Siberian Squill.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, decidua. Filamenta filiformia.	COROLLA 6-petaled, expanding, deciduous. Filaments thread-ſhaped.

SPECIFIC CHARACTER, &c.

Scilla, tetraphylla, ſcapis plurimis ſemiteretibus, ſtriatis, bifloris, poſt floreſcentiam decumbentibus.	Scilla, four-leaved, with many ſemicylindrical, ſcored, two-flowered ſtalks, which after flowering are decumbent.

DESCRIPTIO. *Radix* bulboſus, magnus pro ratione magnitudinis plantæ. *Folia* in bulbis ſenectis, ſæpius 4, latiuſcula, aliquo ſtriatula, parum recurvata, apice obcuneata et ſubinvoluta. *Scapi* 3-5: 1-2, vel rariſſime 3-flori, inæquales, ſemicylindrici, valde ſtriati, lucidi, vix palmares, ſuperne atro-cæruleſcentes. *Pedunculi* alterni, remoti, difformes, 1-6 lineares, baſi bibracteati, erecti, apice nutantes, vel cernui, uniflori, atro-cæruleſcentes. *Bracteæ* difformes, parvulæ, inferne purpuraſcentes, ſuperne albæ et membranaceæ. *Corolla* hexapetala, nutans, vel cernua, campanulata. *Petala* ſublanceolata, obtuſa, concavo-incurva, lætiſſime cærulea; intus pallidiora, baſi albicantia, coſtâ utrinque ſaturatiore. *Filamenta* 6, filiformia, compreſſa, alba, ſuperne profunde cærulea, petalis duplo breviora. *Antheræ* majuſculæ æruginoſa. *Germen* pallidum, ſubrotundum, 6-ſulcatum, ſulcis alternis profundioribus. *Stylus* antheris ſuperans, decumbens, baſi albus, ſuperne azureus. *Stigma* obſoletiſſimum.

REFERENCE TO THE PLATE.

1. The Flower ſpread open, with one Chive magnified.
2. The Pointal and Seed-bud, the Summit magnified.

THIS nondeſcript and beautiful ſpecies of the genus Scilla, is allied to Scilla præcox of Willdenow; but appears to differ in too many particulars, to admit of their being united. It is a native of Siberia, increaſes ſlowly by the root, but ſometimes ripens ſeeds in this country. It commences flowering in the beginning of February, before the common Scilla bifolia; but continues in beauty long after that plant is paſt; and although perfectly hardy, its flowers are liable to be injured by ſtrong froſts, unleſs occaſionally protected.

It thrives well in a light ſoil, and warm ſituation; but, like all dwarf plants, appears to moſt advantage in a pot: and indeed, ſucceeds beſt with the treatment uſually given to alpine plants.

lla siberica

PLATE CCCLXVI.

GERANIUM BARBATUM. *Var. Undulatum.*

Bearded-leaved Geranium. *Var. Waved-petalled.*

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, pentacoccus.

ONE POINTAL. Five ſummits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER, &c.

Geranium. Foliis pinnatis, inciſuris pinnarum ariſtatis barbatiſque, petalis omnibus flavicantibus, rubro-notatis undulatiſque.

Geranium. With winged leaves, the ſegments ariſtated and bearded, all the petals yellowiſh, marked with red, and undulated.

DESCRIPTIO. Pinnæ foliorum inæqualiter inciſæ, inciſſuris acuminatis, barbatisque. *Scapus* ramoſus. *Flores* umbellati. *Petala* omnia linearia, obtuſa, elongata, recurvata, valde undulata, flavicantia, baſi fere ad medium lætiſſime rubra. Stamina fertilia quinque.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal.
3. The ſame magnified.
4. The Pointal magnified.

THIS plant was ſent from the Cape to the collection of George Hibbert, Eſq. at Clapham, where our drawing was taken in September; it is no more than a variety, although a very beautiful one, of the Geranium barbatum of this work, of which one variety has already been figured on plate 323. It is a green-houſe plant, and requires the ſame treatment as the other tuberous rooted ſpecies.

anium barbatum Var. undulatum

PLATE CCCLXVII.

ANAGALLIS GRANDIFLORA.

Great-flowered Pimpernel.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CAPSULA 1-locularis, circumscissa. *Corolla* rotata. *Stamina* hirsuta. *Stigma* capitatum.	CAPSULE one-celled, cut round. *Corolla* wheel-shaped. *Chives* hairy. *Summit* headed.

SPECIFIC CHARACTER, &c.

ANAGALLIS, foliis ternatis cordato-ovatis acuminatis.	ANAGALLIS, with leaves in threes heart-egg-shaped acuminated.

DESCRIPTIO. *Radix* annua. *Rami* elongati, effusi, procumbentes, angulati, superne simplices. *Folia* ternatim verticillata, remota, elliptica, acuminata, amplexicaulia, utrinque 3—5-lineata. *Pedunculi* ternatim verticillati, axillares, filiformes, primo patuli, demum sæpe recurvi, foliis duplo longiores. *Calyx* 4-rarius 5-phyllus, foliolis lanceolatis, acuminatis, carinatis, marginibus membranaceis. *Corolla* 5-rarius 4-petala, petalis basi confluentibus, patulis, orbiculatis, coccineis, basi intus nigris. *Filamenta* 5 hirsuta, atro-purpurascentia, petalis multo breviora. *Germen* pallidum. *Stylus* pergracilis purpureus antheras luteas superans. *Stigma* simplex, capitulatum, viride.

REFERENCE TO THE PLATE.

1. A peduncle and calyx.
2. The corolla spread open.
3. The seed-bud and pointal, and summit magnified.

THIS new and elegant species of Anagallis, the largest and most showy of that genus hitherto discovered, was introduced into England, we believe, in the last year; but by whom, or from what country, we have not yet satisfactorily ascertained. It is reported to be of African origin, and to have come to England from the Paris garden. Our figure was made from a plant trained up near three feet high, in Lady De Clifford's collection at Paddington, where it is treated as a green-house plant. We have not yet seen it produce good seeds, although apparently an annual plant; but it is easily increased by cuttings in the usual way. In every thing except size, and in having more entire petals, it very much resembles Anagallis arvensis; a plant truly remarkable for being the only one indigenous to Britain (the Poppies excepted) with scarlet flowers.

Anagallis grandiflora

PLATE CCCLXVIII.

MELANTHIUM MASSONIÆFOLIUM.

Massonia-leaved Melanthium.

CLASS VI. ORDER I.

HEXANDRIA TRIGYNIA. Six Chives. Three Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 0. *Corolla* infera, 6-petala, petalis staminiferis.	No CALYX. *Corolla* beneath, 6-petalled, with the petals staminiferous.

SPECIFIC CHARACTER, &c.

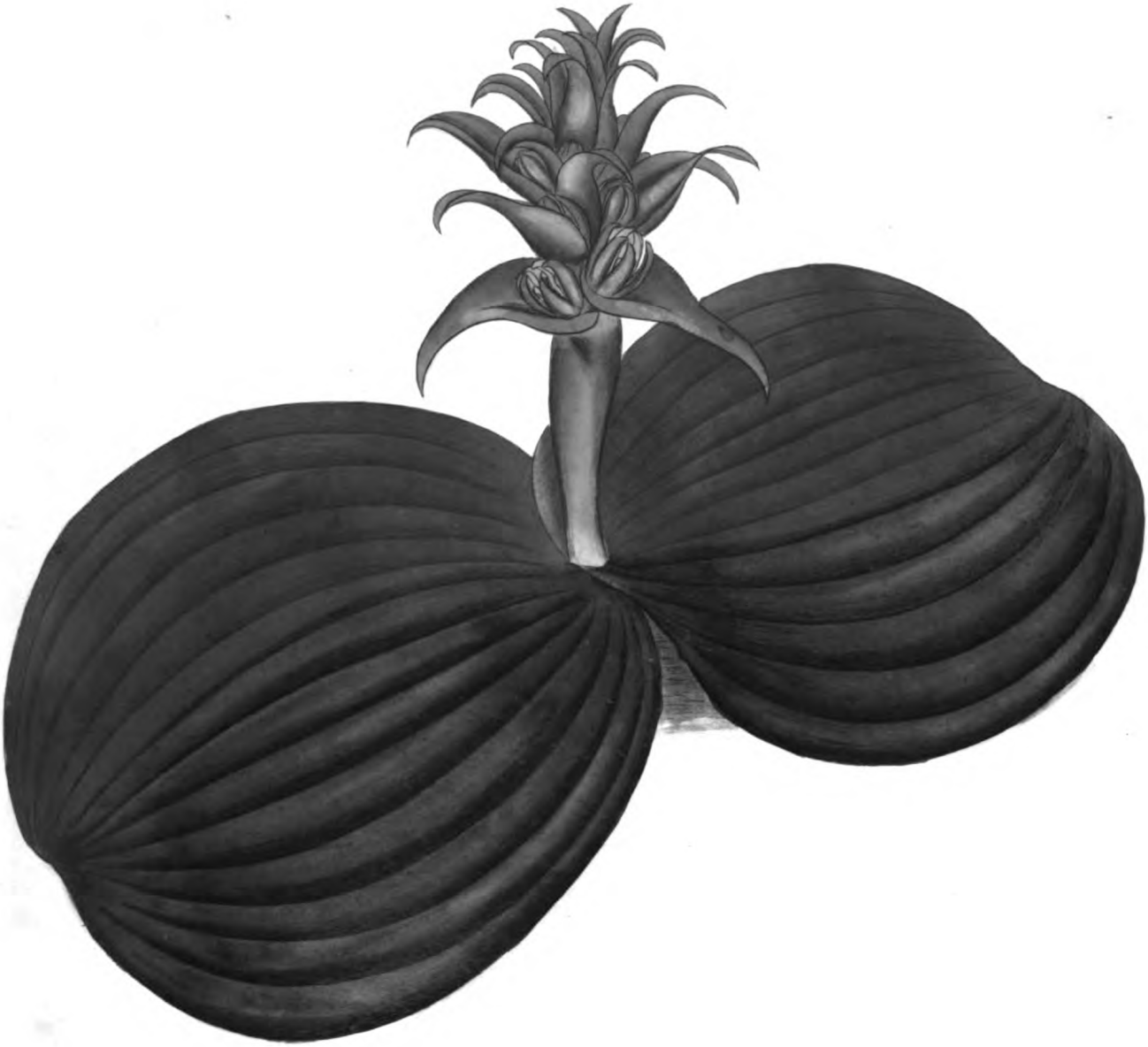
MELANTHIUM, foliis subrotundis prostratis sulcato-striatis, floribus spicatis.	MELANTHIUM, with roundish prostrate sulcato-striated leaves, and spiked flowers.

DESCRIPTIO. *Folia* duo humi appressa, subrotunda, viridia, acumine obsoleto recurvato, striisque sulcatis parallelis circiter 12; subtus glabra pallidiora. *Flores* in spica perbracteata ut in Eucomide. *Scapus* clavatus teres. *Bracteæ* ovato-acuminatæ, magnæ; superiores paulo minores. *Flores* sessiles, bracteis multoties breviores, virides. *Corolla* hexapetaloidea, vix aperta, petalis sublanceolatis, obtusis, erectis, apicem versus incurvis. *Filamenta* brevissima, compressa, collo corollæ imposita, basi confluentia. *Antheræ* erectæ obsoletæ. *Germen* alato-triangulare, desinens in stylos 3 obsoletissimos, subulatos, et fere adnatos.

REFERENCE TO THE PLATE.

1. A floral leaf.
2. The corolla cut open.
3. A back view of the same.
4. The seed-bud and obsolete styles.

THIS singular plant appears to us to be a new, but somewhat anomalous species of the Genus Melanthium; which, as it at present stands, unquestionably contains several Genera. It is a native of the Cape, and a Green-house plant; and prior to flowering possesses altogether the appearance of a Massonia, and thrives very well with the treatment of one. Our drawing of it was taken from fine plants in the Hibbertian collection in the month of March.



Melanthium massoniæfolium

PLATE CCCLXIX.

EUCOMIS PURPUREOCAULIS.

Purple-stalked Eucomis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA infera, 6-partita, persistens. Filamenta nectario adnata.	COROLLA beneath, 6-parted, persistent. Chives conjoined to the base of the corolla, forming a nectary.

SPECIFIC CHARACTER.

EUCOMIS, scapo clavato, foliis multifariis expansis orbiculato-spatulatis.	EUCOMIS, with a clavated scape, leaves pointing many ways expanded orbicular-spatula-shaped.

DESCRIPTIO. *Radix* ut in affinibus. *Folia* 5—7, multifaria, expansa, demum prostrata, orbiculato-spatulata, vel subinde multo angustiora, viridia, obsolete sulcato-lineata et lucida, marginibus minute cartilagineis, glabriusculis; subtus pallidiora, lucidiora, magisque sulcata. *Scapus* claviformis, perbrevis, crassus, atro-purpureus; intra flores valde contractus, viridis, purpureoque punctatus. *Flores* spicati, conferti, sessiles, sæpe adscendentes, unibracteati. *Bracteæ* imæ obcuneatæ, subrecurvæ, submembranaceæ, et sæpe purpurascentes; sensim minores; summæ longiores, lineari-lanceolatæ, purpureo-marginatæ, steriles; in coronam foliolorum perelegantem supra flores collectæ. *Corolla* hexapetaloidea, petalis subæqualibus, lineari-oblongis, vix attenuatis, viridibus. *Filamenta* 6, basi petalorum valde connata, subulata, compressa; superne incurvata. *Antheræ* flavescentes; post florescentiam fuscæ, pendulæ, ad apices petalorum vix attingentes. *Germen* sulcato-triangulare. *Stylus* flexuoso-adscendens, teres, vix subulatus, filamentis multo brevior. *Stigma* nullum sive inconspicuum.

REFERENCE TO THE PLATE.

1. One of the lower floral leaves.
2. The corolla cut open.
3. The seed-bud and pointal.

WE find no account of this fine plant in any publication we have consulted: it is closely allied to Eucomis regia, but differs sufficiently from that species in the shape of its leaves, and the smoothness of their margins. It is a green-house plant, and was lately introduced from the Cape by G. Hibbert, Esq. from a plant in whose collection our drawing was taken in the month of March.

Eucomis purpurocaulis.

PLATE CCCLXX.

POLYGALA TERETIFOLIA.

Cylindric-leaved Milkwort.

CLASS XVII. ORDER III.

DIADELPHIA OCTANDRIA. Two Brotherhoods. Eight Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-phyllus; foliolis duobus alæformibus, coloratis. Legumen obcordatum, biloculare.	CUP 5-leaved; with two of the leaves like wings, coloured. Pod inverse heart-shaped, two-celled.

SPECIFIC CHARACTER.

POLYGALA, floribus cristatis, racemis terminalibus paucifloris, alis calycinis ovatis acutiusculis multinerviis, caule fruticoso, foliis lineari-subulatis. *Willd. Sp. Pl.* 882.	POLYGALA, with cristated flowers, racemes terminal few-flowered, calyx-wings ovate acutish many-nerved, shrubby stem, and linear-awl-shaped leaves.

DESCRIPTIO. Ramuli filiformes, patuli, canescentes. *Folia* sparsa, sæpe conferta, recurva, et falcata, linearia, obtusa, marginibus revolutis, ut in Erica; supra canescentia: subtus cana. *Racemi* 2—5-flori. *Pedunculi* pubescentes.

REFERENCE TO THE PLATE.

1. A leaf.
2. The under surface of the same magnified.
3. The exterior part of the cup.
4. One of the wing-like leaves of the cup, outside.
5. The same inside.
6. The chives, keel and banner spread open.
7. The keel and its crest detached.
8. The same magnified.
9. The chives and banner.
10. The same magnified.
11. The seed-bud and pointal.
12. The same magnified.

OUR plate represents the true species of Polygala, which we promised in our account of P. stipulacea. It is a green-house shrub, and rather delicate; yet may, with care, be propagated by cuttings; but is at present very scarce in this country. Its native country is the Cape. Our drawing was taken from a plant in the Clapham collection in the summer of 1803.

olygala teretifolia.

PLATE CCCLXXI.

POLYGALA ALOPECUROIDES.

Fox-tail Milkwort.

CLASS XVII. ORDER III.

DIADELPHIA OCTANDRIA. Two Brotherhoods. Eight Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-phyllus, foliolis duobus alæformibus, coloratis. Legumen obcordatum, biloculare.	CUP 5-leaved, with two of the leaves like wings, coloured. Pod inverse heart-shaped, two-celled.

SPECIFIC CHARACTER, &c.

POLYGALA, floribus imberbibus, pedunculis solitariis axillaribus, foliis fasciculatis ovatis mucronatis margine ciliatis. *Willd. Sp. Pl.* 890.	POLYGALA, with flowers beardless, peduncles solitary axillary, leaves fascicled egg-shaped mucronated and ciliated on the margin.
P. floribus imberbibus lateralibus, foliis fasciculatis lanceolatis mucronatis villosis. *Thunb. Prod.* 121.	P. with flowers beardless lateral, leaves fasciculated lance-shaped mucronated and villose.

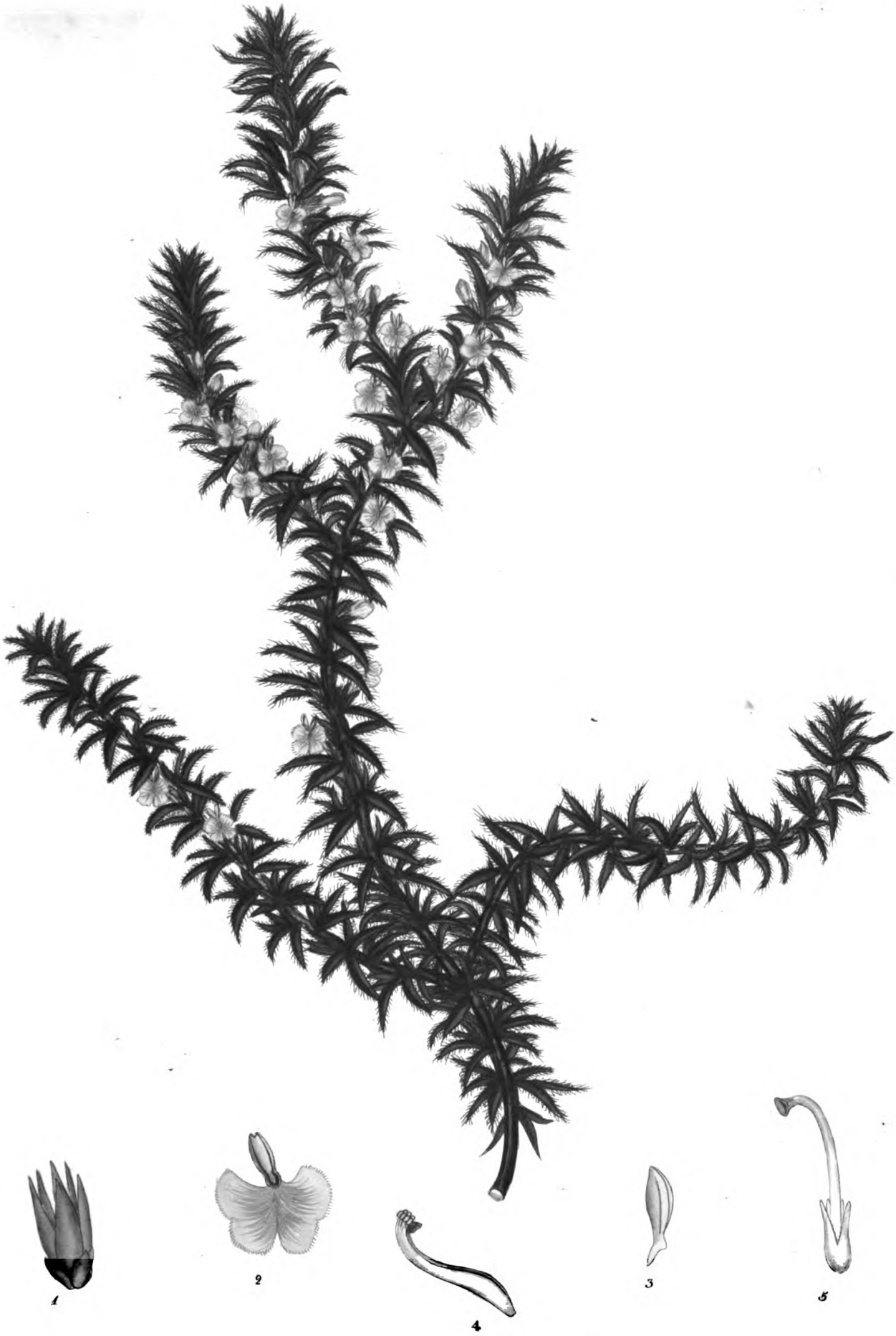
DESCRIPTIO. *Suffrutex* elegans, ramulis hirtis. *Folia* valde conferta, fasciculata, pone medium recurva, 5—6 in singulo fasciculo, infimo majore, latiore, stipuliforme; omnia lineari-lanceolata, mucronata, hirta, ad margines valde ciliata. *Flores* axillares, sessiles, solitarii, minuti, purpurascentes, serrulati.

REFERENCE TO THE PLATE.

1. The empalement magnified.
2. The keel magnified.
3. One of the wings magnified.
4. The chives and pointal magnified.
5. The pointal detached and magnified.

THIS is the Polygala of the Heisteria family, which we last month engaged to lay before our readers. They will now have an opportunity, from our copious dissections of the flowers, of judging of the great and numerous generical differences which exist between a genuine Polygala and the discarded genus Heisteria. All the Heisteriæ we have yet had an opportunity of examining are heptandrous; all the true Polygalæ octandrous: but these are the least of their distinctions.

The Fox-tail Milkwort is a very elegant shrub of the green-house kind, and is often in flower. It was recently raised from Cape seeds in the Clapham collection, and is at present, we believe, in no other: thrives well in a mixture of bog earth and loam, and is capable of propagation by cuttings.



Polygala alopecuroides

PLATE CCCLXXII.

MIMOSA PURPUREA.

Soldier Bush Mimosa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various Dispositions. Upon one Plant.

ESSENTIAL GENERIC CHARACTER.

HERMAPH. Calyx 5-dentatus. Cor. 5-fida. Stam. 5 seu plura. Pist. 1. Legumen.	HERMAPH. Cup 5-toothed. Blos. 5-cleft. Chives 5 or more. Pointal one. A Pod.
Mascul. Calyx 5-dentatus. Cor. 5-fida. Stam. 5—10, plura.	Male. Cup 5-toothed. Blos. 5-cleft. Chives, 5, 10, or more.

SPECIFIC CHARACTER, &c.

MIMOSA, inermis, foliis conjugatis pinnatis, foliolis intimis minoribus. *Linn. Sp. Pl. ed.* 3. *p.* 1500.	MIMOSA, unarmed, with leaves conjugate pinnate, and the inner leaflets smaller.
M. foliis tergeminis. *Plum. Ic. t.* 10. *f.* 2.	M. with leaves three times twinned.

REFERENCE TO THE PLATE.

1. A single flower.
2. The cup.
3. The blossom.
4. The seed-bud and pointal.

THE Mimosa purpurea is a native of the West Indies, and is there known by the expressive appellation of Soldier Bush; from the plants being sometimes almost covered with their bright red-purple flowers, in which state it is said they are visible, and even cognizable, on the sides of hills, at the distance of a mile.

The Soldier Bush in this country must be treated as a tender hot-house shrub, and kept constantly in the tan-bed, planted in rich earth. It is a plant of handsome growth and foliage; but its charming flowers are so very rare, that we do not recollect seeing any of them except those which are here represented, from a plant which flowered in March last, in the collection of Mrs. Wright at Bayswater. It is propagated by cuttings in the usual way.

imosa purpurea

Published for the Proprietor Mr. by Mr. Ambrose Kriegmeier

PLATE CCCLXXIII.

PÆONIA SUFFRUTICOSA.

Shrubby Pæony.

CLASS XIII. ORDER V.

POLYANDRIA PENTAGYNIA. Many Chives. Five Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-phyllus. Petala 5. Styli 0. Capsulæ polyspermæ.	CUP 5-leaved. Petals 5. Pointal none. Capsules many-seeded.

SPECIFIC CHARACTER, &c.

PÆONIA, foliolis subtus glaucis et villosis, capsulis sericeis, caule suffruticoso.	PÆONY, with leaflets glaucous and villose beneath, capsules silky, and shrubby stem.

PÆONIA officinalis. *Thunb. Fl. Jap.* 230.—*Loureir. Fl. Cochin.* 1. 343.

DESCRIPTIO. Suffrutex 3-pedalis et ultra, ramosus. *Rami* erectiusculi, cortice subfusco; ramulis erectis lævibus, apicem versus viridibus, pauloque pubescentibus. *Folia* alterna, bipinnata, pedalia et ultra, horizontalia; superiora adscendentia; petiolis amplexicaulibus, canaliculatis, villis perpaucis sæpe instructis, canaliculâ petiolorum semper lætissime roseâ: pinnæ 2—4, petiolatæ; pinnulæ sæpe 3, sessiles, infimæ oppositæ, tertia terminalis; omnes basi oblique cuneatæ, superne irregulariter inciso-dentatæ; supra virides, venosæ, nudæ, subtus glaucæ, nervosæ, villosæ. *Flores* speciosissimi ut in affinibus, sed in nostris exemplaribus pleni, rosei. *Capsulæ* sericeo-pubescentes.

THE Pæonia suffruticosa is perhaps the most showy and desirable species, in this short but magnificent genus of plants. To the striking peculiarity of a shrubby stem, it unites the advantages of superior size; a profusion of very large flowers; and a facility of culture which ensures an annual succession of them: no wonder, therefore, that it is assiduously sought after by all who admire the beauties of Flora.

The shrubby Pæony was introduced into Britain in the year 1794, from China; where, as well as in Japan, many varieties of it are said to be common in almost every garden. We conceive it to be extremely distinct as a species, from the P. officinalis of all authors except Thunberg and Loureiro: yet Professor Willdenow has not enumerated it in his edition of Species Plantarum. Although introduced so long since, it is still rare; and must be treated as a very hardy green-house plant: indeed it succeeds best when planted in the earth and protected by a glass case; is propagated by slipping the roots, and by cuttings. All the plants hitherto received from China have double flowers; and among them there are two varieties; the rosy one here figured, from the Clapham collection; and another with purplish petals, the bases of which are of a still deeper colour. Flowers in April, making a very fine appearance; but is nearly scentless.

Paeonia suffruticosa

PLATE CCCLXXIV.

XERANTHEMUM PROLIFERUM.

Proliferous Eternal Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum, aut nudum. Pappus setaceus. Calyx imbricatus, radiatus; radio colorato.	RECEPTACLE chaffy, or naked. Feather bristly. Empalement tiled, rayed; the ray coloured.

SPECIFIC CHARACTER, &c.

XERANTHEMUM, caule fruticoso prolifero, floribus sessilibus, foliis granulato-subrotundis imbricatis obsoletis.	XERANTHEMUM, with a shrubby proliferous stem, sessile flowers, leaves grain-shaped roundish tiled and obsolete.

XERANTHEMUM proliferum. *Mant. Pl.* 467.—*Gmel. Syst. Nat.* 2. 1218.

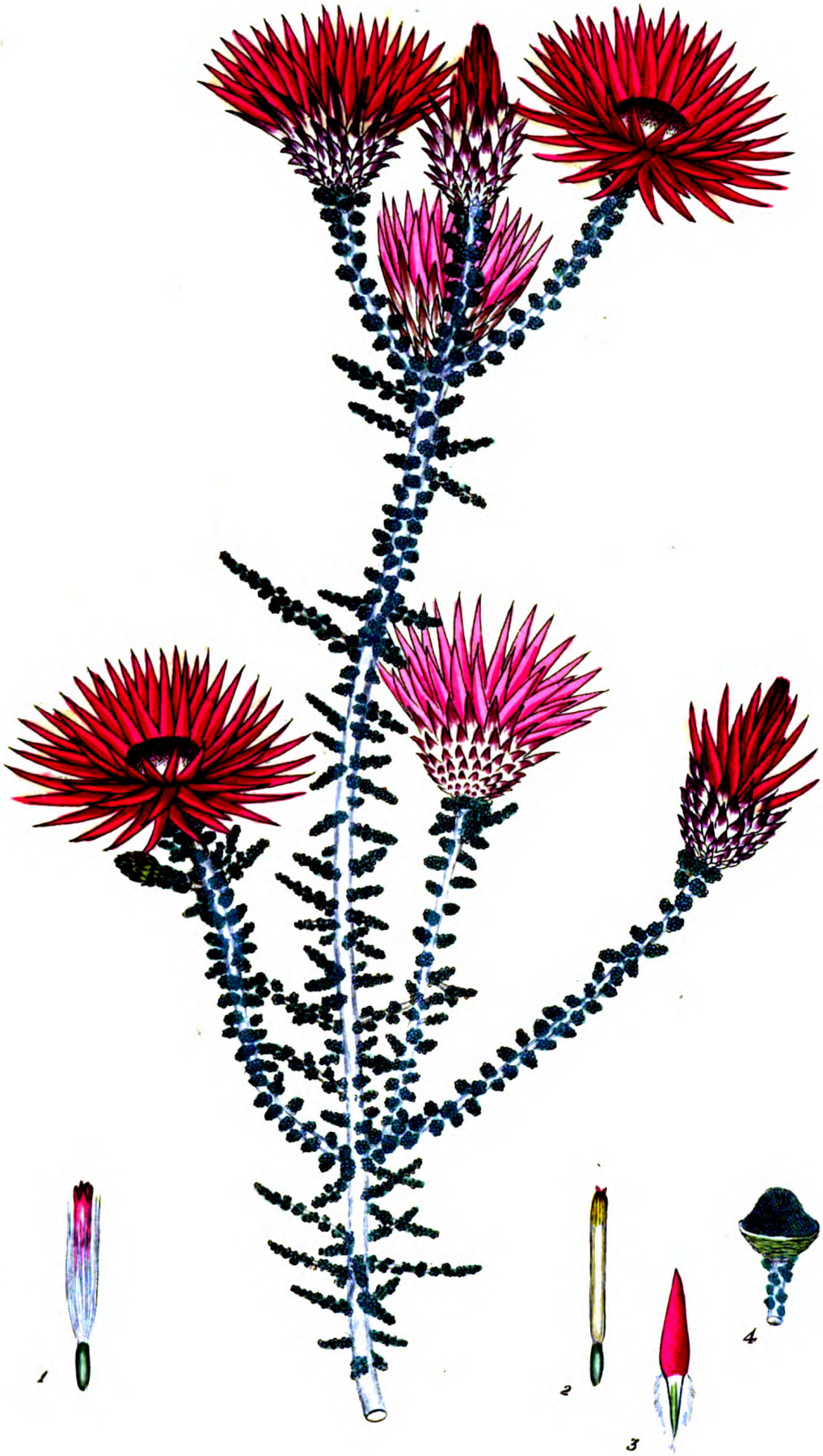
DESCRIPTIO. Frutex erectus, proliferus, tripedalis et ultra. *Rami* teretes, lanâ densâ, niveâ undique vestiti; et ramulis numerosissimis, incipientibus, brevissimis, sæpe quasi reflexo-imbricatis, instructi. *Flores* solitarii magni, squamis calycinis lanceolatis, lætissime et profundissime rubicundis, basin versus valde lanatis, superioribus sensim majoribus.

REFERENCE TO THE PLATE.

1. An hermaphrodite floret magnified.
2. The chives, pointal and seed-bud magnified.
3. One of the scales of the empalement.
4. The receptacle.

FEW genera of plants attract attention so universally and deservedly, as those of the genus Xeranthemum. All the species it contains are at once the favourites of the Botanist, the Gardener, and the Florist. The former, with pleasing satisfaction, contemplates their polished beauties still undiminished in his herbarium; while the latter find them (if sufficiently guarded from humidity) of easy management and ready growth. They bloom annually, and their durable and highly finished empalements are gathered and used in decorating many a mantle-piece; long, very long after they have ceased to live: whence the name of Eternal Flower. Many species of Gnaphalium possess a similar durability; and we have seen dried bouquets of both united, which were extremely beautiful.

The proliferous Eternal Flower is shrubby, commences flowering in May, lasts a long time in bloom, and in point of singularity and showiness yields to few of its congeners. It is a Cape plant: succeeds with the treatment of several species figured before by us; and is propagated by cuttings: was introduced some years since. Our figure was made from the Clapham collection.



anthemum proliferum

PLATE CCCLXXV.

XERANTHEMUM BRACTEATUM.

Waved-leaved Eternal Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum, aut nudum. Pappus setaceus. Calyx imbricatus, radiatus; radio colorato.	RECEPTACLE chaffy, or naked. Feather bristly. Empalement tiled, rayed; the ray coloured.

SPECIFIC CHARACTER, &c.

XERANTHEMUM, foliis alternis amplexicaulibus longo-lanceolatis undulatis, caulibusque erectis pubescentibus; receptaculis nudis, radice annua.	XERANTHEMUM, with alternate stem-clasping long-spear-shaped waved pubescent leaves, pubescent erect stems, naked receptacles, and annual root.

XERANTHEMUM bracteatum. *Vent. Jard. de la Malmaison, tab.* 2.

REFERENCE TO THE PLATE.

1. A hermaphrodite floret magnified.
2. The chives, pointal and seed-bud magnified.
3. The pointal and seed-bud of a female floret magnified.
4. The receptacle.

XERANTHEMUM bracteatum has the appearance of proving as hardy an annual as a China Aster or French Marygold; and if so, will prove a considerable acquisition to our open borders; as it ripens its seeds well, and they vegetate readily.

In being annual, it recedes in its nature from all the species of the genus we are acquainted with, except X. annuum of Linnæus; which, however, we think, with Jussieu, of a perfectly distinct genus; on account of its squamous receptacle; and its variety (inapertum) a distinct species: the structure of the receptacle in the extensive class Syngenesia being of great consequence in the formation and distribution of genera.

The seedlings of the waved-leaved Eternal Flower are best raised early, like China Asters, on a gentle hot-bed, and, when large enough, should be transplanted out in showery weather, where they are intended to remain: they will become erect and bushy, attain the height of three feet or upwards, and produce their polished, golden-coloured flowers in autumn, in profusion. Possessing no recent specimens in bloom, we have omited a technical description. Our drawing was made last summer, from fine living plants at Mr. Colvill's, Nurseryman, in the King's Road; who raised it in the year 1799 from Port Jackson seeds sent him by Colonel Paterson.

anthemum bracteatum.

PLATE CCCLXXVI.

NEOTTIA MINOR.

The Lesser Neottia.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

SPATHÆ vagæ, Spadix simplex. Corolla petala 5 æqualia erecta. Nectarium monophyllum indivisum acuminatum.

SHEATHS scattered. Fruit-stalk simple. Corolla 5 petals of equal length erect. Nectary one-leafed undivided sharp-pointed.

SPECIFIC CHARACTER, &c.

NEOTTIA, foliis ellipticis acuminatis quintuplinerviis.

NEOTTIA, with elliptic sharp-pointed leaves, with five nerves meeting above the base.

NEOTTIA minor, foliis planis, spathis virescentibus. *Jac. Ic.* 3. 16. *t.* 601.—SATYRIUM elatum. *Gmel. Syst. Nat.* 2. 56.—SERAPIAS Neottia. *Gmel. Syst. Nat.* 2. 59. *monente Dryandro, in Linn. Tr.* 2. 215.

DESCRIPTIO. *Folia* elliptica, acuminata, quintuplinervia, nervo medio subtus cæteris multo majore, viridia, infra pallidiora. *Caulis* tereti-compressus, pubescens 1—3-pedalis, foliis alternis spathaceis, remotis, instructus. *Flores* siccos exceptos non possideo. H.

REFERENCE TO THE PLATE.

1. A blossom, seed-bud and sheath.
2. The same magnified without the sheath, the cover of the tips elevated.
3. A flower without the honey-cup.
4. The chives and pointal as they appear detached.
5. The pointal magnified.

WHAT the Neottia minor wants in splendour and beauty, is counterbalanced by the interesting structure of its flowers; which however is not peculiar to it; but frequent in the fine order to which it belongs: the Orchideæ.

Until Jacquin established it as a distinct genus, it was considered as a species of, and retained a place in the genus Serapias, as well as the more showy N. speciosa of our third plate.

The Lesser Neottia is a native of the West Indies; is a very tender hot-house plant, but grows freely in rich earth; either in or out of the tan-bed; rises to the height of about three feet, and flowers in the month of March: is propagated by parting its roots; and although at present rare, was introduced to us before N. speciosa, in the year 1790, by Mr. John Fairbairn, gardener to the Worshipful Company of Apothecaries at Chelsea. Our drawing was taken at Lady De Clifford's collection at Paddington.

Néottia minor

PLATE CCCLXXVII.

ALLIUM CHAMÆ-MOLY.

The Dwarf Moly.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, patens. Spatha multiflora. Umbella congesta. Capsula supera.

COROLLA 6-parted, expanding. Sheath many-flowered. Umbel crowded. Capsule above.

SPECIFIC CHARACTER, &c.

ALLIUM, scapo nudo subnullo, capsulis cernuis, foliis planis ciliatis.

ALLIUM, with a naked very short stalk, drooping capsules, and flat ciliated leaves.

ALLIUM Chamæ-Moly. *Willd. Sp. Pl.* 2. 83.—*Cavan. Ic.* 3. *p.* 4. *t.* 207. *f.* 1.?

DESCRIPTIO. *Radix* bulbus parvulus. *Folia* circiter 4, cruciatim disticha, expansa, linearia, subulata, basin versus parum canaliculata, et subcarinata; hirta, præcipue ad margines, unde ciliata. *Flores* umbellati subsessiles. *Scapus* brevissimus, reconditus, nudus. *Spatha* monophylla 3—8-flora, membranacea, 3-cuspidata. *Pedunculi* perbreves, teretes, superne incrassati, post florescentiam cernui. *Petala* 6, lanceolato-linearia, obtusa, alba, costâ utrinque virescente. *Filamenta* 6, tenuissima, alba, petalis duplo breviora. *Antheræ* luteæ. *Germen* superum, turbinatum, 6-sulcatum superne umbilicatum. *Stylus* albus longitudine filamentorum, sed robustior, apice furcatus. *Stigmata* fere nulla.

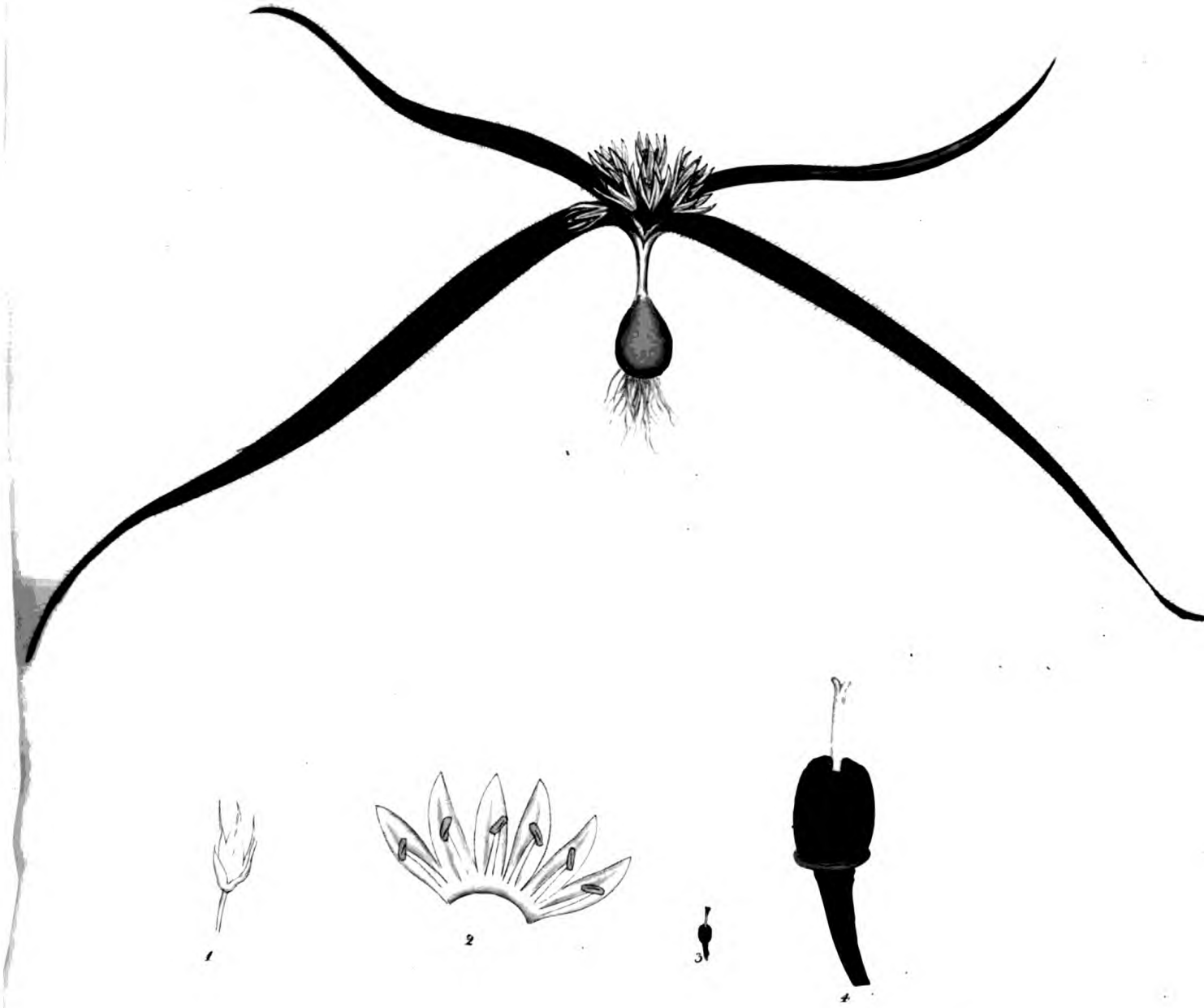
REFERENCE TO THE PLATE.

1. The sheath.
2. A flower spread open, magnified.
3. The seed-bud and pointal.
4. The same magnified.

ALTHOUGH now an old inhabitant of the British gardens, Allium Chamæ-Moly has ever been considered as a rare and interesting one; and is at present extremely scarce. It has several times been entirely lost to us, and again introduced from the south of Europe; where it occurs spontaneously.

In the Hortus Kewensis of Mr. Aiton, it is marked as a hardy species: perhaps inadvertently: because we never knew it survive a single winter in the open ground near London: notwithstanding our having repeatedly tried it, in situations by no means unfavourable: hence, possibly, its present rarity.

It is properly a hardy green-house plant: requires a light soil, and the treatment of an Ixia: increases both by offsets from the root, and by seeds: and flowers annually in the months of January and February. The leaves die down in April or May. In the structure of the flowers, but not the spathe, it agrees with Allium gracile of this work, which is not the gracile of the Hortus Kewensis. The genus Allium is an extensive one; but the present is the least species in it, and possesses the shortest stalk. Cavanilles describes and figures the style as subulate and entire; but in our plant that part is forked: and the spathe in his plant differs much from ours.



Allium chamæ-Moly.

PLATE CCCLXXVIII.

GERANIUM FISSIFOLIUM.

Cloven-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rostratus, pentacoccus.	ONE POINTAL. Five summits. Fruit furnished with long awns, five dry berries.

SPECIFIC CHARACTER, &c.

GERANIUM, radice tuberosa, pinnulis foliorum inæqualiter fissis, scapis radicalibus simplicibus numerosis.	GERANIUM, with a tuberous root, the little wings of the leaves unequally cloven, and flower-stalks radical simple and numerous.

REFERENCE TO THE PLATE.

1. The empalement.
2. The chives spread open.
3. The pointal and seed-bud.
4. The same magnified.

THIS charming species of the tuberous-rooted family of Geranium adds one more to the considerable number in that branch of the genus, which we have already had the satisfaction of laying before our subscribers: nor is it the last we hope to have it in our power to treat them with; for we still possess drawings of two or three more. As a species, it is extremely distinct; and as a beauty, rivalled by very few of its affinities we are acquainted with. It does not appear to have been noticed by any author within our knowledge; flowers at the same time as Geranium barbatum, requires the same treatment, and belongs to L'Heritier's genus Erodium.

Our drawing was taken from the Clapham collection some time since; but we cannot at present procure any specimen of it: which prevents us from describing it in a technical manner.

eranium fissifolium

PLATE CCCLXXIX.

RHODODENDRON PONTICUM, *var. deciduum.*

Deciduous Purple Rhododendron.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-partitus. Corolla rotato-infundibuliformis. Stamina declinata. Capsula 5-locularis.	**Empalement** of 5 divisions. Blossom wheel-funnel-shaped. Chives declined. Capsule 5-celled.

SPECIFIC CHARACTER, &c.

Rhododendron, foliis lanceolatis deciduis, laciniis corollæ valde undulatis.	**Rhododendron,** with lanced deciduous leaves, and segments of the corolla very much waved.

REFERENCE TO THE PLATE.

1. The empalement and peduncle.
2. The same, with the chives and pointal.
3. A chive detached, the tip magnified.
4. The seed-bud and pointal.

The figure which accompanies this description represents a beautiful plant, which is probably an hybrid one; generated between some Azalea and the pontic Rhododendron. It is reported to have been raised some time since in the Nursery at Mile-end, from seeds which were grown in this country. In appearance, and in the structure of the leaves, it resembles its supposed mother the Rhododendron ponticum; but in their deciduous nature, and in some parts of the inflorescence; and likewise in other particulars; it betrays a considerable similitude to the American Azaleæ.

The pontic Rhododendron is a very sportive species; varies much in the formation and colour of its corolla; and we cultivate a strong variety of it with the flowers of R. maximum. The present variety has not any of its undulated flowers spotted with yellow, no more than that which is figured by Pallas in Flora Rossica: yet the spotting of the three superior segments of the corolla is pretty constant in most of the varieties which we have examined; and is even present, although faintly, in R. maximum. Our figure was taken at Whitley and Brames's in the month of May.

hododendron ponticum Var. deciduum.

Pub. as the Act. Directs July 1.1806
by T.G. Hansard & S. Knight Bloomsbury

PLATE CCCLXXX.

ACHYRANTHES PORRIGENS.

Divaricating Achyranthes.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

FLORES incompleti, inferi. Calyx 5-phyllus. Corolla 0. Stigma 2-fidum. Semina solitaria.

FLOWERS incomplete, beneath. Empalement 5-leaved. Corolla none. Summit 2-cleft. Seeds solitary.

SPECIFIC CHARACTER, &c.

ACHYRANTHES, foliis oppositis, lanceolatis, spicis ovatis, acutis. *Jacq. Hort. Schœnb.* 3. 349. *t.* 350.

ACHYRANTHES, with leaves opposite, spear-shaped, and egg-shaped sharp-pointed spikes.

DESCRIPTIO. Suffrutex ramulis distantibus, filiformibus, canescentibus. *Folia* opposita, elliptico-ovata, breviter petiolata, obsolete venosa, supra pallide viridia lente pubescentia; subtus pallidiora magisque pubescentia. *Flores* dichotome-paniculati, divaricati, capitulis ovalibus, persistentibus, ante et post exsiccationem læte purpureis pulchellisque, ut in Gomphrenâ perenni.

REFERENCE TO THE PLATE.

1. A flower complete.
2. The empalement magnified.
3. The blossom magnified.
4. The same cut open.
5. The seed-bud and pointal.

ACHYRANTHES porrigens was introduced into this country from Paris, in the year 1802, by Mr. Woodford of Vauxhall; but its native country we have not ascertained. Our figure was taken from a fine plant in the collection of J. Vere, esq. at Kensington Gore; where it is considered and treated as a hot-house plant of the more hardy kind; and rises to the height of 2 or 3 feet. Thrives well in rich earth, and flowers freely in spring, making an elegant but not showy appearance. Its flowers resemble those of Gomphrena perennis, and like them preserve their colours after death, if gathered before they are fully blown; and are capable of becoming both a novel and a graceful addition to our dried bouquets. Is propagated by cuttings, and promises fair to ripen seeds: but is at present extremely rare.

hyranthes porrigens.

PLATE CCCLXXXI.

SARRACENIA FLAVA.

Yellow Side-saddle Flower.

CLASS XIII. ORDER I.

POLYANDRIA MONOGYNIA. Many Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CAPSULA 5-locularis. Stigma clypeatum. Calyx exterior 3-phyllus, superior 5-phyllus.	CAPSULE 5-celled. Stigma shield-shaped. Calyx outer 3-leaved, upper 5-leaved.

SPECIFIC CHARACTER, &c.

SARRACENIA, foliis erectis tubulatis, valva collo contracta, apice plana erecta.	SARRACENIA, with erect leaves, the valve contracted in the neck, with its point flat and erect.

SARRACENIA flava, *Walt. Fl. Carol.* 153.—*Aiton Hort. Kew.* 2. 225.—*Willd. Sp. Pl. tom.* 2. 1150.

REFERENCE TO THE PLATE.

1. A back view of the flower.
2. A flower deprived of its superior calyx leaves, showing the situation and structure of the stamina and style.

FEW of the productions of Flora exhibit such extraordinary appearances as those of the small but interesting genus Sarracenia: whether we contemplate their tubulose, water-holding, lidded leaves; or the strange conformation of their flowers; but more especially their enormous shield-shaped stigmata.

Walter enumerates four species of Sarracenia in his Flora Caroliniana, all perennial-rooted; and all at this time existing in the London gardens; but they are rare.

The Side-saddle Flowers are rather difficult of cultivation, and succeed best when treated as greenhouse bog plants; and when plentifully supplied with water. They are propagated by dividing their roots in spring. The specimen from which our figure was taken, was obligingly sent us by the honourable Mr. Irby of Farnham Royal, Bucks.

Sarracenia flava

PLATE CCCLXXXII.

LIPARIA VILLOSA.

Concave-leaved Liparia.

CLASS XVII. ORDER III.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYCIS lacinia infima elongata. Alæ inferius bilobæ.	THE lower segment of the empalement elongated. The wings two-lobed on the lower margin.

SPECIFIC CHARACTER, &c.

LIPARIA, floribus fasciculatis, foliis subrotundis concavis, extus tomentosis, intus villosis nudisque.	LIPARIA, with fasciculated flowers, leaves roundish concave, downy outwardly, and villose or naked within.

LIPARIA villosa *α. Willd. Sp. Pl.* 3. 1117. excluso synonymo Thunbergii; quod ad varietatem *β.* potius pertinet.

LIPARIA vestita, floribus capitatis, foliis ovatis concavis subtus lanatis. *Thunb. Prod.* 124. *et etiam Willd. Sp. Pl.* 3. 1115.

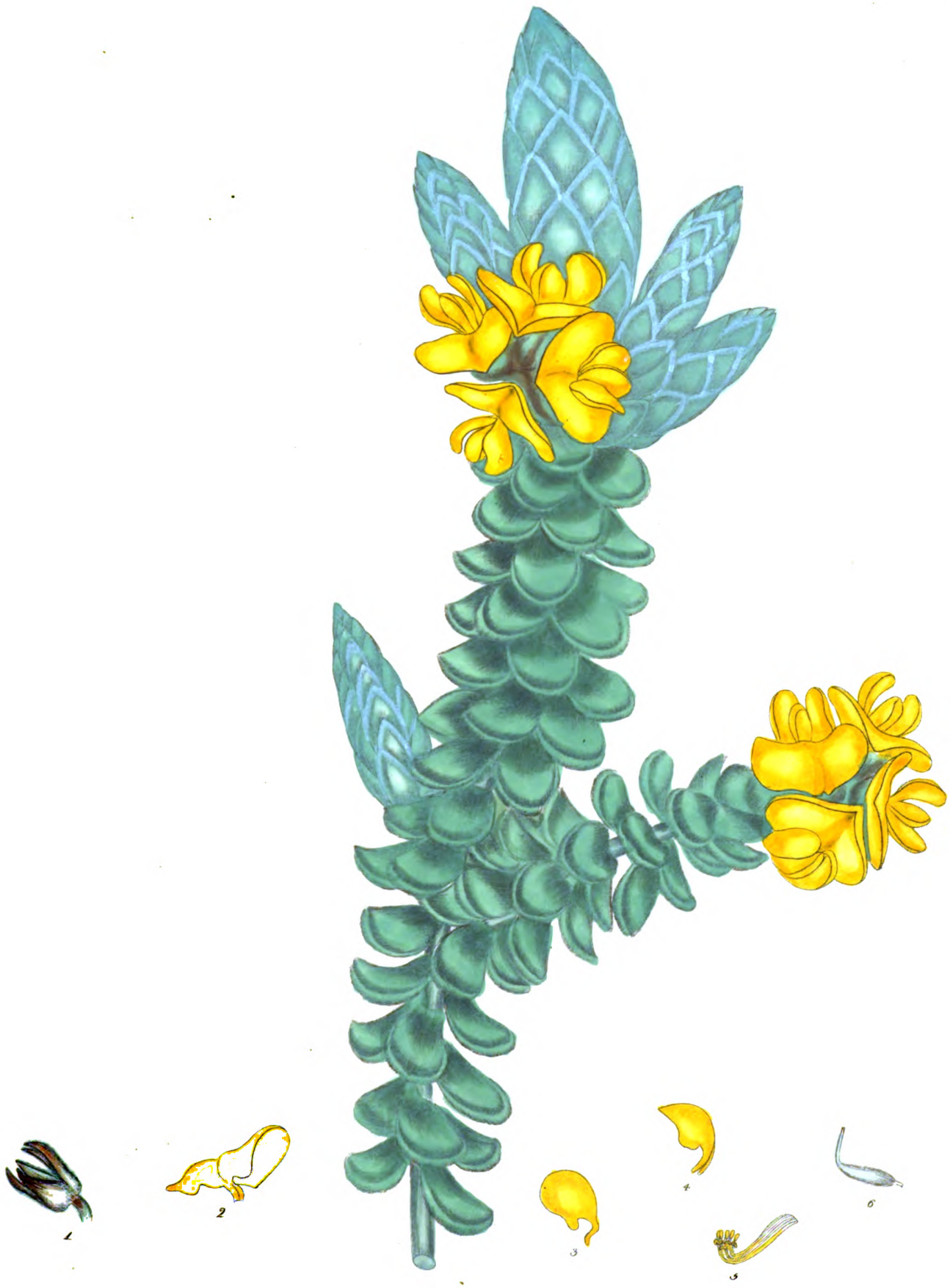
GENISTA africana tomentosa, folio cochleariformi, flore luteo. *Seba Thes.* 1. *p.* 38. *tab.* 24. *f.* 1.

REFERENCE TO THE PLATE.

1. The empalement.
2. The banner.
3. One of the wings.
4. The keel.
5. The chives and pointal.
6. The seed-bud.

THE Liparia villosa is a native of the Cape of Good Hope, and rises with a shrubby, but not much branched stem, to the height of two or three feet. The silvery wool which clothes the younger branches and leaves of the plant gives it a very handsome appearance; yet by age it sometimes acquires a somewhat rusty tint. The leaves are nearly round, and assume, particularly when dried, a deep concave form, and very much resemble in shape, small bivalve shells; a circumstance noticed long since by the great naturalist Seba, as will appear on consulting the synonyms above given. The variety *β.* of Willdenow has much narrower, and not concave leaves; and is a very distinct species.

The concave-leaved Liparia is propagated, but not readily, by cuttings; prefers the treatment of a green-house plant, a light, but good soil; and, like most woolly plants, is very liable to be destroyed by damps. Our figure was taken in May last at George Hibbert's, esq.



Liparia villosa

PLATE CCCLXXXIII.

PITTOSPORUM UNDULATUM.

Waved-leaved Pittosporum.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CAPSULA 2—5-locularis, 5-valvis. Semina tecta pulpa. Petala conniventia in tubum.	CAPSULE 2—5-celled, 5-valved. Seeds covered with pulp. Petals converging into a tube.

SPECIFIC CHARACTER, &c.

PITTOSPORUM, foliis lanceolatis undulatis acutis.	PITTOSPORUM, with lance-shaped, waved sharp-pointed leaves.

DESCRIPTIO. Frutex erectus, ramosus. *Ramuli* fusci, cicatricibus foliorum asperi. *Folia* breviter petiolata, lanceolata, vel elliptico-lanceolata, acuta, undulata, rigida, lucida, viridia, et reticulatim venosa; subtus pallidiora. *Flores* terminales, racemosi, albicantes, pedunculis inæqualibus, rufescentibus, obsolete bracteatis. *Calyx* 5-fidus, deciduus, laciniis acutis, recurvis. *Corolla*, petala 5, lineari-lanceolata, obtusa, revoluta, inferne in tubum conniventia. *Stamina*, filamenta 5, receptaculo inserta, stricta, subulata, subcompressa, altitudine styli; antheræ erectæ, luteæ. *Stylus* albidus, petalis brevior. Stigma obtusum.

REFERENCE TO THE PLATE.

1. The empalement.
2. One of the petals.
3. The chives and pointal, with one tip magnified.
4. The pointal and seed-bud magnified.

THE Pittosporum undulatum is a new plant, introduced into this country in the year 1793 from New Holland, where it is a native. It rises with a shrubby stem, which is branched above, to the height of several feet. Its branches are adorned with a fine undulated foliage that is rigid to the touch; and are terminated, in the month of May, with bunches of whitish flowers.

Is as yet a very rare species, and is raised from imported seeds; and likewise by cuttings. Requires, and thrives well with, the common treatment of a green-house or conservatory plant; and deserves a place in every extensive collection. Our drawing was made from a specimen in the Nursery of Messrs. Colvil, in the King's Road.

[illegible] [illegible] TOGAMIA.

[illegible] RUM UNDULATUM.

[illegible]

[illegible] ORDER I.

[illegible] Cirros. One Pointal.

[illegible] CHARACTER.

[illegible] Pericha[illegible] [illegible]

[illegible] &c.

[illegible]

[illegible]

EXPLANATION OF THE PLATE.

1. [illegible]
2. [illegible]
3. [illegible] magnified.
4. [illegible] magnified.

[illegible]

[illegible]

Pittosporum undulatum

PLATE CCCLXXXIV.

XERANTHEMUM VARIEGATUM.

Variegated Eternal Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum, aut nudum. Pappus setaceus. Calyx imbricatus, radiatus; radio colorato.	RECEPTACLE chaffy, or naked. Feather bristly. Empalement tiled, rayed: the ray coloured.

SPECIFIC CHARACTER, &c.

XERANTHEMUM, floribus solitariis nutantibus, squamis calycinis obtusis maculatis.	XERANTHEMUM, with solitary nodding flowers, and the scales of the empalement obtuse and spotted.

XERANTHEMUM variegatum. *Syst. Veg.* 614.—*Syst. Veg. Litchf. ed.* 2. *p.* 614.—*Reich. Syst. Pl. pars* 3. 766.

XERANTHEMUM africanum Gnaphalii foliis tomentosis, foliis et squamorum summitatibus ferrugineis. *Raii Suppl.* 181.

REFERENCE TO THE PLATE.

1. An hermaphrodite floret magnified.
2. The chives, pointal, and seed-bud magnified.
3. One of the scales of the empalement.
4. The receptacle.

THE Xeranthemum variegatum is a small shrub, and seldom attains the height of two feet. It is a native of the Cape of Good Hope, and was lately introduced from that country to the collection of George Hibbert, esq. where our drawing was taken in the month of May. It requires the same treatment as the other species of the genus, and is propagated in the same manner. The leaves are linear-lanced, embrace the stem alternately, and when old are often reflexed in an imbricated manner: they are clothed, as well as the stems, with wool; and resemble fine woollen cloth to the touch, and often have their edges and points of a purplish rusty colour. The bracteated peduncles are from one to three in number, at the end of each branch. The young flowers are more highly coloured than the old ones, which sometimes assume a nodding attitude: when aged they bleach almost white, except the points of the calycine scales, which always retain a purplish blotch.

Xeranthemum variegatum

PLATE CCCLXXXV.

CAMPANULA LACINIATA.

Ragwort-leaved Bell Flower.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA campanulata, fundo clauso valvis staminiferis. Stigma 3-fidum. Capsula infera, poris lateralibus dehiscens.	COROLLA bell-shaped with the mouth closed by staminiferous valves. Summit 3-cleft. Capsule beneath, gaping with lateral pores.

SPECIFIC CHARACTER, &c.

CAMPANULA, capsulis obtectis pedunculatis, foliis serratis; radicalibus lyratis; caulinis lanceolatis.	BELL FLOWER, with pedunculated covered capsules, and serrated leaves; the root ones lyrated; the stem ones spear-shaped.

CAMPANULA laciniata. *Willd. Sp. Pl.* 1. 911.

CAMPANULA Græca, saxatilis, Jacobeæ foliis. *Tourn. Voyage* 1. 201. cum icone.—*Coroll. Inst. Rei Herb.* 3.

DESCRIPTIO. Herba undique villosa. *Radix* biennis. *Folia* radicalia lyrato-pinnatifida, pinnulis incisis; caulina alterna, sublanceolata, inciso-serrata. *Pedunculi* bracteis subovatis dentatis instructi. *Flores* numerosi cærulei.

REFERENCE TO THE PLATE.

1. The empalement.
2. The blossom laid open.
3. The seed-bud, chives and pointal.
4. A chive magnified.
5. The seed-bud and pointal, the summit magnified.

THE Campanula laciniata, although introduced into the British gardens so long since as the year 1790, is still a very scarce species: this is not owing to a want of beauty, but to its having a biennial root, and not perfecting its seeds well, except in favourable situations. It was originally discovered by the celebrated French traveller and botanist Tournefort, about a century since, on a remarkable rock in the Island of Sikino in Greece; where he appears to have been highly delighted with its beauty and appearance, and says it is "*the fairest Campanula in all Greece**." However applicable this encomium may have been in those days, it ceases to be so now; for, without detracting from the fairness and beauty of the present plant, we have in cultivation another Grecian Campanula, still more fair and beautiful, and much more rare, which we hope soon to have the pleasure of presenting to our subscribers.

The Ragwort-leaved Campanula is usually treated as an alpine plant, and wintered in a frame: it is increased by seeds, and is impatient of superfluous moisture.

* Tournefort's Voyage, vol. i. page 201.

Campanula laciniata

PLATE CCCLXXXVI.

ANTHERICUM PUGIONIFORME.

Dagger-leaved Anthericum.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX patens aut connivens. Stamina filamentis filiformibus hirsutis. Stigma 1. Semina angulata. *Juss. Gen. Pl.* 52.	EMPALEMENT expanding or converging. Chives thread-shaped hairy. Summit 1. Seeds angulated.

SPECIFIC CHARACTER, &c.

ANTHERICUM, foliis carnosis linearibus acuminatis canaliculatis, scapo foliis duplo longiore.	ANTHERICUM, with fleshy linear acuminated channelled leaves, with a stalk twice their length.

ANTHERICUM pugioniforme. *Willd. Sp. Pl.* 2. 144.

ANTHERICUM filamentis barbatis acaule, radice subrotunda perenni, foliis crasso-subulatis antice sulcatis apice teretibus pulposis erectis. *Jacq. Ic. rar.* 2. *t.* 405.

PETALA sex, oblonga, obtusa, plana, patentissima, lutea, cum fascia longitudinali media utrinque viridi. Filamenta subulata patula, petalis breviora, flavescentia, circa medium omnia ex viridi-flavo dense barbata. Antheræ oblongæ, flavæ. Germen ovatum, superum. Stylus filiformis, erectus, longitudine staminum. Stigma obtusum. *Jacq. Collect. Supp.* 83.

REFERENCE TO THE PLATE.

1. The seed-bud, chives and pointal.
2. A chive magnified.
3. The seed-bud and pointal.

A NATIVE of the Cape of Good Hope, from whence it was sent some time since to the collection of G. Hibbert, esq. Clapham Common; where our figure was taken last autumn. It is rather more singular in its appearance, than beautiful; but is at present extremely rare, and deserves a place in all collections; prefers the treatment of a green-house succulent plant, and requires much air; but must be carefully defended from superfluous humidity; particularly when not in a state of active growth; and is best kept constantly in the house. Is propagated by parting its roots, but not very readily: and requires a light, dry soil.

Anthericum pugioniforme

PLATE CCCLXXXVII.

XERANTHEMUM RIGIDUM.

Rigid-leaved Eternal Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum, aut nudum. Pappus setaceus. Calyx imbricatus, radiatus; radio colorato.	RECEPTACLE chaffy, or naked. Feather bristly. Empalement tiled, rayed; the ray coloured.

SPECIFIC CHARACTER, &c.

XERANTHEMUM, floribus parvis paniculatis; foliis villosis lineari-lanceolatis acuminatis viridibus.	XERANTHEMUM, with small paniculated flowers; and hairy linear-lanced sharp-pointed green leaves.

DESCRIPTIO. Suffrutex, ramulis teretibus, subflexuosis, villosis. *Folia*, superiora remotiora, alterna, amplexicaulia, lineari-lanceolata, acuminata, canaliculata, rigida, villosa, viridia, superne patula. *Flores* paniculati, terminales, parvi in hoc genere, et inconspicui. *Pedunculi* lanuginoso-villosi, bracteati. *Calyces* argentei. *Corollulæ* flavicantes.

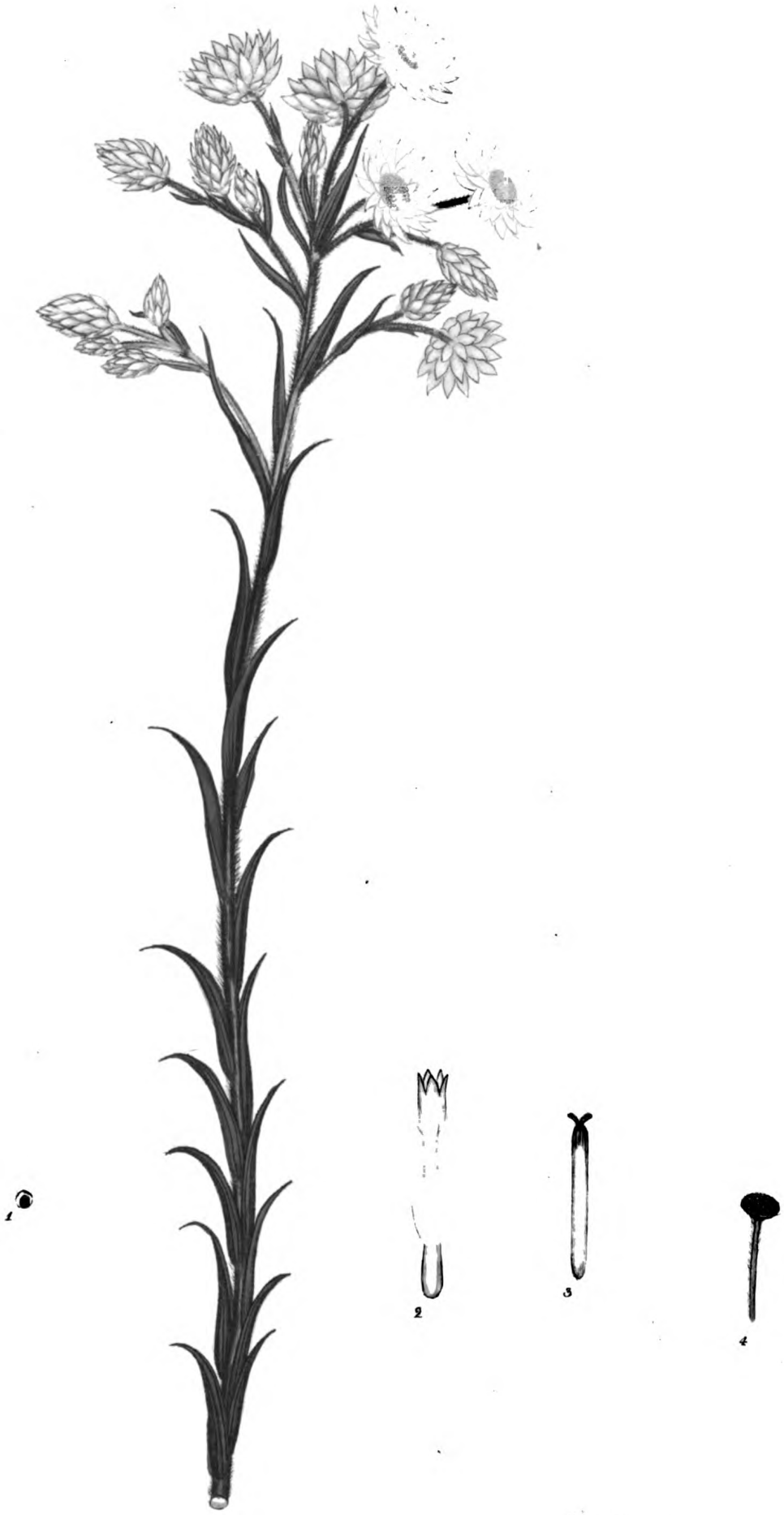
REFERENCE TO THE PLATE.

1. A scale of the empalement.
2. One of the hermaphrodite florets magnified.
3. The chives and pointal.
4. The receptacle.

THE plant here delineated is by no means a conspicuous one; nevertheless, as it is a genuine member of a favourite genus, and at the same time a new species, and almost the last of its fine family we shall be able to present to our readers, it cannot fail to be acceptable to them.

The present species is a weak shrubby plant, flowers freely, and succeeds with the treatment of the other eternal flowers, and is propagated in the same manner: and was lately raised from Cape seeds at our never-failing source of rare plants, the choice collection of G. Hibbert, esq. where the figure here given was made in May last.

It is very closely allied to X. argenteum of our 327th plate, which is the X. paniculatum of Thunberg and the younger Linnæus.



Veranthemum rigidum

PLATE CCCLXXXVIII.

MESEMBRYANTHEMUM INCLAUDENS.

Unclosing-flowered Fig-Marygold.

CLASS XII. ORDER IV.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

ESSENTIAL GENERIC CHARACTER.

PETALA valde numerosa, linearia, basi cohærentia.	PETALS very numerous, linear, cohering at the base.

SPECIFIC CHARACTER, &c.

MESEMBRYANTHEMUM, foliis triquetris lævibus perviridibus, carinâ gibbosâ, corollis inclaudentibus, petalis interioribus valde abbreviatis imbricatisque.	FIG-MARYGOLD, with triquetrous smooth deep green leaves, with a gibbous keel, unclosing flowers, and interior petals extremely abbreviated and imbricated.

DESCRIPTIO. M. mutabili nobis affinis, sed species valde distincta: differt in his, foliis lævioribus, et longe viridioribus, minusque mucronatis, marginibus sæpius plus minusve purpureis: floribus speciosis semper apertis; nec inconspicuis, nocteque clausis; saturatissime et vivacissime rubicundis, petalis cuneato-linearibus, latis in hoc genere, apicibus erosis; interioribus (petalis) maxime abbreviatis, imbricatisque quasi in stellam. *Calyx* subanceps, 5-fidus, membranis rubro punctatis. *Filamenta* recondita, brevissima omnium (vix linearia), alba, basi purpurea. *Antheræ* albidæ, circiter longitudinem filamentorum. *Styli* 5, erecti, pergrossi, virides, altitudine antherarum. Capsulam non vidi. *H.*

REFERENCE TO THE PLATE.

1. The empalement, seed-bud, chives and pointals.
2. The same cut perpendicularly, to show the insertion of the chives and pointal.

OUR figure represents a perfectly new and nondescript, and at the same time very ornamental species of Mesembryanthemum: each flower possesses the valuable property of lasting about ten days in beauty, and never closes after being once expanded: a circumstance of exceeding rare occurrence in this very extensive genus; no fewer than 214 distinct species of which we have now a knowledge of *.

M. inclaudens rises with a branched, shrubby stem, to the height of 10 or 12 inches, and is cultivated in the same manner, and propagated with the same facility, that is common and well known in this tribe: they are all very hardy green-house plants; require in winter as much air as possible, if frost is but avoided; strike freely from cuttings; are great lovers of hot, sunny and sheltered situations, when out for the summer; and are better not watered over their heads, but at the roots only.

The present species was raised from Cape seeds last season, in the collection of G. Hibbert, esq. where our drawing was made in July. Mr. Ross, Nurseryman at Stoke Newington, has also raised it from Cape seeds, and flowered it in July; and he likewise very fortunately flowered at the same time several fine specimens of M. rostratum; the fructifications of which have not been produced before in Europe, that we know of, although the plant has been common in the English gardens ever since the year 1732, and is one of the very few which Dillenius thought proper to figure without flowers, in his celebrated Hortus Elthamensis.

* 211 are described in my Miscellanea Naturalia, lately published. *H.*

Semb·ryanthemum inclaudens

PLATE CCCLXXXIX.
DOMBEYA ERYTHROXYLON.
Saint Helena Red-wood.

CLASS XVI. ORDER VII.
MONADELPHIA DODECANDRIA. Threads united. Twelve Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX duplex, exterior 3-phyllus deciduus. Corolla 5-petala. Stamina 10—20, quorum 5 sterilia. Stylus 5-fidus. Capsulæ 5, coalitæ uniloculares, 1. s. polyspermæ.

EMPALEMENT double, outer 3-leaved deciduous. Corolla 5-petalled. Chives 10 to 20, of which 5 are sterile. Style 5-cleft. Capsules 5, conjoined one-celled, 1- or many-seeded.

SPECIFIC CHARACTER, &c.

DOMBEYA, foliis ovatis acuminatis cordatis, subtus tomentosis reticulatis, pedunculis subtrifloris, floribus pentandris.

DOMBEYA, with ovate acuminated heart-shaped leaves, downy and reticulated beneath, peduncles about 3-flowered, and pentandrous flowers.

DOMBEYA Erythroxylon. *Willd. Sp. Pl.* 3. 725.

PENTAPETES Erythroxylon, foliis cordatis subcrenatis subtus tomentosis rugoso-reticulatis, floribus subumbellatis decandris. *Ait. Hort. Kew.* 2. 438.

ALCÆA arborea, populi nigræ foliis, prona parte albicantibus, flore amplissimo rubicundo. *Pluk. Mant.* 6. *t.* 333. *f.* 1.

DESCRIPTIO. Frutex dumosus; ramulis, petiolis teretibus, paginis inferioribus foliorum, pedunculis calycibusque tomentoso-canis, et ferrugineo dense punctulatis. *Folia* alterna, petiolata, cordata, subintegra, supra perviridia, utraque venosa, subtus obsolete reticulata. *Flores* malvacei, speciosi. *Calyx* duplex, exterior minutus, 3-phyllus, foliolis subulatis, sesquilinearibus, superior 5-phyllus, foliolis lineari-lanceolatis, acuminatis. *Petala* 5, alba, retuse cuneata, venosa, basi uno latere, gibbosa, imbricata. *Stamina*, filamenta 10, atra, patula, quorum 5 sterilia, cæteris duplo longiora. *Antheræ* erectæ luteæ. *Stylus* teres, albus, 5-fidus, antheras superans.

REFERENCE TO THE PLATE.

1. The empalement.
2. One of the petals.
3. The chives and pointal.
4. The chives spread open.
5. The pointal and seed-bud.

THE handsome plant here represented is a native of Saint Helena, and is known by the name of Saint Helena Red-wood. Although introduced into this country by Sir Joseph Banks in the year 1772, it is at this time one of our very rarest and most desirable of hot-house plants. Mr. Aiton enumerates it in the Hortus Kewensis, but marks no time for its flowering; which therefore, we must suppose, but seldom occurs. Our specimen was obligingly sent us by T. Evans, esq. from his fine collection at Stepney in June 1803, and we last month saw it beautifully in bloom at the honourable Charles Greville's, Paddington.

In the colour of its flowers, and in other particulars, it appears to vary. Plukenet calls them rubicund: ours were white: and in the extensive herbarium of A. B. Lambert, esq. we have examined a Saint Helena specimen with purple flowers, and less hoary but more reticulated leaves, which wanted the minute ferruginous spotting so abundant upon ours. It is propagated by cuttings in the usual way.

Dombeya Erythroxylon

PLATE CCCXC.

AMARYLLIS SPECTABILIS.

Waved-leaved Amaryllis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA hexapetaloidea irregularis. Filamenta fauci tubi inserta declinata inæqualia proportione vel directione.	COROLLA 6-petal-like irregular. Chives inserted into the throat of the tube, bent downward, and unequal in proportion or direction.

SPECIFIC CHARACTER, &c.

AMARYLLIS, spatha multiflora, tubo corollæ laciniis sesquilongiore, foliis lato-subulatis serrulatisque scapo longioribus.	AMARYLLIS, with a many-flowered sheath, the tube of the corolla longer than its segments, the leaves broad-awl-shaped serrulated and longer than the stalk.

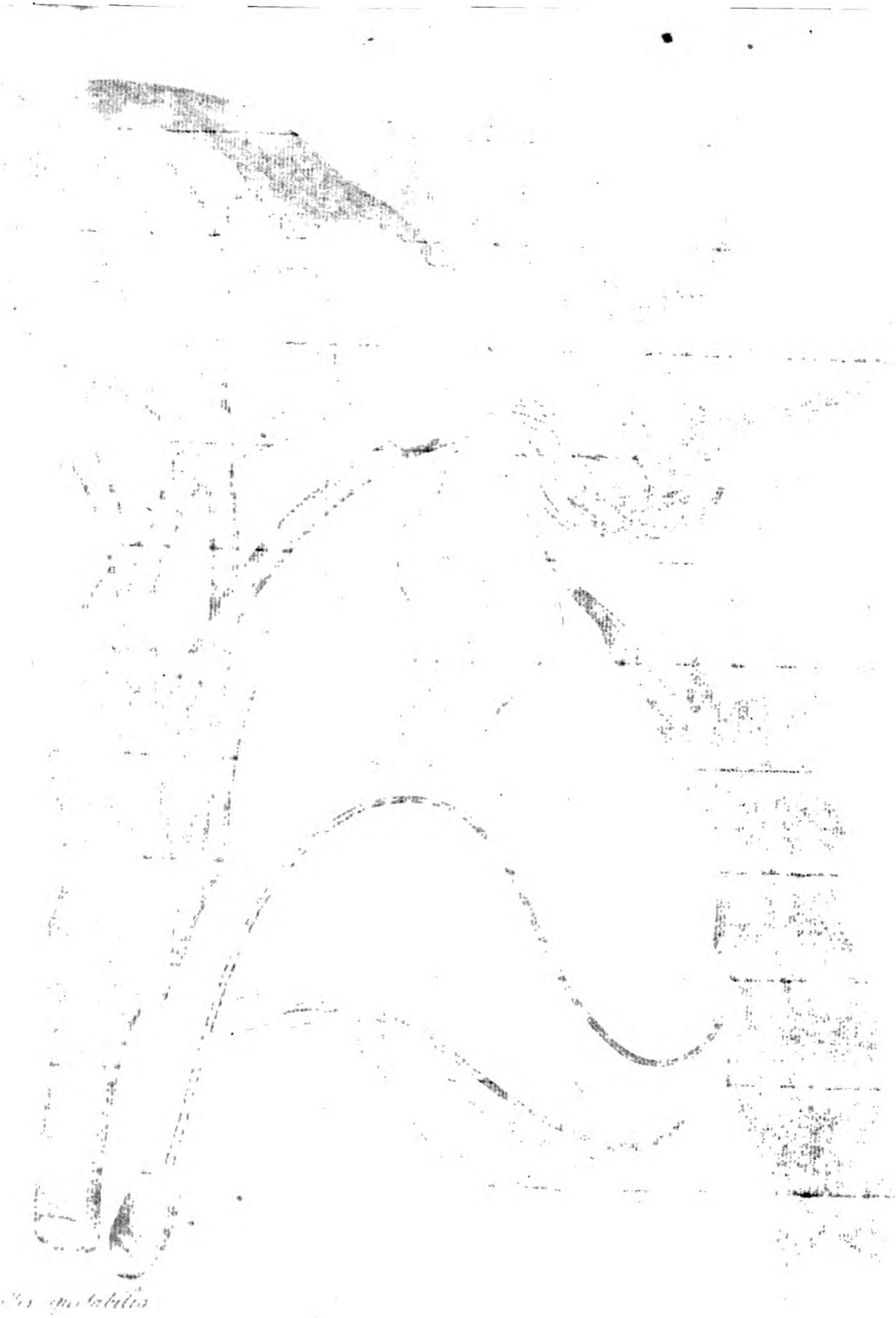
DESCRIPTIO. *Radix* bulbus mediocris tunicatus, et rotundatus, pallidusque. *Folia* multifaria, lato-subulata, sesquipedalia, subcanaliculata, lævia, viridia, carinâ pallidâ, striisque parallelis ad lucem utrinque etiam pallidis; basin versus undulata, et aliquo attenuata; margine cartilagineo, serrulis minutissimis, expansis, albis, remotisque, aspero. *Scapus* foliis duplo brevior, rubens, grossus, obtuse compressus, obsolete at irregulariter sulcato-striatulus, æquali crassitie. *Spatha* diphylla, subquadriflora, valida, foliolis lineatis, apicibus obtusissimis, et minute emarginatis, intus albis, extus virentibus, tinctura rubedinis. *Flores* sessiles, hexapetaloidei, tubulosi: tubus curvatus, angulatus, sulcatus, 5-uncialis et ultra, at gracilis, laciniis sesquilongior. *Petala* late lanceolata, undulata, acuta, alba, vittâ purpureâ. *Filamenta* alba, declinata, laciniis longe breviora. *Antheræ* versatiles, arcuatæ, magnæ, demum atræ. *Germen* sessile, compressum, viride. *Stylus* albus, superne purpureus, antheras superans. *Stigma* minutum. Infra germina, filamenta perpauca, staminiformia, sæpius adsunt.

REFERENCE TO THE PLATE.

1. A petal with its chive attached.
2. The seed-bud and pointal.

THE magnificent species of Amaryllis here represented is a native of Sierra Leona; and was introduced from thence to this country, by Professor Afzelius, several years ago; but has not yet been described by any author whose works have reached us: although it will unquestionably be inserted in the Flora of that part of Africa, which the abovementioned learned Botanist is said to be preparing for publication.

Although a very tender hot-house species, it flowers freely in the tan-bed, in rich earth; but its elegant flowers, like those of Amaryllis ornata, which it also resembles in foliage, are of very short duration, and do not individually last in full beauty longer than a day; unless they are taken out of the hot-house as soon as expanded, and placed in some cool apartment; which indeed they well deserve. Our figure was taken from plants in very great perfection, at J. Vere's, esq. Kensington Gore, in the month of July.



[illegible]

AMARYLLIS SPECTABILIS.

Wreath-Flowered Amaryllis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

[illegible]

[illegible] Diameter [illegible] 6-petal'd [illegible] [illegible] equal [illegible] [illegible] Stamens [illegible] propos [illegible]

SPECIFIC CHARACTER, &c.

[illegible] multiflora [illegible] [illegible] [illegible] AMARYLLIS, with a [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] pointed and longer [illegible].

Desc. [illegible] *Radix* [illegible] mediocre [illegible] et [illegible] palmasque. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] *Germen* [illegible] [illegible] *Stigma* [illegible] [illegible] [illegible]

REFERENCE TO THE PLATE.

[illegible]

2. [illegible]

[illegible] from thence to this country by Professor [illegible] [illegible] [illegible] part of Africa [illegible] to be prepared [illegible] [illegible] freely [illegible] [illegible] [illegible] are [illegible] are [illegible] expo[illegible] which [illegible] they were [illegible] [illegible] Kensington Gore [illegible]

aryllis spectabilis

PLATE CCCXCI.

NYMPHÆA LOTUS.

The Ægyptian Lotus.

CLASS XIII. ORDER I.

POLYANDRIA MONOGYNIA. Many Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA polypetala. Calyx 4-s. 5-phyllus. Bacca multilocularis, loculis polyspermis.	BLOSSOM many-petaled. Empalement 4- or 5-leaved. Berry many-celled, with many seeds in each cell.

SPECIFIC CHARACTER, &c.

NYMPHÆA, foliis cordatis dentatis glaberrimis lobis approximatis, calyce tetraphyllo. *Willd. Sp. Pl.* 2. 1153.	NYMPHÆA, with heart-shaped dentated very smooth leaves, with the lobes approximated, and a four-leaved empalement.

REFERENCE TO THE PLATE.

1. The seed-bud and pointal. 2. A chive. 3. A transverse section of the seed-bud. 4. A capsule.

THERE can be no doubt, but that the plant here figured is the true "Nymphæa Lotus" of Linnæus, and that it is the plant mentioned by Pliny in Nat. Hist. lib. 13. cap. 17. and lib. 22. cap. 21. He there makes mention of a plant which is found at the ebbing of the Nile, the fruit of which resembles a poppy, and the seed of the size of millet: this exactly answers to the "Nymphæa" before us, and does not at all apply to the "Nelumbium," the kernels of which are of the size of nuts or thereabouts: he also remarks that the heads are dried by the natives, and that the seed is beat and broken and made into bread.—Herodotus also mentions that the Egyptians baked the seed into bread, and ate of the roots, or rather tubercles, which resembled an apple and had an agreeable flavour. Vide Euterpe 92—Melpomene 177.

Sonnini, in his Voyages, mentions the Lotus as being most abundant in Egypt, and having *white flowers*; and I apprehend the red one to be nothing but a variety of this.

When we know that the Egyptians worship the Nile, as the Indians do the Ganges, we cannot wonder that a plant so beautiful, and so abundant in that river, should also become an object of adoration; and we find it continually though roughly engraved on their idols.—Indeed Pierius, in his Hieroglyphics, mentions that the Egyptians worshipped the Lotus as the type of the rising Sun.—It is always found on the statues of Osiris, the Egyptian Apollo; it is also to be seen on the medals struck in Egypt by the Romans, and especially during the reign of Adrian, who held it in such veneration, that the medals which that Emperor caused to be struck in Egypt, in honour of his favourite Antinoüs, uniformly represent the latter with the Lotus on his head; whence the expression "Antinoëan crown."—Various animals in the Hieroglyphics appear to have it, as the hawk, the lion, and the ram. It is to be seen on most of, though not all, their deities; as Jupiter Ammon, Iris, Serapis, Orus, Canopus, and most particularly on Harpocrates, who is often figured sitting in the midst of it.—See Cuper's Harpocrates, passim. The Lotus symbolizes Plenty on many of the medals of Egypt and Sicily, probably from being so great an article of food among the inhabitants, and from its generally appearing at the reflux of the Nile, when the banks were again open to the various uses they might be put to. Whether or not the Lotus here figured, which I think I have sufficiently proved to be the true Egyptian one, is the same which grows in the Ganges, and is in such high veneration throughout the continent of India, China, and Japan, can only be proved by a comparison of the two together: certain however it is, that a plant of great similarity to it, if not quite the same, is to be found on most of their idols also; and as the Ganges is worshipped, so may the Lotus be, with which it abounds. It expands in the dusk of the evening, and closes about ten in the morning.

To the Right Honourable the Marquis of Blandford we are indebted for the description of this very interesting plant, accompanied by a fine living specimen from his splendid collection at White Knights near Reading, Berks.

Nymphæa Lotus.

Pub. as the Act. Directs Sept. 1. 1804
by H. Andrews S. Knightsbridge

PLATE CCCXCII.

IXIA COLUMNARIS, *var. angustifolia.*

Columnar-chived Ixia. Narrowed-leaved Var.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sex-petala patens æqualis. Stigmata tria erectiusculo-patula.	BLOSSOM 6-petals spreading equal. Summits three upright-spreading.

SPECIFIC CHARACTER.

IXIA, filamentis basi cohærentibus; floribus subcapitatis, petalis purpureis basi saturatioribus, foliis lineari-ensiformibus.	IXIA, with threads united at the base, flowers rather in heads, petals purple with darker bases, and linear-sword-shaped leaves.

REFERENCE TO THE PLATE.

1. The two valves of the sheath.
2. An entire flower, cut open in the tube only, which is extended nearly to the end of the threads.
3. The chives cut open and magnified.
4. The pointal complete, one of the summits detached and magnified.

THE figure which accompanies this description represents the narrowest-leaved variety of the columnar-chived Ixia hitherto introduced into the British gardens.

Like the other varieties already figured in this work, it is a native of the Cape of Good Hope; and like them must be treated as a Cape-bulb; requiring only the protection of the green-house, and a mixture of loam and peat; and no water during its quiescent state.

It flowers in June or July, and is a very brilliant variety. Our figure was taken some time since at Messrs. Colvill's, Nurserymen in the King's Road.

a columnaris Var. angustifolia

PLATE CCCXCIII.

FUMARIA FORMOSA.

Beautiful Fumitory.

CLASS XVII. ORDER II.

DIADELPHIA HEXANDRIA. Two Brotherhoods. Six Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX diphyllus. Corolla ringens. Filamenta duo membranacea, singula antheris tribus.	EMPALEMENT two-leaved. Blossom gaping. Threads two, membranaceous, each with three tips.

SPECIFIC CHARACTER.

FUMARIA, scapis erectis, pedunculis cernuis subtrifloris bracteatis, corollis basi bilobis.	FUMITORY, with erect stalks, cernuous nearly 3-flowered bracteated peduncles, and blossoms two-lobed at the base.

REFERENCE TO THE PLATE.

1. The empalement.
2. A flower spread open, showing the insertion of the chives, with one filament detached and magnified.
3. The seed-bud and pointal, the summit magnified.

THE beautiful species of Fumaria which we have here represented is a hardy plant; but of what country it is a native, or by whom first introduced into the British gardens, we have yet to learn; neither have we hitherto been able to ascertain it in any author. Our drawing was made from very fine specimens communicated to us by William Anderson, botanic gardener to James Vere, esq. Kensington Gore, in whose collection it flowered copiously in the month of June last.

It is allied to the tuberous-rooted species; and perhaps nearer to Fumaria nobilis than any other: succeeds very well in a mixture of peat earth and loam, but prefers a sheltered and a somewhat shaded situation; and makes a very fine appearance when in flower: it also possesses unusual elegance in its foliage.

Fumaria formosa

PLATE CCCXCIV.

MIMOSA LINIFOLIA.

Flax-leaved Mimosa.

CLASS XXIII. ORDER I.

POLYGAMIA MONŒCIA. Various Dispositions upon one Plant.

ESSENTIAL GENERIC CHARACTER.

HERMAPH. Calyx 5-dentatus. Corolla 5-fida. Stamina 5 sive plura. Pistillum 1. Legumen.	HERMAPH. Empalement 5-toothed. Blossom 5-cleft. Chives 5 or more. Pointal 1. A Pod.
Mascul. Calyx 5 dentatus. Corolla 5-fida. Stamina 5—10, sive plura.	Male. Empalement 5-toothed. Blossom 5-cleft. Chives 5—10, or more.

SPECIFIC CHARACTER, &c.

MIMOSA, foliis sparsis suberectis angustissime linearibus.	MIMOSA, with scattered erectish very narrow linear leaves.

MIMOSA linifolia. *Ventenat Plantes Nouvelles,* tab. 2.

REFERENCE TO THE PLATE.

1. The empalement and blossom magnified.
2. The empalement detached and magnified.
3. A chive magnified.
4. The seed-bud and pointal magnified.

THE Mimosa linifolia is a native of New South Wales, from whence it was introduced to this country several years ago.

It has been considered in the gardens as a new species, and is known under the name of pinifolia; but as it has been recently named linifolia, by M. Ventenat in his Plantes Nouvelles, from plants which we believe were sent to France from England, we have adopted the latter name.

It is a very elegant greenhouse shrub; and arises with stiff erect slender branches to the height of several feet, and does not flower when young.

The Flax-leaved Mimosa is propagated chiefly by seeds, and either not at all, or with great difficulty, from cuttings; and is usually cultivated in light rich earth.

The individual here represented flowered very fine in the month of May at Mrs. Wright's, Bayswater; where our drawing was made.

Mimosa linifolia

PLATE CCCXCV.

ANTHERICUM PANICULATUM.

Panicled Anthericum.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX patens aut connivens. Stamina filamentis filiformibus hirsutis. Stigma 1. Semina angulata. *Juss. Gen. Pl.* 52.	EMPALEMENT expanding or converging. Chives thread-shaped hairy. Summit 1. Seeds angulated.

SPECIFIC CHARACTER.

ANTHERICUM, foliis canaliculato-ensiformibus gramineis, scapo paniculato diffuso, radice tuberosâ.	ANTHERICUM, with channel-sword-shaped grassy leaves, diffuse panicled flower-stem, and a tuberous root.

REFERENCE TO THE PLATE.

1. A leaf.
2. The chives and pointal.
3. The pointal and seed-bud, the summit magnified.
4. The seed-bud magnified.

THE Anthericum paniculatum is a native of New Holland, and was lately introduced from that country to this. In its tuberous root and woolly filaments, it accords very well with the genus Anthericum, as defined by Jussieu, in his celebrated Genera Plantarum; yet recedes from it in wanting thick and fleshy leaves; which all the African species of that genus have: hence it approximates, in habit at least, the genus Phalangium of Jussieu, which Willdenow makes a division only of Anthericum.

But there is nothing peculiarly remarkable in the present species differing a little from its African congeners, because most of the Australasian plants differ in some very striking particular or other from their nearest affinities in all other parts of the world; and very often constitute new genera.

It succeeds with the treatment of the Cape species, loves water, when in active growth; continues in flower several of the summer months, and is propagated by parting its roots in autumn, and by seeds, which it sometimes perfects in this country.

Anthericum paniculatum

PLATE CCCXCVI.

CAMPANULA VERSICOLOR.

Various-coloured Bell-flower.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA campanulata, fundo clauso valvis staminiferis. Stigma 3-fidum. Capsula infera poris lateralibus dehiscens.	COROLLA bell-shaped with the mouth closed by staminiferous valves. Summit 3-cleft. Capsule beneath gaping with lateral pores.

SPECIFIC CHARACTER.

CAMPANULA, foliis glabris cordato-ovatis undulatis, foliolis calycinis subulatis reflexis, corollis rotato-campanulatis.	BELL-FLOWER, with smooth heart-ovate waved leaves, calyx leaflets awl-shaped reflexed, and wheel-bell-shaped blossoms.

REFERENCE TO THE PLATE.

1. A radical leaf.
2. The empalement, chives and pointal.
3. A chive.
4. The seed-bud and pointal.

WITHOUT a doubt the present is not only a new species, but likewise one of the most showy in the extensive genus Campanula; nearly all the individuals of which have charms enough to entitle them to a place in the flower-garden.

When our readers are told that it is an inhabitant of Greece, most of them will readily perceive it is the very species announced in our last number, as one that in beauty surpasses the *fairest of the fair*, and was communicated to us, as well as the laciniata, by the Hon. W. H. Irby, of Farnham Royal, Bucks.

It was first raised from seeds brought to this country from Greece, by the late and much regretted Professor Sibthorp. There are two or three varieties of it, which are all hardy, and flower in July; rising to the height of about two feet, and making a very splendid appearance. They succeed best in peat earth and loam; and are propagated by seeds and by parting their roots: and are at present much sought after by all collectors.

mpanula versicolor

Pub.d as the Act directs Sept.r 1.1804
by W. Woodward Strand Longacre

PLATE CCCXCVII.

STEWARTIA MARILANDICA.

Maryland Stewartia.

CLASS XVI. ORDER XIII.

MONADELPHIA POLYANDRIA. One Brotherhood. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquepartitus. Petala quinque. Stamina numerosa. Stylus 1. Stigma capitatum subquinquelobum. Capsula lignosa conica, calyci reflexo persistenti insidens, quinquelocularis quinquevalvis, valvis crassis ligneis medio septiferis; loculis 1—2-spermis. *Uster's Juss. Gen. Pl.* 324.

EMPALEMENT five-parted. Petals five. Chives numerous. Style one. Summit headed somewhat five-lobed. Capsule woody conical, sitting on the reflexed persistent empalement, five-celled five-valved, with the valves thick woody and with partitions in the middle; with cells one- or two-seeded.

SPECIFIC CHARACTER.

STEWARTIA, foliis alternis ellipticis acuminatis obsolete et remote serrulatis, subtus villosis; floribus solitariis albis.

STEWARTIA, with alternate elliptic acuminated obscurely and remotely serrulated leaves, hairy beneath; and solitary white flowers.

REFERENCE TO THE PLATE.

1. The calyx, seed-bud and pointal.
2. The chives spread open.

THE Stewartia, which we have here represented, is known and cultivated in His Majesty's, and in various other collections of plants in the vicinity of the metropolis, under the name of Marilandica; under which title it likewise occurs in the third edition of Donn's Hortus Cantabrigiensis: but we do not find the name in any other book: neither can we, for want of sufficient specimens, ascertain whether it is specifically distinct from Stewartia virginica, or a variety only of that species. From S. virginica, however, as figured by Cavanilles in his Dissertationes, (tab. 159) it appears to differ, in having larger and much less serrated leaves, and in their being villose beneath; and likewise in its larger and entirely white petals. Cavanilles' plant has one of its petals of a yellow-green colour. From Stewartia Malachodendron it is known, at first sight, by its entire, not lacerated petals; independent of the other *generical* distinctions, according to Jussieu and Cavanilles, which exist between them.

The Maryland Stewartia is, as its name imports, a native of Maryland in America. It is a hardy shrub, and is propagated by layers; but does not thrive unless in a moist situation, planted in a mixture of peat earth and a little loam; and flowers in August and September.

The plant here figured was obligingly communicated to us, in bloom, by the Marquis of Blandford, with whom it flowered in July last, we believe for the first time in this country.

vartia Marilandica

Pub. as the Act directs Dec. 1st 1804
by J. Sowerby & J. Knightson

PLATE CCCXCVIII.

WACHENDORFIA VILLOSA.

Villose Wachendorfia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sex-petala, inæqualis, infera. Capsula trilocularis, supera.	BLOSSOM six-petalled, unequal, beneath. Capsule above three-celled.

SPECIFIC CHARACTER.

WACHENDORFIA, foliis lineari-ensiformibus plicatis triplinerviis, cauleque villosis, floribus paniculatis.	WACHENDORFIA, with the triple-nerved plicated linear-sword-shaped leaves, and stem villous; and panicled flowers.

REFERENCE TO THE PLATE.

1. A floral leaf.
2. The chives and pointal.
3. The pointal and summit magnified.
4. The seed-bud cut transversely.

THE villous-leaved Wachendorfia is not enumerated in Professor Willdenow's new edition of Species Plantarum, and appears to be a new species. It is very closely allied to W. hirsuta, but differs sufficiently from that species in the shape of the leaves. It is likewise extremely near akin to W. graminea, which, however, is destitute of all pubescence, whilst ours is pubescent all over. Its flowers are yellow, like those of hirsuta and paniculata; it rises to the height of a foot and a half, prospers with the usual treatment of Cape Bulbs; and was communicated to us in flower, in June last, by W. Anderson, botanic gardener to J. Vere, Esq. Kensington Gore, where it flowers in great perfection, and increases pretty readily by the roots.

Lendorfia villosa.

PLATE CCCXCIX.

COMMELINA TUBEROSA.

Tuberous-rooted Commelina.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sex-petala. Nectaria quinque, cruciata, filamentis propriis inserta.	BLOSSOM, six-petalled. Nectaries five, cross-shaped, inserted on their proper filaments.

SPECIFIC CHARACTER.

COMMELINA, corollis æqualibus, foliis sessilibus ovato-lanceolatis, subtus villosis et inde ciliatis, radice tuberosâ. Commelina tuberosa. *Willd. Sp. Pl.* 1. 251.—*Dill. Elth. t.* 79.	COMMELINA, with equal flowers, sessile ovate-spear-shaped leaves, villose beneath and thence ciliated, and a tuberous root.

REFERENCE TO THE PLATE.

1. The empalement, chives, and pointal.
2. A petal.
3. One of the nectaries.
4. A chive magnified.
5. The seed-bud and pointal, ummit magnified.

THE herbaceous genus Commelina is a very singular one; and many of its species are remarkable, not so much for the size, as for the structure and brilliancy of their flowers; which, according to the words of the generic character, ought to have six petals: but the present species appears to have but three petals, the three outer being entirely of the nature of a calyx; and effectually answering the purposes of one.

The tuberous-rooted Commelina is a native of Mexico, and in this country requires the treatment of a hot-house herbaceous plant. It is an old, but not common inhabitant of the British gardens; thrives well in rich earth, and is propagated by dividing the tubers of its root, when in a quiescent state; at which period much water is particularly inimical to it.

The genus Commelina can only be distinguished from Tradescantia when the flowers are open; but nevertheless differs very sufficiently, not only in having double the number of stamina, but more especially in the extraordinary cruciform nectaries.

Our drawing was made from very complete specimens communicated to us by the Hon. W. H. Irby, of Farnham Royal, Bucks.

ommelina tuberosa

PLATE CCCC.

EUCALYPTUS RESINIFERA.

Resinous Eucalyptus.

CLASS XII. ORDER I.

ICOSANDRIA MONOGYNIA. About Twenty Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX superus persistens truncatus, ante anthesin tectus *operculo* integerrimo deciduo. Corolla nulla. Capsula quadrilocularis, apice dehiscens polysperma.

EMPALEMENT above persistent truncated, before the flowering covered by an entire deciduous *lid.* Blossom none. Capsule four-celled, gaping at the point and many-seeded.

SPECIFIC CHARACTER.

EUCALYPTUS, operculo conico tereti coriaceo calyce duplo longiori, umbellis lateralibus solitariis. *Smith in Linn. Tr.* 3. *p.* 284.—*Willd. Sp. Pl.* 2. 977.

EUCALYPTUS, with a conical columnar leathery lid twice the length of the empalement, and lateral solitary umbels.

REFERENCE TO THE PLATE.

1. A bud in its infant state.
2. The calyptra or lid, when in perfection.
3. A chive magnified.
4. The pointal and seed-bud.

THIS species of the genus Eucalyptus, a genus well characterized from the singular operculum, which, instead of a corolla, defends the infantile fructification from external injuries, is a native of New South Wales; and was introduced, by seeds from that country, into our gardens, along with some other Eucalypti, several years ago; but has never flowered in Britain until the present summer, in Lady de Clifford's collection at Paddington, where our drawing was made in July last.

It is a shrub of considerable size, and handsome growth and foliage; and its younger shoots droop considerably, after the very elegant manner so much admired in the weeping willow.

But the most singular trait in the plant is its tardy and protracted mode of flowering. It has already shown flowers, which it will not expand until next July: they are scarce half the size they will then be, and have upon the tip of the large calyptra one of a far smaller size, but similar in shape, and which will soon fall off, as will also the large one, a little previous to the expansion of the stamina next July.

It requires a great deal of root-room, and rich earth; is a very hardy green-house plant, and has hitherto been propagated by imported seeds only.

Eucalyptus resinifera

PLATE CCCCI.

SERRATULA SPICATA.

Spiked-flowered Saw-wort.

CLASS XIX. ORDER I.

SYNGENESIA POLYGAMIA ÆQUALIS. Tips united. Æqual Polygamy.

ESSENTIAL GENERIC CHARACTER.

CALYX subcylindricus, imbricatus, muticus.	EMPALEMENT nearly cylindrical, imbricated, without awns.

SPECIFIC CHARACTER, &c.

SERRATULA, foliis linearibus, basi ciliatis, floribus sessilibus lateralibus spicatis, caule simplici. *Gmel. Syst. Nat.* 2. 1185.—*Ait. Hort. Kew.* 3. 138.	SERRATULA, with linear leaves, ciliated at the base, sessile lateral spiked flowers, and a simple stem.

REFERENCE TO THE PLATE.

1. A radical leaf.
2. The empalement spread open.
3. A floret.
4. The same, cut open.
5. The seed-bud and pointal.

THE Serratula spicata is a native of Carolina; but has been cultivated in the gardens of this country ever since the year 1732; notwithstanding which it is by no means a frequent plant in collections; which I should conceive arises from its being rather difficult to increase.

Although a syngenesious plant, its root is of the tuberous kind; which is a peculiarity almost unparalleled in that extensive class. The flowering-stems shoot up late in spring, and are chiefly simple: they rise to the height of one or two feet, furnished with long linear leaves; the uppermost of which are gradually shortened, and they are all more or less ciliated near the base; but in this respect they are either liable to differ very considerably, or there are several varieties (perhaps species) of the plant. There is likewise another strikingly singular trait in the character of this Serratula: the flowers commence opening at the top of the spike first, and continue flowering downwards; instead of upwards, in the usual manner; which is a circumstance I cannot recollect having seen in any other plants; except Agave virginica and Allium descendens. Cultivators usually suppose the name of the last-mentioned plant to apply to its roots striking deep into the earth: but this we apprehend is an erroneous supposition; for it is clearly allusive to its perverted mode of flowering.

The spiked-flowered Saw-wort flowers in July, loves a light soil in the open air; and is propagated, although slowly, by parting its roots after the stems die down.

Gmelin queries, and with propriety, in his edition of *Systema Naturæ* above cited, whether S. spicata, and S. squarrosa, (another North American species,) are not generically distinct from the other Serratulæ.

Our drawing was made from plants in the collection of Lady de Clifford, at Paddington.

Serratula spicata

Published as the Act directs by Lackington, Allen & Co. Finsbury Sq.

PLATE CCCCII.

CLEMATIS FLORIDA.

Large-flowered Virgin's Bower.

CLASS XIII. ORDER VI.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Petala quatuor, rarius quinque. Semina caudata.	EMPALEMENT none. Petals four, rarely five. Seeds tailed.

SPECIFIC CHARACTER.

CLEMATIS, foliis decompositis, foliolis binatis ternatisque, petalis ovatis. *Willd. Sp. Pl.* 2. 1287.	CLEMATIS, with decompound leaves, leaflets in twos and threes, and egg-shaped petals.

REFERENCE TO THE PLATE.

1. A petal.
2. The chives and pointals.
3. The pointals.

THE large-flowered Virgin's Bower was introduced into the English gardens, in the year 1776, from Japan; of which country it is a native; and possesses by much the largest and most showy flowers in the whole genus.

Although introduced so long since, it is not often met with. Our drawing was made from very fine plants in the collection of Messrs. Colvill, Nurserymen in the King's Road, in the month of July last; where they made an exceeding fine appearance.

Like many of the Japanese plants, it is found capable of resisting the severity of our ordinary winters, without receiving much injury.

It thrives best when trained against a wall or other fence, planted in rich soil; and is usually propagated by laying down the lowest branches in a careful manner; which take root in due time, and may then be safely separated from the mother plant.


Pl.
1
3
2
Clematis florida

PLATE CCCCIII.

IPOMÆA GRANDIFLORA.

Great-flowered Ipomœa.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquefidus. Corolla infundibuliformis longa, limbo plicato quinquefido aut quinquedentato. Stigma capitatum. Capsula trilocularis polysperma. *Uster's Juss. Gen. Pl.* 149.

EMPALEMENT five-cleft. Blossom funnel-shaped long, with a five-cleft or five-dentated border. Summit headed. Capsule three-celled, with many seeds in each cell.

SPECIFIC CHARACTER, &c.

IPOMÆA, foliis cordatis acuminatis integerrimis, pedunculis subunifloris.

IPOMÆA, with heart-shaped acuminated very entire leaves, and chiefly one-flowered peduncles.

CONVOLVULUS *grandiflorus*, foliis cordatis ovatis obtusiusculis integerrimis, pedunculis subbifloris, calycibus coriaceis, caule petiolisque pubescentibus. *Linn. Supp. Pl.* 136.—*Willd. Sp. Pl.* 1. 859.

REFERENCE TO THE PLATE.

1. The empalement.
2. The tube of the flower cut open, to show the structure and insertion of the chives.
3. The pointal.
4. A capsule nearly ripe, cut horizontally and lifted up to show the seeds.

THIS magnificent species of Ipomæa (the Convolvulus grandiflorus of authors) was obligingly communicated to us in bloom in the month of September, by A. B. Lambert, Esq. who thinks that its root will only prove an annual one. If this indeed should eventually be the case, it will cause it to recede in a material manner from the Convolvulus grandiflorus as described in the Supplementum Plantarum, and consequently in Willdenow's Species Plantarum, which is there said to be an arborescent species: from C. grandiflorus it should also appear to differ, in its more pointed leaves and solitary peduncles; and likewise in having a stigma agreeing altogether in structure with the genus Ipomæa; which latter circumstance has occasioned us to separate it from Convolvulus, and transfer it to Ipomæa; because the conformation of the stigma in those extensive genera, often (but we fear not always) affords the most satisfactory characters for discrimination. All their species which we have examined, (and they have been very numerous,) possibly might be united into one genus, without committing much outrage against nature, or the natural affinities of her vegetable kingdom.

Publ. 1st Feb. Act. Directs Nov. 1. 1804
by H. Andrews S. Knightsbridge

...omea grandiflora

PLATE CCCCIV.

MORÆA MINIATA.

Red-lead-coloured Moræa.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA hexapetala; petala tria interiora patentia; angustiora. Stigma trifidum.	BLOSSOM six-petalled, the three interior ones spreading Summit trifid.

SPECIFIC CHARACTER.

MORÆA, monadelphia, scapo tereti ramoso, foliis lineari-ensiformibus, caulinis spathaceis, petalis expansis sub-æqualibus ovalibus.	MORÆA, monadelphous, with a round branched scape, leaves linear-sword-shaped, stem ones spathaceous, and petals expanded nearly equal and oval.

REFERENCE TO THE PLATE.

1. The outer sheath of the flower.
2. The inner one.
3. The seed-bud, chives and pointal, as they stand in the flower.
4. The same magnified.
5. The monadelphous chives spread open.

IN vain have we turned over all the multifarious works of Jacquin, and many other publications, in search of information concerning this elegant plant: for our labour has not been rewarded with the east success. As a species, therefore, we conceive it to be entirely new; and in its generic characters, by no means destitute of botanical importance. With Moræa we have placed it, because it perhaps best agrees with that genus; yet cannot satisfactorily associate it with Moræa tricuspis (Vieussieuxia De la Roche) and its affinities. In its monadelphous stamina it approaches Sisyrinchium and Ferraria; and its flat red flowers remind us of the anomalous Ixia Chinensis*.

Our drawing was made from the Clapham collection, about the same time that Iris Pavonia of our 364th plate was drawn. It requires the same treatment as that splendid plant, and is a native of the same country: but we fear it is not at present to be found alive in Britain.

* This plant, after having been arranged under the several genera, Ixia, Moræa, and Ferraria, is now established as a new genus, by the name of Pardanthus, in the second number of Annals of Botany, just published.

Moræa miniata

PLATE CCCCV.

PRIMULA DENTIFLORA.

Toothed-flowered Primula.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX tubulosus quinquedentatus persistens. Corolla tubulosa quinqueloba, fauce perviâ. Capsula apice decemvalvis. *Uster's Juss. Gen. Pl.* 108.	EMPALEMENT tubulose five-toothed persistent. Blossom tubulose five-lobed, with a pervious throat. Capsule at the apex ten-valved.

SPECIFIC CHARACTER.

PRIMULA, foliis cordatis crenato-lobatis prærugosis, corollis acute dentatis.	PRIMULA, with heart-shaped crenatedly lobed very rough leaves, and sharply dentated flowers.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom laid open, to show the insertion and structure of the chives.
3. The seed-bud and pointal.
4. The same magnified.

THE species of the favourite genus Primula which we have here represented, is a very elegant one; and greatly resembles P. cortusifolia, which is figured on our 7th plate; but differs from it in the extraordinary denticulations of the flowers; which we have been assured are a constant and permanent character of the plant, and, if so, affords an excellent and decisive mark of specific distinction, and at the same time a trivial name of undeniable goodness. We have not been able to ascertain with any kind of certainty its native place of growth. It was communicated to us in bloom in the month of September last, from the select collection of Lady de Clifford, at Paddington, and is found to be a hardy plant, and to succeed with the treatment of the other Primulæ; that is, as an alpine plant in bog earth, and a small portion of loam; and protected in summer from the mid-day and afternoon, but not the morning or evening sun. It is propagated by parting the roots in autumn; and as a new and at the same time beautiful Primula, it cannot fail to be acceptable to all our subscribers.

dentiflora

Pub. as the Act Directs 1st June
by R. Ker Curt Knightsbridge

PLATE CCCCVI.

APONOGETON MONOSTACHYON.

Simple-spiked Aponogeton.

CLASS XI. ORDER IV.

DODECANDRIA TETRAGYNIA. Twelve Chives. Four Pointals.

ESSENTIAL GENERIC CHARACTER.

AMENTUM e squamis compositum. Calyx nullus. Corolla nulla. Capsulæ 4, trispermæ.	CATKIN composed of scales. Empalement none. Blossom none. Capsules 4, three-seeded.

SPECIFIC CHARACTER, &c.

APONOGETON, spicâ simplici, foliis cordato-ovalibus. *Willd. Sp. Pl.* 2. 927.	APONOGETON, with a simple spike, and heart-oval shaped leaves.

REFERENCE TO THE PLATE.

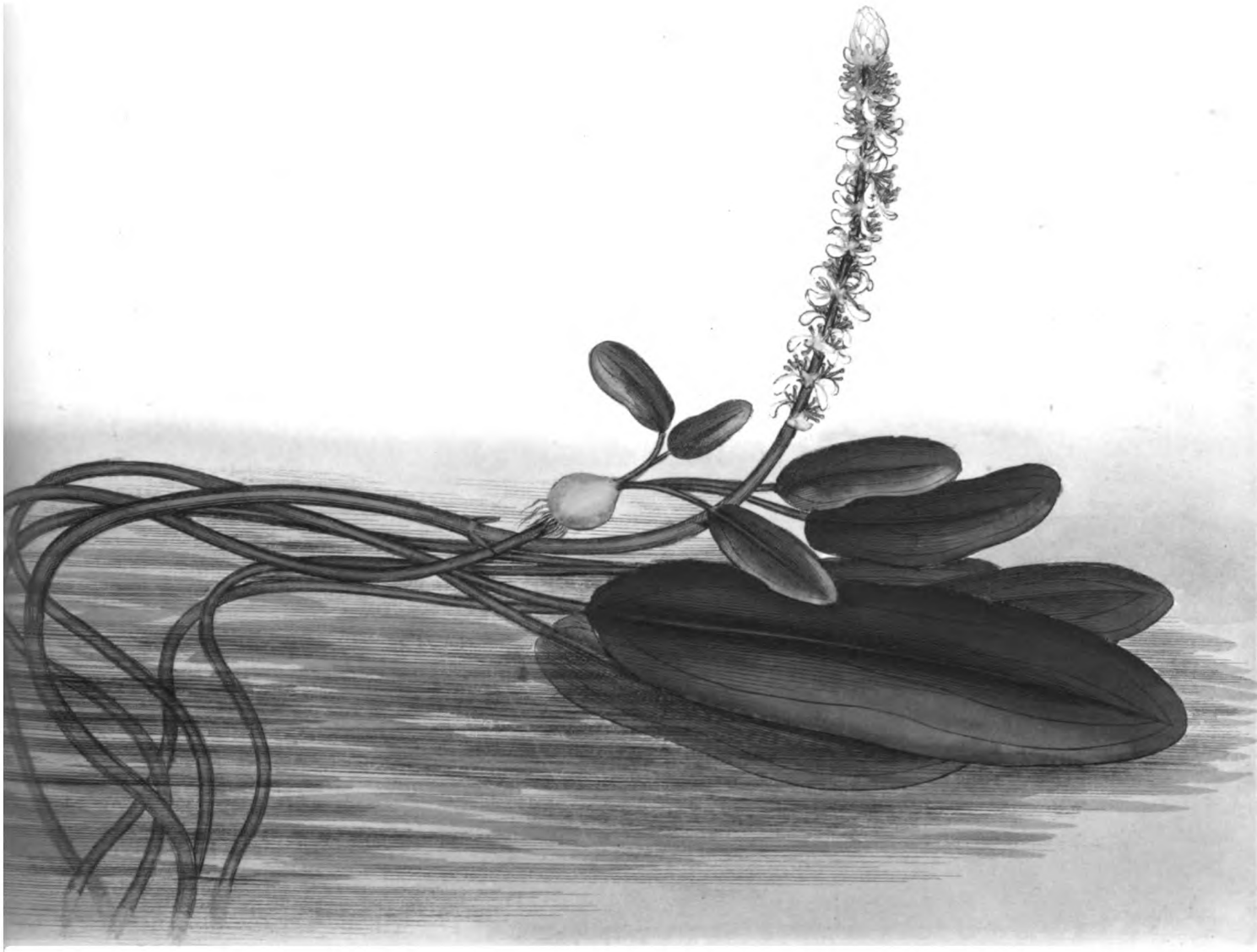
1. The chives detached.
2. The pointals detached.
3. The same magnified.

FOUR species only of this singular genus have hitherto been enumerated by authors: viz. the present one from the East Indies; crispum, a native of Ceylon; and angustifolium and distachyon, from the Cape of Good Hope; the last of which is the most showy, and is figured on our 290th plate.

They are all water plants, and could no more thrive with their roots and natant leaves out of that element than an Aloe or Stapelia could prosper in it: they are therefore, along with other tropical aquatics, cultivated in our hot-houses in troughs or cisterns of rich earth and clear water; in which, consociated with the majestic Nymphææ, the stately Thalia, and the more humble but not less interesting Menyanthes indica, they produce a most fragrant and desirable appearance; that perhaps is indebted for some of its charms to the fine contrast formed by the terrestrial exotics which surround them.

In a collection of tropical plants, where a few cisterns of aquatics are judiciously interspersed, the oppressive heat of the stove in which they grow, is as it were delusively alleviated, "in the mind's eye," by the simple, yet cooling sight of the little pools of water in which they float. Few are the number of observers who contemplate them without imbibing pleasure. This unquestionably arises from the strong but agreeable contrast that is exhibited to the eye, by the happy junction of the productions of the waters with those of the earth. They are vegetables of widely different orders—productions of very different natures—and inhabitants of elements diametrically opposite.

The simple-spiked Aponogeton produces roundish tubers in various parts of its shoots; by the transplantation of which the plant is readily and speedily propagated. Our drawing of it was made in July last, at J. Vere's, Esq. Kensington Gore, in whose collection it thrives very well. We have not as yet seen it in any other.



mogeton monostachyon

PLATE CCCCVII.

CALENDULA DENTATA.

Toothed-leaved Marygold.

CLASS XIX. ORDER IV.

SYNGENESIA POLYGAMIA NECESSARIA. Tips united. Necessary Polygamy.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM nudum. Pappus nullus. Calyx polyphyllus, subæqualis. Semina disci utplurimum membranacea.	RECEPTACLE naked. Pappus none. Empalement many-leaved, nearly equal. The seeds of the disk chiefly membranous.

SPECIFIC CHARACTER, &c.

CALENDULA, foliis alternis linearibus remote et acute dentatis; caule fruticoso decumbente.	MARYGOLD, with alternate linear remotely and acutely dentated leaves, and a decumbent shrubby stem.

Calendula dentata. *Donn's Hort. Cantab. ed.* 3. 163.

REFERENCE TO THE PLATE.

1. The empalement.
2. A floret of the circumference.
3. A floret of the disk.
4. The same laid open and magnified, to show the situation of the chives.
5. The pointal, with the summit detached and magnified.

ALTHOUGH this species of Calendula appears to have been introduced to the British gardens so long since as the year 1790, from the Cape of Good Hope, its native country; I do not find it enumerated either in Mr. Aiton's Hortus Kewensis or Gmelin's edition of Systema Naturæ; but it will in all probability be taken up in Willdenow's Species Plantarum, when he arrives at that part of it which is to include the genus Calendula.

It is well known in the gardens by the applicable name of dentata, but is not a common plant,—although, from the beauty and size of its flowers, highly worthy of general cultivation: its branches are weak, yet shrubby; and require support.

It is a green-house plant, and is propagated by cuttings in the usual way. Our drawing was made from the Clapham collection in July last.

Calendula dentata

PLATE CCCCVIII.

DAHLIA PINNATA.

Pinnated Dahlia.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX duplex. Corolla radiata, radiis lacinias calycis numero æquantibus: corollulæ pedicellatæ. Receptaculum paleaceum. Stigmata plumosa.	EMPALEMENT double. Blossom radiated, with the rays equalling in number the segments of the empalement: the florets pedicelled. Receptacle chaffy. Tips plumose.

SPECIFIC CHARACTER, &c.

DAHLIA, foliis oppositis, impari-pinnatis; pinnulis quinque, ovatis, crenato-dentatis. *Cav. Ic.* 1. 57. *tab.* 80.	DAHLIA, with leaves opposite, pinnated with an odd one; the pinnules five, ovate, and notch-dentated.

REFERENCE TO THE PLATE.

1. A young flower with the peduncle and empalement.
2. One of the radiating florets with its pedicel.
3. A floret of the disk.
4. The same spread open, to show the chives and pointal.
5. The pointal detached, with the summit magnified.

THE genus Dahlia was first established by the celebrated botanist Cavanilles *, (in honour of Andrew Dahl, a Swedish botanist, not Dale an Englishman,) for three lofty, thick-rooted, perennial plants, natives of the distant regions of Peru; but all of which we have had the recent pleasure of seeing alive in the overflowing gardens of our own happy country. They are extremely desirable and showy plants; and none of them more so than the present one; which was raised from seeds sent from Madrid last spring, by the Right Hon. Lady Holland, and flowered last September and October, in the open ground, in her Ladyship's collection at Holland House, Kensington; where our drawing was lately made. It has acquired the stately height of near eight feet, with a circumference of three; and makes indeed a truly specious appearance: but we do not expect it will ripen its seeds; the season being too far advanced to encourage any reasonable hope of that nature.

The best mode of propagation should seem to be that of dividing its somewhat tuberous roots, after the stems die down. As to treatment, we see no valid reason why it, and both the other Dahliæ, (the coccinea and rosea,) should not be treated as hardy herbaceous plants; placed in rich earth and a warm situation. But as they are both rare and valuable, it may at present be safer to consider them as greenhouse plants, keeping them in very large pots and well watered, until their stems show symptoms of dying down; when moisture must be administered with a sparing hand.

There are considerable reasons for thinking that the pinnated Dahlia will hereafter be raised with double flowers, because the figure in Cavanilles' Icones, above cited, represents them nearly semi-double; and the doubling of radiated syngenesious plants is well known to horticulturists to be a circumstance of pretty frequent occurrence.

* The public have now to regret the loss of this valuable botanist; they are deprived of him: he died in May last at Madrid, aged 59.

...lia pinnata

PLATE CCCCVIII.

DAHLIA [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] established by the celebrated botanist Cavanilles*, (in [illegible] Dale an Englishman) [illegible] but [illegible] we have [illegible] the accounts [illegible] gardens of our own [illegible] They are [illegible] none of them [illegible] which was [illegible] Lady's [illegible] at Kew, [illegible] the height [illegible] at eight feet, with a [illegible] we do not expect it will [illegible] is [illegible] hardy [illegible] that nature.

The [illegible] the stems [illegible] coccinea [illegible] as [illegible] herbaceous [illegible] situation [illegible] it may at present [illegible] for to [illegible] house [illegible] the [illegible] pots and well watered [illegible] the stem [illegible] with a spacing and [illegible]

[illegible] because the figure [illegible] Cavanilles' [illegible] above cited, represents them nearly [illegible] subsequent [illegible] plants is well known to horticulturists to [illegible] very frequent [illegible]

* The plants [illegible] valuable botanist; they [illegible] of [illegible] aged [illegible]

lia pinnata

Published as the Act directs, Nov. 1st 1804
by W. Anderson, Cheapside

PLATE CCCCIX.

PROTEA SCOLYMUS.

Smooth-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA quadrifida sive quadripetala. Antheræ lineares insertæ petalis infra apicem. Calyx proprius nullus. Nux unisperma supera.	BLOSSOM four-cleft or four-petaled. Tips linear, inserted on the petals below the apex. Empalement proper, none. Nut one-seeded above.

SPECIFIC CHARACTER, &c.

PROTEA, foliis lanceolatis acutis capituloque terminali rotundo glabris.	PROTEA, with lance-shaped acute smooth leaves and a round terminal smooth head of flowers.
Protea Scolymus. *Willd. Sp. Pl.* 1. 522.—*Schrad. Sert. Hann. tab.* 20.—*Ait. Hort. Kew.* 1. 127.	

LEUCODENDRON (*Scolymocephalum*) foliis lanceolatis, floribus subrotundis, caule fruticoso ramoso. *Linn. Sp. Pl.* 2. 153.

LEPIDOCARPODENDRON acaulon, ramis numerosis e terra excrescens, calyce floris immaturo extus e rubro et flavo variegato, intus flavo. *Boerh. Lugb.* 2. *p.* 192. *tab.* 192.

SCOLYMOCEPHALUS africanus, fruticis æthiopici coniferi Breynii foliis, capite majori squamato. *Raj. H.* 3. 10.

REFERENCE TO THE PLATE.

1. A floret detached.
2. A petal with its tip magnified.
3. The seed-bud and pointal.

THE Protea Scolymus grows spontaneously on the Tiger mountain at the Cape of Good Hope; but has long been an inhabitant of European conservatories, although a rare one. It was well known to several of the old botanists, who appear to have differed much concerning the generical appellations which they thought proper to bestow upon it; as will appear on consulting the synonyms above. They made several genera of Proteæ; but the botanists of later times have melted them all down (we fear injudiciously) into one great genus: and Schrader has even added Lambertia to Protea; and figured it in his Sertum Hannoverianum, under the name of Protea nectarina; thereby alluding to the sweet juice which abounds in the tubes of its flowers:—melliflua would have been a still more expressive term. The smooth-leaved Protea requires the same treatment as the rest of the genus, and is a very fine species, producing its flowers in May and June. Our figure was taken at the Clapham collection.

2 Scolymus

PLATE CCCCX.

CYNANCHUM UNDATUM.

Waved Cynanchum.

CLASS V. ORDER I.

PENTANDRIA DIGYNIA. Five Chives. Two Pointals.

ESSENTIAL GENERIC CHARACTER.

CONTORTA. Nectarium cylindricum, quinquedentatum.	CONTORTED. Honey-cup cylindrical, five-toothed.

SPECIFIC CHARACTER.

CYNANCHUM, caule volubili, foliis cordatis oblongis obtusis cum acumine undatisque, umbellis axillaribus subproliferis.	CYNANCHUM, with a twining stem, heart-shaped oblong blunt leaves, but with a sudden point, and waved, axillary somewhat proliferous umbels.

REFERENCE TO THE PLATE.

1. The empalement.
2. The blossom spread open.
3. The outer scale of the honey-cup.
4. The parts of fructification magnified.
5. The inner scale of the honey-cup.
6. The outside of the same.
7. The seed-bud, shaft, summit and chives magnified.

THE Waved Cynanchum is more remarkable for novelty than beauty; yet, as an addition to our volubilous exotics, it possesses sufficient elegance to render it worthy our attention: especially as climbing plants have of late years become quite fashionable in most of the best conservatories in the vicinity of London.

As a species, we conceive it to be perfectly nondescript, although it should seem to possess several characters in common with Cynanchum reticulatum, and C. undulatum of Willdenow, &c.; both of which are known to us, but are described as having ovate, or oblong, not heart-shaped leaves. C. reticulatum is also a native of the same country, the East Indies; from whence seeds of the undatum were brought in the year 1803 by Captain Thomas Hardwicke; and were raised in the collection of the Marquis of Blandford, at White Knights, Berks, where they flowered last July; when that nobleman obligingly communicated to us the specimen from which the annexed figure was made.

The Waved Cynanchum is a hot-house plant, and requires nearly the same treatment as Pergularia minor of our 184th plate.

chum undatum

Pub.d as the Act Directs Dec.r 1.1804
by Th. Andrews S. Knightsbridge

PLATE CCCCXI.

PSORALEA SPICATA.

Spiked-flowered Psoralea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX longitudine leguminis. Stamina diadelpha. Legumen monospermum subrostratum evalve.	EMPALEMENT the length of the pod. Chives diadelphous. Pod one-seeded roundish and valveless.

SPECIFIC CHARACTER, &c.

PSORALEA, foliolis obovatis recurvato-mucronatis subtus punctatis, spica terminali oblonga. *Willd. Sp. Pl.* 3. 1345.	PSORALEA, with leaflets inversely egg-shaped, recurvedly mucronated and dotted beneath, and an oblong terminal spike of flowers.

REFERENCE TO THE PLATE.

1 The empalement.
2. A standard.
3. One of the wings.
4. The keel.
5. The chives and pointal.
6. The seed-bud and pointal.

THE spiked-flowered Psoralea is a shrubby plant, and rises to the height of a foot or two; producing its spikes of flowers in the months of July and August, at the ends of its branches. It is a native of the Cape of Good Hope, and in this country is found to succeed very well in any green-house which has a flue to keep out the frost: and is propagated by seeds, and also by cuttings if carefully managed. Although not a very newly-introduced plant, it is certainly not a frequent one in our gardens; indeed we do not recollect having ever seen it in any collection, except the Nursery of Messrs. Whitley and Brames, Old Brompton; where our drawing was made some time since; and where it was considered and treated as a new species: which, however, as appears by our synonym above given, is not the case.

oralea spicata

PLATE CCCCXII.

CALENDULA VISCOSA.

Viscous Marygold.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA NECESSARIA. Tips united. Necessary Polygamy.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM nudum. Pappus nullus. Calyx polyphyllus, subæqualis. Semina disci utplurimum membranacea.	RECEPTACLE naked. Pappus none. Empalement many-leaved, nearly equal. The seeds of the disk chiefly membranous.

SPECIFIC CHARACTER.

CALENDULA, viscosa, foliis alternis lineari-cuneatis pinnatifido-dentatis, calycibus lucidis tomentoso-ciliatis, caule fruticoso debili.	MARYGOLD, viscous, with alternate linear-cuneated pinnatifid-toothed leaves, shining tomentosely-ciliated empalements, and a weak shrubby stem.

REFERENCE TO THE PLATE.

1. The empalement.
2. A floret of the ray.
3. A floret of the disk.
4. The same magnified.
5. The corolla spread open and magnified.
6. The seed-bud and pointal.

THE figure annexed represents a new and very ornamental species of the genus Calendula, which we lately discovered flowering beautifully, amongst many other rare plants in the charming collection of exotics at George Hibbert's, esq. Clapham; where it was lately raised from seeds, sent to him, we believe, from the Cape of Good Hope, of which country we understand it is a native.

It is a shrubby species, and possesses much of the growth and habit of Calendula dentata of our last number; and indeed in most things, except its considerable viscosity and the colour of its flowers, exhibits a very great similitude to that species; and will be found to succeed with the same treatment and mode of propagation; but is in every respect a much more desirable plant.

Éndula viscosa

PLATE CCCCXIII.

GERANIUM HYMENODES.

Ternate-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rostratus pentacoccus.	ONE POINTAL. Five summits. Fruit beaked, five berries.

SPECIFIC CHARACTER, &c.

GERANIUM, pedunculis multifloris, foliis obtusis inciso-dentatis, inferioribus ternatis, superioribus trilobis, caule erecto.	GERANIUM, with many-flowered peduncles, obtuse gash-dentated leaves, the inferior ones ternate, the superior three-lobed, and an erect stem.

GERANIUM (*trifolium*) caule herbaceo crasso ramoso, foliis radicalibus ternatis lobatis, caulinis oppositis simplicibus lobatis, petalis venosis, superioribus maculatis. *Cav. Diss.* 4. *p.* 223. *tab.* 97. *fig.* 3.

ERODIUM hymenodes. *L'Herit. Geran. tab.* 4.

ERODIUM hymenodes. *Willd. Spec. Pl.* 3. 635.

REFERENCE TO THE PLATE.

1. The empalement and parts of fructification.
2. The seed-bud, chives and pointal magnified.
3. The seed-bud and pointals.
4. The same magnified.

THE ternate-leaved Geranium belongs to L'Heritier's genus Erodium. It is a native of mountainous, rocky situations, in the northern parts of Africa; but has been cultivated in most of our best collections of exotics several seasons; yet is not so frequently met with as it deserves to be, on account of the unusual delicacy in the veining and spotting of its flowers; which, from their size and number, make a good appearance; and are produced in succession most part of the year. The plant itself is of very humble, scarcely shrubby growth; yet rises somewhat higher than the real tuberous species; to which, however, in its contracted, thickened stems, it betrays a considerable affinity. It is propagated readily by seeds, and likewise by cuttings; and stands out in the open ground in mild winters uninjured, although it is generally killed in severe ones; which renders it necessary to preserve a supply of it in the conservatory.

ranium Hymenoides

PLATE CCCCXIV.

CRASSULA OBLIQUA.

Oblique-leaved Crassula.

CLASS V. ORDER V.

PENTANDRIA PENTAGYNIA. Five Chives. Five Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX pentaphyllus. Petala quinque. Squamæ quinque nectariferæ ad basin germinis.	EMPALEMENT five-leaved. Petals five. Five honey-bearing pores at the base of the germ.

SPECIFIC CHARACTER, &c.

CRASSULA, foliis ovatis obliquis integerrimis acutis distinctis, margine cartilagineis. *Willd. Sp. Pl.* 1. 1553.—*Ait. Hort. Kew.* 1. 395.	CRASSULA, with leaves egg-shaped oblique very entire acute distinct, and cartilaginous on the margin.

REFERENCE TO THE PLATE.

1. A flower with its empalement.
2. The seed-bud and pointals.
3. A detached pointal magnified.

ALTHOUGH the genus Crassula is a very extensive one, and possesses many species which are remarkable either for beauty, singularity, or fragrance; the one which we have here the satisfaction of illustrating is, we think, by far the most ornamental; and is at the same time both a stately and a singular plant. . It is very succulent, and requires the heat of the hot-house to make it bloom; but prospers best, like all other succulent plants of the more tender kind, on the shelves of a dry stove. It is a native of the Cape of Good Hope, and is propagated with facility by cuttings; prefers a light loamy soil, and a dry treatment; and produces its large bunches of flowers late in the year; which are very showy and of considerable duration, particularly if removed into the green-house while in bloom, and at that time more liberally watered.

The oblique-leaved Crassula is an old inhabitant of our gardens, but not a frequent one. Our drawing was made from a fine specimen obligingly sent us by Thomas Evans, esq. from his fine collection at Stepney, last August.

rafsula obliqua

PLATE CCCCXV.

CANTUA CORONOPIFOLIA.

Coronopus-leaved Cantua.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX 3—5-fidus. Corolla infundibuliformis. Stigma trifidum. Capsula trilocularis, trivalvis, polysperma. Semina alata.	EMPALEMENT from three- to five-cleft. Blossom funnel-shaped. Summit trifid. Capsule three-celled, three-valved, many-seeded. The seeds winged.

SPECIFIC CHARACTER, &c.

CANTUA, floribus terminalibus, staminibus longitudine corollæ, foliis pinnatifidis.	CANTUA, with terminal flowers, chives the length of the blossom, and feather-cleft leaves.

CANTUA (coronopifolia). *Willd. Sp. Pl.* 1. 879.

POLEMONIUM (rubrum), foliis pinnatifidis linearibus, floribus racemosis pendulis. *Linn. Sp. Pl. ed.* 3. *p.* 231.

IPOMEA (rubra). *Linn. Syst. Veg.* 171.

IPOMOPSIS (elegans), minutim pubescens, foliis lineari-pinnatifidis. *Mich. Fl. Boreali-Americ.* 1. 142.

QUAMOCLIT pinnatum erectum, floribus in thyrsum digestis. *Dill. Hort. Elth.* 321. *tab.* 241. *fig.* 312.

REFERENCE TO THE PLATE.

1 The empalement.
2. The blossom spread open, with the chives attached.
4. The seed-bud and pointal, with the summit magnified.

ALTHOUGH the Coronopus-leaved Cantua was cultivated in Sherard's celebrated garden at Eltham, in the time of Dillenius, and is figured by him, in the *Hort. Elth.* above cited, as a species of *Quamoclit*, it has been an entire stranger to our modern gardens until very lately; having no doubt long since perished in all the old collections.

Who the reintroducer of this very elegant plant is, we have yet to learn : but the beautiful specimen here figured, was obligingly communicated to us by the Marquis of Blandford, from White Knights, Berks, about the end of November last.

It is a native of Carolina, and sufficiently hardy, we should think, to resist the cold of our ordinary winters : its root is herbaceous, and the plant admits of increase by parting the same, in spring or autumn.

Writers have differed in a very remarkable manner concerning the Genus to which they should refer this plant; and Linnæus himself seems to have been as undetermined as any of them concerning it; having at different times given it as a *Polemonium*, and an *Ipomea;* as will appear among our synonyms above. Michaux has called it *Ipomopsis*: and another foreign writer, whose work we have not got, has given it the appellation of *Noothea Pulchella:* but Willdenow has added it to the genus *Cantua*, with which we conceive, in our humble opinion, it sufficiently accords; and have therefore ventured to follow him in his arrangement of it.

Cantua Corenopifolia

PLATE CCCCXVI.

SALVIA CHAMÆDRIFOLIA.

Germander-leaved Sage.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA inæqualis. Filamenta tranverse pedicello affixa.	BLOSSOM unequal. Chives affixed transversely to a pedicel.

SPECIFIC CHARACTER, &c.

SALVIA, foliis ovalibus rugosis obsolete crenatis, verticillis terminalibus nudis quadrifloris, staminibus corolla brevioribus.	SAGE, with oval rough obsoletely notched leaves, terminal naked four-flowered whorls, and chives shorter than the blossom.

SALVIA Chamædrifolia. *Donn's Hort. Cantab. p. 7.*

REFERENCE TO THE PLATE.

1. The empalement.
2. The blossom with the chives attached.
3. The seed-bud and pointal, with the summit magnified.

OUR drawing was made from plants in the Hibbertian collection at Clapham last autumn: but we have also seen this Sage in other places; particularly at Cambridge; and know it to be the Salvia Chamædrifolia of the Hortus Cantabrigiensis ed. 3.: but we do not find that name in any other publication within our reach.

Mr. Donn marks it as a green-house perennial, and gives Spain as its native country, but with a note of interrogation; and adds that it flowers in July and August; and that it was introduced into our gardens in the year 1798.

We believe that A. B. Lambert, Esq. was the first introducer of it, and that gentleman thinks he received the seeds of it from Spain. The first time of our seeing it was at J. Vere's, Esq. in the autumn of 1802, where it was cultivated as a green-house shrub, and by the name of S. citrina, a name that well expresses the charming odour of its leaves when gently rubbed; which not a little resembles the pleasing, well-known scent of Lemon Thyme.

It is propagated by cuttings in the usual way: its stem and branches are very slender, but shrubby, and arise to the height of two or three feet. The flowers are terminal, large, showy, and possess a beautiful colour of the deepest blue.

ria Chamædrifolia

PLATE CCCCXVII.

CROTOLARIA PULCHELLA.

Ternate Large-flowered Crotolaria.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

LEGUMEN turgidum, inflatum, pedicellatum. Filamenta connata cum fissura dorsali.	POD turgid, inflated, pedicelled. Chives conjoined with a dorsal fissure.

SPECIFIC CHARACTER.

CROTOLARIA, frutescens, ramulis teretibus sericeis, foliis ternatis, foliolis lineari-lanceolatis acutis petiolis sesquilongioribus, subtus subpilosis.	CROTOLARIA, shrubby, with cylindrical silky branches, and ternate leaves, with the leaflets linear-lanced acute-once, and-an-half the length of the foot-stalks, and somewhat hairy beneath.

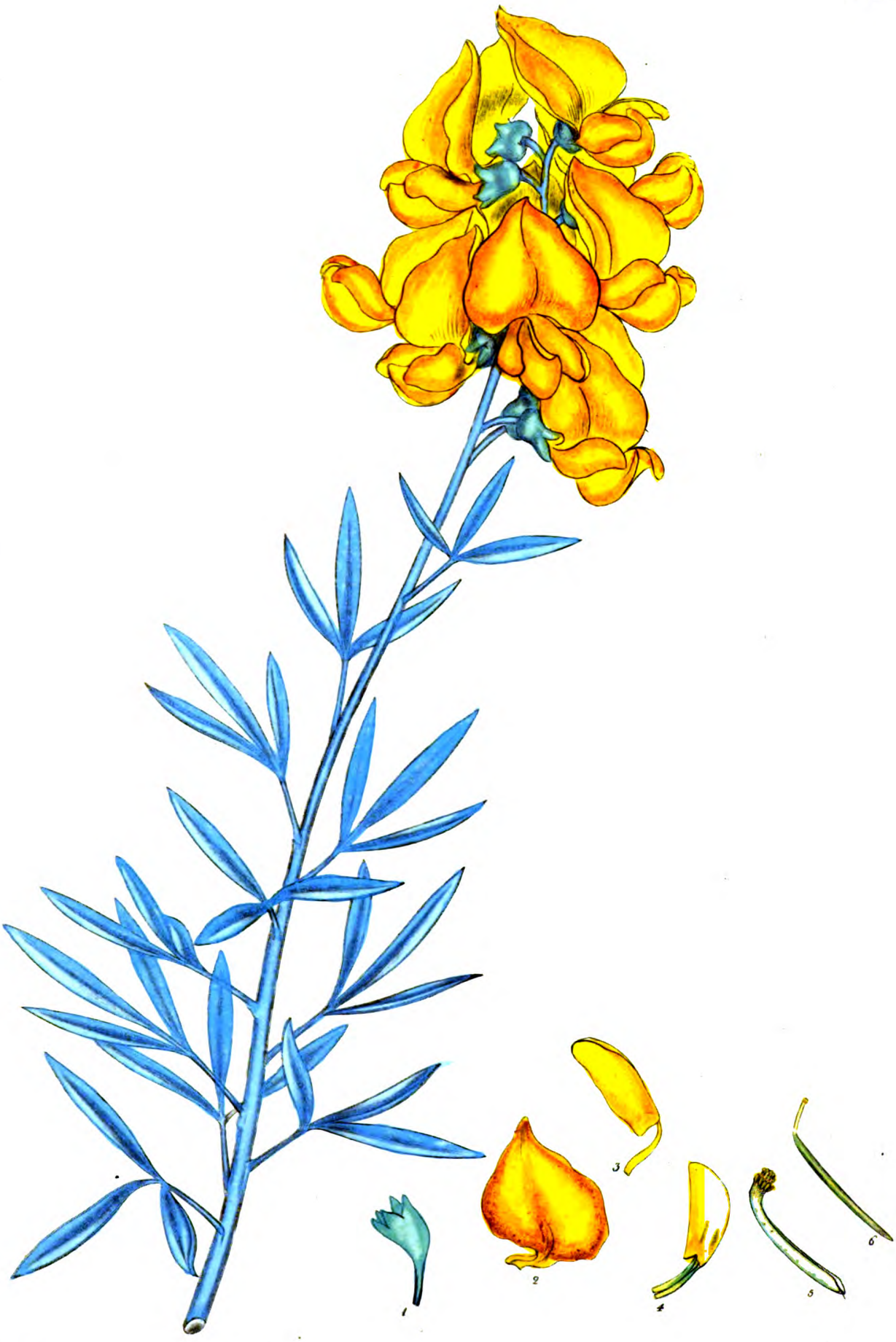
REFERENCE TO THE PLATE.

1. The empalement.
2. The standard.
3. One of the wings.
4. The keel.
5. The chives.
6. The seed-bud and pointal.

THE species of Crotolaria here represented, may perhaps be the "C. (pilosa) foliis ternatis pilosis, foliolis mucronatis, floribus terminalibus," of Thunberg's Prodromus: but from so insufficient a character we have not ventured to determine it to be that plant; having rather chosen to give it as a new species by the name of Pulchella; which it well deserves.

It is a green-house plant, a native we understand of the Cape; and arises with a straight, but little branched, woody stem, to the height of about 3 feet: the branches are cylindrical and silky: the leaves alternate and ternate, inclining to hoary, with pubescent and channelled foot-stalks: the leaflets are lance-shaped, or linear-lanced, once and an half, or sometimes twice the length of their common foot-stalk, and furnished beneath with minute, close-pressed hairs: the flowers are in a terminal racemus, large, yellow, and showy; and are produced in the month of July.

Hitherto we have seen this plant only at the Nursery of Messrs. Colvill, in the King's Road, where our drawing was made. In favourable seasons the plant will probably ripen its seeds in this country: and at other times we have no doubt of its being capable of propagation by cuttings in the usual way; although we do not know that this has yet actually been done.



Melaria patchella

PLATE CCCCXVIII.

GENTIANA CATESBÆI.

Catesby's Gentian.

CLASS V. ORDER II.

ESSENTIAL GENERIC CHARACTER.

COROLLA monopetala. Capsula bivalvis, unilocularis; receptaculis duobus longitudinalibus.	BLOSSOM one-petalled. Capsule two-valved, one-celled; with two longitudinal receptacles.

SPECIFIC CHARACTER, &c.

GENTIANA, foliis remotis oppositis ternatisque, corollis verticillatis ventricosis decemfidis, laciniis alternis inæqualiter bifidis lacerisque; calycibus minute ciliatis.	GENTIAN, with remote opposite and ternate leaves, whorled ten-cleft bellied flowers, with their alternate segments unequally bifid and torn; and minutely ciliated empalements.

GENTIANA (*Catesbæi*), corollis campanulatis ventricosis extus cæruleis, foliis lanceolatis remotis. *Walt. Fl. Carolin.* 109.

GENTIANA (*Saponaria*), corollis quinquefidis campanulatis ventricosis verticillatis, foliis ovato-lanceolatis trinerviis. *Willd. Sp. Pl.* 1. 1338.

REFERENCE TO THE PLATE.

1. The empalement.
2. The blossom spread open.
3. The pointal.

THE beautiful species of Gentiana here represented, does not appear to be noticed either in Willdenow's edition of Species Plantarum, or the Hortus Kewensis of Mr. Aiton; except by the former of these authors, as being synonymous with G. Saponaria; from which as a species we conceive it distinct: neither do we find it enumerated in Mr. Donn's Hortus Cantabrigiensis: but it is described by Walter in his Flora Caroliniana, under the name of Catesbæi; and is known in several of the principal gardens in the neighbourhood of London by that appellation; which we have therefore thought it more eligible to adopt, than run any risk of occasioning confusion by applying a new one.

The plant is perennial and herbaceous, a native of Carolina, and is propagated by parting its roots in autumn, or early spring; but requires a moist sheltered situation, and peat earth in the open air, to make it flourish.

It rises with several stems to the height of a foot or upwards: the leaves are opposite, or in threes, remote, lanceolate, stem-clasping, and obscurely three-nerved, with scabrous margins, occasioned by minute, upwardly-directed serrulations, which at the base of the leaf are decurrent, and form four or six roughened lines on the stem: the flowers are irregularly whorled; but the uppermost whorl is by much the largest; each blossom is of a rich deep purple colour, ventricose, and opens very little at the mouth, where it is divided into ten incurving segments, every other of which is of a much paler colour than the rest, broader, unequally bifid, and minutely lacerated: the empalement is five-cleft, and its segments are linear-lance-shaped, with minutely ciliated edges, after the manner of the edges of the leaves.

The living specimen from which our figures were made, was obligingly communicated to us by the Hon. Mr. Irby, of Farnham Royal, Bucks.

ntiana Catesbei

Pub. as the Act Direts Jan. 1. 1805
by Baldwin Cradock & Joy Lond.

PLATE CCCCXIX.

GENISTA LUSITANICA.

Portugal Genista.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX bilabiatus: 2—3 dentibus, binis superioribus brevissimis. Vexillum oblongum a pistillo staminibusque deorsum reflexum.	EMPALEMENT two-lipped: with 2—3 teeth, the two uppermost very short. The standard oblong, and reflexed downwards from the chives and pointal.

SPECIFIC CHARACTER, &c.

GENISTA, caule aphyllo, spinis decussatis. *Willd. Sp. Pl.* 2. 946.—*Ait. Hort. Kew.* 2. 16.	GENISTA, with a leafless stem, and decussated spines.

SCORPIUS secundus. *Clus. Hist.* 1. *p.* 107.

REFERENCE TO THE PLATE.

1. The empalement.
2. The standard.
3. One of the wings.
4. The keel.
5. The chives.
6. The seed-bud and pointal.
7. The same magnified.

THE Portugal Genista is a very spiny, and almost leafless shrub, of bushy growth; and although very well known to most of the old Botanists, does not appear to have been cultivated in the British gardens until the year 1771; when, according to Mr. Aiton's Hortus Kewensis, it was introduced by Mrs. Primmet. It is a native of Portugal and Spain, but is sufficiently hardy to resist the cold of our ordinary winters, if planted in a sheltered situation: yet is extremely liable to be injured, or even destroyed, in those which take place with rigour and severity: but as it very frequently produces good seeds, a supply of it is not difficult to be kept up that way. The best time of sowing them is spring, and they will require some slight protection from frost while young.

The plant blooms freely from March till May, and when decorated with its golden flowers, makes a very ornamental appearance in the shrubbery; in which, although it has been so long in cultivation, we cannot help regretting that it but seldom occurs: and we venture to recommend it along with G. germanica (a closely allied species) to the further attention of our cultivating friends.

Like many other shrubby leguminous plants, this Genista is averse to being frequently transplanted; and never suffers the operation of removal with impunity. Let that business therefore, when necessary, be performed with all possible diligence and care. Our figure was taken from plants in the Clapham collection.

ista lusitanica

PLATE CCCCXX.

GERANIUM FLORIBUNDUM.

Tuberous Many-flowered Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rostratus pentacoccus.	ONE POINTAL. Five summits. Fruit beaked, five berries.

SPECIFIC CHARACTER.

GERANIUM, tuberosum, pinnis foliorum oppositis bipartitis, laciniis ellipticis; scapis numerosis ramosis, petalis clavato-linearibus.	GERANIUM, tuberous, with the pinnæ of the leaves opposite and two-parted, with their segments elliptical; numerous branched flower-stalks, and clavatedly-linear petals.

REFERENCE TO THE PLATE.

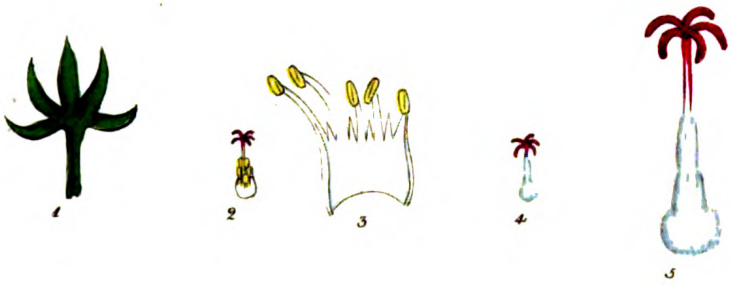
1. The empalement.
2. The seed-bud, chives, and pointal.
3. The chives spread open.
4. The seed-bud and pointal.
5. The same magnified.

GERANIUM floribundum appears to be not only a nondescript species of the Erodium family of this extensive tribe of plants; but at the same time, a new and brilliant one. Few in number are the species which equal it in beauty: and still more rare are those which can be allowed to surpass it.

It is of extremely humble growth, and its roots are tuberous: from the crowns of which it throws up, in the early part of summer, a considerable number of flowering stems, each adorned with many flowers; whence our specific name of floribundum.

It is a native of the Cape of Good Hope, and prospers with the same treatment as the other dwarf Geraniums; and is propagated like them, by carefully dividing the tubers of its roots.

Our figure was made from the Clapham collection, which it is well known abounds more in this description of plants, than any other existing in this country.



uum floribundum

PLATE CCCCXXI.

RENEALMIA CALCARATA.

Upright-flowering Renealmia.

CLASS I. ORDER I.

MONANDRIA MONOGYNIA. One Chive. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX superus, monophyllus, in 2 sive 3 dentes irregulares rumpens. Corolla trifida. Nectarium oblongum. Anthera sessilis, nectario opposita. Bacca carnosa, trilocularis, profunde sulcata, et hirta. Semina plurima, alte truncata, arillo membranaceo niveo adpresso.

EMPALEMENT above the fruit, one-leafed, breaking into 2 or 3 irregular teeth. Blossom trifid. Nectary oblong. Chive sessile, opposite to the nectary. Berry fleshy, three-celled, profoundly sulcated, and hairy. Seeds many, deeply truncated, and furnished with a membranous, close-pressed, snow-coloured exterior skin.

SPECIFIC CHARACTER.

RENEALMIA foliis lanceolato-ensiformibus, racemo terminali erecto.

RENEALMIA with lance-sword-shaped leaves, and an erect terminal racemus of flowers.

REFERENCE TO THE PLATE.

1. The spathe.
2. A blossom divested of the chive and honey-cup.
3. The honey-cup.
4. The sheath which crowns the seed-bud.
5. The chive, pointal, and seed-bud.
6. The same without its chive.
7. A transverse section of the seed-bud magnified.

THE new and elegant plant here figured was obligingly communicated to us in September last by A. B. Lambert Esq. who informs us that it had grown vigorously to the height of about three feet in the bark-bed of his hot-house, without showing flowers; but that, on being removed from the tan and placed upon the flue, it soon produced those which we have here delineated; whence it is probable that the check to its growth, occasioned by the mere change of situation, was the cause of its blooming, as in other collections it has not hitherto done it. Mr. L. likewise informs us that its native country is Coromandel, and that it is intended for publication by Dr. Roxburgh under the name of Amomum calcaratum; and showed us a drawing of it, so named, copied from one that was made in the East Indies from a native specimen, and which represents the plant somewhat slenderer and less upright than the individual we have here depicted.

Whoever will carefully investigate and compare our dissected figures of this plant with those which are given with Renealmia nutans on our 360th plate, will not only find that they precisely agree with each other (as much as two distinct species of plants can do), but that both of them very sufficiently correspond with the essential characters of the genus Renealmia: yet both are, no doubt, specifically distinct from Renealmia exaltata; wherefore we have not hesitated to withdraw the present plant from the genus Amomum, from which, independent of its widely different mode of flowering, we believe it to be generically distinct. Neither are the above-mentioned all the species of Renealmia we have a knowledge of; for even in the British gardens (exclusive of those which have not yet been introduced to us alive) we are already acquainted with at least three more. But how far some of these plants are distinct from the four diandrous Globbæ enumerated by Willdenow, and from Schrader's Zerumbet speciosum, which is a true Renealmia, we are not at present prepared to determine; yet cannot help remarking that the last-mentioned plant should seem to resemble the Globba Japonica of Thunberg;—that our present subject may resemble G. Marantina;—that G. nutans greatly resembles Renealmia nutans; and that at least one of the figures cited by Willdenow for the former in Rumphius, is absolutely the same as R. nutans:—and, lastly, that R. exaltata of Linn. Supp. Pl. possesses, in a very striking and remarkable manner, the extraordinary habit of the remaining Globba uviformis.

As to culture, these are all stove plants, and in this country require the assistance of the tan-bed to make them flourish. Rich earth and great plenty of pot-room are likewise requisite, and also a large portion of water when they are vegetating briskly, but less when they are almost at a stand,—which is sometimes the case,—although they are never perfectly quiescent, as is common in the neighbouring genus Amomum. They are propagated easily by parting their perennial roots.

dmia calcarata.

Pub.d as the Act. Directs (P.)
by J.G. Andrews & Nosy (Colour)

PLATE CCCCXXII.

CROTOLARIA JUNCEA.

Rushy-stalked Crotolaria.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

LEGUMEN turgidum, inflatum, pedicellatum. Filamenta connata, cum fissura dorsali.	POD turgid, inflated, pedicelled. Chives conjoined, with a dorsal fissure.

SPECIFIC CHARACTER, &c.

CROTOLARIA, foliis simplicibus lanceolatis subsessilibus, leguminibus glabris, racemo terminali, caule sulcato. *Willd. Sp. Pl.* 3. 974.—*Curt. Bot. Mag.* 490.	CROTOLARIA, with simple lanceolate somewhat sessile leaves, smooth pods, a terminal bunch of flowers, and a furrowed stem.

REFERENCE TO THE PLATE.

1. The empalement.
2. The standard.
3. One of the wings.
4. The keel.
5. The chives.
6. The same spread open.
7. The seed-bud and pointal.

THE species of Crotolaria here represented is a native of Malabar and the coast of Coromandel. It was obligingly sent us in bloom last August by the Hon. Mr. Irby, of Farnham Royal, Bucks, and was raised by him from East Indian seeds. Its root is annual; and the plant, in consequence of it, admits of increase by seeds only, which should be sown early on a hot-bed, with the most tender annuals, and the young plants when large enough should be transplanted into separate pots of rich earth; and after they have sufficiently recovered the effects of removal, they should be taken into the hot-house, the assistance of which is requisite to bring them to maturity. They rise with slender and rather rushy stems, which are but slightly branched, to the height of two or three feet, and make a fine appearance when in flower; but they are, like many other tender leguminous plants, very subject to the annoyance of insects, and more especially to that almost indestructible pest of stoves, the red spider; the best mode of destroying which is that of steaming the plants; that is, keeping them well watered, and in a hot and humid air.

Some of our friends conceive this plant to differ from that which is figured in the Botanical Magazine, No. 490. It is true, I found the seed-bud quite silky; and if the full grown pod (which I never saw *) should likewise be so, it would certainly be worthy distinguishing from that plant, which is said to have smooth, and therefore, in all probability, naked pods.

* Neither have I yet seen the pod of the Crotolaria figured in the last number, which, if it should prove cylindrical and not turgid, would refer that plant to the genus Lebeckia, with which in habit it very well accords.

Crotalaria Juncea

PLATE CCCCXXIII.

GERANIUM LUTEUM.

Dwarf Yellow-flowered Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus pentacoccus.	ONE POINTAL. Five summits. Fruit beaked, five berries.

SPECIFIC CHARACTER.

GERANIUM, tuberosum, pinnis foliorum oppositis subovatis acutis inciso-bifidis seu trifidis integrisve, scapis simplicibus, petalis clavato-linearibus.	GERANIUM, tuberous, with the pinnæ of the leaves somewhat ovate acute gash-bifid or trifid or entire, simple flower-stalks, and clavatedly-linear petals.

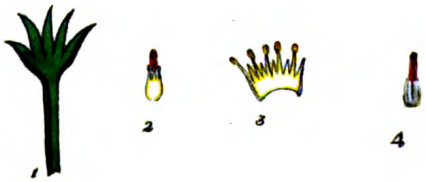
REFERENCE TO THE PLATE.

1. The empalement cut open.
2. The chives and pointal.
3. The chives spread open.
4. The seed-bud and pointal.

WE have here the pleasure of adding another tuberous-rooted Geranium, not enumerated by Willdenow, to the great variety of that description already given in this work. As a species it appears sufficiently distinct from any of them, although pretty closely allied to that which is delineated in our last number; and also to G. fissifolium of our 378th plate. Its flowers are yellow marked with red, as is frequently the case amongst the tuberous species of this extensive tribe of plants, but of very rare occurrence in the other departments of it.

From the Clapham collection, incomparably rich in this description of plants, our figure was derived, so long since as the summer of the year 1803.

Like its congeners, it is a native of the Cape; requires the treatment of a green-house plant; and is increased, but very slowly, by carefully dividing the tubers of its roots, when quiescent; taking especial care that no moisture comes in contact with the wounded parts, until nature has healed them by drying, and formed what the gardeners call a callus; that is, a dry and hardened external skin.



ranium luteum

PLATE CCCCXXIV.
POLYGALA MICRANTHA.
Small-flowered Milkwort.

CLASS XVII. ORDER III.

DIADELPHIA OCTANDRIA. Two Brotherhoods. Eight Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-phyllus, foliolis duobus alæformibus, coloratis. Legumen obcordatum, biloculare.	EMPALEMENT 5-leaved, with two of the leaves like wings, coloured. Pod inversely heart-shaped, two-celled.

SPECIFIC CHARACTER, &c.

POLYGALA, virgata, floribus imberbibus axillari-sessilibus solitariis subdistantibus folio brevioribus, foliis alternis subremotis internodio longioribus subulatisque.	MILKWORT, twiggy, with beardless axillary-sessile solitary rather distant flowers which are shorter than the leaf, and alternate remotish awl-shaped leaves, longer than the space they are distant from each other.

POLYGALA (micrantha) floribus imberbibus axillari-sessilibus, foliis linearibus mucronatis. *Thunb. Prod.* 121.—*Willd. Sp. Pl.* 3. 892.

REFERENCE TO THE PLATE.

1. The empalement.
2. The same magnified.
3. The keel magnified.
4. One of the wings.
5. The same magnified.
6. The chives.
7. The same magnified.
8. The pointal.
9. The same magnified.

THERE is an elegance and a grace in the habit and appearance of this Polygala, which in a great measure compensates for its trifling flowers. It forms a small, and but little branched, twiggy shrub; is a native of the Cape of Good Hope; and belongs to the Heisteria division of the genus. We do not know that it has ever been figured before; but, notwithstanding the short character given by Thunberg, have little doubt of its being the plant he intended for P. micrantha. The honour of introducing it, and also some other shrubby Polygalæ, into this country, is due to G. Hibbert, Esq., from whose choice collection at Clapham our figure was taken.

Polygala micrantha continues flowering the greatest part of the year, winter as well as summer, is a very hardy green-house plant, and is propagated by cuttings in the usual way.

If we were to consider the flowers as resupinate, and perhaps they really are so, what we have called the keel would become the standard, and the small appendage which is a part of it below would answer as its keel. The expanded flowers of this species, and also those of P. stipulacea of our 363d plate, viewed in front, very remarkably resemble in outline, and almost in size, the insects which I have named Tineæ Bombyciformes; but the wings of the flower, which answer to the pectinated horns of the insects, appear rather too large. P. alopecuroides of our 371st plate possesses this extraordinary resemblance still more completely; inasmuch as the ciliæ of its keel correspond exactly to the fringes of the insects' wings! A more perfect similitude between objects in reality so remote and so different, I have very rarely, or never, beheld.

Polygala micrantha.

PLATE CCCCXXV.

MANGIFERA INDICA.

Indian Mango Tree.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

FLORES pentapetali, inferi. Drupa reniformis. Corolla petalis lanceolatis. Nux lanuginosa.	FLOWERS 5-petalled, beneath the fruit. Drupe kidney-shaped. Blossom with lanceolate petals. Nut woolly.

SPECIFIC CHARACTER, &c.

MANGIFERA, foliis oblongo-lanceolatis, floribus submonandris, drupa maxima reniformi. *Willd. Sp. Pl.* 1. 1150.	MANGO, with oblong-lanceolate leaves, somewhat monandrous flowers, and a large kidney-shaped drupe.

REFERENCE TO THE PLATE.

1. A front view of a detached flower magnified.
2. A back view of the same.

THE Mango tree very seldom produces its flowers, and, we believe, never perfects its fruit, or, as Miller calls it, its plum, in Europe. In India this tree acquires considerable size, with a rough bark, and luxuriant foliage, and its fruit is held in great esteem. For the sake of its fine leaves alone it is worthy cultivation in our hot-houses, where, according to Miller, it prospers better out of, than in the tan; yet I believe most of the horticulturists of the present day prefer the bark-bed for their Mangoes, planting them in rich earth and large pots. They are propagated by layers or cuttings, seldom by seeds, because these will not keep long after they are mature, and therefore perish before they reach this country and can be sown in it. The flowers are extremely trifling, but they are curious in their conformation, and remarkable in constantly having four out of their five chives abortive, imperfect, and destitute of anthers; wherefore the plant is monandrous. Our figure was taken at Whitley and Brames's in the month of December last.

gifera indica

PLATE CCCCXXVI.

LIMODORUM TANKERVILLIÆ.

Chinese Limodorum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

NECTARIUM monophyllum, concavum, pedicellatum, intra petalum infimum.	NECTARY one-leafed, concave, on a pedicel, upon the lower petal.

SPECIFIC CHARACTER, &c.

LIMODORUM, floribus racemosis imberbibus. *Ait. Hort. Kew.* 3. 302.—*Gmel. Syst. Nat. tom.* 2. *p.* 60.	LIMODORUM, with beardless racemose flowers.

REFERENCE TO THE PLATE.

1. A miniature figure of the plant.
2. The spathe.
3. The honey-cup.
4. The parts of fructification as they stand in the plant. The upper part of the same with its lid elevated, and one chive detached and magnified.

No coloured representation of this magnificent plant within our knowledge has yet been published, either in this country or on the continent; but a large folio black print of it was given in Aiton's Hortus Kewensis, along with the above specific character, and with the circumstance of its having been introduced into the British gardens by the late Dr. Fothergill, in the year 1778, from China; of which country it is a native. In England it requires the artificial heat of the tan-bed to make it flower, which it does annually, with good management, from the month of November to that of April. It requires rich earth, and in dry weather frequent waterings; when in bloom makes a very stately appearance, and is propagated pretty readily by parting the tubers of the roots. Our drawing was made from fine plants in the Hibbertian collection at Clapham last month.

dorum Jankervillia

PLATE CCCCXXVII.

GOMPHOLOBIUM MACULATUM.

Maculated Air-pod.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX campanulatus, simplex, alte 5-fidus. Corolla papilionacea. Stigma simplex, acutum. Legumen inflatum, sphericum, uniloculare, polyspermum.

EMPALEMENT bell-shaped, simple, deeply five-cleft. Blossom butterfly-shaped. Summit simple, acute. Pod inflated, spherical, one-celled, many-seeded.

SPECIFIC CHARACTER.

GOMPHOLOBIUM, foliis ternatis linearibus nudis, senioribus declinatis, pedunculis basin versus bibracteatis, ramulis teretibus nudis.

GOMPHOLOBIUM, with leaves in threes and naked, the older ones bent downwards, peduncles with 2 floral leaves near the base, and naked round branches.

REFERENCE TO THE PLATE.

1. A leaf.
2. The empalement, peduncle, and floral leaves.
3. A front view of the standard.
4. A back view of the same.
5. One of the wings.
6. The keel.
7. The chives and pointal.
8. The seed-bud and pointal.

THE plant here represented is quite a new species, and is said to be a native of New Holland: it is a stiff little shrub, and prospers in the green-house; and its yellow flowers, deeply blotched with brown on the standard, make a good appearance.

In its habit, and in the generic characters, it comes nearer to Gompholobium of Dr. Smith in Exotic Botany, tab. 5, than to any other genus within our knowledge; yet the dissections here given, will be found to swerve from the characters there advanced, in several perhaps not unimportant particulars. The stamina appear more united. The stigma appears slightly capitated, instead of acute; and the infant pod somewhat too long. The bracteæ also differ in number as well as structure.

Our drawing was made from living plants in the Hibbertian collection in the year 1803, but the above description from the drawing only.

mpholobium maculatum.

PLATE CCCCXXVIII.

ELYCHRISUM STÆHELINA.

Stœhelina-like Eternal-flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Polygamy.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM nudum. Pappus pilosus, vel plumosus. Calyx imbricatus, radiatus, radio colorato.	RECEPTACLE naked. Down hairy, or feathery. Empalement imbricated, rayed, with the ray coloured.

SPECIFIC CHARACTER, &c.

ELYCHRISUM, fruticosum, erectum, foliis oblongo-lanceolatis basi attenuatis sericeis, pedunculis nudis unifloris terminalibus. *Willd. Sp. Pl.* 3. 1910.	ELYCHRISUM, shrubby, erect, with leaves oblong-lanced attenuated at the base and silky, and terminal naked one-flowered peduncles.

XERANTHEMUM (Stæhelina) pedunculis terminalibus exertis nudis unifloris, foliis lanceolatis tomentosis. *Syst. Veg.* 624.

XERANTHEMUM foliis lanceolato-oblongis carinatis lanatis, caule erecto. *Thunb. Prod.* 153.

OBS. Caulis lignosus, tener, paniculato-ramosus, ut tota herba albo-tomentosus. Pedunculi longi terminales. *Willd.* l. c.

REFERENCE TO THE PLATE.

1. A flower cut open.
2. An hermaphrodite floret with its down.
3. The same without the down.
4. The same spread open.
5. The seed-bud and pointal, with the summit detached and magnified.

IN the last volume of Willdenow's Species Plantarum, containing the great class Syngenesia, are found many valuable botanical alterations and amendments, respecting the division and distribution of the genera and species; and amongst others, we find the Linnæan genus Xeranthemum, and even its species the annuum, with its supposed variety the inapertum, divided and arranged exactly after the manner proposed in our account of X. bracteatum (Plate 375), now Elychrisum bracteatum: those few species only being now called Xeranthema which have a squamous receptacle: viz. the annuum, and inapertum, of European origin; and the orientale, a native of Armenia.

The plant here depicted was drawn from a living specimen in the Clapham collection, last December, where at first it only threw up one flower-stalk; but it has since become stronger, and shows a peduncle from the end of almost every branch.

Although this species comes nearer Elychrisum in its generic characters than to any other genus, Gnaphalium not excepted, yet still we cannot help remarking, how much it recedes from the external appearance of most of its congeners, in being quite destitute of radiating scales.

It is a green-house plant, a native of the Cape, and is propagated by cuttings; but is not at present in any collection we are acquainted with, except Mr. Hibbert's.

Helichrysum Stachelina

PLATE CCCCXXIX.

PROTEA INCURVA.

Incurved-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA quadrifida, sive quadripetala. Antheræ lineares, insertæ petalis infra apicem. Calyx proprius, nullus. Nux unisperma, supera.	BLOSSOM four-cleft, or four-petaled. Tips linear, inserted on the petals below the apex. Empalement proper, none. Nut one-seeded, above.

SPECIFIC CHARACTER, &c.

PROTEA, foliis filiformibus incurvis glabris, capitulis racemoso-spicatis tomentosis. *Thunb. Prod.* 26.—*Diss. no.* 22. *tab.* 3. *fig.* 2.—*Willd. Sp. Pl.* 1. 516.	PROTEA, with thread-shaped incurved smooth leaves, and heads of flowers racemose-spiked and woolly.

REFERENCE TO THE PLATE.

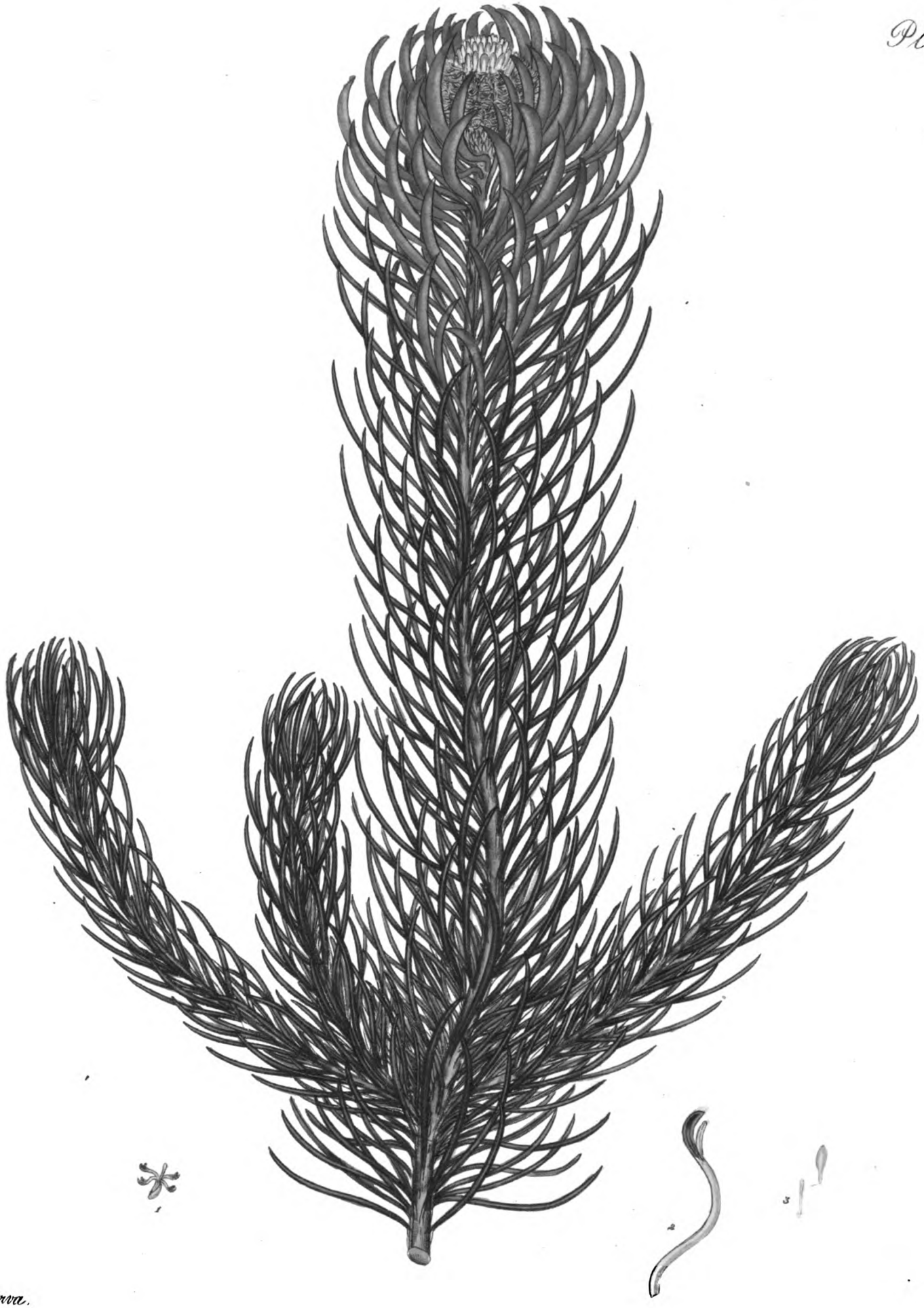
1. A flower.
2. A petal magnified.
3. The seed-bud and pointal, with the summit detached and magnified.

THE Protea incurva is a native of the Cape of Good Hope, which is also the native country of by far the greater part of this extensive genus.

In this country it is considered and treated as a hardy green-house plant; and requires, like most of its congeners, a fresh loamy soil, and an airy situation in the winter. A very abundant supply of fresh air, indeed, is of essential consequence in the cultivation of most of the Cape plants; they benefit by it in the day time in most sorts of weather, even if rainy, provided the plants are not wetted by the rain, and the temperature of the atmosphere is not lower than forty degrees of Fahrenheit's thermometer.

In many collections, we are of opinion, too little air is usually admitted in the green-house; especially in winter, and early spring: and we are also of opinion, that where we have seen the most given, the plants are the most healthy and robust. The fine collection at Mr. Hibbert's is a powerful argument in favour of this theory.—In few places is air so freely given; in none are plants in finer health: therefore much air is essentially necessary; for plants, like animals, are now known to absorb from the atmosphere, through a process analogous to respiration, its oxygenous particles; thence deriving strength and vigour, and without which no animal or vegetable can at all maintain either health or life.

Our figure was made from the Clapham Collection last June. The plant is shrubby, erect, and is propagated by cuttings in the usual way.



Protea incurva.

PLATE CCCCXXX.

RICINUS ARMATUS.

Prickly-capsuled Ricinus.

CLASS XXI. ORDER VIII.

MONOECIA MONADELPHIA. One House. One Brotherhood.

ESSENTIAL GENERIC CHARACTER.

MAS. Calyx 5-partitus. Corolla 0. Stamina numerosa.

FEMINA. Calyx 3-partitus. Corolla 0. Pistilli 3, bifidi. Capsula 3-locularis. Semen 1.

MALE. Empalement 5-parted. Blossom none Chives numerous.

FEMALE. Empalement 3-parted. Blossom none. Pointals 3, 2-cleft. Capsule 3-celled. Seed one.

SPECIFIC CHARACTER.

RICINUS, foliis peltatis alte palmato-novemfidis serratis, petiolis glandulosis, capsulis undique spinis herbaceis.

RICINUS, with leaves peltated deeply palmate-9-cleft and serrated, with glandulose petioles, and capsules every where furnished with herbaceous spines.

REFERENCE TO THE PLATE.

1. A male flower.
2. The male empalement.
3. The pointals.
4. A capsule.
5. A seed.

THE species of Ricinus here depicted, was raised in Lady Holland's garden at Kensington last summer, from seeds sent by her ladyship from Malta, where the plant has been cultivated for medicinal purposes about four years; and where it is considered as a new sort. And such indeed it appears to us: for as a species, although it comes extremely near to R. communis, R. inermis, and perhaps R. medicus of Forskall, it appears to be sufficiently distinct; differing from the former and latter, in its deeper cloven, and more numerously lobed, and glandular petioled leaves; and from R. inermis, in having its capsules thickly beset with considerable, but herbaceous spines; whence our specific name of armatus, in contradistinction also to R. inermis, which has smooth capsules. The plant from which our drawing was taken was eight feet high and very much branched; and its ample yet elegant foliage, and red stalks and veins, communicated that kind of appearance to it which is often attributed to Asiatic plants—stately, and magnificent. Its root is biennial; it requires the protection of the greenhouse, and can be increased very readily by seeds, which should be raised on a hot-bed in spring, and afterwards transplanted into very large pots. There were two glands at the top of the petioles.

The valuable drug called castor oil is extracted from the seeds of this and other species of Ricinus.

Ricinus armatus.

PLATE CCCCXXXI.

CÆSULIA AXILLARIS.

Axillary-flowered Cæsulia.

CLASS XIX. ORDER I.

SYNGENESIA POLYGAMIA ÆQUALIS. Tips united. Æqual Polygamy.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum, paleis semina involventibus. Pappus nullus. Calyx triphyllus.	RECEPTACLE chaffy, with the chaff enveloping the seeds. Down none. Empalement three-leaved.

SPECIFIC CHARACTER, &c.

CÆSULIA, foliis lanceolatis basi attenuatis serratis alternis. *Willd. Sp. Pl.* 3. 1796.	CÆSULIA, with alternate lanceolate serrated leaves attenuated at the base.

REFERENCE TO THE PLATE.

1. A floret with its seed enveloped by the chaff.
2. The same divested of its seed and chaff.
3. The same spread open and magnified.
4. The seed-bud, pointal, and chaff.
5. and 6. The same in different states.

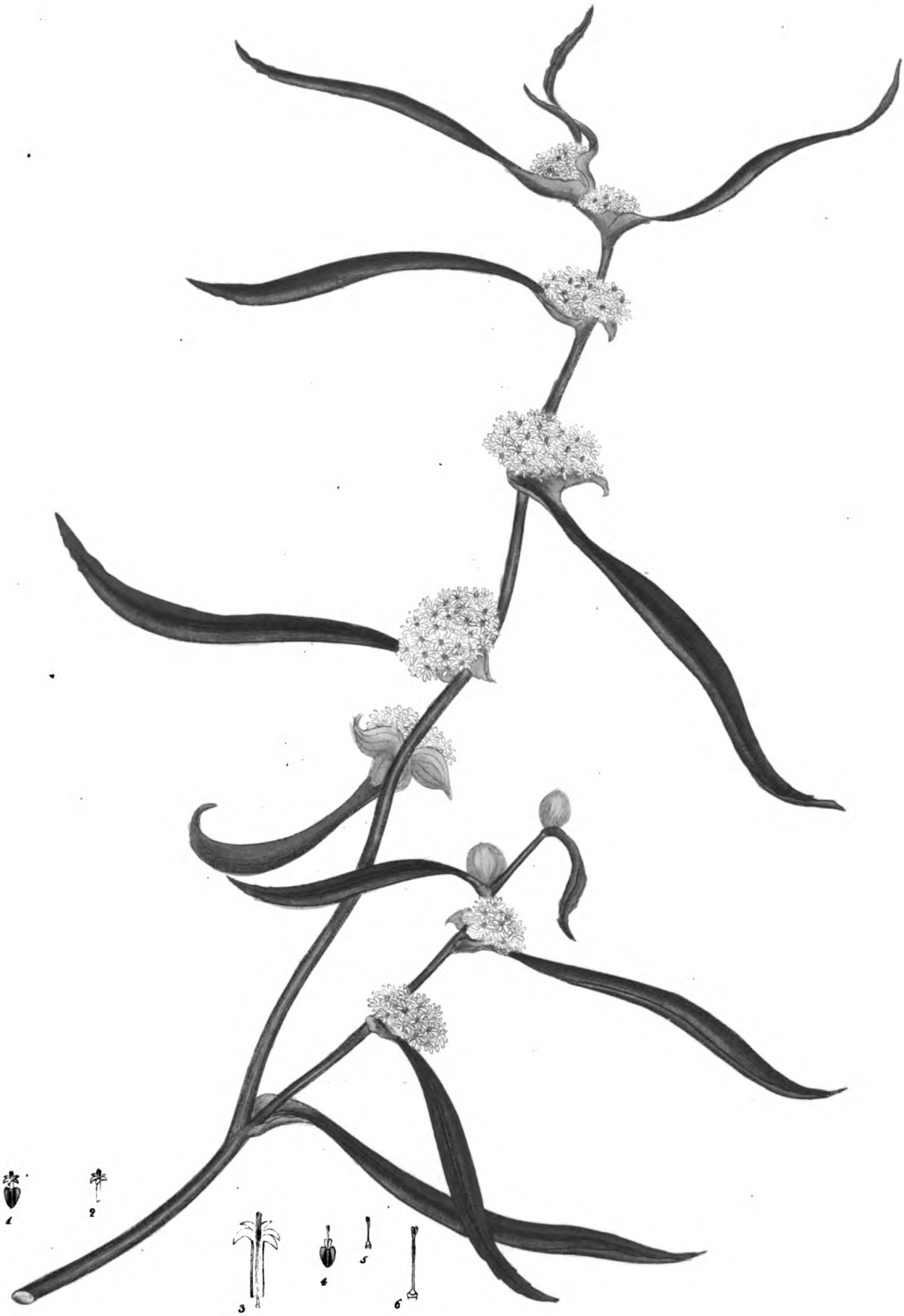
NOVELTY, oddity, and a very unusual appearance in every part, for a syngenesious plant, must in the present subject compensate for its trifling flowers.

Few of our cultivating friends, except those who are the most botanical, will be inclined to add this Cæsulia to their collections; although a very rare, and, in many respects, an interesting species.

It was first described and figured by Dr. Roxburgh, as a new genus, and by the name it here bears, in his sumptuous work on the plants of the coast of Coromandel, of which country it is a native; and it has since been taken up by Professor Willdenow, in his edition of Species Plantarum, and has had a new species (the *radicans*), from Guinea, added to it by that botanist.

The axillary-flowered Cæsulia is quite new in the gardens, and is said to have a perennial root, by the parting of which we suppose it may be increased; and must be considered as a hot-house plant in this country.

Our figure was taken from a living specimen, obligingly communicated to us last summer by the Marquis of Blandford, from White Knights, Berks; who, we believe, first raised it in this country, from East Indian seeds.



rulia axillaris

PLATE CCCCXXXII.

STRELITZIA REGINÆ.

The Queen's Strelitzia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

SPATHA universalis, partialesque. Calyx 0. Corolla 3-petala. Nectarium 3-phyllum, genitalia involvens. Capsula 3-locularis; loculis polyspermis.

SPATHE a common one, and partial spathes. Empalement none. Blossom three-petalled. Nectary three-leaved, involving the organs of fructification. Capsule three-celled; with many seeds.

SPECIFIC CHARACTER, &c.

STRELITZIA, foliis ellipticis basi undulatis parallelo-costatis.

STRELITZIA, with leaves elliptic undulated at the base, and ribbed in a parallel manner.

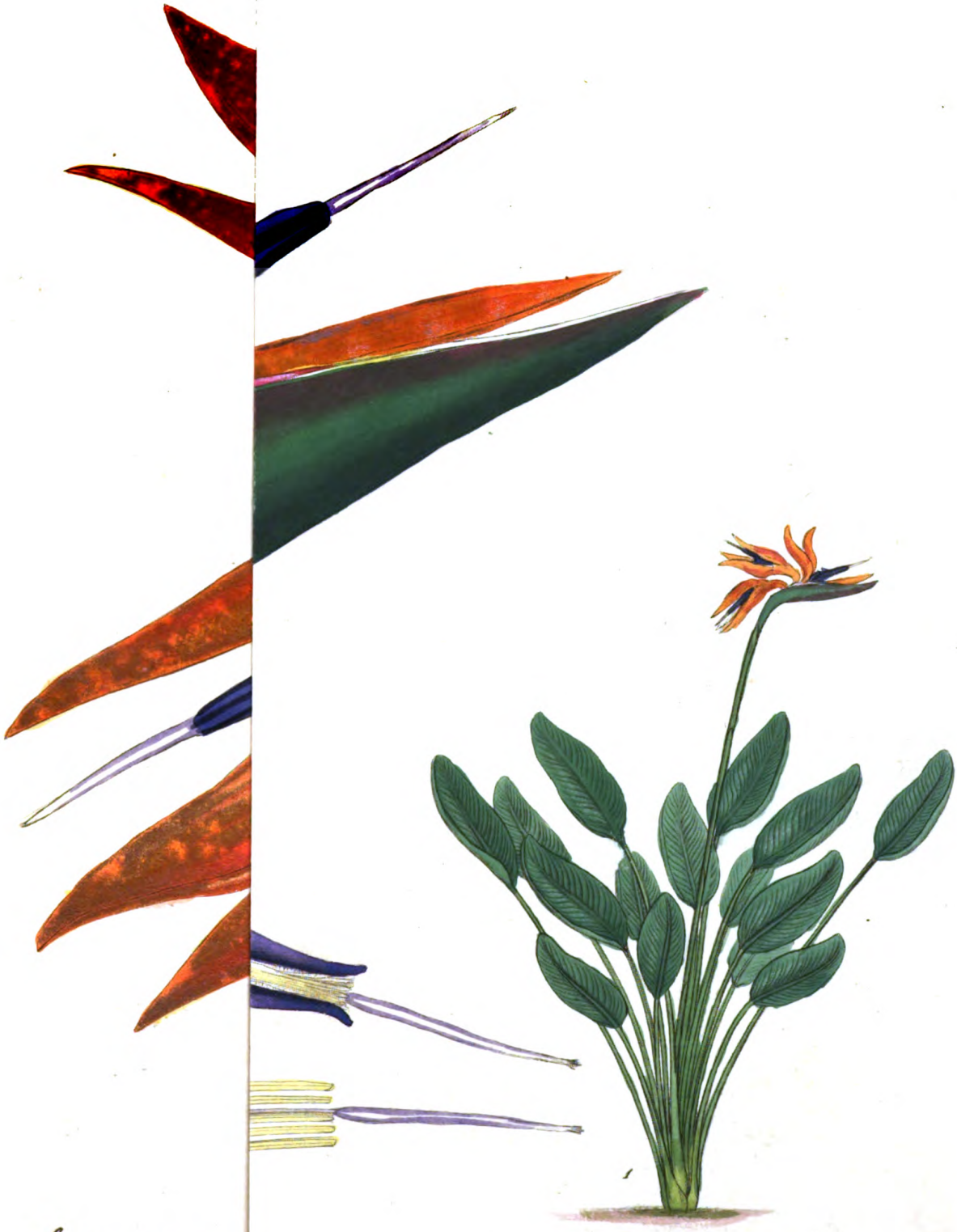
STRELITZIA Reginæ. *Willd. Sp. Pl.* 1. 1190.—*Curt. Bot. Mag. tab.* 119.—*Ait. Hort. Kew.* 1. 285. *tab.* 2.

REFERENCE TO THE PLATE.

1. A miniature figure of the plant.
2. The two-petal-like nectary.
3. The upper short petal of the nectary.
4. The seed-bud, chives and pointal.

AT the request of several of our subscribers, who compliment us in saying this work contains nearly all the more showy plants now in cultivation; and who moreover are desirous that it should not long want any of them: we here beg leave to present them with that queen of hot-house plants, the superb Strelitzia: although strictly against our rules and plan; a coloured quarto print of it having already been given in the Botanical Magazine.

Of this majestic genus, first established in the Hortus Kewensis, there are now living in the British gardens, not fewer than four species, and several varieties; all natives, we believe, of the Cape of Good Hope, and all hot-house plants: viz. 1st, Strelitzia alba (Hortulanorum), which, towering far above the rest, and quite erect, attains the kingly height of twenty feet or upwards: it ought to have been called S. Regis;—2nd, S. Reginæ, here delineated, of which there are three or four varieties, differing only in the undulation of the leaves, and in their length, which (including the petiole) is usually from three to five feet;—3d, A nondescript narrow-leaved species, with very long petioles; this should be called S. Principis;—and 4th, another nondescript, but smaller sort, whose leaves are mere petioles, and scarce ever expand in the slightest manner into laminæ: this should be called S. juncea: it is very rare, and we believe at present only in the royal collection at Kew. All the Strelitziæ are propagated, though slowly, by carefully dividing their perennial roots, which are usually planted either in very large pots, or small beds annexed to the tan-bed in hot-houses. Our figure was made from a plant at Mesrs. Colvill's, in the King's Road, last autumn, but the plant flowers freely at various seasons.



Strelitzia Regina