





PLATE CXLV. HILLIA LONGIFLORA. Long-flowered Hillia.

CLASS VI. ORDER I. HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium hexaphyllum; foliolis oblongis, acutis, erectis.

- COROLLA monopetala; tubus cylindricus, longiffimus; limbus fexfidus; laciniis oblongis, planis.
- STAMINA. Filamenta fex, breviffima. Antheræ oblongæ, erectæ, intra faucem corollæ.
- PISTILLUM. Germen inferum, oblongum, obfolete hexagonum. Stylus filiformis, longitudine tubi. Stigma capitatum.
- PERICARPIUM oblongum, compreffum, biloculare.

SEMINA numerofa, minima.

EMPALEMENT. Cup fix-leaved; leaflets oblong, fharp pointed and upright.

- BLOSSOM one petal, tube cylindrical, very long; border fix-cleft; fegments oblong, flat.
- CHIVES. Threads fix very fhort. Tips oblong, upright, within the mouth of the bloffom.

POINTAL. Seed-bud beneath oblong, flightly fix-fided. Shaft thread-fhaped, the length of the tube. Summit headed.

SEED-VESSEL oblong, flattened and two celled.

SEEDS many, very fmall.

SPECIFIC CHARACTER.

Hillia corollis fexfidis, laciniis lanceolatis, fupra convexis; foliis ovatis, acutis, glabris. Hillia with bloffoms fix cleft, fegments lancethaped, convex above; leaves egg-fhaped, pointed and fmooth.

REFERENCE TO THE PLATE.

- 1. A flower cut open, to expofe the number and fituation of the Chives.
- 2. The Shaft and its fummit, natural fize, placed by the flower, to thew its proportional length to the tube.
- 3. The Seed-bud, with the leaflets of the Empalement attached, cut transverfely, to fhew the division of the cells in the center.

This fpecies of Hillia was firft introduced to our gardens in the year 1789, from the Ifland of Barbadoes, fent in plants, by Mr. J. Elcock, to Meffrs. Lee and Kennedy, Hammerfmith. Originally this flurub was fpecifically termed, *parasitica* by profetfor Jacquin, when he firft formed, and titled the Genus, after Dr. J. Hill, of voluminous memory; from a fuppofition that it was to be found growing, only, upon fome other plant; a circumftance, which being denied by Swartz, he has altered it to *longiflora*. We have followed the latter name that ours may go in unifon with the author of the laft Species plantarum now publishing by Willdenov, as well as profeffor Martyn, who in his edition of Miller's Dictionary has followed Swartz; they appearing to be the moft accurate, as well as the moft read and followed of any modern Botanical authorities. It is a tender hot-houfe plant, ftrikes eatily from cuttings, thrives in rich mould and flowers about the end of February. To the Right Hon. Lord Vifcount Valentia we are indebted, for the fpecimen from which our figure was taken, fent from his Lordfhip's famed collection at Arley near Bewdley, Staffordfhire; where, we believe, it has flowered for the firft time in England.





PLATE CXLVI.

PSORALEA ACULEATA. Prickly Psoralea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two fets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tuberculis punctatum, quinquefidum; laciniis acutis, æqualibus, perfiftentibus; infima duplo longiore.

COROLLA papilionacea, pentapetala. *Vexillum* subrotundum, emarginatum, affurgens. *Alce* lunulatæ, obtufæ, parvæ. *Carina* dipetala, lunulata, obtufa.

- STAMINA. Filamenta diadelpha (fimplex fetaceum ct novem coalita), adfcendentia. Antheræ fubrotundæ.
- PISTILLUM. Germen lineare. Stylus fubulatus, adfcendens, longitudine ftaminum. Stigma obtufum.

PERICARPIUM. Legumen longitudine calycis, compreffum, adfcendens, acuminatum.

SEMEN unicum, reniforme.

Pforalea foliis ternatis, minimis, confertifimis, recurvatis, in fpinulam definentibus. EMPALEMENT. Cup one leaf, dotted over with fmall tubercles, and five-cleft; the fegments equal and remaining, the lower one twice the length of the others.

BLOSSON butterfly-fhaped, five petalled. Standard nearly round, notched at the end, turned upwards.

- Wings half-moon-fhaped, obtufe, fmall.
- Keel two-petalled, half-moon-fhaped, obtufe.
- CHIVES. Threads in two fets (a fingle one like a briftle, and nine united), afcending. Tips nearly round.
- POINTAL. Seed-bud linear. Shaft awl-fhaped, afcending, the length of the chives. Summit blunt.

SEED-VESSEL. A pod the length of the cup, flattened, afcending, and tapered to the point. SEED, one, kidney.thaped.

SPECIFIC CHARACTER.

Pforalea with three-leafletted leaves, very finall, very crowded, bent back, and ending in a finall fpine.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The Standard of a Bloffom.
- 3. One of the Wings of the fame.
- 4. The two Petals of the Keel.
- 5. The Chives, a little magnified.

THE Prickly Pioralea is not a new plant in our collections; for, it was firft introduced by Mr. F. Maifon to the Royal Gardens at Kew, as we learn from the Catalogue, in the year 1774. But although fo long a fojourner with us, it is not found in many collections, owing to the difficulty in its increafe, as it feldom ripens its feeds; and cuttings, the only remaining method, but seldom fucceed; although by taking them from a vigorous growing plant and giving them the affiftance of the bark-bed of the hothoufe, early in March, a few plants have been procured occasionally. Our drawing was made from a moft beautiful plant in the Clapham Collection, laft year, in the month of Auguft.





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PLATE CXLVII.

GLADIOLUS CUSPIDATUS. •

Spear-spotted Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. Stamina adfeendentia. BLOSSOM fix divitions, gaping. Chives afcending. See GLADIOLUS ROSEUS. Plate XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis lineari-enfiformibus, glabris; corolla ringente; laciniis longiffimis, acuminatis, undulatis, fubæqualibus, tribus inferioribus in medio macula oblonga notatis. Gladiolus with leaves that are linearly fwordfhaped and fmooth; blofforn gaping; fegments very long, tapered to the point, waved and nearly equal, the three lower in the middle have an oblong fpot.

REFERENCE TO THE PLATE.

1. The two fheaths of the Empalement.

2. A bloffom cut open, with the Chives remaining attached.

3. The Seed-bud, Shaft, and Summit.

 T_{HE} Gladiolus here figured, reprefents a variety of one of the moft errant fpecies of the Genus, known commonly by the name of Spade Gladiolus, and of which we have drawings of eight, quite, diffind; yet all, unquefionably, originating in one common parent. It was introduced in 1796, from the Cape of Good Hope, by Mr. R. Williams, nurferyman of Turnham-green, near Brentford; is a very hardy greenhoufe bulb, increafes from the root in abundance, if planted in very fandy peat earth, and flowers about the Month of April, or May.





PLATE CXLVIII.

LACHENALIA QUADRICOLOR.

Four-coloured Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COR. 6-petala, infera; petalis 3 interioribus longioribus. Stamina erecta. Capfula fubovata, trialata. Semina globofa. BLoss, 6-petals, beneath; the three inner petals the longest. Chives erect. Capfule nearly egg-fhaped, three winged. Seeds elobular.

SPECIFIC CHARACTER.

Lachenalia foliis geminis, lineari-lanceolatis; fcapo erecto; corollis propendulis, cylindricis, quadricoloratis, cum limbo petalorum interiorum patulo. Lachenalia with leaves in pairs, linearly lancefhaped; flower-flem erect; bloffoms hanging down, cylindrical, and four-coloured, with the border of inner petals fpreading out.

REFERENCE TO THE PLATE.

- 1. A Flower cut open, with the Chives remaining.
- 2. An inner Petal, with its Chive, fhewn from the infide.
- 3. An outer Petal, fhewn from the outfide.
- 4. The Pointal complete.

ABOUT the year 1789, this very handfome fpecies of Lachenalia was first received by Meffrs. Lee and Kennedy, Hammerfmith, from the Cape of Good Hope, fent in bulbs to them by J. Pringle, Efq. It is as hardy as the L tricolor, to which it much inclines, well known to collectors, and is equally eafily propagated; an excellent figure of which is to be found, in the 82d Plate of the Botanical Magazine of Mr. Curtis. The L quadricolor is given as a fynonym by Willdenow to L. pendula, a plant we have already figured, and from which this ftands quite diffinct in the conformation of every part; they are both to be found in the 2d Vol. of Icon. of Jacquin, from whom we copy our fpecific title, the pendula, t. 400, the quadricolor, t. 396.







PLATE CXLIX.

STRUTHIOLA CILIATA.

Fringed-leaved Struthiola.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PERIANTHIUM diphyllum. Corolla tubulofa, 4-fida; Nectarium, glandulæ octo fauci circumpofitæ. Semen unum, fubbaccatum. CUP two-leaved. Bloffom tubular, 4-clcft; Honey-cup, 8 glands placed round the mouth of the bloffom. One feed like a berry. See STRUTHIOLA INERICATA, PL CXIII, Vol. II.

SPECIFIC CHARACTER.

Struthiola foliis ovato-lanceolatis, mucronatis, ciliatis, concavis, quadrifariam imbricatis, apice incurvis; corolla fubalbida. Struthiola with leaves between egg and lancefhaped, pointed, fringed, concave, tiled in four rows, turned inwards at the point; bloffom whitifh.

REFERENCE TO THE PLATE.

1. A leaf flewn fide-ways that the incurvature of the upper part may be feen.

2. A flower complete.

- 3. The two leaves of the Empalement, magnified.
- A bloffom- cut open, to expose the fituation of the chives, at the mouth of the tube, magnified.
- 5. The Pointal, a little magnified.

This is the variety of Struthiola ciliata promifed in the laft number. It varies from the other in the largenefs and incurvation of the leaves, and colour of the flower, as well as, in the growth of the plant; in this, the fiem rifes to three feet; in that, it feldom exceeds one. With rather lefs difficulty it is increafed and preferved than the red variety, and makes a very handfome figured plant, flowering in the month of Auguft, at which feafon, laft year, our drawing was taken from a plant in the Hibbertian Collection. This Var. has the advantage of the other, in having the bloffoms extremely fragrant, in the evening.







PLATE CL.

GERANIUM PRÆMORSUM.

Bitten-leaved Geranium.

CLASS XVI. ORDER IV. of Suppl. Syst. Veg. 1781.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus, 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 incifo-lobatis, reniformibus; lobis cuneiformibus, præmorfis; floribus fubfolitariis, heptandris; caule flexuoto, fubcarnoso. Geranium with leaves deeply cut into lobes and kidney-fhaped; lobes wedge-fhaped, and bitten at the ends; flowers generally folitary, with feven fertile tips; fiem grows zig-zag, rather flefhy.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to fhew its tubular firucture.

2. The Chives and Pointal.

3. The Chives fpread open.

4. The Pointal and Seed bud.

THE Geranium præmoríum offers a moft beautiful addition to this already very extensive genus, but is without doubt a true species. It is a native of the Cape of Good Hope, and was introduced to us, from thence, in the year 1798, by Captain Quarrel; brought in feed, and communicated to Mr. J. Colville of the King's Road, Chelfea; who informs us, that it flowers from March, till November, that he keeps it in rich dungy earth, and that it is raifed, pretty freely, by cuttings; requiring the heat of a dry flove in the winter months. Our figure was made at the nurfery, Chelfea, about the beginning of March this year.







PLATE CLI.

PITTOSPORUM CORIACEUM.

Thick-leaved Pittofporum.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, inferum, deciduum.

- COROLLA. Petala quinque; ungues concavi, in tubum urceolatum conniventes; laminæ ovato-oblongæ, patentes.
- STAMINA. Filamenta quinque, fubulata, receptaculo inferta. Autheræ fagittatæ, erectæ, filamentis dorfo affixæ.
- PISTILLUM. Germen ovatum, fuperum, compreflum. Stylus brevifimus, cylindricus. Stigma capitatum, planum.
- PERICARPIUM. Bacca fubglobofa, 2-5 locularis, 2-5 valvis; loculamentis pulpa refinofa fcatentibus; diffepimenta valvulis contraria.
- SEMINA tria feu quatuor, angulata, oblonga, obtufa, offea.

- EMPALEMENT. Cup five-leaved, beneath, and falling off.
- BLOSSOM. Five petals; claws concave, clofing into a tube pitcher-fhaped; the borders oblong egg fhaped, fpreading.
- CHIVES, Threads five, avi-fnaped, inferted into the receptacle. Tips arrow fnaped, upright, fixed by the back to the threads.
- POINTAL. Seed-bud egg-fhaped, above, flattened. Shaft very flort, cylindrical. Summit headed, flat.
- SEED-VESSEL. A roundifh berry 2-5 cells, 2-5 ' valves; the cells filled with a refinous pulp; partitions contrary to the valves.SEEDS, three or four, angulated, oblong, ob-
- SEEDS, three or four, angulated, oblong, obtufe, and bony.

SPECIFIC CHARACTER.

Pittofporum foliis ovalibus, obtufis, glaberrimis, coriaceis, integerrimis.

Pittofporum with oval leaves, blunt ended, very imooth, leathery, and quite entire.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Petal of the Bloffom.
- 3. The Chives and Pointal.
- 4. The Pointal feparated from the Chives.
 - 5. A Berry of the fize when ripe.

ABOUT the year 1783, this plant was first raifed in Britain, from feeds which had been received from the Island of Madeira, by Metl'rs. Lee and Kennedy, Hammerfmith. It forms one of the most decorative and confipicuous plants, either in the Confervatory, or Green-houfe; and if encouraged in its growth, by being planted in the border of the one; or kcpt in rich earth, in a large pot in the other, will attain the height of from 6 to 8 feet. The fineft fpecimen we believe, in England, of this plant is to be found in the elegant Confervatory of the Right Honourable Lord R. Spencer, Woolbedding, Suffex. The flowers, which grow in clutters from the ends of the branches in May, have the flavour of Jafmine; but are rather transfitory. It is propagated but flowly and with difficulty, as it does not perfect its feeds with us, and it is not to be increafed by laying: the only method is cuttings, which floud be taken whillt very young and tender from the plant, about April, and put from 6 to 8 in a pot, fixed very tight, in ftiffth loam; they must remain under a hand-glafs on a flady border till Autumn, when they may be removed into the hot-houfe and plunged into the bark bed, where they will begin to grow the enfuing fpring.





PLATE CLII.

GERANIUM SPATHULATUM.

Spatula-leaved Geranium.



CLASS XVI, ORDER IV. of Suppl. Syst. Veg. 1781.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus, penta-coccus. One Pointal. Five summits. Fruit furnifhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Pl. XII, Vol. I.

SPECIFIC CHARACTER.

GERANIUM foliis integerrimis, fpathulatis, glabris, obtufis, radicalibus; calycibus monophyllis; framinibus quinque fertilibus; radice tuberofa. GERANIUM with quite entire leaves, fpatulafhaped, fmooth, blunt, and growing from the root; cups one-leaved; five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement cut open, to fhew its hollow ftructure.
- 2. The Chives and Pointal natural fize.
- 3. The Chives fpread open, to fhew the number and fituation of the fertile ones, which are alternate.
- 4. The Pointal magnified.



The greater number of Geraniums which have been introduced of late, are of the tuberous herbaceous kind; drawings of 14 we have, independent of thofe already figured; conflictuting a diffinguifhed, and diffind natural branch of this extensive family. For the most part, they have only five fertile chives with tubular empalements, fome only two, and others feven, with the footflatk of the flower folid up to the bottom of the cup. This fpecies is as yet, we believe, only in the Hibbertian Collection, Clapham, where our drawing was taken in April this year. The roots had been received in the autumn of 1500 from the Cape. It appears to require the fame management as G, punctatum, and like it, may be increased by the root.







PLATE CLIII. VIOLA PEDATA. Bird's-foot-leaved Violet.

CLASS XIX. ORDER VI.

SYNGENESIA POLYGAMIA MONOGAMIA. Tips united. Flowers fimple.

GENERIC CHARACTER.

- CALXX. Perianthium pentaphyllum, breve, perfiftens; foliolis ovato-oblongis, erečtis, apice acutioribus, bafi obtufis, fupra bafin affixis, æqualibus, fed difpofitione variis; quorum duo fulciunt petalum α ; fingula fingulum petalum β , γ ; unicum duo petala δ . ε . fimùl.
- COROLLA pentapetala, irregularis, petalis inæqualibus; quorum
- Petalum a. supremum rectum, deorium fpectans, latius, obtufius, emarginatum, defi nens bafi in nectarium corniculatum, obtufum, inter calycis toliola prominens.

 β . γ . Lateralia paria, obtufa, oppofita, recta.

- δ. ε. Infima paria, majora, furfum reflexa.
- STAMINA. Filamenta quinque, minima, quorum duo petalo a. proxima appendicibus annexis intrant nectarium. Autherté fapius connexae, obtufae, membranis ad apicem auctae.
- PISTILLUM. Germen fubrotundum. Stylus filiformis, extra antheras prominens. Stigma obliguum.
- PERICARPIUM. Capfula ovata, trigona, obtufa, unilocularis, trivalvis.
- SEMINA plura, ovata, appendiculata, valvis affixa. Receptaculum lineare, per fingulam valvulam lineæ inftar excurrens.
- Ols. Stigma vel in hamum simplicem reflectitur, vel capitulum est concavum apice perforato.
- VIOLA acaulis; foliis pedatis, feptempartitis; laciniis dentatis.

- CUP five-leaved, fhort, permanent; leaflets oblong-egg-fhaped, erect, fharpifh at the point, bluut at the bottom, joined together above the bafe, equal, but varioufly difpofed; of which, two fupport petal α . one each petal β . γ . and one the two petals δ . ϵ , together.
- BLOSSOM five petals, irregular, unequal petals, of which
- The upper petal a. is upright, bent back, broader, and blunter than the reft, notched at the end, terminating at the bafe in a blunt hornfhaped honey-cup, protruding between the leaflets of the cup.
- The lateral petals β . γ . grow in pairs, obtufe, opposite, upright.
- The lower petuls d. E. grow in pairs, larger, and reflexed upwards.
- CHIVES. Five threads, very finall; of which the two nearcfi to the petal α . have finall appendages which enter the honey-cup. Tips generally united, blunt, enlarged by fkinny fubfiances at the end. POINTAL. Seed-bud roundifh. Shaft thread-
- POINTAL. Seed-bud roundifh. Shaft threadfhaped, projecting beyond the tips. Summit oblique.
- SEED-VESSEL. Capfule egg-fhaped, three-fided, blunt, one cell and three valves.
- SEEDS many, egg-fhaped, having appendages, fixed to the valves. Receptacle linear, running like a line along each valve.
- Obs. The summit is either reflexed into a simple hook, or a concave small head perforated at the cud.

SPECIFIC CHARACTER.

VIOLET without a flem, leaves formed like a bird's foot, with feven divisions; fegments toothed.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. One of the upper Petals of the Bloffom.
- 3. One of the lateral Petals.
- 4. The lower Petal, with its Honey-cup.
- 5. The Chives and Pointal with the Appendages that fall into the Honey-cup from the two hinder threads.
- 6. The Pointal magnified.

The Bird's-foot-leaved Violet is a native of North America near Philadelphia; and (according to the Kew Catalogue) was cultivated by Mr. P. Miller, in 1759, at the Phyfic Gardens, Chelfea. It is a hardy herbaccous plant, but is fometimes defiroyed by the wetnefs of our autumnal months: the flowers, if kept in the open air, expand about May, or the beginning of June; but if kept in pots they, with a flight protection from the Spring froits, will be produced in April. Peat earth is the foil it approves moit, and it floud not be expofed to too much wet, whether planted in the borders or in pots. The roots may be parted in March.

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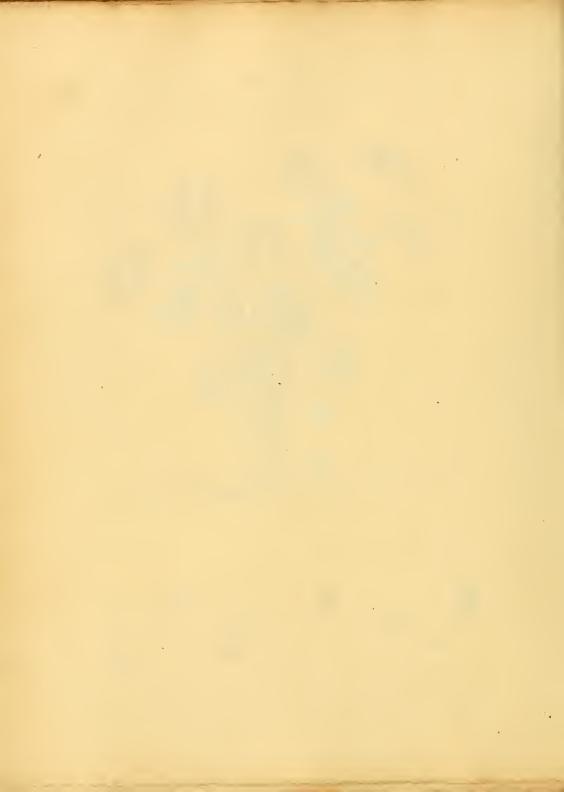




PLATE CLIV.

ECHIUM ARGENTEUM.

Silvery-leaved Viper's-Buglofs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA irregularis, fauce nudà.

BLOSSOM irregular, mouth naked. Sce Echium GRANDIFLORUM, Pl. XX. Vol. I.

SPECIFIC CHARACTER.

Echium foliis lanceolatis, acutis, fericeo-villofis; fpicis terminalibus; corolla violacea, fubæqualia. Viper's-buglofs with lance-fhaped leaves, fharppointed and filkily-hairy; fpikes terminate the branches; bloffom violet colour, nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.

2. A Flower cut open, with the Chives remaining attached.

3. The Seed-buds, Shaft, and Summit.

This fine fpecies of Echium, was raifed from feeds received from the Cape of Good Hope in the year 1789, at the nurfery, Hammerfmith: where our drawing was made, laft year, from a plant which had been planted in the open ground, for the fummer months; and where it had grown to the height of four feet. It is a hardy green-houfe plant, and grows beft in light earth, either peat, or leaf mould; and flowers about July. It is as difficult to propagate as either, the E. grandiflorum, or E. fercoffimum; but only to be increafed, like them, by cuttings.







PLATE CLV.

IXIA POLYSTACHIA.

Many-fpiked Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, patens, equalis. Stigmata 3, crectiuículo-patula.

BLOSSOM 6-divisions, fpreading, equal. Summits three, nearly upright and fpreading. See IX1A REFLEXA, Vol. I. Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis linearibus; fcapo fpicis pluribus; floribus oppofitis, fpicatis; corollis albidis. Ixia with linear leaves; flower-ftem with many fpikes; flowers grow oppofite and fpiked; bloffoms white.

REFERENCE TO THE PLATE.

1. The two fheaths of the Empalement.

2. A flower cut open to fhew the fituation of the Chives.

3. The Pointal natural fize.

This is the plant which is figured by Miller, in the coloured plates which correfpond with the dictionary, 104, t. 155. fig. 2. under the fpecific title it here bears; and, fays the Kew Catalogue, was cultivated by him 1757. Since this is the first which bere the title of Polyfachia, and being of the colour we think is mostly primitive in flowers, we have given it the preference; and shall confider all the other 18, (of which we have drawings and decidedly of this species) as varieties from this. The flowers of this fpecies are more lafting than most of the others; and are in general, effecially this fort, very hardy. It propagates freely by the root and by feed. Our drawing was made at the nurfery, Hammerfmith, laft year; in the month of May.







PLATE CLVI.

BANKSIA ERICÆFOLIA.

Heath-leaved Bankfia.

CLASS IV. ORDER 1.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Receptaculum commune elongatum, fquamofum. Corolla tetra-petala. Stamina limbo inferta. Capfula bivalvis, difperma, interjecto feminibus diffepimento mobili. Semina alata. Common receptacle elongated, fcaly. Bloffom of four petals. Chives inferted into the limb of the bloffom. Capfule with two valves, two feeds, and a moveable partition betwen them. Seeds winged.

See BANKSIA SERRATA, Pl. LXXXII. Vol. II.

SPECIFIC CHARACTER.

Bankfia foliis linearibus, margine revolutis, truncato-emarginatis, fupra glabris. Bankfia with linear leaves, rolled back at the edge, appearing cut off at the ends, which are notched and fmooth on the upper fide.

REFERENCE TO THE PLATE.

1. A Bloffom complete.

2. The fame fpread open.

3. The Petals of a flower, with their chives magnified.

- 4. The Pointal natural fize, with the Summit detached, magnified.
- 5. The rudiments of a cone; cleared from the flowers.

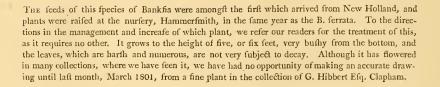








PLATE CLVII.

CORDIA SEBESTENA.

Rough-leaved Cordia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, apice dentatum, perfiltens.

- COROLLA monopetala, infundibuliformis; tubus patulus, longitudine calycis, limbus erecto-patens, fectus in quinque (quatuor vel fex), lacinias obiufas. STAMINA. Filamenta quinque, fubulata. An-
- theræ oblongæ, longitudine tubi.
- PISTILLUM. Germen fubrotundum, acuminatum. Stylus fimplex, lougitudine flaminum, fuperne bifidus, laciniis bifidis. Stigmata obtufa.
- PERICARPIUM. Drupa globofa, acuminata, calyce accreta.
- SEMEN. Nux fulcata, quadrilocularis.

EMPALEMENT. Cup one leaf, tubular, toothed at the upper part, remaining.

- BLOSSOM one petal, funnel-shaped; tube widening, the length of the cup; border upright and fpreading, cut into five (four or fix) obtufe fegments.
- CHIVES. Five threads, awl-fhaped. Tips oblong, the length of the tube.
- POINTAL. Seed-bud roundifh, tapered. Shaft finple, the length of the chives, two-cleft at the upper part, fegments two-cleft. Summits blunt.
- SEED-VESSEL, pulpy, globular, tapered, growing to the cup.

SEED. A furrowed, four-celled nut.

SPECIFIC CHARACTER.

Cordia foliis oblongo-ovatis, fcabris; floribus miniatis, crifpis, hexandris.

Cordia with oblong egg-fhaped rough leaves; flowers deep orange colour, crumpled, and with fix chives.

REFERENCE TO THE PLATE.

1. The Empalement.

- 2. A Bloffom fpread open, with the Chives in their place.
- 6. The Pointal and Seed-bud.

As it fhould feem a determined principle in the inferutable arrangement of nature's productions, to the greater humiliation of our very limited underflandings; that no effort as emanating folely from thence, shall be perfect; fo must we be content to purfue our Botanical travel, under the guidance of a fyftem decidedly defective; yet certainly, the beft we have to boaft. Scarce a genus, comprehending a number of species, but muft be firained in its class or order, for the introduction of one, or more species, evidently of the fame family. So convinced was our great mafter of the feience, of the impofibility of forming such certain data, that to prevent the coutufion and difficulty, which muft have arisen, from such an accumulation of Genera, if every fexual character was attended to, that, where certain other characters (called by him effential, and adopted as a fubflitute for fuch occafional hiatus) are formed, the plant is retained under the Genus fo characterifed. This difquifition is the natural refult of our examination of the prefent plant, which, although the chives are fix, is placed in the fifth class!

The Rough-leaved Cordia is a native of the Weft India Iflands, and was cultivated, fays Martyn's Dictionary, from Dillenius, in the year 1728, by Dr. Sherard. It is a tender hot-houfe plant, may be increased by cuttings made about the month of April, if kept from too much moifture, in a pot of fandy loam, under a finall firiking glafs in the bark-bed. At prefent it is rather a fcarce plant in our collections, and as it is rather difficult to propagate, is likely to continue fo, at least for fome years. From an imported plant, received by Meffrs. Lee and Kennedy, Hammerfmith, from the ifland of Barbadoes, our figure was taken in the year 1789, about the month of July. It is grown to the greatest perfection by keeping it in a mixture of rotten dung and loam,







PLATE CLVIII.

GERANIUM ECHINATUM.

Var. flore rul ropurpureo.

Prickly-ftalked Geranium. Red-purple flowered Var.

CLASS XVI. ORDER IV. of Suppl. Syst. Veg. 1781.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus roftratus, penta-coccus. ONE POINTAL. Five Summits. Fruit furnished with long awns, five dry berries. See GERANIUM GRANDIFLORUM. PLXII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis fericeis, cordatis, inequaliter dentatis; caule fpinofo, fubcarnofo, fpinis retrofractis; floribus hexandris, rubro-purpureis; calycibus pilofis. Geranium with filky heart-fhaped leaves, unequally toothed; frem fpiny, rather flefhy, fpines turned downwards; flowers with fix fertile tips and red-purple; cups hairy.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. An upper Petal of the Bloffom.
- 3. An under Petal of the Blofforn,
- 4. The Chives and Pointal.
- 5. The Chives fpread open.
- 6. The Pointal, magnified.

THIS fine variety of the Prickly-fialked Geranium, was introduced, at the fame time with the white variety, by Mr. Francis Maffon, to the Royal Gardens, Kcw, in the year 1795. It is a tender plant, and requires the heat of the hot-houfe, through the winter months to preferve it, being a native of that part of Africa near the Namaqua land, which is in moft parts a barren, arid fand, extremely hot and parched, experiencing little change through the whole year. The propagation is either produced by cuttings, or from the roots, which are tuberous, in moft inflances, if the plant is kept in light fandy peat earth. The drawing was made, in March this year, at the Nurfery of Mr.J. Colville, King's Road, Chelfea.







PLATE CLIX.

IXIA CAPITATA.

Bunch flowering Ixia.

Var. white flowered, Hack bottom.

Var. flore allo, fundo nigro.



CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal,

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata tria, erectiufculo-patula. BLOSSOM fix petals, fpreading, equal. Summits three, nearly upright, fpreading. See IXLA REFLEXA, Vol. I. Plate XIV.

SPECIFIC CHARACTER.

Ixia, foliis enfiformibus; floribus capitatis, confertis, albidis, petalis bafi nigriffime notatis. Ixia, with fword-fhaped leaves; flowers grow in clofe bunches, whitilh, the petals very dark, marked at the bafe.

REFERENCE TO THE PLATE.

1. The two fleaths of the Empalement.

2. A Bloffom fpread open, with the Chives remaining.

3. The Seed-bud and Pointal, one Summit detached, magnified.



As no difference, either in culture or increafe, is neceffary for this plant, more than is required for the other varieties of this fpecies of Ixia; we fhall refer our readers to the directions for the treatment of them, for the management of this. Our figure is from a drawing taken at the Hammerfinith nurfery in the year 1709, about the month of May. It is one of thofe introduced to the Royal Gardens at Kew by Mr. F. Maflon about the year 1774, although loft to us for fome years, but fince received from the collections in Holland.







PLATE CLX.

ARISTEA MAJOR.

Spike-flowered Aristea.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PETALA Ó. Stigma concavum. Capíula triloba, trilocularis, loculis comprefís. Semina in fingulo loculo bina, comprefía truncata. PETALS 6. Summit concave. Capfule threelobed, three celled; cells flattened. Seeds two in each cell, flattened and appearing cut off at the end.

See ARISTEA CYANEA, Pl. X. Vol. I.

SPECIFIC CHARACTER.

Ariftea foliis enfiformibus longiffimis; floribus fpicatis, cæruleis.

Ariftea with very long leaves; flowers grow in fpikes, and blue.

REFERENCE TO THE PLATE.

1. The two fheaths of the Empalement.

2. A Bloffom with the Seed-bul, both cut open and remaining attached, the Shaft removed.

3. The Pointal natural fize, with the fummit detached magnified.

4. A ripe feed-veffel, natural fize.

5. The fame with the cells laid open to fhew the fituation of the feeds.

THE Genus Ariftea, having certainly been formed from a dried fpecimen of the plant, the alterations we have made in our Generic and Effential characters, will, upon infpecting the diffections, appear abfolutely neceffary; as the fhaft is not bent, in either fpecies we have examined, whilf the flower is perfect; but affumes that appearance on its decay, as it becomes involved with the petals, which will up in the manner of Morœa, Iris, &c. The Summit likewife, is not funnel-fhaped, but merely a little concave, with a border: other fnall variations have been made, in the character of the feed-veffel and feed. In the year 1794, this fine plant was raifed by Meffrs. Lee and Kennedy, from feeds received by them from the Cape of Good Hope, where it is native. It is one of the very hardieft inhabitants of the greenhoufe, and is propagated, either from the feed, which ripens with us; or by the offsets made from the root. The plant is perfittent, but does not acquire a ftem; the leaves growing to the length of from two, to three feet, the flower-ftem fometimes to the height of four feet; which was nearly that of the plant in the Collection of G. Hibbert, Efq. Clapham, from which our drawing was taken in the month of July 1600. It fhould be planted in fandy peat.







PLATE CLXI. HERMANNIA PULVERATA.

Powdered Hermannia.

CLASS XVI. ORDER H.

MONADELPHIA PENTANDRIA. Threads united. Five Pointals.

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, quinquefidum, fubrotundum, inflatum; lacinulis inflexis; perfiftens.
- COROLLA pentapetala, fpiralis; ungues longitudine calycis, utrinque aucti membranula connivente in tubum cucullatum nectariferum; limbus patens, latiufculus, obtufus.
- STAMINA. Filamenta quinque, latiufcula, inferne leviflime in unum corpus coalita. Antheræ crectæ, acuminatæ, conniventes.
- PISTILLUM. Germen fubrotundum, pentagonum, quinquangulare. Styli quinque, filiformes, approximati, fubulati, ftaminibus longiores. Stigmata fimplicia.PERICARFUM. Capiula fubrotunda, pentagona,

PERICARPIUM. Capiula fubrotunda, pentagona, quinque-locularis, apice dehifcens.

SEMINA plurima, parva.

Hermannia foliis bipinnatifidis, fcabriufculis, albicantibus; pedunculis bifloris, longiffunis; corollis fordidé luteis.

- ENPALEMENT. Cup one leaf, five-cleft, roundifu and fwelled out; fegments turned inwards; remaining.
- BLOSSOM, five petals, fpiral; claws the length of the cup, widened on both fides by a fmall fkinny fubfiance forming a honey-bearing, . cowl-fhaped tube; borderfpreading,broadifh, blunt
- CHIVES. Five threads, broadith, flightly joined at the base into one body. Tips upright, tapered, and approaching each other.
- POINTAL. Seed bud roundiff, five fided, fiveangled. Shaits five, thread-fhaped, clofe together, awl fhaped, longer than the Chives. Summits fimple.
- SEED VESSEL. Capfula roundifh, five-fided, fivecelled, fplitting at top.

SEEDS, many, fmall.

SPECIFIC CHARACTER.

Hermannia with doubly wing-cleft leaves, rather rough and whitifh; flower-frems twoflowered, very long; bloffoms of a dirty yellow.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A leaf of the Bloffom, to fhew its incurved character at the bafe.
- 3. The Chives, magnified, with the pointals remaining, to flew their length with regard to the Chives.
- 4. The Seed-bud, Shafts, Summits, magnified.

This plant appears to find an intermediate charafter, between Mahernia and Hermannia: the general habit affines moft to the former, and indeed, the fhape of the threads, on which the effential generical diffinction refts, approaches very near to thofe in Mahernia; for, although they have not abfolutely foot falks, they are much larger, above the middle, than is ufual in Hermannia, as may be feen on the plate; where thefe parts are fhewn, magnified. It has likewife that fingularly curious character, feen in Mahernia, of the two bloffoms which terminate the flower-fiems, each taking a contrary direction, in its fpiral twift, to the other. As a greenhoufe plant, it is rather tender in regard to damp, though not to cold; therefore, fhould be kept in the most airy part of the houfe. It is a native of the Cape, from whence it was introduced in the year 1706, to the Royal Gardens, Kew. By cuttings made in the month of April, it may be preferved, and increafed, as it is not a long-lived plant. Loam, with a fmall portion of old rotten dung, it thrives in moft. Our drawing was taken, at the Nurfery, Hammerfinith, in June 1800.







PLATE CLXII.

VERBASCUM FERRUGINEUM.

Rufty-flowered Mullein.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum, parvum, perfittens; laciniis erectis, acutis.

COROLLA monopetala, rotata, fub-inæqualis; tubus cylindraccus, brevifimus; limbus patens, quinque-partitus; laciniis ovatis, obtuńs.

- STAMINA. Filamenta quinque, fubulata, corolla breviora. Antheræ fubrotundæ, compreffæ, erectæ.
- PISTILLUM. Germen fubrotundum. Stylus filiformis, longitudine ftaminum, inclinatus. Stigma craffiufculum, obtufum.
- PERICARPIUM. Capfula fubrotunda, bilocularis, bivalvis, tuperne dehifcens. Receptacula dimidiato-ovata, diffepimento affixa.

SEMINA numerofa, angulata. Ols. In plerifque flamina inclinata funt, villifque coloratis inferne veftita.

- EMPALEMENT. Cup of one leaf, with five divifious, fmall, remaining; fegments upright, fharp pointed.
- BLOSSOM one petal, wheel-fhaped, rather unequal; tube cylindrical, very thort; border fpreading, five divisions; tegments eggfhaped, blunt.
- CHIVES. Threads five, awl shaped, shorter than the blotsom. Tips roundilh, flattened, upright.
- POINTAL. Seed-bud roundifh. Shaft threadthaped, the length of the chives, bent downward. Summit rather thick and blunt.
- SEED-VESSEL. Capfule round th, with two cells, two valves, fplitting at the top. Receptacles the form of half an egg, fixed to the partition.

SEEDS numerous, angular.

Ols. In the greatest number of fpecies the chives are bent downward, and clothed with soft, coloured hairs on the lower part.

SPECIFIC CHARACTER.

Verbafeum foliis fubvillofis, rugofis; caulinis fubfefilibus, æqualiter crenatis, radicalbus oblongis, cordatis, duplicato crenatis. Mullein with leaves a little hairy and rough; ftem leaves almoft without foot ftalks, equally fcolloped; leaves from the root oblong, heart-fhaped, and doubly fcolloped.

REFERENCE TO THE PLATE.

1. A Leaf of the plant, from the lower part.

- 2. The Empalement.
- 3. A Blotion, fhewn from the front.
- 4. The fame cut open trom the fide, to fhew the infertion of the chives.

5. One Chive magnified.

6. The Pointal and Seed-bud, magnified.

THE rufty-flowered Mullein of the Kew Catalogue, collated from Sutherland's Hortus Medicus Edinburghenfis, is undoubtedly our plant; but, though it flands a name in the book, we much quefition its having graced the garden, at the time of its publication. It certainly has been loft to us above a century and but recently introduced to the Oxford Botanic Garden by the late Dr. Sibthorpe. Being a hardy biennial, it will perfect its feeds about July, which may be lown in Auguft the fame year. It will grow in any foil, but a fandy composit of light peat and loam fuits it molt. The flowers on the fpikes, which grow fometimes to the length of four feet, continue to expand, upwards, for above two months; that is to fay, from April, till June. Our figure was taken from a fpecimen fent by the Hon. W. H. Irby, from his garden at the Parfonage, Farnham Royal, Bucks.







PLATE CLXIII.

AMARYLLIS FOTHERGILLIA. Fothergillian 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 fhaped. Summit threecleft. See AMARYLLIS RADIATA, Pl. XCV. Vol. II.

SPECIFIC CHARACTER.

Amaryllis fpatha multiflora; petalis lanceolatis, apice revolutis; genetalibus erectis; foliis linearibus, iub-canaliculatis, obtufis, glau. cis.

Lily	Daffodil with many flowers in the fheath;
	petals lance-fhaped, rolled back at the point;
	parts of fructification upright; leaves linear,
	rather channelled, obtufe, and of a fea-green
	colour.

REFERENCE TO THE PLATE.

1. A Petal, with its Chive attached.

2. The Secd-bud, and Pointal.

3. A ripe Seed-veffel, with the Seeds.

EVEN amidft this fplendid family, Amaryllis Fothergillia ftands confpicuoufly preeminent; the flowers have the fame vivid character of refulgence, when exposed to the fun's rays, which is perceived in A. Sarnienfis, or the Guernfey Lily, to which it is nigh affined. The late Dr. Fothergill (to whom the botanical world is fo much indebted, for the zeal and extraordinary liberality he conftantly manifefted, in advancing the fcience) received this plant from China at the fame time with A. aurea, A. radiata, &c. about the year 1777. It is rather a fcarce and tender bulb, as it is fubject to rot by overmuch wet. It has hitherto been kept, as are most plants on their first arrival from China, in the hot-houfe; but, from every appearance, we fhould be led to fuppofe, it would not perifh if kept in the Green house, as we question much, whether it is not equally hardy with the Guernfey Lily, and a native, originally, as well as the latter, of Japan.

It fhould be planted in fandy loam, with a fmall quantity of rough peat, above the tiles in the pot, to make it flower. The propagation is from offsets, which are produced but rarely from the old bulbs. Our figure was taken from a plant in the Hammerfmith nurfery this year, 1801, in the month of May.







PLATE CLXIV.

GALAXIA GRANDIFLORA.

Large-flowered Galaxia.

CLASS XVI. ORDER I.

MONADELPHIA TRIANDRIA. Threads united. Three Chives.

ESSENTIAL GENERIC CHARACTER.

SPATHA univalvis. Corolla monopetala, 6 fida, tubus filiformis. Stigma multipartita. SHEATH of one valve. Bloffom one petal, 6-cleft, tube thread-fhaped. Summit many divifions.

See GALAXIA OVATA, Pl. XCIV. Vol. II.

SPECIFIC CHARACTER.

Galaxia foliis canaliculatis, acuminatis, arcuatis; corolla magna, lutea, folia æquantia. Galaxia with channelled leaves, tapered to the point, and arched; bloffom large, yellow, and the length of the leaves.

REFERENCE TO THE PLATE.

1. The fheath of the bloffom.

- 2. A Bloffom fpread open, with the Chives attached.
- 3. The Seed-bud, Shaft, and Summit, the fummit detached, magnified.

The figure of this delicate little bulb was taken from a plant in the Hibbertian Collection, which had been imported in the laft, and flowered in February this year 1801. It is a tender plant, and the roots are very fubject to decay after flowering, for which reafon, they flould be removed from the pot before the leaves are quite decayed. Mr. Allen informs us he has kept it, in the greenboufe, with the other Cape bulbs, planted in light fandy peat earth.







PLATE CLXV.

ECHIUM GLAUCOPHYLLUM.

Sea-green-leaved Viper's-Buglofs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA irregularis, fauce nuda.

BLOSSOM irregular, mouth naked. See Echium GRANDIFLORUM, Pl. XX. Vol. I.

SPECIFIC CHARACTER.

Echium caule fruticofo; ramis calycibufque glabris; foliis ovato-lanceolatis, glaucis, glabris, margine ferrulatis; corollis fubæqualibus. Viper's-Buglofs with a fhrubby ftem; branches very fmooth; leaves between egg and lancefhaped, of a fea-green colour, fmooth, and flightly fawed at the margin; bloffoms nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.

2. A Bloffom cut open, to fhew the infertion of the chives.

3. The Seed-bud, Shaft, and Summit, magnified.

This firubby fpecies of Echium was introduced, to the Royal Gardens at Kew, by Mr. F. Maffon, in the year 1792, from the Cape of Good Hope. It grows to the height of three feet, or more, rather bufhy at the top, flowers about the month of May, and perfects its feeds with us; by which only method, it is to be propagated. It thrives beft in a light loamy foil, with a fmall proportion of fandy peat, about one fourth.

Profeffor Martyn, in his Miller's Dic. has collated two defcriptions of Echiums under the titles of 'lavigatum, and glabrum; the firft, No. 9, from Lin. Sp. Plant. 199; the fecond, No. 19, from Vahl. Symb. 3. 22. Thunberg has likewife, in his Prodronus, 33. two names of plants. as E. lævigatum, and E. glabrum; from whom Willdenow, in his new Edition of Sp. Plant. p. 785, has copied them under the same titles; adding, the various fynonims, from Linnæus's Sp. Plant. to the one; and to the latter, Prof. Jacquin's fpecific of glaucophyllum, taken from his Ic. rar. 2. t. 312, and his Collect. 2. p. 325. Now, we have little hefitation in declaring our opinion, and we think, thofe who choofe to compare our figure with the different defcriptions here mentioned, will coincide with us, that this is the plant from which they muft all have originated, except the E. glabrum of Vahl, which we take to be a different plant; as, the cup is defcribed hairy, the length of the tube of the bloffom; the chives longer, and the flower finaller. Wherefore, we have taken, for our plant, the fpecific title of Jacquin, as being, in our idea, the moft appropriate.







PLATE CLXVI.

GLADIOLUS ABREVIATUS.

Shortened-petalled Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. Stamina adfcendentia. BLOSSOM fix divisions, gaping. Chives afcending.

See GLADIOLUS ROSEUS, Pl. XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis linearibus, cruciatis, fcapo longioribus; corolla tubulofa, ftriata, ima anguftata, lacinia fumma magna, recta, ovata, reliquæ vero parvæ, abreviatæ. Gladiolus with linear leaves, crofs fhaped, longer than the flower-ftem; bloffom tubular, ftreaked, and narrowed at the lower part, the upper petal is large, grows fraight out, and egg-fhaped, the others are fmall, and appear as if fhortened.

REFERENCE TO THE PLATE.

- 1. The outer fheath of the Empalement.
 - 2. The inner fleath of the Empalement.
 - 3. A Bloffom fpread open, with the Chives attached.
 - 4. The Seed-bud, Shaft, and Summits.



THIS moft fingular Gladiolus was received, 'amongft a variety of others, in the year 1799, from the Cape of Good Hope, by Meffrs. Lee and Kennedy, Hammerfmith; at whofe nurfery it flowered in March, this year 1801, for the firft time. It is a hardy bulb, and propagates freely from the root; grows about two feet high, and, before flowering, has much the appearance of G. triffis.







PLATE CLXVII. BRUNSFELSIA UNDULATA. Waved-flowered Brunsfelsia.

CLASS XIV. ORDER II. DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, campanulatum, quinquedentatum, obtufum, minimum, perfiftens.
- COROLLA monopetala, infundibuliformis; tubus longitimus, fubineurus; limbus planus, quinquefidus, obtufus.
- STAMINA. Filamenta quatuor, breviflima. Antheræ oblongæ, erectæ, filamentis dorfo affixæ.
- PISTILLUM. Germen fubrotundum, parvum. Stylus filiformis, longitudine tubi. Stigma craffufculum.
- PERICARPIUM. Capfula extus baccata, globofa, unilocularis, bivalvis.
- SENINA plurima, compreifa, hinc convexa, inde angulata, punctato-fcabra.
- RECEPTACULUM fundo capfulæ adnatum, paleaceum; paleis coadunatis, apice fubulatis, femina diftinguentibus.
- Brunsfelfia foliis lanceolato-obovatis, utrinque acuminatis, petiolis brevillimis; tubus parum incurvatus, laciniis limbi undulatis.

- EMPALEMENT. Cup one leaf, bell-fhaped, fivetoothed, blunt, very fmall, remaining.
- BLOSSOM. One petal, funnel-fhaped; tube very long, rather curved; border flat, five-cleft, obtuie.
- Chives. Four threads, very flort. Tips oblong, upright, fixed by the back to the threads.
- POINTAL. Seed-bud roundifh, fmall. Shaft thread-fhaped, the leugth of the tube. Summit rather flefhy.
- SEED-VESSEL. Capfule on the outfide a berry, globular, one cell, two valves.
- SEEDS many, flat, convex on one fide, angular on the other, roughly punctured.
- RECEPTACLE fixed to the bottom of the capfule, chaffy; chaffy joining at the bafe, awl fhaped at the point, feparating the feeds.

SPECIFIC CHARACTER.

Erunsfelfia with leaves between lance and inverfely egg-fhaped, tapered to both ends, footfialks very thort; tube a little incurved, the fegments of the border waved.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The tube of the bloffom cut open, to flew the infertion and character of the Chives.
- 3. The Pointal and Seed-bud.

The Genus Brunsfelfia (by Plumier fo named, in honour of Otho Brunsfels a monk, the firft who edited in 1530 a Botanical work with good figures, it contained 238 plates) has undergone a very neceffary revision fince the days of Linnæus; indeed, it appears fingular that Father Plumier, from whom Linnæus quotes his Generic character, fhould have committed fo great an overfight, as to deferibe it with five chives; a feature fearcely to be expected, from a fport of nature, in plants of this Clais. So however it is on record, and the fifth Clais of the Gen. and Spe. Plant and of the Syft. Nat, tom. it. each includes this Genus; from which, we fhould be induced to think he had defigued fome other plant; if the figure, and the reft of the defeription, did not confirm it. Schreber, in his Gen. Plant, has likewife an obfervation, that the fruit fhould be named a capfule, rather than a berry; as given by Linnæus, Miller, and Swartz; his reafon, that it fplits determinately, by a future, from the top to the bafe.

Our fpecies, is the third now in Britain; they are all natives of the Weft India Iflands. The Iff B. americana has been long an inhabitant of our hothoufes; the 2d B. maculata is but little known to moft, though long cultivated here; as it has been treated as a variety of the first fpecies, notwithflanding the firong fpecific difference, in the fhape of the leaves and bloffoms; which in the B. maculata, are beautifully marked at the bafe, and as large as the undulta; the leaves inverfely eggfhaped and more downy. The prefent plant feldom grows more than four feet high, flowers freely about March, is very fweet fcented, and is eafily propagated by cuttings. It was first feet to England in the year 1784, by Mr. Eleock from the Ifland of Barbadoes, to Meffrs. Lee and Kennedy, Hammerfmith. Our drawing was made from a plant in the Clapham Collection, in March 1860. It should be planted in rich earth.







PLATE CLXVIII.

GERANIUM PICTUM.

Painted-flowered Geranium.

CLASS XVI. ORDER IV. MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5 Fructus roftratus, 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 cordato-oblongis, obtufis, inequaliter incifis, tomentofis, bumi adpretfis; corolla alba, petalis fuperioribus profundė fupra medium rubro maculatis; flaminibus feptem fertilibus; radice tuberofa. Gerapium with oblong heart-fhaped leaves, blunt, unequally gafhed, downy, and lying clofe to the ground; bloffom white; the upper petals deeply marked with red about the middle; feven fertile chives; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The Chives and Pointal, magnified.
- 3. The Chives fpread open, magnified.
- 4. The Seed-bud, Shaft and Summit, magnified.

No Genus of Plants claims our notice, for its beauty, more than Geranium, and this fpecies, certainly, ranks amongit the foremoft. It is a native of the Cape of Good Hope, and we believe only to be found in the Clapham Collection; where, our figure was taken in April this year, from a plant, the bulb or root of which had been received the preceding autumn. It is nearly the only one, amongit twenty two fpecies of the tuberous kind, all having irregular petalled bloffoms and tubular cups, of which we poffers drawings, that has feven fertile chives; the greater number have two, four, or five. It appears to flourifh under the treatment given it by Mr. Allen, which is, by keeping it in fandy peat, on a fhelf, very dry, in the green-houfe. The propagation appears to be the fame for this, as the other tuberous kinds, that is, by the root.





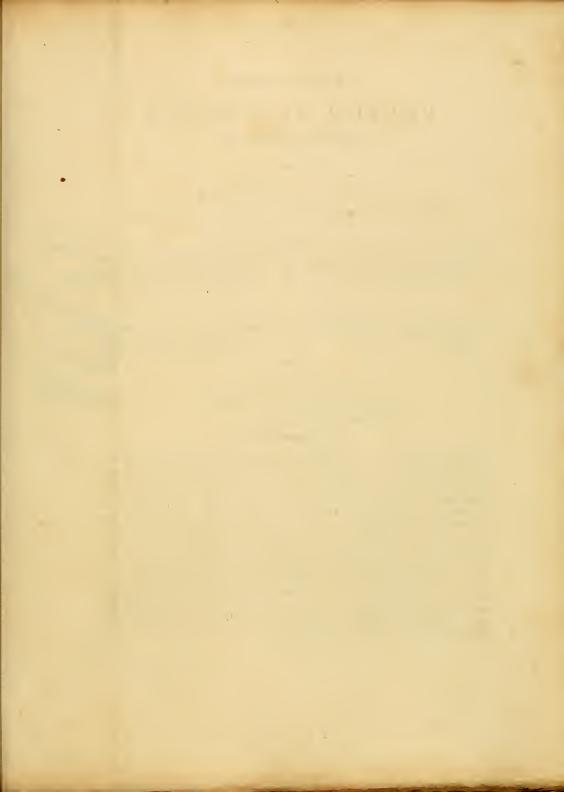


PLATE CLXIX.

CRINUM GIGANTEUM.

Gigantic Afphodel-Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fupra, infundibuliformis, fexpartita, æqualis; filamenta tubi fauci inferta; femina ad bafin corollarum, vivipara. BLOSSOM above, funnel-fhaped, fix-parted, equal; threads inferted into the mouth of the tube; feeds at the bale of the bloffoms, viviparous. See CRINUM SPIRALE, Pl. XCII. Vol. II.

SPECIFIC CHARACTER.

Crinum foliis flaccidis, undulatis; floribus feffilibus, umbellatis; petalis concavis, fubalbidis. Afphodel-Lily with flaccid, waved leaves; flowers fitting clofe to the flower ftem in umbels; petals concave, nearly white.

REFERENCE TO THE PLATE.

1. A miniature reprefentation of the whole plant.

2. A Petal with its chive.

3. The Seed-bud, Shaft, and Summit.

THE coaft of Africa bordering on our fettlement at Sierra Leone, has furnithed us with a number of beautiful plants; but none more fo, than those of the natural order of Lily; witness our prefent figure, which was taken from a plant in the Hammerfmith collection, in the month of August 1800. The bulbs of this grand fpecies of Crinum, were received by her Ladyfhip, the Right Honourable the Marchionels of Rockingham, about the year 1792, from Sierra Leone; they may be confidered as hardy hothouse plants, and may be kept in any part of it: will flower, freely, about the month of August, the flower-flems rifing, fometimes, to the height of three feet. A mixture, of leaf mould, or fandy peat one half, and light loam the other, is the beft composit to make them flourish. It is propagated from the feed, or offsets.----Having made a fmall alteration, in the Effential Character of the Genus; and as it is likely we may figure fome other fpecies of Crinums fhortly; we think it neceffary to add a few words, to that point. The moft oftenfible difference, we have been able to trace, in comparing above 40 fpecies of Crinums and Amaryllis's, and on which to reft, with certainty, for generical diftinction; can, unqueftionably, be taken only, from the feeds; as thefe in moft fpecies of Pancratium, Hæmanthus, and all of this Genus, are viviparous or formed like flefhy bulbs, producing plants, like offsets taken from the original bulbs. From Pancratium it is diffinet, in being defitute of the Honeycup; and equally fo from Hæmanthus, which has its fheath of many leaves, the flowers and chives upright, and the chives, twice the length of the bloffoms.











PLATE CLXX.

IXIA BULBOCODIUM. Var. flore speciosissimo.

Crocus-leaved Ixia. Var. with most leautiful flower.



CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stamina tria, erectiuículo-patula.

BLOSSOM 6-petals, fpreading, equal. Chives three, upright, fpreading. See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia fcapo unifloro; foliis linearibus, canaliculatis, fcapo æquantibus; corolla declinata, tubo brevi; fligmatibus fextuplicibus. Ixia with one flower on the flem; leaves linear, and channelled, the length of the flowerflem; bloffom declined, with a flort tube; fummits fextuple.

REFERENCE TO THE PLATE.

- 1. The two fheaths of the Empalement.
- 2. A Bloffom cut and fpread open, with the Chives, flewn from the infide.
- 3. The fame, fhewn from the back or outfide.
- 4. The Pointal, with the Summits, magnified.



THIS extremely delicate, and beautiful little Ixia, flowered, for the firft time, in March this year, 1801, in the collection of G. Hibbert, Efq. Clapham Common; the bulbs having been received the preceding autumn from the Cape of Good Hope. It appears to be one of those plants, which feldom furvive the fecond feafon, in this climate; and we much fear, without a fresh supply, it will be foon loft to this country; as it does not ripen its feeds, and the roots do not feem as if inclined to increase by offsets.







PLATE CLXXI.

HYPOXIS LINEARIS.

Linear-leaved Hypoxis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, perfistens, fupera. Capfula bafi angustior. Spatha 2-valvis. BLOSSOM 6-parted, remaining, above. Capfule narrower at the bafe. Sheath 2-valved. · See HYPOXIS STELLATA, Pl. CI. Vol. II.

SPECIFIC CHARACTER.

Hypoxis foliis linearibus, glabris, canaliculatis, longiore fcapo unifloro; corolla intus aurea, extus viridis. Hypoxis with linear leaves, fmooth, channelled, and longer than the flower-ftem, which has but one flower; bloffom orange within, green without.

REFERENCE TO THE PLATE.

1. Chives and Seed-bud.

2. Pointal and Seed-bud, magnified.

3. The Seed-bud cut transverfely.

At firft, we had fome doubts whether this plant fhould not be confidered as a variety of Hypoxis ftellata, to which it undoubtedly affines; but, upon due examination, find it a diffinct and new fpecies; as well, from the fhape and length of the leaves, as the fhape, character, and colour of the bloffom, and figure of the root.

Like Hypoxis fiellata it is a native of the Cape of Good Hope, and was introduced, from thence, by Meffrs. Lee and Kennedy, in the year 1792. For its treatment, &c. we muft refer our readers to the above fpecies, Pl. 101. Vol. 2. Our drawing was taken in March 1801 from a plant in the Hibbertian Collection, Clapham Common. The flower of this plant, like many of the Ixias, &c. is expanded but a few hours each day, and that only, whilft under the influence of a firong morning fun; as, if the weather is gloomy, it keeps clofe flutt, but does not fpeedily decay, for it will continue to open, with equal brilliancy, for eight or ten days.







PLATE CLXXII. ANEMONE PALMATA.

Cyclamen-leaved Portugal Anemone.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

CALYX nullus.

- COROLLA. Petala duorum triumve ordinum, in fingula ferie tria, oblongiufcula.
- STAMINA. Filamenta numerofa, capillaria, corolla dímidio breviora. Antheræ didymæ, erectæ.
- PISTILLA. Germina numerofa, in capitulum collecta. Styli acuminati. Stigmata obtufa.

PERICARPIUM nullum. Receptaculum globofum, five oblongum, excavato-punctatum.

SEMINA plurima, acuminata, flylum retinentia.

EMPALEMENT none.

- BLOSSOM. Petals in two or three rows, three in a row, rather oblong.
- CHIVES. Threads numerous, hair-like, half the length of the blotforn. Tips doubled, erect.
- POINTALS. Seed-buds numerous, collected into a fmall head. Shafts tapered. Summits blunt.
- SEED-VESSEL none. Receptacle globular or oblong, hollowed and dotted.
- SEEDS many, tapered, retaining the fhaft.

SPECIFIC CHARACTER.

Anemone foliis reniformibus, fub-lobatis, crenatis; involucro multifido; petalis exterioribus villofis, majoribus. Anemone with kidney-fhaped leaves, a little lobed, fcolloped; fence many-cleft; the outer petals hairy and larger.

REFERENCE TO THE PLATE.

- 1. An outer Petal of the Bloffom, fhewn from the infide.
- 2. The Chives, as they ftand on the receptacle.
- 3. The fmall Head, as formed by the pointals.
- 4. A Seed-bud and its appendages, a little magnified.

THIS species of Anemone, is a native of Portugal, having been brought from thence about the year-1788, and first cultivated at the Hammerfmith Nurfery; the specific title of Luftanica obtained for a time, but little doubt refts now of its being the A. palmata of Linnaus's Sp. Pl. p. 758, and of Vahl, Desfontaines, &c. How the plant could first acquire the name of palmata, is certainly a mystery; unlefs it might be, from the appearance of the fence, which neverthelefs but ill accords with that character. Bauhin's affination, as Cyclamen-leaved, is certainly the most appropriate, as the leaves both in fhape, and the colour of the upper and under part, are exact with C. coum. It is rather too delicate for our winters, if exposed in the open borders; but, makes a pretty appearance, in fpring, if kept in a pot, in light, rich earth. Like most Anemonies, it propagates best by dividing the roots, which are long and cylindrical; but, care must be taken not to water the pots, for fome time after planting, as they are apt to rot, where they are broken.







PLATE CLXXIII.

GERANIUM ROSEUM.

Rofy Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus, 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 incifo-lobatis, tomentofis, lobis crenatis, obtufis; pedunculis multifloris; floribus ereĉtis, confertis, rofeis, pentandris; calycibus monophyllis; radice tuberofa. Geranium with deeply-gafhed, lobed, downy leaves, the lobes (colloped and blunt; flowerstems many flowered; the flowers erect, crowded, rofe-coloured and with five tips; cups one-leaved; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement, with its hollow tube cut open.
- 2. The Chives cut open.
- 3. The Seed-bud, Shaft, and Summits.

ABOUT the year 1794, this fpecies of Geranium was firft introduced to the Royal Gardens, Kew, by Mr. Francis Maffon, from the Cape of Good Hope. Of all the tuberous kind, this is, certainly, the moft fpecious yet in England; it flowers generally about March, in which month, our drawing was made, from a fpecimen in the nurfery of Mr. J. Colville, King's Road, Chelfea. Mr. Colville informs us, that the propagation is very difficult, and only to be performed by the root; as the plant does not produce any branches, and that the feeds do not ripen; he keeps it in a mixture of rotten leaves, and fandy peat, in which, it has every appearance of luxuriant health.







PLATE CLXXIV.

ANTHOLYZA TUBULOSA. Var. flore variegato.

Tubular Antholyza. Striped flowered Var.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA tubulofa, irregularis, recurvata. Capfula infera. BLOSSOM tubular, irregular, and bent backward. Capfule beneath. Sce Antholyza ringens, Pl. XXXII. Vol. J.

SPECIFIC CHARACTER.

Antholyza floribus tubulofis, fubcylindraceis; feapo difficho, foliis lanceolato-enfiformibus, breviore. Antholyza with tubular, nearly cylindrical flowers; flower-ftcm with the bloffoms pointing two oppofite ways, leaves between lance and fword fhaped, florter.

REFERENCE TO THE PLATE.

- 1. A Bloffom of a variety, differing in the palenels, and fize of the flowers, and without variegation.
- 2. The Empalement.
- 3. A flower cut open, with the Chives attached.
- 4. The Seed-bud, Shaft, and Summits, one Summit magnified.

This fine fpecies of Antholyza was received by Meffrs. Grimwood and Wykes, Kenfington, from the Cape of Good Hope, in the year 1796; they poffcfs three varieties, and we fhould have been happy to have given a bloffom of the third, but, it was out of flower before our drawing was taken, which was, in the end of June, this year. It is a hardy bulb, and increafes freely, either by the feed, or from the root, and fhould be planted in fandy peat, with a finall mixture of loam.





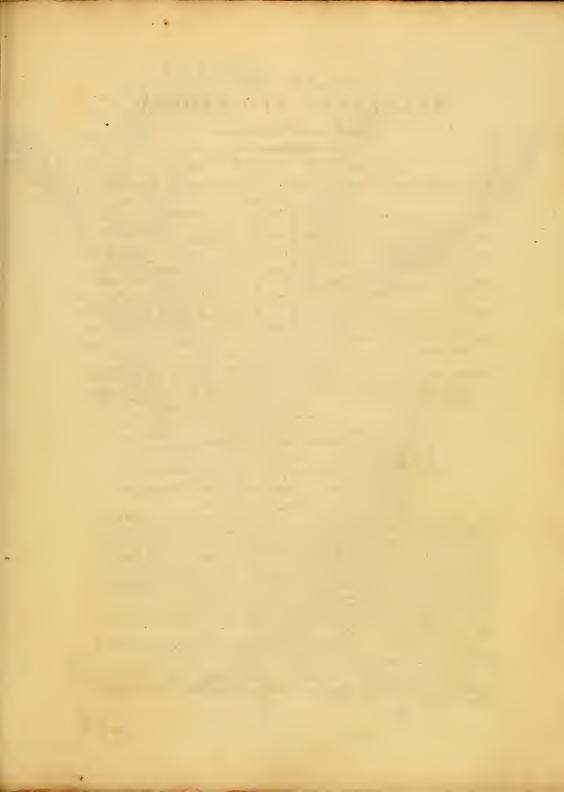


PLATE CLXXV. MELALEUCA ERICÆFOLIA.

Heath-leaved Melaleuca.

CLASS XVIII. ORDER IV.

POLYADELPHIA POLYANDRIA. Threads in many fets. Many Chives.

GENERIC CHARACTER.

- CALYX. Perianthium turbinatum, germini adnatum, quinquefidum seu quinquedentatum.
- COROLLA. Petala quinque, rotundata, calycis margini interiori inferta.
- STAMINA. Filamenta numerofa, filiformia, in fasciculos quinque connata. Antheræ incumbentes.
- PISTILLUM. Germen turbinatum, fundo calycis adnatum. Stylus filiformis, erectus. Stigma fimplex.
- PERICARPIUM. Capfula fubglobofa, calycis ventre corticata, fummitate nuda, trilocularis, diffepimentis contrariis.
- SEMINA plurima, oblonga, feu rotundato-augulata, feu alata.
- Melalenca foliis fparfis oppofitifve, linearibus, enerviis, fubrecurvis, muticis; floribus feffilibus, apicem versus ramulorum confertis, fpicatis.

- EMPALEMENT. Cup turban-fhaped, growing to the feed-bud, five-cleft or five-toothed.
- BLOSSOM. Five petals rounded, inferted into
- the inner margin of the cup. CHIVES. Threads numerous, thread-fhaped, united in five bundles. Tips incumbent.
- POINTAL. Seed-bud turban-fhaped, growing to the bottom of the cup. Shaft threadfhaped, erect. Summit fimple.
- SEED-VESSEL. Capfule nearly globular, coated by the belly of the cup, the upper part naked, three-celled, partitions contrary.
- SEEDS many, oblong, or rounded with angles, or winged.

SPECIFIC CHARACTER.

Melalenca with fcattered or oppofite leaves, linear, without nerves, a little turned back and beardlefs; flowers grow clofe to the ftem, crowded together near the end of the fmaller branches in fpikes.

REFERENCE TO THE PLATE.

- 1. A Prop, one which is to be found at the bafe of each flower.
- A Bloffom, natural fize.
 The fame magnified.
- 4. One of the five bundles of Chives, with its Petal, to which it is attached at the . bafe, magnified.
- 5. The Cup, Seed-bud, Shaft and Summit, natural fize, the fummit detached and magnified.

THE plants from New Holland, of the natural order of Myrti; comprized under the different Genera of Metrofideros, Eucalyptus, Leptofpermum, Myrtus, and this prefent one of Melaleuca; feen, from what we yet know, to conflitute a very diffinguithed part, of the woody vegetable productions of that country: wherefore, we can have little hopes of feeing many of them flower with us, at leaft, for many years to come. The M. ericæfolia was among the first plants raifed in 1788, by Meffrs. Lee and Kennedy, Hammerfmith, from feeds; but, till this year, we believe it has not been feen to flower, in any collection in Great Britain; nor perhaps would it, as yet, had not a large and old plant, been planted out in the novel and elegant confervatory of the Right Hon, the Marquis of Blandford at White Knights, near Reading, Berks, from a branch of which, obligingly communicated by his Lordthip, our drawing was taken, the beginning of July, this year. The Plant grows to the height of fix or feven feet, upright, very branching, the branches weep-

ing, and the flowers, which grow in spikes or branches of about fix inches in length, project, straight out, from about the middle of the flem.

It grows beft in a mixture of two thirds fandy peat, and one third loam; may be propagated by cuttings made, from the tender fhoots, in the month of March, and kept under a glafs, in the tan bed of the hothouse, or in a melon frame until rooted.

This species of Melaleuca and the Metrofideros Nodofa of Gaertner, 1st Vol. de fruct. p. 172, t. 34, f. 6, we mult confider as the fame, though made by Dr. Smith, fee Linn. Tranf. Vol. III. p. 276, diffinct fpecies; perhaps from fpecimens gathered at different times, differently dried, or from differcut parts of the country.







PLATE CLXXVI.

CRATÆVA CAPPAROIDES.

Caper-like Cratæva.

CLASS XI. ORDER I.

DODECANDRIA MONOGYNIA. Twelve Chives. One Pointal.

GENERIC CHARACTER. Schreb. Gen. Plant. Vol. I. p. 320.

- CALYX. Perianthium monophyllum, quadrifidum, deciduum, bafi planum; laciniis pa-tentibus, ovatis, inæqualibus.
- COROLLA. Petala quatuor, oblonga, unguibus tenuibus, longitudine calycis, divifuris inferta.
- STAMINA. Filamenta fedecim vel plura, fetacea, corolla breviora. Antheræ erectæ, oblongæ.
- PISTILLUM. Germen, pedicello filiformi, longiffimo, ovatum. Stylus nullus. Stigma feffile, capitatum.
- PERICARPIUM. Bacca? carnofa, globofa, maxima, pedicellata, unilocularis, bivalvis.
- SEMINA plura, fubrotunda, emarginata, nidulantia.

Cratæva foliolis elipticis, glabris; floribus umbellatis, terminalibus, luteo-viridibus, petalis longiffimis, apicibus crifpis.

- EMPALEMENT. Cup one leaf, four-cleft, falling off, flat at the bafe; fegments fpreading, egg-fhaped, unequal.
- BLOSSOM. Four petals, oblong, claws flender, the length of the cup and inferted into the divificns.
- CHIVES. Threads fixteen or more, like briftles, thorter than the bloffom. Tips erect, oblong.
- POINTAL. Seed-bud on a thread-fhaped and very long foot-flalk, egg-fhaped. Shaft none. Summit fitting on the feed-bud, headed.
- SEED-VESSEL. A Berry? flefliy, globular, large, with a foot-ftalk, one-celled, two-valved.
- SEEDS many, roundifh, notched at the end, difperfed in pulp.

SPECIFIC CHARACTER.

Cratæva with eliptical, finooth leaflets; flowers grow in umbels, terminal and yellow green; petals very long, crifped at the ends.

REFERENCE TO THE PLATE.

1. Shews the Pointal, part of the Chives, and three Petals of the blottom; a few of the Chives, one of the Petals, and the leaves of the Empalement, being removed, the better to exhibit the ftructure of the bloffom. A REAL PROPERTY AND INCOME.

2. The Pointal, complete.

To Mr. Eldred Elfzelius, a native of Sweden, we are indebted for this fpecies of Cratæva; by whom it was brought to Great Britain, on his return from Sierra Leone, in the year 1795. As a native of that burning clime, it will not endure our winters, without the protection of the hothoufe; to which, as a burning clinic, it will not endure our winters, without the protection of the holomole; to winch, as a clinich; it is a confiderable ornament, both in foliage, and flower; the flowers coming, in fucceflion, from Juue, till Auguft; perhaps, much later, as we believe, this is the first time its bloffoms have been produced in England. The propagation is extremely eafy, by cuttings; but, to give the plant furficient vigour for flowering, it mult be planted in a border, prepared of old rotten dung, fandy peat, and loam, of each, equal parts; feparated from the tan-bed by a partition of boards, fufficiently firong to fupport the earth, upon the removal of the tan. This method of treating many of the tropi-cal clinibers, and even the common Caper, though a native of the fouth of Europe, has been found neceflary to their production of flowers in this construct. Our foury was taken from a ulant, treated in necessary to their production of flowers in this country. Our figure was taken from a plant, treated in the above manner, in the Stepney collection; from whence, through the kind indulgence of the truly urbanic, and indefatigable proprietor, T. Evans, Efq. we are in hopes of gratifying our botanical friends, with the figures of a number of plants, new to this country; and of which he is, at prefent, the fole poileffor.







PLATE CLXXVII.

IXIA PUNCTATA.

Dotted flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, patens, æqualis. STIGMATA 3, erectiufculo-patula. BLOSSOM 6 divisions, fpreading, equal. SUMMITS three, nearly upright, fpreading. See Ixia reflexa, Pl. XIV. Vol I.

SPECIFIC CHARACTER.

Ixia foliis linearibus, fcapo vaginantibus; fcapus geniculatus, fubtriflorus; laciniis corolke obovatis, lineato-punctatis, purpureis. Ixia with linear leaves fheathing the ftem; flowerftem jointed, moftly three flowered; fegments of the bloffom inverfely egg-fhaped, dotted in lines, and purple.

REFERENCE TO THE PLATE.

1. The two valves of the fheath.

2. A Bloffom cut open, with the Chives attached.

3. The Seed-bud, Shaft, and Summits; a division of one of the fummits magnified.

This curious Ixia was introduced from the Cape of Good Hope, in the year 1800, by G. Hibbert, Eiq. and is, we believe, in the possession of no other in this kingdom. It is a tender bulb, flowering about April, or May, and appears, either by the bulb, or seed, to be flow of increase. The bulb, from which our figure was taken, was planted in light, fandy peat carth.







PLATE CLXXVIII. FERRARIA PAVONIA. Mexican Ferraria.

ORDER L CLASS XVI. MONADELPHIA TRIANDRIA. Threads united. Three Chives.

GENERIC CHARACTER. Schreb. Gen. Plant. V. II. p. 451.

- CALYX. Spathæ binæ, alternæ, carinatæ, involutæ, unifloræ.
- COROLLA monopetala, fupera, fexpartita; laciniis oblongis, erecto-patentibus, undulatocrifpatis, maculatis; tribus alternis exterioribus latioribus.
- STAMINA. Filamenta tria, in tubum cylindraceum, corolla breviorem, connata, fuperne dittincta. Antheræ fubovatæ, didymæ.
- PISTILLUM. Germen oblongum, triquetrum, obtufum, inferum. Stylus filiformis, longitudine tubi.

- STIGMATA tria, profundè bifida. PERICARPIUM. Capfula oblonga, triquetra, trilocularis, trivalvis; diffepimentis contrariis.
- SEMINA numerofa, fubrotunda, pulpa involuta. SPECIFIC CHARACTER.
- Ferraria corollis fub campanulatis, fpeciofifimis; laciniis planis, tribus interioribus haftatis, nectariferis; foliis plicatis, basi spathaceis.

- EMPALEMENT. Sheaths two, alternate, keeled, involute, one-flowered.
 - BLOSSOM one petal, above, fix divided; fegments oblong, upright fpreading, crifpwaved and fpotted; the three alternate outer ones the broadeft.
 - CHIVES. Threads three, in a cylindrical tube fhorter than the bloffom, joined together, feparate at the top. Tips nearly egg-fliaped, double.
- POINTAL. Seed-bud oblong, three-fided, blunt, beneath. Shaft thread fhaped, the length of the tube.

SUMMITS three, deeply two cleft.

- SEED VESSEL. Capfule oblong, three-fided, threecelled, three-valved; partitions contrary.
- SEEDs many, roundifh, covered with a pulp.

Ferraria with bloffoms nearly bell fhaped and very thewy; fegments plain, the three inner ones are halbert-fhaped, and have honeycups, leaves plaited, fheathing at the bale.

REFERENCE TO THE PLATE.

- 1. The two Sheaths of the Empalement,
- 2. An outer Petal of the Flower.
- 3. Au inner Petal of the Flower.
- 4. The Chives and Pointal.
- 5. The Chives fpread open.
- 6. The Pointal complete, one of the fummits magnified.

This is, without doubt, the Mexican plant given in the 2nd, Vol. t. 31. f. 2. of Swertius's Florilegium, published in 1612; by F. Hernandez, in his Nov. Plant. &c. Mex. Hift. p 276, in 1648; and of Mutis, under the title it here bears, in his Flo. Amer. 1. t. 15; from whom it has been copied into the Suppl. Plant, of the younger Linnæus, p. 407. and continued by Profeffor Martyn in his Mill, Dic. Art. Ferraria 2. This Genns, which was originally formed on the Ferraria undulata of the Cape, and placed to the clafs Gynandria by Linnæus, has been to continued by Martyn, &c. but upon what grounds, we are unable to determine; unlefs the miftake arole from the impracticability of dividing the tube of the chives, from the fhaft, in a dried fpecimen; which, in fuch transitory flowers as those of Ferraria, Sifyrinchium, Galaxia, &c. all of this class, feem, in that ftate, to form a perfect unifon. Schreber has referred these Genera, in his Ed. of Linn. Gen. Plant. to where they certainly must stand, to Monadelphia. But, although we have continued the plant under the title by which it is generally known, from an adherence to our original principle; yet do we think, it equally neceffary to state our opinion, why we confider its generical reference to have been as ill taken up, as the Genus had been ill claffi-fied. This plant, as may be feen from our diffections, is much nigher affined to Sifyrinchium, as it wants every effential character of Ferraria, fuch as a fheath of one leaf, undulated crifped petals, hooded and fringed funimits, &c. for we do not confider the length of the tube of the bloffom of any moment, as it is not conflant. Now, every diffinguifhing feature of Silyrinchium are here extant, viz. a fheath of two leaves, flat or plain petals, fummits neither hooded or fringed; but our figure will better explain, than words, thele tirong marked differences. If indeed we were to give an opinion, it certainly would not be in coincidence with Thunberg, by placing the whole Genus to Moræa; but to create a new one from this plant; whole whole firucture, but effectially from the Nectaria or honeycups upon the margin of the inner petals, fiands eminently diffinguished from all others.

This most diffinguished plant, was first introduced to this country by Mrs. Hudson of Manchester, about the year 1797; but is now found in most collections round the Metropolis. It is increased by the feed, which ripens in this climate, and from the root, which makes abundance of offsets. The flowers expand in rotation, three or four upon each flem at the interval of a few days; the flem growing to the height of about two feet. So very rapid is the progrefs of the bloffom in its decay, from the time of its opening, which is generally about feven o' clock in the morning; that before twelve, the luftre is gone, and it is quite decayed by three, or four. Our drawing was made at the Hammerfmith Nurfery in July ; and fiill there were a number of flower flems, which had not, as yet, made an appearance of flowering. It is beft grown in peat earth.





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PLATE CLXXIX.

AMARYLLIS RETICULATA.

Netted-flowered 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-fhaped. Summit threecleft. See AMARYLLIS RADIATA, Pl. XCV. Vol. II.

SPECIFIC CHARACTER.

Amaryllis fpatha multiflora; corollis reticulatis, purpureis; foliis oblongis, reticulatis, bafi attenuatis. Lily Daffodil, fheath many flowered; bloffoms netted and purple; leaves oblong, netted, and tapered at the bafe.

REFERENCE TO THE PLATE.

A Petal and its Chive, attached, as it is in the flower.
 The Seed-bud, Shaft, and Summit.



THE Amaryllis reticulata, a native of Brazil, South America, was firft cultivated in the year 1772, at the Hammerfmith nurfery; the bulbs had been received from Portugal by Edward Whittaker Gray, M.D. of the Britifh Mufeum; and were by him communicated to Meffrs. Lee and Kennedy. Our drawing was made this fpring, in May, from a plant in the invaluable, and extensive collection of hothouse plants, at Stepney, belonging to T. Evans, Efq. where it flowers annually.

To enfure the flowering of this plant, it is neceffary to plunge the pot in the heat of the bark-bed of the hothoufe; and, during the winter months, to keep the earth rather dry, as the bulbs are very fubject to rot, without that precaution. It fhould be planted in a composition of old rotten dung, or leaf mould, and a fmall proportion of loam.







PLATE CLXXX.

ATRAGENE AUSTRIACA.

Austrian Atragene.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 4-phyllus. Petala, 12. Semina caudata.

EMPALEMENT 4 leaves. Petals 12. Seeds with tails.

See Atragene Capensis, Pl. IX. Vol. I.

SPECIFIC CHARACTER.

Atragene foliis oppofitis, triternatis; foliolis rugofis, ferratis; floribus folitariis, tomentofis, cernuis; calyce magno, cæruleo, marginato. Atragene with oppofite, twice-three-divided leaves; leaflets rough and fawed; flowers folitary, downy, nodding; empalement large, blue, and bordered.

REFERENCE TO THE PLATE.

- 1. A Leaf of the empalement.
- 2. A Fetal of the flower.
- 3. A Chive complete.
- 4. The Pointals as they ftand in the flower.
- 5. A ripe feed, with its feathered tail.

THIS is, unquefionably, the Auftrian Atragene of Jacquin's Vind. 249; and, we think, no one who has had an opportunity of comparing the A. alpina with this plant, but will determine it a diffinct fpecies. It is a hardy, climbing fhrub; growing frequently, eight or ten feet in a featon, and covers itfelf pretty abundantly with foliage; the foot-flalks of the old leaves becoming cirrhi or tendrils, and the wood growing to a confiderable thicknefs. The flowers begin to appear about May; and continue in fucceffion, till July. It may be propagated by layers; but, the furctf mode is by feed, which may be fown as foon as ripe, and which will be perfected from the firft flowers, by Auguft. It grows the most flourifhing in light rich earth; but will live in the most common. Our figure was made from a plant in the Hammerfmith collection, to which it was firft introduced in the year 1792.







PLATE CLXXXI.

VACCINIUM VIRGATUM.

Green-twigged Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX fuperus. Corolla monopetala. Filamenta receptaculo inferta. Bacca quadrilocularis, polyfperma. CUP fuperior. Bloffom one petal. Threads fixed into the receptacle. A berry with four cells and many feeds.

See VACCINIUM ARCTOSTAPHYLLOS. Pl. XXX. Vol. I.

SPECIFIC CHARACTER.

Vaccinium foliis oblongo-ovatis, ferrulatıs, deciduis, ramulis viridibus; floribus, fub-umbellatis, axillaribus; corollis, fub-cylindraceis; calycibus apice reflexis. Staminibus decem. Whortle-berry with oblong egg-fhaped leaves, flightly fawed, deciduous, the fmall branches green; flowers grow rather umbelled from where the leaves are fixed to the ftem; bloffoms nearly cylindrical; cups reflexed at the upper part. Ten chives.

REFERENCE TO THE PLATE.

- 1. A flower complete.
- 2. The Cup.
- 3. The Chives, Pointal, and Seed-bud, the cup cut off, magnified.
- 4. A nearly ripe berry.

This fpecies of Whortle-berry was, according to the Kew Catalogue, introduced by Mr. Young in the year 1770. It is a hardy plant; and, as a native of North America, where it is an under fhrubof the woods, fhould be planted in a fhady fituation, in peat earth. It is rarely killed by our frofts; grows about two feet high, and lofes its leaves in winter. Our drawing was made in June, this year, at the Nurfery, Hammerfmith, where it is propagated by layers.



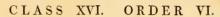




PLATE CLXXXII.

MALVA DIVARICATA.

Straddling-branched Mallow.



MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX duplex; exterior 3-phyllus. Arilli plurimi, monofpermi. CUP double; outer three-leaved. Seed-coats many, one-feeded. See MALVA REFLEXA, Pl. CXXXV. Vol. II.

SPECIFIC CHARACTER.

Malva foliis lobatis, plicatis, dentatis, fcabridis; ramis ramulifque divaricatis, flexuofis. Mallow with lobed leaves, plaited, toothed, and rough; the large and fmall branches grow ftraddling, and zig-zagged.

REFERENCE TO THE PLATE.

1. The double Cup.

2. A Flower fpread open, with the threads remaining.

3. The Chives cut open, and magnified.

4. The Seed-bud, Shaft, and Summits, magnified.

As a lively, but little, green-houfe plant, this fpecies of Mallow has not many equals; and its property of continuing to flower from June, till December, muft confiderably enhance its value. It is a native of the Cape of Good Hope, and was introduced to us, about four years fince. Moft collections now poffers it, from its facility of increase, may be planted in rich earth, and is increased by cuttings, or feeds, which ripen perfectly in this country. The drawing was made at the Nurfery, Hammerfmith.







PLATE CLXXXIII. GARDENIA TUBIFLORA.

Tube-flowered Gardenia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

- CALYS. Perianthium monophyllum, quinquefidum, fuperum, laciniis erectis, perfiftentibus.
- COROLLA monopetala, infundibuliformis; tubus cylindricus, calyce longior; limbus planus, quinquepartitus.
- STAMINA. Filamenta nulla. Antheræ quinque, ore tubi infertæ, lineares, firiatæ, longitudine dimidia limbi.
- PISTILLUM. Germen inferum. Stylus filiformis feu clavatus. Stigma exfertum, ovatum, obtufum, bilobum, fæpe fulcatum.
- PERICARPIUM. Bacca ficca, uni bis feu-quadrilocularis.
- SEMINA plurima, depresfa, per feries imbricatim fibi impofita.

Gardenia inermis; foliis elipticis, undulatis, floribus ternis; corollæ laciniis tortis, linearibus, reflexis, tubo filiformi, longifimo.

- EMPALEMENT. Cup one leaf, five-cleft, above, feginents upright, permanent.
- BLOSSOM one petal, funnel-fhaped; tube cylindrical, longer than the cup; border flat, five divisions.
- CHIVES. Threads none. Tips five, fixed into the mouth of the tube, linear, firiped, half the length of the border.
- POINTAL. Seed-bud beneath. Shaft threadfliaped or club-fliaped. Summit flanding out, egg-fliaped, obtufe, two-lobed, often furrowed.
- SEED-VESSEL. A dry berry, onc, two, or fourcelled.
- SEEDS many, flattened, lying upon one another in tiers.

SPECIFIC CHARACTER.

Gardenia without thorns; with eliptical, undulated leaves; flowers grow by threes; the fegments of the bloffom are twifted, linear, reflexed, the tube thread thaped, very long.

REFERENCE TO THE PLATE.

- 1. The Cup and Seed-bud.
- 2. A Blofform cut open, with the Chives remaining at the mouth.
- 3. The Shaft and its Summit, the fummit detached and magnified.

THE Tube-flowered Gardenia was introduced to Britain, in the year 1789, from Sierra Leone, and muft, therefore, be treated as a tender hot-houfe plant. It grows, with us, to the height of about two feet before it flowers; and, from the beauty and fize of the leaves, the regular, oppofite manner in which it forms its branches, becomes a very handform flutub. The flowers, which are produced in July, grow generally three together, at right angles, from the infertion of the leaves, in a bunch, which lafts about fix or eight days, having but one flower open and perfect at a time, the decaying ones becoming brown. It is propagated, with eafe, by cuttings, made in the month of March, and kept under a bell-glafs, in a pot of fitifiifh loam, in the bark-bed of the hot-houfe, or a melon frame. The agreeable character, of a delicate fragrance, attendant on the bloffoms of moft fpecies of this genus, is eminently powerful in this. Our drawing was made at the Hammerfmith nurfery; where, it was firft raifed, from feeds received in a prefent, by Meffrs. Lee and Kennedy, from the Hon. Sierra Leone Company.







PLATE CLXXXIV. PERGULARIA MINOR. Smaller Pergularia, or Weft-coaft Creeper.

CLASS XX. ORDER VI. of Linn. Gen. Plan. 1764. GYNANDRIA DECANDRIA. Chives on the Pointal. Ten Chives.

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, quinquefidum, erectum, acutum, perfifiens.
- COROLLA monopetala, hypocrateriformis; tubus cylindricus, calyce longior; limbus quinquepartitus, planus; laciniis oblongis.

Nectarium, duplex; exterium quinquefidum, quinquedentatum, plicato-angulatum, dentibus acutis, incurvis, apice corniculis nutantibus, approximatis; interium quinquefidum, exteriori bafi adnatum, fquamula membranaceae, apice denticulatae, obtufæ, fingula involvens ftamina duo, alterna.

- STANINA. Filamenta decem, capillaria, brevia, divaricata, per paria adnexa glandulis quinque fiigmati affixis. Antheræ pellucidæ, lutæ, fubrotundæ.
- PISTILLUM. Germina duo oblonga. Stylus brevifimus, carnofus. Stigma corpufculum conicuta, obtufum, carnofum.
- PERICARPIUM. Folliculi duo, uniloculares, introrfum dehifcentes per longitudinem.

SEMINA numerofa, parva, fubrotunda.

Pergularia foliis cordatis, acutis, apicibus tortis; laciniis corollæ ovatis, erectis, luteis.

- EMPALEMENT. Cup one leaf, five-cleft, upright, pointed and remaining.
- BLOSSOM one petal, falver-fhaped; tube cylindrical, longer than the cnp; border fivedivided, flat, fegments oblong.

Honey-cup, double; the outer, five cleft, five toothed, plaited into angles, with the teeth pointed, incurved, approaching at the point by finall nodding horns; the inner five-cleft, growing to the bafe of the outer, fcales fkinny, toothed at the end, blunt, each covering two oppofite chives.

- CHIVES. Threads ten, hair-like, fhort, ftraddling, connected by pairs to five glands fixed to the fummit. Tips transparent, yellow, roundith.
- POINTAL. Seed-buds two, oblong. Shaft very fhort, flefhy. Summit a conical, obtufe, flefhy fubitance.
- SEED-VESSEL. Two follicles, one-valved, fplitting lengthways from the infide.

SEEDS numerous, fmall, roundifh.

SPECIFIC CHARACTER.

Pergularia with heart fhaped leaves, fharppointed and twifted at the ends, the fegments of the bloffom are egg-fhaped, upright, and yellow.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A flower cut open.
- 3. The parts of fructification magnified.
- 4. Two Scales of the honey-cup as they are attached together, magnified.
- 5. An outer Scale magnified.
- 6. An inner Scale magnified.
- 7. The Seed-buds, Shaft, Summit, and Chives magnified.

THAT a juft judgment may be formed, upon what grounds we have taken up a fpecific difinition, between the only two fpecies we policis of this genus; fo diffimilar in our opinion, but, which have been confidered as fearcely to be deemed varieties, by much abler botanits than ourrelives profefs to be; we have given the figures of both in confequence. Much is it to be regretted, that the whole natural order of plants forming the Apocineæ of Juffieu, fo charaftered in themfelves, have not undergone a proper revision, in clatification, upon the original Linnæan sexual principles; which, we muft fuppofe, have been left in the prefent bewildered chaos, from the intricacy, fingularity and minutenefs of the parts, being fo difficult to develope. From critical and actual obfervations, taken from the living plants, we are in hopes of being able to illuftrate, and correct where neceffary, the characters of fuch as may come under our review.

Upon the changing the clafs of this genus, there needs no comment; as moft authors seem to allow, though they have not followed the hint, that it is properly Gynandrous; although they have not equally agreed as to the Order; fome taking the glands, furrounding the fummit, for the chives, and fome, for the fummits themfelves, of a columnar ihaft. Dr. Smith, who has figured our other fpecies, has jufily taken, the parts fixed to the five glands, for what they certainly are; as may be eafly traced through the whole order of Orchideæ, where the chives are nearly fimilarly placed and fo hooded.

The Genus is by no means new, in name, having been fo tilled by Linnæus, from the names of Pergulans and Pergulanus of Burman and Rumphius; who derived them from the ufe made of the plants by the natives, of the weftern coaft of the peninful of India; where, they are cultivated to form arbors, for the agreeable flavour of their flowers. This fpecies was firft introduced about the year 1784, by Sir Jofeph Banks, Bart, fome time before the other fpecies; wherefore, we have given it the preference. It is propagated by cuttings, and fhould be treated in the fame manner as directed for the Cratava capparoides of our latt Number, to have it flower in perfection. The figures of both fpecies were taken, in Auguft, from two plants in the collection of J. Vere, Efq. Kennington Gore; where, Mr. Anderfon (to whom we muft beg our fincere acknowledgments for his frequent and ready obfervations and afliftance) informs us, they are treated in the manner.







PLATE CLXXXV.

PERGULARIA ODORATISSIMA.

Sweet Pergularia, or Chinefe Creeper.

CLASS XX. ORDER VI. of Linn. Gen. Plant. 1764.

GYNANDRIA DECANDRIA. Chives on the Pointal. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CONTORTA. Nectarium duplex, genitalia involvens; fquamulæ exteriores quinque, cufpidatæ; quinque interiores, membranaceæ, fingula fquamula occultans ftamina duo alterna.

COROLLA hypocrateriformis.

- CONTORT. Honey-cup double, concealing the parts of fructification; the *outer* fcales are five, and fpear-fhaped; the five *inner* are fkinny, each fcale covering two alternate chives.
- BLOSSOM falver-fhaped.

See PERGULARIA MINOR, Pl. CLXXXIV. Vol. III.

SPECIFIC CHARACTER.

Pergularia foliis cordatis, fenioribus fubtomentofis; laciniis corollæ margine revolutis, tortis, linearibus, reflexis, viridibus. Pergularia with heart-fhaped leaves, the older ones rather downy; the fegments of the bloffom rolled back at the margin, twifted, linear, reflexed, and green.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Bloffom.
- 3. The fame, cut open.
- 4. The parts of fructification, as they appear when covered by the honey-cups, magnified.
- 5. The outer fcale of the Honey-cup, magnified.
- 6. The inner scale of the Honey-cup, magnified.
- 7. The two Scales, as they are connected together at the bafe.
- 8. The Pointal, with the Chives; the Shaft, Summit, and Chives, with the bodies connecting the Chives, detached and magnified.

This fpecies of Pergularia is a native of China, from whence it was received in the year 1769, by Lady Hume; in whofe collection at Wormleybury, Herts, it firft flowered in 1791. It is cultivated and increafed in the fame manner as the P. minor, and is equally fragrant. We have little doubt that our two fpecies comprife four, of the different authors who have collated from each other; we fhall take the laft, Willdenow. The P. glabra and P. Japonica as our P. minor; and the P. purpurea and toopentofa as our P. odoratifiuma. The P. edulis of Thunberg is certainly Cynanchum.







PLATE CLXXXVI.

IXIA SPECIOSA.

Deep crimfon Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpetala, patens, æqualis. Stamina tria, erectiufculo-patula. BLOSSOM fix petals, fpreading, equal. Chives three, upright fpreading. See IX1A REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis linearibus, medio coftatis, gramineis; fcapus biflorus, filiformis; corollis fubcampanulatis, profunde coccineis. Ixia with linear leaves ribbed in the middle and graffy; flower-flem two-flowered and threadfhaped; bloffoms rather bell-fhaped and of a deep crimfon.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Flower cut open.
- 3. The Pointal, one of the tips magnified.

ALTHOUGH this fpecies is not fcarce, yet, from the general method of treating it, that is, by giving it no more heat than has been found neceffary for the generality of Cape Ixias, few have feen its bloffoms, though they poffefs the roots. To enfure their flowering, as foon as the bulbs are well rooted, which will be about January, if planted in October; they may be then put into the heat of a melon or cucumber frame, or taken into the hothoufe, where they will flower about the latter end of May. This Ixia was firft introduced, from Holland, about the year 1778, under the name of Ixia Kermofina fpeciofa; and, under that title, is to be found, in moft collections; wherefore, confidering it a diffinct fpecies, having drawings of two varieties, we have continued the fpecific name of fpeciofa. Our drawing was made at the Hammerfmith nurfery, in May 1799.







PLATE CLXXXVII. ECHITES SUBERECTA Oval-leaved Echites.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALVX. Perianthium quinquepartitum, acutum, parvum.

- COROLLA monopetala, infundibuliformis; limbus quinquefidus, planus, patentiflimus. *Nectarium* glandulis quinque, germen circumflantibus.
- STANINA. Filamenta quinque, tenuia, ereĉta. Antheræ rigidæ, oblongæ, acuminatæ, apice convergentes.
- PISTILLUM. Germina duo. Stylus filiformis, longitudine ftanninum. Stigma oblongocapitatum, bilobum, glutine antheris adnexum.
- PERICARPIUM. Folliculi duo, longifimi, uniloculares, univalves.

SEMINA plurima, imbricata, coronata pappo longo.

- EMPALEMENT. Cup five-parted, pointed, and fmall.
 - BLOSSOM one-petal, funnel-fhaped; border fivecleft, flat and fpreading very much. *Honey-cup* five glands, ftanding round the bud.
 - CHIVES. Five threads, flender, erect. Tips fliff, oblong, tapered, and clofing together at the top.
 - POINTAL. Seed-buds two. Shaft thread-fhaped, the length of the chives. Summit oblongheaded, two-lobed, attached to the tips by a glutinous fubflance.
 - SEED-VESSEL. Two follicles, very long, one celled, one valvcd.
- SEEDS many tiled, crowned with a long feather.

SPECIFIC CHARACTER.

- Echites pedunculis racemofis; foliis ovalibus, obtufis, mucronatis; floribus luteis, amplifimis; corollæ tubus hirfutus.
- Echites with bunched foot-flalks; leaves oval, blunt and pointed at the ends; flowers yellow and very large; the tube of the bloffom hairy.

REFERENCE TO THE PLATE.

- 1. The Cup.
- 2. A Flower cut open, with the chives remaining, but detached frem each other.
- 3. The Chives and Pointal as they are in the flower, the lower part of the bloffom remaining, the upper cut away, magnified.
- 4. One of the Chives a little magnified.
- 5. The Pointal and Seed-buds, magnified.

THE Lady Dowager De Clifford received this plant from the ifland of St. Vincent's, in the year 1794; and we much queffion, whether it was ever feen in Britain prior to that period; although faid to be cultivated in 1759, by Millar, in the 7th Edit. of his Dictionary, and from thence, collated into the Kew Catalogue, p. 280, Vol. I. It is a climbing plant, if fupported; but does not grow to any confiderable height, if kept in a pot. The beft method of treating this plant, is the fame as that propofed for the Cravava capparoides, Fl. 176. Vol. III. The fpecific name Suberecta, of Jacquin and Browne, muft undoubtedly have been taken from the plants which grow in the Savannas; where, they feldom acquire above the height of two feet. The whole plant, from which, if any part is cut or broken, there iffues a milky fubfiance, is confidered by Dr. Browne as polfonous. Our figure was taken at Meffre, Lee and Kennedy's, this year, in Auguft. It is propagated by cuttings, put in about the month of May.







PLATE CLXXXVIII.

GLADIOLUS CAMPANULATUS.

Bell-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. STANINA adfcendentia. BLOSSOM fix divitions, gaping. CHIVES afcending. See Pl. XI. Vol. I. GLADIOLUS ROSEUS.

SPECIFIC CHARACTER.

Gladiolus foliis lanceolatis, nervofis, glabris; fcapo fubtrifloro, foliis longior; corolla fubcampanulata, palidè purpurea, laciniis fubæqualibus; ftigmatibus bifidis. Gladiolus with lance fhaped leaves, nerved and fmooth; flower-flem moftly three-flowered, longer than the leaves; bloffom rather bellfhaped, of a pale purple, the fegments nearly equal, with the fummits two-cleft.

REFERENCE TO THE PLATE.

1. The Sheaths of the Empalement.

2. A Flower fpread open, with the Chives attached.

3. The Seed-bud, Shaft, and Summits, one Summit detached and magnified.



THE Bell-flowered Gladiolus, was amongft the number of thofe imported from Holland, in the year 1794, by Meffrs. Lee and Kennedy, Hammerfmith; when they partook of that large collection, brought to Haarlem by a Frenchman; who had been long refident at the Cape of Good Hope, where he had cultivated moft of the bulbs prior to his bringing them to Europe. Nothing particular is required for the management of this, more than the moft common of the Genus, from the Cape. It flowers in May, and increafes by the root; the feeds rarely ripen.







PLATE CLXXXIX. ZINNIA VERTICILLATA.

Double Zinnia.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum. Pappus arifiis 2 erectis. Calyx ovato-cylindricus, imbricatus. Flofculi radii 5, perfiftentes, integri.

See ZINNIA VIOLACEA. Pl. LV. Vol. I.

SPECIFIC CHARACTER.

Zinnia foliis verticillatis, feffilibus; floribus pedunculatis; florculi radii fæpe tria feries. Zinnia with leaves growing in whorls without foot-flalks clofe to the flem; flowers with foot-flalks; the florets of the ray often three rows.

REFERENCE TO THE PLATE.

1. An outer female Floret of the ray, the feed attached, a little larger than nature.

2. An inner hermaphrodite Floret of the difk, with its feed and fkinny chaff, magnified.

3. The Chives, Pointal, and Seed of an hermaphrodite Floret, divefted of its corolla, magnified.

THE Englifh fpecific title to this plant, fhould feem to imply, that the flowers are fuch, as fhould not come into our arrangement; but, as the character is not conflant in all the flowers, even on the fame plant, it cannot be confidered but as a fpecific character in this particular fpecies, though the name has its proper force, in contradifinction to its congeners, in our language. It is a native of Mexico, South America; and was introduced to our gardens about the year 1789, by Mons' Richard, from the Paris gardens, at the fame time with the Virgilia; a most beautiful annual, of the habit of Arctotis, now lost in both countries from the difficulty of procuring ripened feeds. It is to be raifed in the fame manner as the other fpecies, on a gentle hot-bed, in March, and planted out the beginning of May. The flowers make their appearance about the beginning of Auguft, and continue, in fucceffion, till they are deftroyed by the froft. To be certain of the feed, the heads muft be taken from the plant, whild they appear yet freft; as the petals are perfufient, and have not the appearance of entire decay, though the feed is nearly ripe; for if the receptacle once begins to rot, (which it is very fubject to,) the feeds are immediately cont-minated and fpoilt. Our figure was taken, this year, at the Hammerfinith Nurfery, where, it was grown firft in this kingdom.

RECEPTACLE chaffy. Feather with 2 uprightawns. Empalement cylindrical-egg-fhaped, and tiled. Florets of the ray 5, remaining and entire.







PLATE CXC.

GERANIUM ASTRAGALIFOLIUM.

Aftragalus-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. FRUCTUS roftratus, 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 pinnatis, hirfutis, foliolis rotundato-ovatis; calycibus monophyllis; petalis undulatis ad bafin tortis; flaminibus guinque fertilibus; radice tuberofa. GERANIUM with winged, hairy leaves; leaflets of a roundifh-oval thape; cups one-leaved; petals waved, twifted at the bafe; five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement.

- 2. The Chives and Pointal.
- 3. The Chives fpread open and magnified.
- 4. The Seed-bud, Shaft, and Summits, magnified.

By the Kew Catalogue we are informed, that this fpecies of Geranium, was introduced to this country, in the year 1758, by Mr. F. Maffon. It is, like many of this branch of the extended family of Geranium, rather a tender Green-houfe plant; and will not flower, in perfection, without the affiftance of the Hot-houfe. It lofes its foliage after flowering, and remains in a flate of inaction for at leaft three months; during which period, it flould be watered but feldom, and that fparingly. To prepagate it, the only mode is, by cutting fmall portions of the root off, and putting them into the flrong heat of a hot-bed, about the month of March; as hitherto, it has not perfected any feeds with us, and the plant produces no branch, except the flower-flem may be fo denominated. Our drawing was made from the Clapham Collection, in July, this year. This fpecies has been confidered by Profeffor Martyn, (fee his edition of Mill. Dift. article Pelargonium 2.) as the fame with G. pinnatum, and G. prolificum of Linn. Sp. Plan. But, however, the fpecific characters in Linnæus, of thofe fpecies, may agree with our figure, the G. Aftragalifolium of Jacquin and Cavanilles, they are, unquefionably, all different plants; drawings of the two former we have, and will be given in due courfe.







PLATE CXCI. PLATYLOBIUM SCOLOPENDRUM.

Scolopendra-like stemmed Flat-Pea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two Sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium, campanulatum quinquedentatum; laciniis tribus inferioribus acutis, patentibus; duabus fupremis maximis, obtufis, obovatis, vexillo adprefiis. COROLLA papilionacea.

Vexillum, obcordatum, cmarginatum, erec-

tum, maximum. Alæ vexillo breviores, obtufæ, femi-obcordatæ, bafi denticulatæ.

Carina obtuía, comprefía, longitudine ct figura alarum.

STAMINA filamenta deceni, coalita in vaginam, fupra semifissam, apice libera, æqualia, affurentia. Antheræ fubrotundæ, verfatiles.

PISTILLUM. Germen lineare, pilofum. Stylus incurvatus, glaber. Stigma fimplex.

PERICARPIUM. Legumen pedicellatum, compreifum, obtufum, mucronatum, uniloculare, dorfo alatum.

SEMINA, plurima, compressa, reniformia.

EMPALEMENT. Cup bell-fhaped, five-toothed; the three lower fegments pointed, fpreading; the two upper very large, obtufe, prefied to the ftandard.

BLOSSOM butterfly fhaped.

Standard, inverfely heart-fhaped, notched at the end, upright, very large.

- Wings fhorter than the ftandard, obtufe, half inverfely heart-fhaped, toothed at the bafe. Keel, obtufc, flattened, the length and fliape
- of the wings. CHIVES. Ten threads, united into a fheath, half cleft on the upper fide, feparate at the top, equal and turned upwards. Tips roundith, verfatile.
- POINTAL. Seed-bud linear, hairy. Shaft turned inwards, fmooth. Summit fimple. SEED-VESSEL. Pod with a footftalk, flattened, ob-
- tufe, with a fmall point, one-celled, winged along the back.
- SEEDS many, flattened, kidney-fhape.

SPECIFIC CHARACTER.

Platylobium foliis ovatis, glabris; ramis ramulifque compreffis, alatis, margine, cicatrifatis, floribus folitariis.

Flat-pea with egg-fhaped fmooth leaves, larger and finaller branches flat, winged and hatched at the edges; flowers folitary.

REFERENCE TO THE PLATE.

- 1. The Empalement, natural fize.
- 2. The Standard of the bloffom.
- 3. One of the Wings of the bloffom.
- 4. The two petals of the Keel.
- 5. The Chives and Pointal, with part of the cup, magnified.
- 6. The Seed-bud magnified.

THIS Genus of plants was first named by Dr. Smith, in the Linn. Trans. Vol. II. 350, from the P. formotium, which he afterwards figured in the New-Holland fpecimens, Tab. VI. Our fpecies was introduced, to Britain, in the year 1792, by Meffrs. Lee and Kennedy. It is a hardy greenhoufe plant; but has not, hitherto, been increafed in this country. It muft be planted in very fandy peat earth, and not much watered, in winter, as too much wet is apt to defiroy it. The young branches, which in the old plant appear much more like leaves, (as feldom any leaves are produced from the upper part of the plant, after a certain age,) are very tender; but in time become as tough as leather, and are almost equally pliable. Our drawing was taken in May 1799, from a plant, we believe, the first that slowered in England, in the Hibbertian Collection.





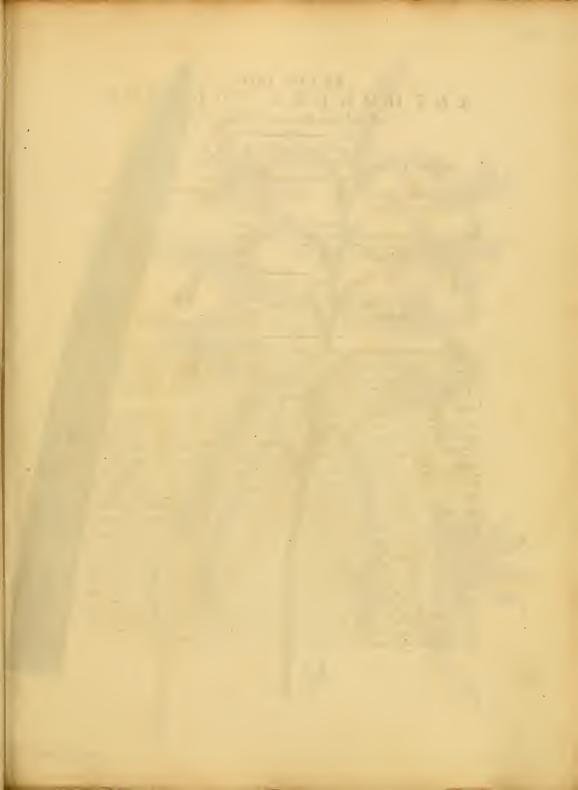


PLATE CXCII. ANTHOLYZA FULGENS.

Refulgent-flowered Antholyza.

CLASS III. ORDER I. TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA tubulofa, irregularis, recurvata. Capfula infera. BLOSSOM tubular, irregular and bent backward. Capfule beneath. See ANTHOLYZA RINGENS, Pl. XXXII. Vol. I.

SPECIFIC CHARACTER.

Antholyza floribus tubiformibus, curvatis, coccineis, fulgentibus; laciniis corollæ maximis, patentibus; foliis longiflimis, glabris, bafi attenuatis. Antholyza with trumpet-fhaped flowers, curved, fearlet, and refulgent; the fegments of the blotfom very large, fpreading; leaves very long, fmooth, and tapered at the bafe.

REFERENCE TO THE PLATE.

- 1. Part of a Leaf, cut from the upper part.
- 2. The two fheaths of the Empalement.
- 3. The Flower cut open, with the chives attached.
- 4. The Pointal and Seed bud; one of the fummits detached and magnified.

This moft beautiful genus does not poffefs amongft its numerous fpecies, (drawings of twenty-two of which we have) a rival to A. fulgens; whether, for the fize of the plant, which grows to the height of three feet, or the extreme brilliancy of its bloftoms, which frequently make a fpike near a foot in length. The roots fhould not be taken from the pots, but fhifted into frefh earth annually, which may be a composition of half fandy peat, and half loam, as the leaves do not decay, until frefh ones arc produced. Our figure was taken at the Hammerfmith Nurfery, in May 1800, to which it was firft brought, from the Cape of Good Hope, in 1792. It increafes by the root.

In a cotemporary, and fomething finilar publication to our own, we were forry to obferve, a rifing itch to do away, what, under the conduct of its original fcientific proprietor, was allowed by all, to confitute its chief merit and utility; efpecially to thole, "who wifh to become fcientifically acquainted with the plants they cultivate." The late Mr. Curtis, purfuing the path he planned, with rigour, to prevent confution, and avoid as much as poffible the greateft difficulty of the fcience; feldom altered a commonly known, or eftablished name; unlefs abfolutely neceffary to fyftematic arrangement. We were naturally led to thefe obvious obfervations, from the hints thrown out in the laft Number of the Bot. Mag. in which, the A. tubulofa of all the collections, which poffes the plant, and fo named and figured by us, in the preceding Number of the Botanifts Repofitory, has a new generic and fpecific title; and in which a gentleman "with INFINTE Jkill" of the uame of Gawler, the acknowledged father of the innovation, is (poken of as qualified to ferutinize and refuti the "errors, falle fynonims, and blanders upon blanders, which have from carelessness, &c." crept into the, or curie, infignificant labours of a Linnaw. a Jacquin, a Thunberg, a Willdenow, or a Curtis. It may perhaps be an acquifition to the fcience, that, fince fuch confution prevails amongft "the moft learned Botani/s," from their " acknowledged inability to determine thofe plants;" which, nevertheless, they have all foolifully attempted to allow, we have one at laft, whole "forutinizing" eye" has been able to make out all Linnaws's and even Thunberg's fpecies." This elucidation, ot fo intricate a fubject, by a perfoa whole knowledge of inviting plants, we tear, does not lead him, fcarcely, to an acquaintancehip with the difference of face in allow for plants, which have form carely, which have form on finite moment, to thole, " who with the blants they cultivate;" and the fmall trouble, to moft perfoawhole knowledge of ilving plants, we tear, does







PLATE CXCHI. GERANIUM LINEARE.

Linear-petalled Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. FRUCTUS roftratus, 5-coccus. One POINTAL. Five Summits.

FRUIT furnished with long awns; five dry berries.

See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

GERANIUM foliis lanceolatis, obtufis, fubfinuatis; petalis fubæqualibus, linearibus; floribus pentandris; radice tuberofa. GERANIUM with leaves lauce-fhaped, obtufe, and a little fcolloped at the edges; petals nearly equal, linear; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement cut open, to fhew its hollow ftructure.
- 2. The Chives and Pointal natural fize.
- 3. The Chives fpread open, magnified.
- 4. The Pointal, magnified.

This is another of those curious tuberous Geraniums, which have been introduced, to this country, by Mr. Niven; who was fent to the Cape of Good Hope by G. Hibbert, Efq. for the fole purpose of enriching his Gardens and Herbarium, (now, we prefume, the first in Europe) with the vegetable productions of that country. It has no apparent difference, in habit, to require any other treatment than has been mentioned in the former part of this work, as neceffary to the reft of its congeners. Our drawing was taken, from the Clapham Collection, in July 1801; the roots having been received the preceding autumn.





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PLATE CXCIV. HEMEROCALLIS ALBA. White Day-Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA campanulata; tubo cylindrico. Stamina declinata. BLOSSOM bell-fhaped; tube cylindrical. Chives declining.

See HEMEROCALLIS CÆRULEA, Pl. VI. Vol. I.

SPECIFIC CHARACTER.

Hemerocallis foliis cordatis, petiolatis; corolla alba, tubo longifimo.

Day-Lily with heart-fhaped leaves that have foot-ftalks; bloffom white, tube very long.

REFERENCE TO THE PLATE.

- 1. The Chives and Pointal, as they are placed in the flower.
- 2. The Seed-bud, Shaft, and Summit.
- 3. A ripe Seed-vetlel of its natural fize.
- 4. The Seed-veffel cut transversely, to shew the fituation and number of the cells and valves.
- 5. A ripe Seed, natural fize.

THE White Day-Lily is from the fame country, and of the fame date in our gardens, as the Blue; figured in the Firft Vol. Pl. VJ. and was introduced through the fame medium. It is herbaceous, and generally flowers, if kept in the hot-houfe, about Auguft; having that true and conftant character of the genus, and from which it had its name, the producing but one folitary, perfect flower, per diem, till all the bloffoms on the fpike are exhaufted; which, in this fpecies, are much more abundant than in any of the others It is increafed by the root or feed.

thi all the biolons on the pice are exhauted, which in this picets, are inserted and the line of the others. It is increafed by the root or feed. This plant, we prefume, is the fame as those fpecified under the different titles of Lilium Longiflorum, and L. Japonicum, in Willdenow's new edition of the Species Plant.; the L. candidum, and L. Japonicum, of Thunberg's Japan; and the L. Longiflorum of the Linn. Tranf. Vol. II. P. 343. The Hemerocallis formerly figured by us, under the fpecific title of Cærulea, we take to be, the Hemerocallis Japonica, and Lilium Cordifolium of Willdenow; the H. Cordata of Thunberg's Japan; and the Hemerocallis Japonica, and Lilium Cordifolium of the Jinn. Tranf. Vol. II. P. 332. Willdenow, who had never icen even dried fpecimens of the plants in quefition, has hence been led to place the fame plant, under different genera; and to confider the Hemerocallis. Now, as we have no doubt, (nor do we think any one can, that will take the trouble to examine the diffections given with each figure,) that if the one is an Hemerocallis, the other muft be admitted of the fame family; folhave we made no fruple in rejecting the generic name of Lilium, for the prefent plant; although we would gladly have adopted the fpecific one of Longiflora, had not that of Alba, already obtained fo generally in our gardens; a rule, for our direction, paramount to all others as to fpecific denomination.







HYPOXIS OBLIQUA.

Oblique-leaved Hypoxis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fex-partita, perfiftens, fupera. Capfula bafi anguftior. Spatha bivalvis. BLOSSOM fix-parted, remaining, above. Capfule narrower at the bafe. Sheath two-valved. See HYPONIS STELLATA. Pl. CI. Vol. II.

SPECIFIC CHARACTER.

Hypoxis fcapo fubtrifloro, pilofo, longitudine foliorum; pedunculis flore triplo longioribus; foliis lineari-lanceolatis, oblique flexis, glabris; radice fibrofa. Hypoxis with moftly three flowers on the ftcm, which is hairy, the length of the leaves; foot-ftalks three times the length of the flower; leaves linearly lance-thaped, obliquely bent downward, fmooth; root fibrous.

REFERENCE TO THE PLATE.

- 1. A Petal of the Bloffom, with its Chive, as attached to its bafe.
- 2. The Seed-bud, on its foot-ftalk, with a part of the tube of the bloffom, to which the Chives are fixed.
- 3. The Seed-bud, Shaft and Summit, magnified.

This fpecies of Hypoxis is from the Cape of Good Hope; and, we believe, folely in the poffeifion of G. Hibbert, Efq. Clapham; from whole collection our drawing was made, in June, this year, 1801. It appears to be a hardy green-houfe plant; but, is certainly more curious than handfome, and, from its general character, we fhould judge the propagation would be from the root.

Profeffor Jacquin has given the Hypoxis Obliqua in his Icones Plantarum Rariorum, 2. t. 371; and in his Supplement to the Collectanea, 54; but, we muft fuppofe from a more vigorous fpecimen than ours; as, the appearance of a woolly character, at the margin of the leaves, was not to be traced in our plant, although every other part is exact. Wherefore, we have retained his name, though we have rejected the latter part of his fpecific character, to introduce one, which we confider, of more confequence, as oppofed to those with bulbous roots, this being fibrous.





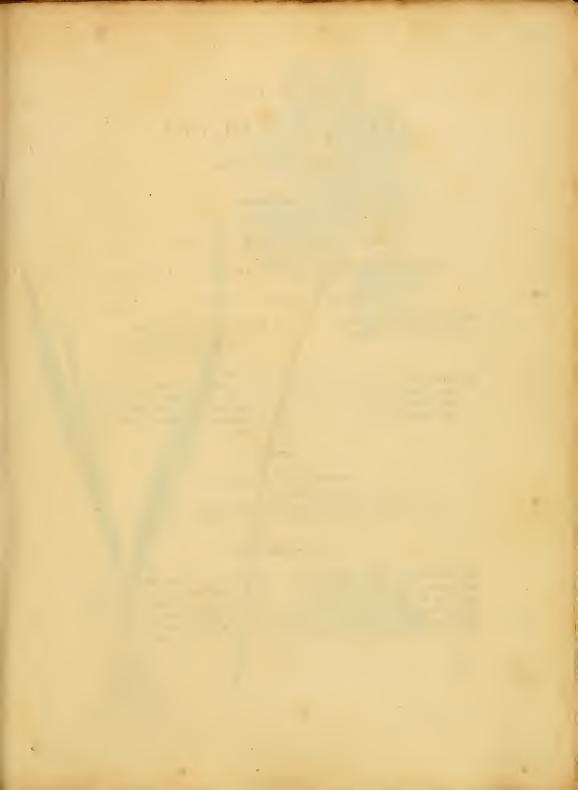


PLATE CXCVI.

IXIA MACULATA.

Spotted-flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. STAMINA tria, erectiufculo-patula. BLOSSOM 6 petals, fpreading, equal. CHIVES three, upright, fpreading. See IX1A REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis enfiformibus, glabris, fcapo duplo brevioribus; floribus alternis, fub-fpicatis; petalis bafi obfcuris, ovatis, concavis; ftigmatibus bifidis. Ixia with fword-fhaped, fmooth leaves, half the length of the flower-flem; flowers alternate, rather fpiked; petals dark at the bafe, egg-fhaped and concave; fummits twocleft.

REFERENCE TO THE PLATE.

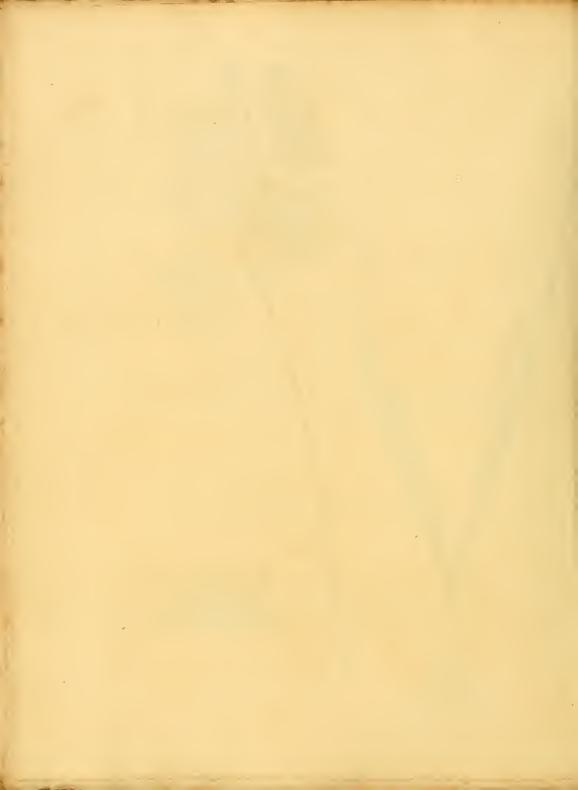
1. The two valves of the Empalement.

- 2. A Flower cut and fpread open, with the Chives in their natural flation.
- 3. The Pointal complete, with one of the Summits detached and magnified.



This Ixia has been long cultivated in Britain, fo fays Millar, &c. but, till within thefe few years, we have not feen it in our gardens; perhaps it has been (like many others) loft to us, and recently introduced with the multitude of other fpecies, which now decorate our green-houfes; either from the Cape of Good Hope or Holland. It is one of the moft defirable of the genus, from the length of time it continues in flower; which is, at leaft a month, from the firft flowers beginning to expand. It increafes by the bulb, and is to be cultivated as other common lxias. Flowers in May or June.





AND A DESCRIPTION OF A

PLATE CXCVII. NYMPHÆA CŒRULEA.

Blue Water-Lily.

CLASS XIII. ORDER I.

POLYANDRIA MONOGYNIA. Many Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium inferum, tetraphyllum, magnum, fupra coloratum, perfiftens.

- COROLLA. Petala numerofa (quindecem fæpe,) germinis lateri infidentia, ferie plus quam fimplici.
- STAMINA. Filamenta numerofa (feptuaginta fape,) plana, curva, obtufa, brevia. Antheræ oblongæ, filamentorum margini adnatæ.
- PISTILLUM. Germen ovatum, magnum. Stylus nullus. Stigma orbiculatum, planum, peltato-feffile, radiis notatum, margine crenatum, perfidens.
- PERICARPIUM. Bacca dura, ovata, carnofa, rudis, collo anguftata apice coronata, multilocularis (decem ad quindecem loculis,) pulpa plena.
- SEMINA plurima, fubrotunda.

EMPALEMENT. Cup beneath, four leaved, large, coloured above, permanent.

- BLOSSOM. Petals numerous (often fifteen,) placed on the fide of the feed-bud, in more than one row.
- CHIVES. Threads numerous (often feventy,) flat, curved, blunt, fhort. Tips oblong, fixed to the margin of the threads.
- POINTAL. Seed-bud egg-fhaped, large. Shaft, none. Summit round, flat, central, fitting, marked in rays, feolloped at the edge, remaining.
- SEEN-VESSEL. Berry hard, egg-fhaped, flefhy, rough, narrowed at the neck, crowned at the top, many-celled (from ten to fifteen cells,) full of pulp.

SEEDS many, roundifh.

SPECIFIC CHARACTER.

Nymphæa foliis cordato-orbiculatis, fenioribus crenatis, lobis acutis imbricatis, acuminatis; petalis acutis, lanceolatis, cæruleis. Nymphæa with between heart-fhaped and round leaves, the old ones feolloped, lobes fharp, tiled, and tapered; petals fharp, lancefhaped, and blue.

REFERENCE TO THE PLATE.

J. A Chive.

- 2. The Seed-bud and Summit.
- 3. The Seed-bud, cut transverfely, to shew the number of cells.

ANONGST aquatic or water plants, the Nymphæsa are undoubtedly the moft defirable in cultivation; although, we fhould agree to the exclusion of N. Nelumbo, &c. now forming a diffindt genus in the Sp. Plant. of Willdenow; taken from Ufteri's Ed. of Juffieu's Gen. Plant. claffed from the natural characters, under the title of Nelumbium's. This plant may be kept in the green-houfe, or hot-houfe, in a large tub filled with water and a finall portion of mud at the bottom. It propagates by the root, and the flowers, which are extremely fragrant, are produced in August, in which month, this year, our drawing was made, from a large plant in the Hibbertian collection; but, from an omifion in the figure, we were obliged to finish the plate from a plant, in the collection of J. Vere, Efq. Kenfington Gore, fill in flower, the beginning of October. The leaves of this fpecies are most beautifully fcolloped, and near a foot in diameter; but the indentitions are fcarcely to be precised in the younger; one of which, as we could not introduce the larger is fhewn on the plate of the natural fize.

one of which, as we could not introduce the larger, is flewn on the plate of the natural fize. It is a native of the Cape of Good Hope, and was introduced to the Royal Gardens, Kew, by Mr. F. Maffon, about the year 1792.





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PLATE CXCVIII. BAUERA RUBIOIDES.

Three-leaved Bauera.

CLASS XIII. ORDER II.

POLYANDRIA DIGYNIA. Many Chives. Two Pointals.

GENERIC CHARACTER.

CALYX. Perianthium octophyllum, foliolis perfistentibus, acuminatis, reflexis, dentatis.

COROLLA. Petala octo, ovata, concava, patentia, æqualia, calyce majora.

- STANINA. Filamenta numerofa, capillaria, co-rolla breviora, receptaculo inferta. An-theræ latiufculæ, obtufæ, erectæ.
- PISTILLA. Germen fubovatum, villofum. Styli duo, filiformes, longi, apice curvati. Stigmata fimplicia.
- PERICARPIUM. Capfula fubrotunda, pilofa, apice dehifcens, bilocularis, bivalvis.

SEMINA plurima, fubrotunda.

EMPALEMENT. Cup eight-leaved, remaining, leaflets tapered, reflexed, and toothed.

- BLOSSOM. Eight petals, egg-fhaped, concave, fpreading, equal, larger than the cup. CHIVES. Threads numerous, hair-like, fhorter
- than the bloffom, fixed into the receptacle. Tips broadifh, obtufe and erect.
- POINTALS. Seed-bud nearly egg-fhaped, hairy. Shafts two, thread-fhaped, long, curved at the ends. Summits fimple. SEED-VESSEL. Capfule roundifh, hairy, fplit-
- ting at the top, two cells, two valves.
- SEEDs many, roundifh.

SPECIFIC CHARACTER.

Bauera foliis ternatis, apice dentatis, feffilibus, oppositis.

Bauera with leaves composed of three leaflets, toothed at the point, growing close to the ftem, and opposite.

REFERENCE TO THE PLATE.

- 1. The Empalement, with the Chives and Pointal.
- The Chives and Pointal magnified.
 The Empalement, Seed-bud, Shafts, and Summits, magnified.
- 4. The Seed bud cut transversely, with the feeds in the cells, magnified.

This handfome fhrub, a native of Port Jackfon, New Holland, was first raifed at the feat of the How the Marchioner's of Rockingham, Hillingdon, Middlefex, in the very 1793; and, from a plant, in the confervatory, fill in flower, this prefent month November, our drawing was made, at the Narfery, Hammerfmith. It is hardy, although delicate in ftructure, and flourithes in the green-houfe. The ftem of the plant from which our figure was taken, although the oldeft in the kingdom, and near fix feet high, is fcarce the thicknefs of a quill at the bafe, therefore must be fupported. The young hoots and leaves are covered with a flight pile; the fmaller branches fland out at right angles, pro-ceeding from the infertion of the leaves, and the whole plant has, at firft fight, much the appearance of a Rubus. It is propagated by cuttings, made in the month of March, and put under a fmall bell-Sir J. Banks, Bart. P. R. S. &c. from whofe natural genius and love for the fcience, and by whofe foftering and liberal hand to promote it, the ftudy of Botany has become fo general a tafte; has named this genus, in honour of two moft eminent Botanical painters, of the name of Bauer, natives of Germany, and brothers. The one, now under the immediate patronage of Sir Jofeph, as Botanical Painter to his Majefty at Kew; well known for his fuperb and excellent coloured engravings of Heaths, &c. in large folio. The younger confidered no lefs able, engaged under the fame influence, with the other artifls, &c. who are now upon the laft expedition for difcovery to the South Sea; but not equally known to Botanifts, as the perion who accompanied the late Dr. Sibthorpe, on his voyages through Greece; and whofe pencil has produced all those drawings, detigned to decorate and illuftrate the famous Flora Graca, preparing for the public, under the aufpices of the intelligent Dr. Smith, P. L. S. &c. &c.







PLATE CXCIX.

CAMELLIA JAPONICA. Var. flo rubro pleno.

Double red Camellia.

CLASS XVI. ORDER VI. of Schreber's 8th edit. of Gen. Plant.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus, polyphyllus; foliolis interioribus majoribus. EMPALEMENT tiled, many-leaved; the inner leaflets the largeft.

SPECIFIC CHARACTER OF VARIETY.

Camellia foliis fenioribus bafi attenuatis, junioribus rubentibus; pctalis interioribus divaricato-erectis; floribus plenis, rubris. Camellia with the older leaves tapered at the bafe, the younger ones reddift; the inner petals ftand upright fpreading different ways; flowers double and red.

AGAIN have we to call upon the indulgence of our Botanical friends for their fufferance, in a third intrufion on the forms of our own prefeription. But, as we had given the two other varieties of this fine plant; and taking it for granted, by judging from our own feelings, that a figure of this very fcarce variety would be agreeable to moft; that they might be (by comparison) able to decide upon the difference which does exift, but has been denied by many, between this, and the Striped Var.; fee our figure, Vol. 11. Pl. XCI. It has been thought by moft, who have not feen this plant; that it was but the Striped Var. which had loft its variegation. This is certainly not the cafe; for, it flands as diffind from the Striped, as from the White variety; which may be readily traced, either from the plants themfelves, or our figures; by comparing the fpecific, or rather differing character we have affigued to cach. The Double red Camellia was introduced about the year 1794 from China, by R. Prefton, Efq. Woodford, Effex.

The largeft plant now in Europe, of this variety, is in the felect and moft valuable collection of the Hon. T. Greville, Efq. Paddington, imported, laft year, from China in the higheft perfection. It is propagated by cuttings, or layers; and delights in a light, fandy loam; with about one-third of the pot, from the bottom, filled with peat earth. It flowers from November, till February, in the Hothoufe; or from January, till April, if kept in the Green-houfe. Our figure was taken, in November, this year, at the Hammerfmith Nurfery.







PLATE CC.

MELALEUCA HYPERICIFOLIA.

St. John's-wort-leaved Melaleuca.



CLASS XVIII. ORDER IV.

POLYADELPHIA POLYANDRIA. Threads in many Sets. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquefidus, femifuperus. Petala quinque. Filamenta multa, longiffina, connata in quinque corpora. Piftillum unum. Capfula trilocularis. CUP five-cleft, half above. Petals five. Threads numerous, very long, united into five bodies. Pointal one. Capfule three-celled.

See MELALEUCA ERICÆFOLIA, Pl. CLXXV. Vol. III.

SPECIFIC CHARACTER.

Melaleuca foliis oppofitis, eliptico-oblongis, uninerviis; floribus confertis; filamentis longiffimie, linearibus, apice radiato-multifidis. Melaleuca with oppofite leaves, eliptic-oblong, one-nerved; flowers cluftered; threads very long, linear, rayed and many-cleft at the top.

REFERENCE TO THE PLATE.

- 1. A flower, natural fize.
- 2. One of the five bundles of Chives, with its petal, to which it is attached at the bafe, magnified
- 3. The cup, feed-bud, flaft and fummit, natural fize, the fummit detached and magnified.

ABOUT the year 1792 this plant was first raifed from feeds, by the late Mr. William Malcolm, Nurferyman, at Stockwell, Surry; and was, from the very great refemblance it bears to the St. John'sworts, fo denominated, until it flowered. It has now become one of the commoness of the structure of







PLATE CCI. A I Z O O N C A N A R I E N S E.

Purstane-leaved Aizoon.

CLASS XII. ORDER IV.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum; laciniis lanceolatis, perfitientibus. COROLLA nulla.

STAMINA. Filamenta plurima, capillaria, finui calycis per phalanges in ferta. Antheræ fimplices.

PISTILLA. Germen pentagonum, fuperum. Stili quinque, fimplices. Stigmata fimplicia.

PERICARPIUM. Capíula ventricola, retula, pentagona, quinquelocularis, quinque valvis.

SEMINA plura, fubrotunda.

BLOSSOM none, CHIVES. Threads numerous, hair-like, inferted

EMPALEMENT. Cup one leaf, five-parted; feg.

ments lance-fhaped, remaining.

- into the hollow part of the cup in bunches. Tips fumple.
- POINTALS. Seed-bud five-fided, above. Shafts five, fimple. Summits fimple.
- SEED-VESSEL. Capfule bellied, dented, five-fided, five-celled, five-valved.
- SLEDS many, roundifh.

SPECIFIC CHARACTER.

Aizoon foliis cuneiformi-ovatis; floribus folitariis, fubfeffilibus, axillaribus. Aizoon with leaves between wedgeand egg-fhaped; flowers folitary, growing almost close to the ftem from the infertion of the leaves.

REFERENCE TO THE PLATE.

- 1. The Empalement fhewn from the infide.
- 2. The fame thewn from the outfide.
- 3. A Chive magnified.
- 4. The Pointals natural fize.
- 5. The fame, magnified.

This plant is herbaceous, and is found near the fea coaft, in moft parts of the world, within the tropics. It has a charafter common to many Genera of the natural order of fucculents, fuch as Mefembryanthemum, Craffula, &c. that of an indeterminate number of pointals; which, in this genus, extend from three, to five, on different plants; this circumflance not having been fufficiently attended to has unfortunately occafioned fome confution. Brown in his Natural Hiftory of Jamaica has deferibed it as growing on that Ifland, and with five pointals, therefore placed it to its right genus. Plumier, Sloane, &c. treated it as Portulaca, to which, as the genus now flands, it in no way affines. Læffing in his Iter Hifpanicum, publifhed in 1758, having found the plant in Spain with three pointals, immediately placed it to another genus, Halimum; upon whofe authority, corroborated by Jacquin, (who acknowledges a variation in the number of pointals, on different plants, found in the different Caribee Iflands,) Linnæus took up the plant, faid to have but three pointals, under the title Sefuvium. As to the plant faid to be cultivated by Miller in the Hort. Kew: under the laft named genus, we have no difficulty in referring that, to the Aizoon cararienfe of the fame work; as the time of flowering not being noticed, the diffinction of charafter could not be obferved, and the genus introduced, taken upon the *gratis dictum* of Miller. Burmann, in his Ed: of Rumphius's plants of Amboyna, has it as Halimus; and Plukenet as Portulaca from Eaft Indian fpecimens; with numbers of other Botanifts from different parts; as AEgypt, the Canary Iflands, &c. &c. under different names.

Seeds received from Spain of our plant were fown by Mr. Anderfon in 1793, at the gardens of J. Vere, Efq. Kenfington Gore; fince which time, it has annually died to the ground, about November, and re-appeared in Spring; from this circumfance, the great delicacy of the plant, and having been treated as an annual; it has been repeatedly loft to this country; though fo confantly introduced, in almost every parcel of feeds which arrives from either the East or Wett Indies. It may be increased by cuttings made early in the year, and put in a hot-bed to accelerate their growth, and thould be planted in rich loamy earth. It flowers from July till September. To preferve it more than one year, it must be kept in the hot-house.







PLATE CCII. SAMYDA SERRULATA.

Sawed-leaved Samyda.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYS. Perianthium monophyllum, interne coloratum; tubus campanulatus, decemfriatus; limbus quinquefidus, laciniis ovatis planis, patentifiimis, obtufis, duabus acumine aučtis.

COROLLA nulla.

Nectarium monophyllum, conicum, truncatun, decentfriatum, longitudine fere calycis, ejufque limbo ad batin infertum, ore obtufe 10 ad 18-dentato.

- STAMINA. Filamenta nulla. Antheræ decem ad octo-decem, oblongæ, erectæ, parvæ, dentibus nectarii infidentes.
- PISTILLUM. Germen ovatum. Stylus fubulatus, erectus, longitudine nectarii. Stigma capitatum, obtufum.
- PERICARPIUM. Capfula fubrotunda, quadrifulcata, coriacea, craffa, unilocularis, quadrivalvis.
- SEMINA plurima, fubovata, obtufa, bafi foraminulo notata, valvulis affixa, obvoluta pellicula pulpofa.

EMPALEMENT. Cup one leaf, coloured within; tube bell-fhaped, ten-ftriped; border fivecleft, fegments egg-fhaped, finooth, very much fpread, obtufe, two lengthened by a pointed end.

BLOSSOM none.

Honey-cup, one leaf, conical, appearing cut off, ten-ftriped, nearly the length of the cup and fixed to it at the bafe of the border, obtufely from 10 to 18-toothed at the mouth.

- CHIVES. Threads none. Tips from 10 to 18, oblong, upright, finall, fixed to the teeth of honeycup.
- POINTAL. Seed-bud egg-fhaped. Shaft awlfhaped, upright, the length of the honeycup. Summit headed, blunt.
- SEED-VESSEL. Capfule roundifh, four-furrowed, leathery, thick, one-celled, four valves.
- SEEDS many, nearly egg-fhaped, blunt, marked with a fmall hole at the bafe, fixed to the valves, furrounded with a flight pulpy fkin.

SPECIFIC CHARACTER.

Samyda floribus rofeis, dodecandris; foliis ovatooblongis, ferrulatis. Samyda with rofy coloured flowers having twelve chives; leaves between egg-fhaped and oblong, flightly fawed.

REFERENCE TO THE PLATE.

1. The Empalement, with its honcy-cup, and the tips, cut and fpread open.

- 2. The Pointal and feed bud natural fize, the fummit detached and magnified.
- 3. The Seed-bud cut transverfely and magnified, to show the number of valves

and fituation of the feeds.

THE Sawed-leaved Samyda is an inhabitant of moft of the Weft India Iflands, but was received in England, about the year 1795, from the Ifland of St. Vincent; tranfinited from thence, by Mr. An derfon, curator of the Botanic garden, originally eftablished there, under the fanction of our government, by Dr. Young. It is a very tender plant, grows to about three feet in height, making but few fmall branches, and rather weak in the fem. Our drawing was taken in July this year at the garden of T. Evans, Efq. Stepney, who we believe firft had it to flower in this kingdom. It is propagated by cuttings; muft be kept in the bark-bed of the hot-houfe, and fhould be planted in very rich mould.





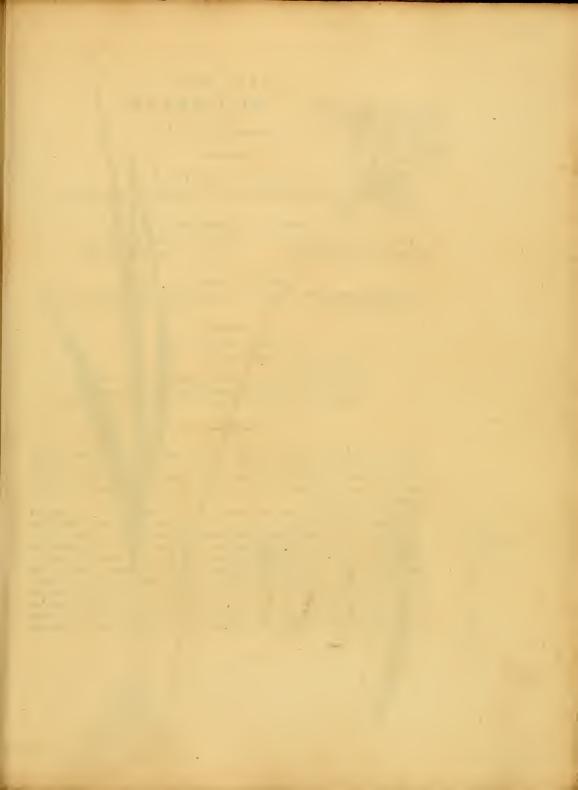


PLATE CCIII. IXIA COLUMNARIS.

Columnar-chived Ixia.

CLASS III. ORDER I. TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. STIGMATA tria, erectiufculo-patula. BLOSSOM 6 petals. fpreading, equal. SUMMITS three, upright-fpreading.

SPECIFIC CHARACTER.

Ixia filamentis bafi cohærentibus; floribus capitatis; corollis purpureis. Ixia with threads united at the bafe; flowers grow in heads; bloffoms purple.

REFERENCE TO THE PLATE.

- 1. The two Valves of the empalement.
- 2. A Bloffom cut open.
- 3. The Chives and Pointal, with the tube of the blofform, the border cut off.
- 4. The Chives cut and fpread open, with the tube of the bloffom, magnified.
- 5. The Pointal and Seed-bud, with one of the Summits detached and magnified.

HERE we have a plant which prefents one of those obstacles, constantly met, in all attempts to a fyshematic arrangement of the productions of nature. Every feature of Ixia we find positively expressed, but in the unison of the Threads; a circumstance, which Linnæus in his fyshem, always deemed of fuch fingular moment, that a number of Genera have been formed, from this natural order of plants, hinging on this only character.

But, as this plant has been named, and accurately deferibed by Mr. Salisbury, in the Prodromus to his garden 36. n. 18; and continued, from him, by Profeffor Martyn, in his Edit. of Miller's Dict. article Ixia, 50; in the following therefore fuch fuperiour judgments to our own, we have thought it proper, not to make any alteration; and in confequence, have retained his Generic and Specific title. The extreme brilliance of the flowers of Ixia Columnaris, pervading all the varieties, (of which we have drawings of 6,) is not exceeded by any in the whole Genus; they generally, are not longer expanded than for about four hours, and that only under a hot fun; from about eight, till twelve o'clock; when they clofe for the day; but neverthelefs they have a permanence not ufual in Ixias, as the fame blofforms will open diurnally for above a week. It is a native of the Cape of Good Hope, and came firft to England, by the way of Holland, about the year 1794. It flowers in June and July, amongfit the lateft of the tribe, and increafes by the root in abundance. Our figure was taken at the Hammerfmith Nurfery.







PLATE CCIV.

GERANIUM LACINIATUM. Var. flore purpureo.

Ragged-leaved Geranium. Purple flowered Variety.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. FRUCTUS roftratus, penta-coccus. One POINTAL. Five furmits. FRUIT furnished with long awns; five dry berries.

SPECIFIC CHARACTER.

GERANIUM foliis radicalibus, integris laciniatifque, petiolis filiformibus; calycibus monophillis; flaminibusquinque fertilibus; radice tuberofa; floribus purpureis. GERANIUM with leaves growing from the root, entire and jagged, footftalks thread-fhaped; cups one-leaved; five fertile chives; root tuberous; flowers purple.

REFERENCE TO THE PLATE.

- 1. The Empalement magnified.
- 2. The Chives fpread open.
- 3. The Pointal and feed-bud magnified.

THIS very handfome variety, (for we cannot confider it as a fpecies,) of the Geranium laciniatum, was imported in 1800, from the Cape of Good Hope, by G. Hibbert Efq.; in whofe collection it flowered, laft year, in the month of June, when our drawing wastaken; and we believe it is in no other at prefent in this kingdom. Mr. Allen, under whofe care that collection is preferved in fuch high order and perfection, and to whofe kind communications, we are much indebted; informs us, that he has not, as yet, been able to increafe it; but, from every appearance, the plant, he has no doubt, may, by the root, as are the other fpecies which have the tuberous character; and that he did not treat it differently from the reft of the Geraniums which compose this branch of that interefting family.



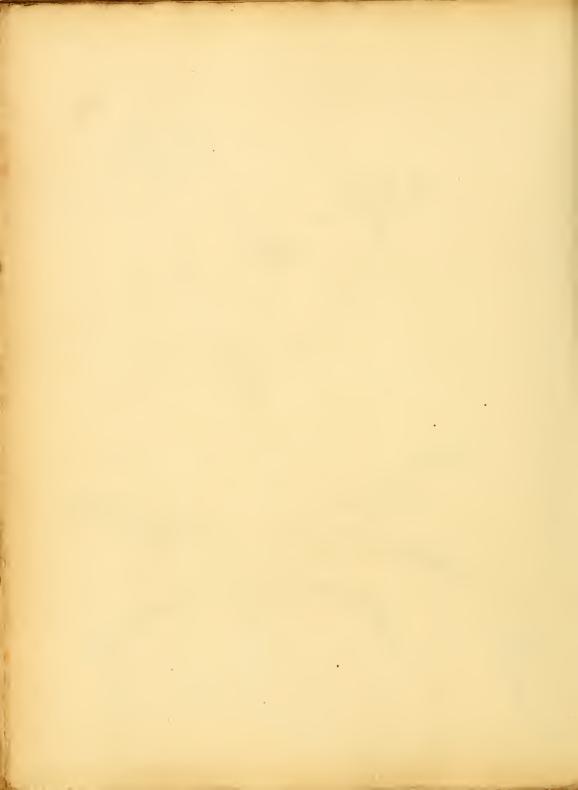




PLATE CCV. PLATYLOBIUM LANCEOLATUM.

Lance-shaped-leaved Flat-pea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two Sets. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX campanulatus, quinquefidus; laciniis duabus fupremis maximis, obtufis. Stamina omnia coalita. Legumen pedicellatum, compretifum, dorfo alatum; polyfpermum.

Cup bell-fhaped, five-cleft; the two upper fegments very large and obtufe. Chives all united Pod on a footfialk, comprefield, winged along the back; many feeded.

See Plate CXCI. Vol. III. PLATYLOBIUM SCOLOPENDRUM.

SPECIFIC CHARACTER.

Platylobium foliis glaberrimis, diftichis, linearilanceolatis; floribus folitariis, axillaribus; ramis junioribus fub-comprefis. Flat-Pea with very fmooth leaves pointing oppofite ways, linear-lance thaped; flowers grow folitary from the lower part of the leaves clofe to the branches; the younger branches are rather flatith.

REFERENCE TO THE PLATE.

1. The Empalement of the flower.

- 2. The Standard, or upper petal of the bloffom.
- 3, One of the Wings, or fide petals of the bloffom.
- 4. The two lower Petals, or keel of the bloffom.
- 5. The Chives, natural fize.
- 6. The fame, magnified.
- 7. The Seed-bud, natural fize.
- 8. The fame magnified, but rather more mature.

No Clafs, amongft the 24, is more diffinft in its natural charafter than Diadelphia; yet, fince the difcovery of New South Wales, no one has prefented more difficulty to the botanist. From the great number of plants of that country, appertaining to this Clafs, and the firong differing charafters which moft of them exhibit, fuch indeed, as might formerly have been thought of fufficient moment to conflitute new Genera; many muft now bend a little for the cafe of fcience; or otherwife they will in a fhort time become doubled in number; a matter of no finall moment to weak although willing memories. Our having placed the P. fcolopendrum of this Volume, Pl. CXCI., and our prefent plant to the Genus Platylobium, is the occafion of the above prelude; as it may be thought by fome who have not feen the feed veffel and feeds, the principal parts upon which the Genus is founded, that nature is a little outraged in fo doing; but, without we had fo joined them, we muft have given them a new title. This plant was introduced at the fame time as the P. fcolopendrum, and the three other fpecies now in Britain; not one of them, but has baffled all our moft experienced cultivators to increafe it, by any other mode than from the feed; fome of which has been procured from the P. formofum, only. They all require to be kept in the dryeft part of the green-boule, as they are impatient of damp. Our drawing was made in November 1801, at the Nurfery of Meffrs. Lee and Kennedy, Hammerfmith, by whom it was first raifed in 1792. The general height of the Platylobiums, is about three feet and a half, at moft, in this country, and they do not form buffy furuls. They require a light, fandy peat foil, with rather lefs root room, than is in general neceffary for plants of equal fize.







PLATE CCVI. DRACENA BOREALIS.

Oval leaved Dracana.

CLASS VL ORDER L

HEXANDRIA MONOGYNIA. Six Chives. One Pointals.

GENERIC CHARACTER.

CALYX nullus.

- COROLLA. Petala fex, oblonga, erectiufcula, æqualia, unguibus cohærentia.
- STAMINA. Filamenta fex, unguibus inferta, fubulata, medio crasfiora, bafi membranacea, longitudine vix corollæ. Antheræ oblongæ, incumbentes.
- PISTILLUM. Germen ovatum, fexfiriatum. Stylus filiformis, lougitudine staminium. Stigma trifidum, obtufum.

PERICARPIUM. Bacca ovata, fexfulcata, trilocularis

SEMINA folitaria, ovato-oblonga, apice incurvata.

OBS. Character fere Afparagi, habitus diverfus.

EMPALEMENT DODE.

- BLOSSOM. Petals fix, oblong, rather upright,
- equal, cohering by the claws. CHIVES. Threads fix, inferted into the claws, awl-fhaped, thicker about the middle, fkinny at the bafe, almost the length of the blosson. Tips oblong, incumbent.
- POINTAL. Seed-bud egg-fhaped, fix-fireaked. Shaft thread thaped, the length of the chives. Summit three-cleft, obtufe.
- SEED-VESSEL. Berry egg-fhaped, fix-furrowed, three-celled.
- SEEDS folitary, oblong-egg-fhaped, turned inward at the end.
- OBS. The Character is very near Afparagus, the habit different.

SPECIFIC CHARACTER.

Dracæna, herbacea, fubcaulescens, foliis elipticis.

Dracæna, herbaceous, rather afpiring to a ftem, leaves eliptic.

REFERENCE TO THE PLATE.

- 1. A Petal with its chive.
- 2. A Chive, magnified.
- 3. The Pointal, magnified.
- 4. A ripe Berry.
- 5. The fame, cut transverfely.

ABOUT the year 1776, this plant was first received in England, by Meffrs Lee and Kennedy from Montreal, Canada, N. America. It is a native of all the northern parts of that country, as far as New England; propagates itfelf by the root, and flowers in July. It will not three but on a fhady border, which should be made of light fandy peat.

Much we revere the name of Solander, and highly rate his merit as a Botanift; yet we cannot forbear flating our diffent from the arrangement of this plant, as a Dracæna, certainly nothing can be more diffimilar, in every part; this may be eafily traced by comparing our figure and diffections, as connected with the Generic character. The whole natural habit of the plant, points out Convallaria for its genus, to which it is much nearer allied than Dracæna, even in the fexual characters. However, we only flate our opinions, without even thinking of change, as the plant is known as Dracena, having been figured and defcribed in the First Vol. of the Kew Catalogue, page 454, under the prefent title.







PLATE CCVII.

MIMOSA LONGIFOLIA.

Long-leaved Mimofa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA.

Various difpofitions. Upon one Plant.

ESSENTIAL GENERIC CHARACTER.

Hermaphrod. CALYX 5-dentatus. Cor. 5-fida. Stam. 5 fcu plura. Pist. 1. Legumen.
Mafcul. CALYX 5-dentatus. Cor. 5-fida. Stam. 5, 10, plura. Hermaph. CUP five-toothed. Blois. 5-cleft. Chives 5 or more. Pointal one. A pod.

Male. Cup 5-toothed. Blofs. 5-cleft. Chives 5, 10, or more.

See MIMOSA STRICTA. Pl. LIII. VOL. I.

SPECIFIC CHARACTER.

Mimofa foliis integris longifiimis, utrinque glabris, obtufis; capituli geminati, racemofi, longifiimi, oppofiti, lutei, fubcernui. Mimofa with entire, very long leaves, fmooth on both fides and blunt; flower heads grow by pairs in very long bunches oppofite to each other, yellow and rather nodding.

REFERENCE TO THE PLATE.

1. A flower, magnified, fhewn fideways.

2. The Empalement, magnified.

3. The Bloffom, magnified.

- 4. A Chive, magnified.
- 5. The Pointal, magnified.

ABOUT the year 1792 J. Ord, Efq. of Purfers Crofs, Fulham, received the feeds of this Mimofa from New South Wales; the plants were raifed, the enfuing year, by Mr. White, who has managed, much to his credit, the felect collection of that Gentleman near 20 years, and who obligingly fent us a fine fpecimen in March 1801, taken from a plant near 18 feet in height. Of the Mimofas now in Britain, we think, this fpecies is likely to exceed them all in height; making a very handfome plant; and moft beautiful at the feeton when covered with its long pendulous bunches of flowers. It is increafed by cuttings, but with difficulty; and, as yet, feeds have not been perfected in this country. A light fandy earth is what it thrives in moft, but it will grow in almoft any foil.





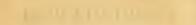


PLATE CCVIII. LASIOPETALUM FERRUGINEUM.

Rufty Woolly-bloffom.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALVX. Perianthium triphyllum, foliolis fubulatis, tomentofis, perfifientibus, ferrugino-

COROLLA monopetala, rotata, lanuginofa, quinquefida; laciniis ovatis, apicibus acutis, incurvatis.

STAMINA. Filamenta quinque, brevia, erecta, germinis bafi affixa. Antheræ erectæ, dorío bilobæ, apice poris duobus.

PISTILLUM. Germen ovatum, fuperum. Stylus minutus, filiformis, erectus. Stigma obfoletum.

PERICARPIUM. Capfula fubrotunda, fupera, trifulcata, trilocularis, trivalvis, diffepimentis e medio valvularum.

SEMINA numerofa, fubrotunda.

- EMPALEMENT. Cup three-leaved, leaflets awlfhaped, downy, permanent, and of a rufty iron colour.
- BLOSSOM, one petal, wheel-fhaped, woolly, and five-cleft; fegments egg-fhaped, fharp pointed and incurved at the point.
- CHIVES. Threads five, thort, upright, fixed to the bafe of the feed-bud. Tips upright, twolobed at the back, and two pores at the point.
- POINTAL. Seed-bud egg-fhaped, above. Shaft fmall, thread-fhaped, upright. Summit obfolete.
- SEED-VESSEL. Capfule roundifh, above, threefurrowed. three cells, three valves, partitions from the middle of the valves. SEEDs numerous, roundifh.

SPECIFIC CHARACTER.

Lafiopetalum fòliis fublinearibus, obtufis, inequaliter finuatis, fupra glabris, fubtus lanuginofis; floribus racemofis, axillaribus. Woolly bloffom with nearly linear leaves, blunt, unequally indented, fmooth above, woolly beneath; flowers grow in long bunches from the infertion of theleaves into the ftem.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The Bloffom.
- 3. The Chives and Pointal.
- 4. A Chive, magnified.
- 5. The Pointal.
- 6. The fame magnified.

The fingularity of this plant recommends it to our notice, rather than its beauty. It is a native of New South Wales, near Port Jackfon, and is found in marfhy grounds; where its branches are feen to extend many yards, embracing all the under fhrubs they meet; they feldom exceed the fize of imall twine, but are exceeding tough. The whole plant, when old, has a dirty or rufty brown appearance, the leaves, becoming very imall and narrow; although from culture in this country, we have feen the leaves, on ofmer plants, near an inch in breadth, and three in length. For the Generic and Specific titles of this plant we are indebted to Dr. Smith, P. L. S. &c. and we do not think more appropriate ones could have been invented. The giving fpecific names and charafters to plants, where only one has been difcovered of the Genus, although a little from Linnæn principles, we mult confeis accords with our ideas; for, although, to compare is neceffary to difficience; yet, if the moft oftenfible, and novel appearance of the parts, are taken from the firt difference; there is no more danger of confunt, from any addition to the Genus, than if no fuch obfervations had been made; for, what muft in future be taken as fpecific difficition muft arife from an oppofition to the firft plant on which the Genus was founded: wherefore we have adopted this manner, from the commencement of the work. This plant was firft raifed at the Hammerlimith Nurfery, from feeds received from New South Wales in 1791. It is propagated by cuttings taken from the young fhoots, in April; fhould be planted in very fandy peat earth, and kept very dry in winter. It is in flower nearly the whole year.







PLATE CCIX. GERANIUM MELANANTHUM.

Black-flowered Geranium.

CLASS XVI. ORDER IV.

Threads united. Ten Chives. MONADELPHIA DECANDRIA.

ESSENTIAL GENERIC CHARACTER.

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

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

SPECIFIC CHARACTER.

Geranium foliis lobatis integrifque, hifpidis, obtufis; calycibus monophyllis, laciniis linearibus; floribus nigricantibus, dioicis; radice tuberofa.

Geranium with lobed, and entire leaves, hairy and obtufe; cups one leaved, fegments li-near; flowers blackifl, with the chives and pointals diffinct; root tuberous.

REFERENCE TO THE PLATE.

- I. The Empalement, natural fize, the tube cut open.
- 2. The Chives of a male bloffom, natural fize.
- The fame, cut open and magnified.
 The abortive Pointal of a male bloffom, natural fize.
 The fame, magnified.
- 6. The abortive Chives of a female bloffom, natural fize.
- 7. The fame, magnified.
- 8. The Pointal of a female bloffom, magnified.

THIS fpecies of Geranium has been given by Professor Jacquin in his Icon: rar. 514, and his Collectanea 4. 188; from him, we find it collated by Professor Martyn into his Edit. of Miller's Dict. under the article Pelargonium, 59. But, as no notice has been taken by Jacquin of fo remarkable a circumfance as this fpecies being Dioecious, or with male and female by steeping in or inferent plants, we may be led to fuppofe, that it has not flowered in Germany; or that the fpecimens he had feen, were from male plants, as he numbers the fertile chives as five, which could not have been different from a female specimen. Of five plants we had the good fortune to examine, which were all in flower at the fame time, the roots of which had been imported from the Cape of Good Hope in the year 1793; three were male, with five fertile tips, the pointals obfolete; and two female, without the leaft trace of a tip, in either bloffom, or bud. As the tips frequently fall upon the expansion of the flower, in many fpecies, the bud is the only fure fitus whence to determine this character. It is increased from feed, procured from female plants only, which are much more unfrequent than the male; likewife from the roots, which, (like to those of most of the species forming this link of the Genus,) are tuberous; form-ing finall bulbs of unequal fizes, connected to the main root by flight radicles, and at a little diffance from it: which, indeed, is the reason we have not adopted the term rapaccous, or turnip rooted, although it is a character which has been applied to them by very able Botanifts, yet we think unadwheely or from their not having had the opportunity of examining them clofely; as, we prefume, this term cannot with propriety be given to any root which is composed of more than one body, as are the Turnip, Carrot, Parfnip, Radifh, &c, where it applies. It must be planted in light peat earth, and kept in the dryeft part of the green-houfe, where it will flower about the month of July. Our figure was taken at Clapham in June, this year, from a male plant in the Hibbertian Collection.







PLATE CCX. ANTHOLYZA ÆTHIOPICA.

Broad-leaved Antholyza.

CLASS III. ORDER L TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA tubulofa, irregularis, recurvata. Capfula infera.

BLOSSOM tubular, irregular, and bent backward. Capfule beneath. See ANTHOLYZA RINGENS, Pl. XXXII. Vol. I.

SPECIFIC CHARACTER.

Antholyza foliis floribulque diffichis; lacinia fumma corolla recta, fpathulata, basi ferrata; fpathis rigidis, adpreffis.

Antholyza with the leaves as well as the flowers pointing opposite ways; the upper fegment of the bloffom ftraight, fpathula-fliaped, and fawed at the bale; fheaths harfh and preffed to the bloffoms.

REFERENCE TO THE PLATE.

1. The whole plant, upon a diminished scale.

2. The Empalement.

A Bloffom cut open, with the chives remaining.
 The Seed-bud, Shaft, and Summits.

This very handfome Antholyza, which is feen to feldom to flower, in this kingdom, has been long an inhabitant of our gardens. So long ago as 1759, it is faid to have been cultivated by Miller; and from the firm and hardy character of the root, we fhould quefion its having been fince that period, ever, like many others of this natural order, loft to us. The unfrequency of its flowering has, perever, like many others of this hatural order, lot to us. The uniffequency of its flowering has, per-haps, occafioned the inattention, which is in general flowm to its cultivation; though molt collectors polifefs the bulbs, few have feen their flowers. Our figure was taken in the month of July, this year, from a plant in the collection of T. Evans, Efq. Stepney. It is increafed from the roots, which fhould be removed from the pots in July, and replanted the end of October. We have not been ahle to procure any certain data on which to give directions to infure its flowering; but the plant in wording the plant in the collection of the plant in quetion was planted in a very large pot the earth was a compound of light peat one part, fiiff loam one part, and old rotten dung one part. It has been thought by fome, that the Antholyza we have figured in the Botanift's Repository, Plate XXXI, was the A. Æthiopica of Linnæus, &c; but, we have given it as a broad-leaved variety of the A ringens of that author, as we have a drawing of the Narrow leaved Var: taken from a living plant, to which, as well as to our prefent figure, it much affines; and, we are led to think, natural order would not be much violated, if we had treated them all as varieties of one fpecies.



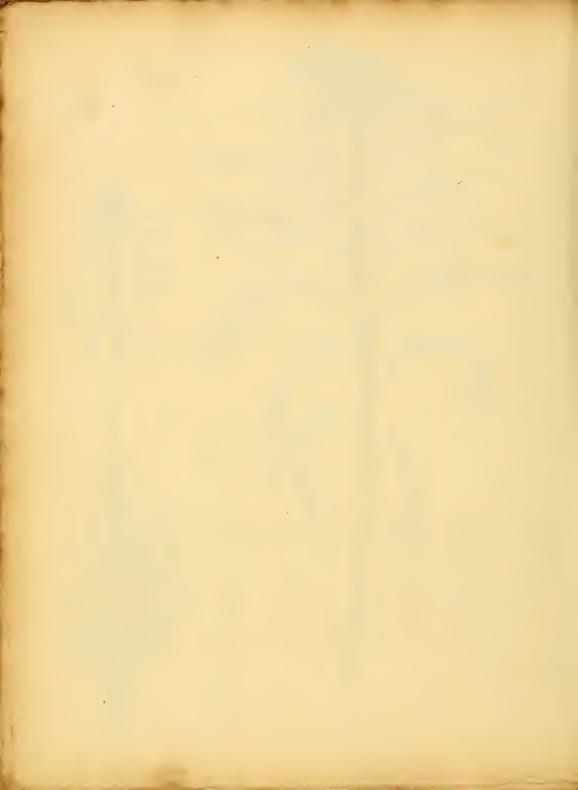




PLATE CCXI.

IXIA COLUMNARIS. Var. versicolor.

Columnar-leaved Ixia. Changealle coloured var.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, equalis. Stigmata tiia, erectiufculo-patula.

BLOSSOM 6-petals, fpreading, equal. Summits three, upright-fpreading.

SPECIFIC CHARACTER.

Ixia filamentis bafi cohærentibus; floribus fubcapitatis; corollis verficoloribus. Ixia with threads united at the bafe; flowers grow nearly in heads; blofforns changeable-coloured.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Bloffom fpread open.
- 3. The Seed-bud, with the Chives, as they fland upon the mouth of the bloffom; the petals being cut off, and the fumnits as they appear through the tips, the whole magnified.
- 4. The Threads cut open, magnified.
- 5. The Seed bud, Shaft, and Summits, magnified.

This moft beautiful variety, of the Columnar-chived Ixia, was introduced to us, from Holland, in the year 1799. It flowers about the beginning of June, and continues in bloffom about three weeks. The beautiful manner in which the colours of the flowers, of this variety, are blended, and which appear to change, as regarded from different points of view, is beyond the painter's fkill; the beft that can be done is but a faint imitation. The roots of this plant are rather more delicate than the other varieties of this fpecies.



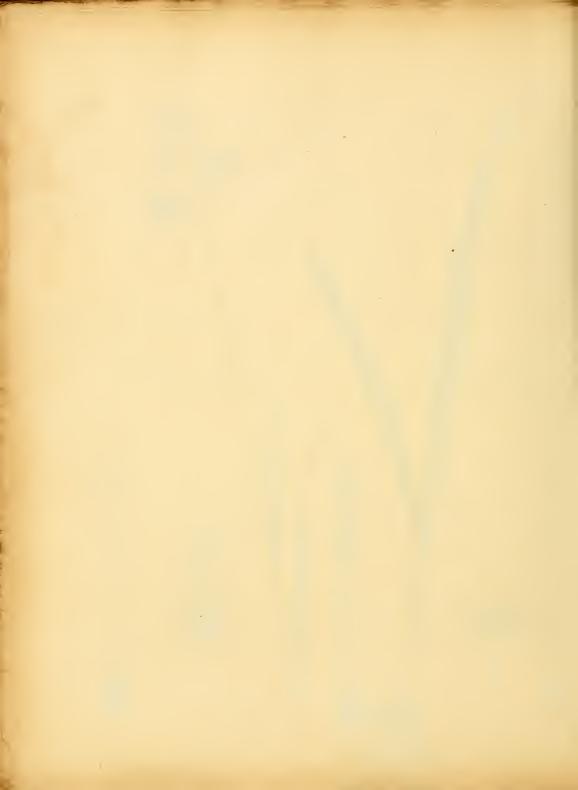




PLATE CCXII.

POGONIA DEBILIS.

Slender-stemed Pogonia.

CLASS V. ORDER L

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

- CALYX. Perianthium pentaphyllum perfiftens; foliolis lanceolatis, erectis, acutis, apicibus reflexis.
- COROLLA monopetala, infundibuliformis, tubus cylindricus, longitudine calycis, ore villis claufo; limbus femiquinquendus, laciniis concavis, acutis.
- STAMINA, Filamenta quinque, tubo fupra medium inferta. Antheræ erectæ, fagittatæ, intia faucem.
- PISTILLUM. Germen ovatum. Stylus filiformis, apice parum curvatus, longitudine tubi, perfiftens. Stigma concavum.
- PERICAEFIUM. Bacca ovata, comprefib, calyci accreta
- SEMEN. Nux quadrilocularis, putamine duriflimo; nuclei oblongi.

SPECIFIC CHARACTER.

Pogonia foliis lanceolatis, apicibus fæpe ferrulatis, diffichis; floribus folitariis, axillaribus, cæruleis; cortice feabrola.

Pogonia with lance-fhaped leaves, often flightly fawed at the ends, and pointing oppofite ways; flowers foliary, growing from the infertion of the leaves into the flem, and blac; bark rough.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Flower cut open, with the Chives as they fland in the bloffom.
- 3. A Chive, magnified.
- 4. The Fointal.
- 5. Summit, with part of the Shaft, magnified.
- 6. The Cup, with the ripe berry, the thaft remaining, and the cup a little enlarged.
- 7. A Berry cut transverfly, to thew the fituation of the kernels in the cells.

THE Pogonia here figured, is the only one of the genus we at prefent poffers; it is a native of Port Jackfon, New South Wales, and was first transmitted to England, by Col. Paterfon, in the year 1793. It is a climbing plant, the branches acquiring a confiderable length, the bark being covered with fmall tubercles, like glands, and the younger branches covered, their whole length, with bloftoms. Although this is not to be reekoned among if the handfoment of the productions of that country, yet, from the lively colour of the flowers, the profution of them which the plant produces, and their continued fuccoffion, from April, till September, it must be confidered as a valuable addition to the fmall number of feandent plants, as yet in our green houses; more particularly at the prefent juncture, when, from fathion, a trellis has become a necellary appendage to them. It is propagated from the feeds, which ripen in this country; as well as from cottings, which should be made in May, and kept in the heat of a cucumber-frame, or hot-houte, till they are rooted. It is grown beft in fandy peat. Our figure was taken at the Hammerfmith Nurfery, where it was first raifed in this kingdom. The name, Pogonia, is derived from the apprarance of the mouth of the flower which is bearded; Haywww, Fogonion, fignifying a little beard.

- EMPALEMENT. Cup five leaved, permanent; leaflets lance-flipped, upright, pointed, and reflexed at the ends. BLOSSOM one petal, funnel-fhaped, tube cylin-
- drical, the length of the cup, the mouth clofed with foft hairs; border half fivecleft; fegments concave and pointed. Chives. Threads five, inferted into the tube above the middle. Tips npright, arrow-
- fhaped, within the month.
- POINTAL Seed-bud egg-fhaped. Shaft threadfh pcd, a little curved at the end, the length of the tube, remaining. Summit concave.
- SEED-VESSEL. An ogg-fhaped, flattened berry, growing to the cup.
- SEED. A four-celled nut, thell very hard; kernels oblong.



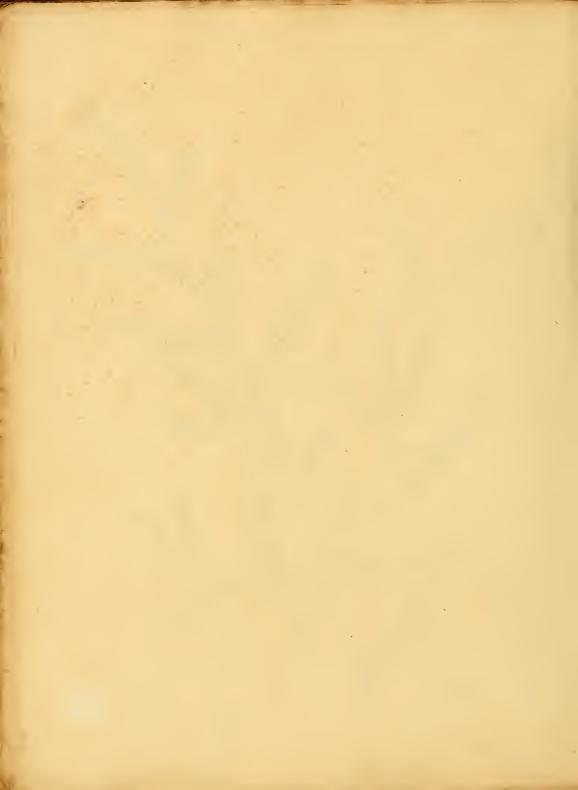




PLATE CCXIII.

IXIA COLUMNARIS. Vor. latifolia.

Columnar-chived Ixia.

Broad-leaved var.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA.

Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, equalis. Stigmata tria, erectiufculo-patula.

BLOSSOM 6-petals, fpreading, equal. Summits three, upright-fpreading.

SPECIFIC CHARACTER.

Ixia filamentis bafi cohærentibus; floribus fubcapitatis; corollis pallide cæruleis; foliis latioribus, falcatis. Ixia with threads cohering at the bafe; flowers grow nearly in heads; bloffoms pale-blue; leaves broader, feymitar flaped,

REFERENCE TO THE PLATE.

1. The Empalement.

- 2. A Bloffom cut open, with the chives remaining attached.
- 3. The Tube of a bloffom, with the chives, the petals cut off.
- 4. The fame, cut open and magnified.
- 5. The Seed-bud, Shaft, and Summits; the fummits detached and magnified.

The variety here given, was introduced to England, with the changeable-flowered variety, in 1799, from Holland. It is the firongeft marked variety of the fix we poffels; it flowers in May. The petals of this variety are remarkably thick at the infertion into the tube, and have a foft, beautiful brown on the outfide, when the flower is clofed, which fill is never fo fully fo, but a finall margin of the blue appears; which gives them a most beautiful appearance in that flate. No particular regime is neceffary to this plant, more than what is neceffary to all the common fpecies.







PLATE CCXIV. WESTERINGIA ROSMARINACEA. Rofemary-like Wefteringia.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, fub-cylindricum, erectum, perfittens, quinquedentatum, æquale; bracteis binis fuffultum.
- COROLLA monopetala; petalum tubulatum calyce paulo longius; limbus patens, quinquepartitus, tub æqualis; laciniis duabus fuperioribus emarginatis.
- STANINA. Filamenta quatuor, filiformia, fauci tubi inferta, quorum duo fuperiora longiora, fertilia; duo breviora fterilia. Antheræ le culis oblongis, duæ fuperiores dependentes; duæ inferiores erectæ, fagittatæ, fquaniformes.
- PISTILLUM. Germen tetragonum. Stylus filiformis, parum curvatus, longitudine tubi. Stigma bifidum, reflexum.
- PERICARPIUM nullum. Calyx in fundo femina continens.

SEMINA quatuor, ovalia.

- EMPALEMENT. Cup one-leaf, nearly cylindrical, upright, remaining, five-toothed, equal; fupported by two leaflets.
- BLOSSOM one petal; petal tubular, rather longer than the cup; border fpreading, five-divided, nearly equal; the two upper fegments notched at the end.
- CHIVES. Four threads, thread-fhaped, inferted into the mouth of the tube, of which the two upper ones are longer, and fertile; two fhorter, and ferile. Tips with oblong cells, the two upper ones hang down; the two lower are upright, arrow-fhaped, and like thin feales.
- POINTAL. Seed-bud four-fided. Shaft threadfhaped, a little curved, the length of the tube. Summit two-cleft, reflexed.
- SEED-VESSEL none. Cup containing the feeds at the bottom.
- SEEDs four, oval.

SPECIFIC CHARACTER.

- Wetteringia foliis verticillatis, fub-linearibus, acutis, fubrus fericeis; floribus axillaribus, fpicatis.
- Wetteringia with leaves growing in whorls, nearly linear, pointed and filky underneath; flowers grow from the bafe of the leaves clofe to the from, in finkes, -

REFERENCE TO THE PLATE.

- 1. The Empalement, with the two props attached to the bafe.
- 2. A Flower fpread open, with the chives in their place, magnified.
- 3. The Pointal, natural fize.
- 4. The fame magnified.

THE prefent plant was introduced to our gardeus, in the year 1791, from New South Wales, by Meff. Lee and Kennedy, Hammerfmith. It was first named Cunila verticillata, and, from what we can judge, it might, without much forcing of the charafters of the genus, have been fo continued; but our opinions shall always give way, when the decifion is pass from fuch fuperior talents as those of Dr. Smith; by whom it has been thought to poffels a fufficiency of diffinitive charafter, on which to form a new genus, under the title it here bears. It is a bufny flutub, grows to the height of three feet, the branches flanding out almost horizontally, in whorls, and the whole plant bearing a great refemblance to the Rofemary. It is propagated by cuttings made in March from the end of the finall branches; approves most of light fandy peat, and is in flower from March till November. The whole plant is feethels.







PLATE CCXV.

EMBOTHRIUM SALIGNUM.

Willow-like Embothrium.

CLASS IV. ORDER I.

TETR'ANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Cor. tetrapetala. Stamina limbo petalorum inferta. Folliculus polyfpermus. Sem. alata.

imbo mus. Empalement none. Bloß, four-petalled. Chives inferted into the limb of the petals. Onecelled-pod, many feeded. Seeds winged. See EMBOTHRIUM SERICEUM, Pl. C. Vol. II.

SPECIFIC CHARACTER.

Embothrium foliis lanceolatis, uninervis, utrinque glaberrimis; umbellulis axillaribus; corollis fubalbidis. Embothrium with lauce-fhaped leaves, one nerved, very fmooth on both fides; the fmall umbels of flowers grow from the infertion of the leaves into the ftem; bloffoms whitifh.

REFERENCE TO THE PLATE.

1. A flower complete, with the fummit relieved from the petals, magnified.

- 2. The fame with the fumnit yet reftrained by the petals.
- 3. One petal with the tip, magnified.
- 4. The Seed-bud, Shaft, and Summit, magnified.

THIS Genus, if we may judge from what we already poffefs, amounting to 6 fpecies, promifes to furnifh an ample feaft for Botanitis; for we have no doubt, but the fpecies are as numerous as of any one from New Holland. The Willow-like Embothrium makes a very handfome bufhy green-houfe plant ; the leaves are not fubject to damp, and the ftem acquires the height of 5 or 6 feet. It flowers about May, and from the manner in which the leaves rather fall downwards, from their infertion, leaving the bunches of flowers fully exposed, at their bafe, it has a very picturefque appearance, as the whole plant is fometimes covered with bloffoms. It thrives beft in fandy peat earth, and is increafed by cuttings, made about March, or April, and placed in the heat of the Hot-houfe, or a cucumber frame. Our figure was taken at the Hammerfinith Nurfery ; where, it was first raifed from feeds, in the year 1791.







PLATE CCXVI. EPIDENDRUM SINENSE.

Chinefe Epidendrum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

NECTARIUM turbinatum, obliquum, reflexum. || Honey-cup top-fhaped, oblique and reflexed. See Plate XIII. Vol. I. EPIDENDRUM COCHLEATUM.

SPECIFIC CHARACTER.

Epidendrum foliis enfiformibus, nervofis, radicalibus; nectario revoluto, punctato; petalis firiatis. Epidendrum with fword-fhaped leaves, nerved, and;growing from the root; honey-cup rolled back, and dotted; petals firiped.

REFERENCE TO THE PLATE.

- A flower, one of the petals and the honey-cup cut off; to flow the fituation, and place of the parts of fructification.
- 2. The Honey-cup.

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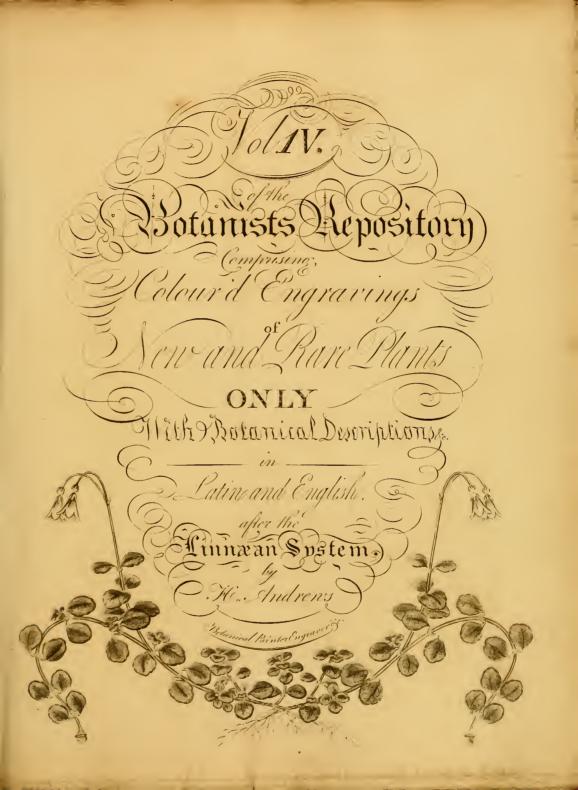
3. The Seed-bud, Shaft, Summit, and Chives; the finall hood which covers the Chives, lifted up.

This long genus of plants, fo little known hitherto, but in our books, bids fair to become one of the greateft ornaments of our hot-houfes; 20 fpecies we already enumerate, in the different collections in the vicinity of London; one of which, the prefent plant, has not flowered in this kingdom, till this year, although introduced, fo long ago as 1793, by the late J. Slater, Efq. of Layton-ftone; at the fame time with the two varieties of the Double Camellia, from China. Our figure was taken in September 1801, from a plant which had been placed in the fpring of the fame year, in the Confervatory built on purpofe for the protection of Chinefe plants, and where they flourifh to a degree, not feen before in this country, in the garden of G. Hibbert Efq. Clapham common. It is propagated by offsets, from the root ; is rather a hardy hot-houfe plant; and thrives moft in a mixture of fandy loam, and peat; about one fourth of the loam, and three fourths peat, or leaf-mould.

Upon the firft obfervation of this plant, we were inclined to think it the fpecies defigned by Thunberg in his Icon. Plant. Japon. 28, under the Genus Limodorum; and afterwards, altered by him, in the Linnæan Tranf. Vol. ii. p. 327, to Epidendrum firiatum. But upon clofe examination of it, as anfwering his deferiptions, &c. we cannot but think it, if not a different fpecies, at leaft a very firong variety of his plant; wherefore, we have retained the name it is in common known by, in the various collections in which we have feen it. If we were to decide on the fubject, it fhould be to place both that and this plant again to Limodorum; to which, they hold greater affinity than to Epidendrum; but indeed, we have an opinion, that one title might readily ferve for the plants conflictuing both genera.







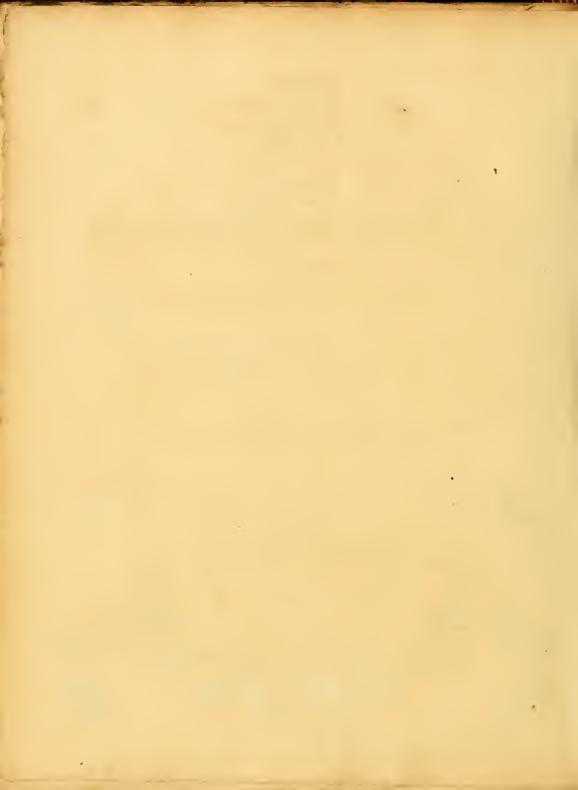




PLATE CCVII.

PASSIFLORA MALIFORMIS.

Apple-fruited Paffion-Flower.

CLASS XX. ORDER IV.

GYNANDRIA PENTANDRIA. Chives on the Pointal. Five Chives.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum, planum, coloratum, petalis conforme.

- COROLLA. Petala quinque, femi-lanceolata, plana, obtufa, magnitudine et figura calycis. Nectarium corona triplex; exterior longior, intra petala itylum cingens, fuperne magis coarcitata.
- STAMINA. Filamenta quinque, fubulata, ad bafin germinis columnæ annexa, patentia. Antheræ incumbentes, oblongæ, obtufæ.
- PISTILLUM. Germen fubrotundum, apici columuæ cylindraceæ, rectæ infidens. Styli tres, fuperne craffiores, patuli. Stigmata capitata.
- PERICARPIUM. Bacca carnofa, fubovata, unilocularis, pedicellata. SEMINA plurima, ovata, arillata.

Receptaculum feminum triplex, cortici pericarpii longitudinaliter adnatum.

- EMPALEMENT. Cup five-parted, flat, coloured, like the petals.
- BLOSSOM. Petals five, half lance-fhaped, flat, blunt, of the fize and thape of the cup. Honey-cup, a triple crown; the outer longer, encircling the thaft within the petals, more contracted above.
- CHIVES. Five threads, awl-thaped, fixed to the bafe of the column of the feed-bud, fpreading. Tips fixed by their backs, oblong, obtufe.
- POINTAL. Seed-bud roundifh, falling into the end of a cylindrical, upright column. Three fhafts, thicker above, fpreading. Summits lieaded.
- SEED-VESSEL. A flothy berry, nearly egg-fhaped, one-celled, pedicelled.
- SEEDs many, egg-fhaped, covered by a feed-coat. Receptacle of the feeds triple, fixed longitudinally to 1 e rind of the berry.

SPECIFIC CHARACTER.

- Paffiflora foliis indivifis, cordato-oblongis, integerrimis; petiolis biglandulofis; involucro triphyllo, flore majore; tructu maliformi.
- Paffion-Flower with undivided leaves, heartfliape-oblong, quite entire; foot-flaks with two glands, fence three-leaved, larger than the flower; fruit like an apple.

REFERENCE TO THE PLATE.

1. A ripe fruit.

2. A Flower cut perpendicularly through the middle, to flew its interior firucture, with the parts of tructification complete.

THIS fpecies of Paffion-Flower is faid to be a fojourner with us fince the year 1731, and to have been then cultivated by Miller. It is likewife faid to be a native of Dominica, but it is found in all the Weft India iflands. It rarely flowers in this climate; and we flould not now have been able to grawhen the analysis. At a constraint of the relation of the relation of the treatment of hot house plants, by Mr. Anderfon, fuperintendant of the rich collection of plants in the gardens of J. Vere, Efq. Ken-fington Gore, who by a long experience in cultivation, added to a particular love for the profefilion, has placed his knowledge in the treatment of exotics, in particular, much beyond most cultivators of the prefent day. Our figure was taken from a plant which continued in flower from July till November; it was planted in a border of rich earth, clofe to the tan pit, and trailed along the front raiter of the houfe; the only method, we prefume, by which it can be induced to flower, as we have never feen it elfewhere. It is propagated with eafe by cuttings.

Much contention has arifen among Botanifts, fince the days of Linnæus, where to place this tribe of plants. Swartz placed it to Monadelphia, who is lately followed by Willdenow. Schreber, Thun-berg, &c. have thrown it to Pentandria. But our antiquated notions of the capability of that great man, in claffifying to his own fyttem, those plants which came under his actual review, has occafioned our retaining it, under its old clafs, juff as he left it.







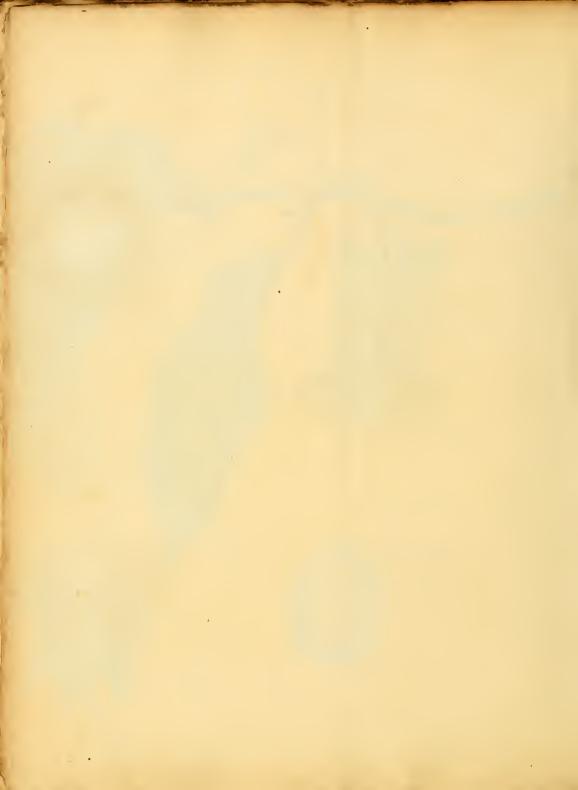




PLATE CCXVIII.

EMBOTHRIUM BUXIFOLIUM.

Box-leaved Embothrium.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA tetrapetala. Stamina limbo inferta. Folliculus polyfpermus. Semina alata. BLOSSOM four-petals. Chives inferted into the limbs. One-celled pod, many feeded. Seeds winged.

See EMBOTHRIUM SERICEUM, Pl. C. Vol. II.

SPECIFIC CHARACTER.

Embothrium foliis ellipticis, integerrimis, margine revolutis, pubefcentibus; umbellis terminalibus; folliculo villofo. Embothrium with elliptical, entire leaves, rolled back at the edge, and downy; umbels terminal; feed-pod hairy.

REFERENCE TO THE PLATE.

1. A Flower, magnified, the petals yet attached to each other.

- 2. The fame, the petals difengaged.
- 3. The Pointal, magnified.
- 4. A Seed-veffel, natural fize.
- 5. A ripe Seed, natural fize.

This we believe is amongfi the moft rare of the plants, hitherto introduced, from New Holland. It has been figured in the third Number of New Holland Botany, publifhed by Dr. Smith in 1793: it is there faid not to have been, at that time, in England; but, as it had not then flowered, the plant was not known, although in the collection of Metirs. Lee and Kennedy, three years precedent to that publication; and where, it first flowered in 1795. Our figure was taken in September 1789 from a plant (we fear the only one at prefent in this kingdom) in the Hibbertian collection. It has not yet been propagated with us, and the feeds do not mature. The plant is nearly four feet high, and forms a hand-forme, buffy fhrub, continuing in flower nearly the whole fummer. Over the whole plant there is a brown, or rufty-like appearance, which takes much from its beauty. It flourifles in peat earth.







PLATE CCXIX.

GLADIOLUS CUSPIDATUS. Var. petalis crifpis.

Spear-spotted Gladiolus. Var. with crifped petals.

CLASS III. ORDER L

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fex-partita, ringens. STAMINA adfcendentia.

BLOSSOM fix divisions, gaping. CHIVES afcending. Sce GLADIOLUS ROSEUS, Plate XI, Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis lineari-enfiformibus, glabris; corolla ringente ; laciniis longiffimis, acuminatis, crifpatis, fubæqualibus, tribus inferioribus in medio macula oblonga notatis; corollis albicantibus.

Gladiolus with linear - fword - fhaped fmooth leaves; bloffom gaping, fegments very long, tapered to the point, crifped and nearly equal, the three lower ones in the middle have an oblong fpot; bloffoms whitifh.

REFERENCE TO THE PLATE.

1. The two valves of the Empalement.

- 2. The Bloffom cut open, with the chives.
- 3. The Seed bud, Shaft and Summit, one division of the fummit magnified.

ALTHOUGH this fpecies of Gladiolus is as old in our gardens as, almost any, we have; yet, it is not much known, from the unfrequency of its flowering, of which there is no certainty. The beft method to affift it with a vigorous growth, is to place it in a confiderable degree of warmth, fuch as the heat of the hot-house, the pot being kept in a pan, with water. With this affiftance, it may be made to flower, fometimes, about the end of May. It is a very hardy bulb, in what regards the root, and its prefervation. Our figure was made in May, 1800, from a plant which had been treated in the above manner, at the Hammersmith nursery.







PLATE CCXX.

MASSONIA SCABRA.

Rough-leaved Maffonia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA infera, limbo 6-partito. Filamenta collo tubi impofita. Capfula 3-alata, 3-locularis, polyfperma.

BLOSSOM beneath, border 6-divided. Threads placed on the neck of the tube. Capfule 3-winged, 3 celled, many-feeded.

See MASSONIA VIOLACEA, Pl. 46. Vol. I.

SPECIFIC CHARACTER.

Maffonia foliis cordato-orbiculatis, fupra fcabrofis ; laciniis corollæ reflexis.

Maffonia with leaves between heart-fhaped and round, rough on the upper fide; the fegments of the blotfom reflexed.

REFERENCE TO THE PLATE.

1. A tkinny theath, one being attached to each flower, at the lower part of the foot-flalk.

- 2. A Flower complete.
- 3. The Bloffom cut open, to fhew the infertion of the chives into the mouth, juft within the honey-cups.
- 4. The Seed bud, thaft and fummit.

THE rough-leaved Maffonia is, as well as all the hitherto difcovered fpecies of the genus, a native of the Cape of Good Hope, and was introduced to Britain, in the year 1796, by Meffrs. Lee and Kennedy; at whofe nurfery, our figure was taken in the year 1800; where, it had then flowered for the firft time, in this kingdom. It is a hardy greenhoule bulb; propagates from the root, and perfects its feeds: flowers in February and March, and lofes its leaves in June. It fiands quite diffinct from M. latifolia, both in the character of the leaves and bloffoms; though, at first fight, it has much the appearance of that fpecies. A loamy foil lightened by a fmall mixture of fandy peat is that it most approves. The roots should not be taken from the pots after the decay of the leaves, but kept rather dry till the leaves begin to re-appear.

Much will it contribute to the illustration of fcience, to find our prefent figure, when copied into a certain magazine at fome future period, (and of which we have no doubt,) (pecifically denominated, fmooth-leaved; as unfortunately, the other fpecies figured by us, Pl. 46. Vol. I. with obovate, bluntended, or fpathula fhaped leaves, has been, by a certain hocus-pocus conjuror, and our very good friend, converted into fword fhaped! rifum teneatis.





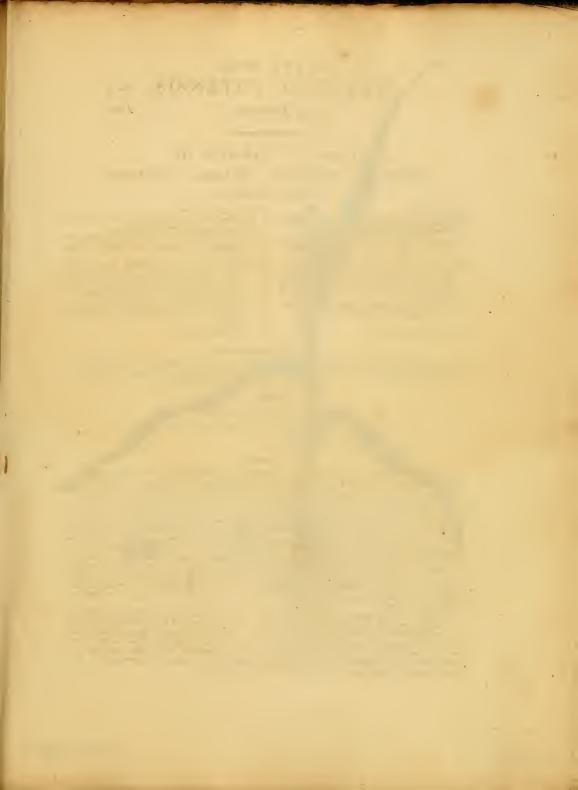


PLATE CCXXI. WURMBEA CAPENSIS. Var. β.

Cape Wurmbea.

2. Var. :

CLASS VI. ORDER III. HEXANDRIA TRIGYNIA. Six Chives. Three Pointals.

GENERIC CHARACTER.

CALYX nullus.

- COROLLA monopetala, fexfida, infera; laciniis lanceolatis, acutis, ereclis.
- STAMINA. Filamenta fex, filiformia, erecta, fauci corollæ infertæ. Antheræ erectæ, didymæ.
- PISTILLA. Germen triquetrum, apice tripartitum, glabrum, fuperum. Styli tres, triquetri, fubulati, incnrvi, longitudine flaminum. Stigmata obfoleta.
- PERICARPIUM. Capfula oblonga, triquetra, trifulca, trilocularis, a medio tripartita.

SEMINA plurima, rotunda.

Wurmbea foliis cucullatis, lanceolatis; fpica multiflora; floribus feffilibus, atro-purpureis. EMPALEMENT none.

- BLOSSOM one petal, fix-cleft, beneath; fegments lance-fhaped, pointed and upright.
- CHIVES. Threads fix, thread-fhaped, upright, inferted into the month of the bloffom. Tips upright, double.
- POINTALS. Seed-bud three-fided, three-divided at the top, finouth and above. Shafts three, three-fided, awl-fhaped, turned inwards, the length of the Chives. Summits obfolete.
- SEED-VESSEL. Capfule oblong, three-fided, threefurrowed, three-celled, three-divided from the middle.
- SEEDS many, round.

SPECIFIC CHARACTER.

Wurmbea with hooded, lance-fhaped leaves; fpike many-flowered; flowers fitting clofe to the ftem and dark-purple.

REFERENCE TO THE PLATE.

- 1. A Blotlom cut and fpread open, with the Chives in their place.
- 2. The Pointals, natural fize.
- 3. The fame, magnified.

This genus was firth formed by Thunberg as diffinft from Melanthium, in his Differtatio Nova Genera Plantaruum, under the title Wurmbea, from the confitution of the boffion, which in this, is formed of one petal, but in that, is compored of fix; a diffinftion which has always been confidered as momentous, in determining the limits of the different genera of this clafs; fince which, however, it has been abandoned by him, and thrown to Melanthium; although Schreber, in his Genera Plantarum, G. 017, p. 239, Vol. 1. made no formple in adopting it. Willdenow has, in his Species Plantarum, G. 703, p. 265, T. 11 P. 1. we think with propriety, renewed its claims to particular difficition, under the firft title; but with this difference, that out of the four varieties given by Thunberg, all under the firft title; but with this difference; near out of the four varieties given by Thunberg, all under the firft title; but with Willdenow, in this alteration; but thinking with Thunberg, who mut have feen the plants alive, and thence, of courte, the befi judge; we have the rather followed him; as we poffers drawings of two more of the varieties quoted by him, taken from living fpecimens, and whofe triffing difference of charafter does not warrant them to be treated as tpecifically different, but as nere varieties of each other.

The roots of this fpecies, with the others, of which we have drawings, were received by G. Hibbert, Efq. in the year 1800, from the Cape of Good Hope. The bulbs are tolid like, thole of Ixia, &c. but of a moti fingular form, having an appendage at the bate like the pat of a mole. None of the varieties we have feen produce more than three leaves, which fheath the flower-flem one above the other, and are rather longer than it. It flourifhes in fandy peat earth, and flowers in May or June; but has, certainly, more to recommend it to our notice trom its fingularity, as forming a feparate genus; than from its beauty. Our figure was taken from the Claphan collection.







PLATE CCXXII.

GERANIUM RADIATUM.

Rayed-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus, penta-coccus. One POINTAL. Five fummits. Fruit furnished with long awns, five dry berries.

SPECIFIC CHARACTER.

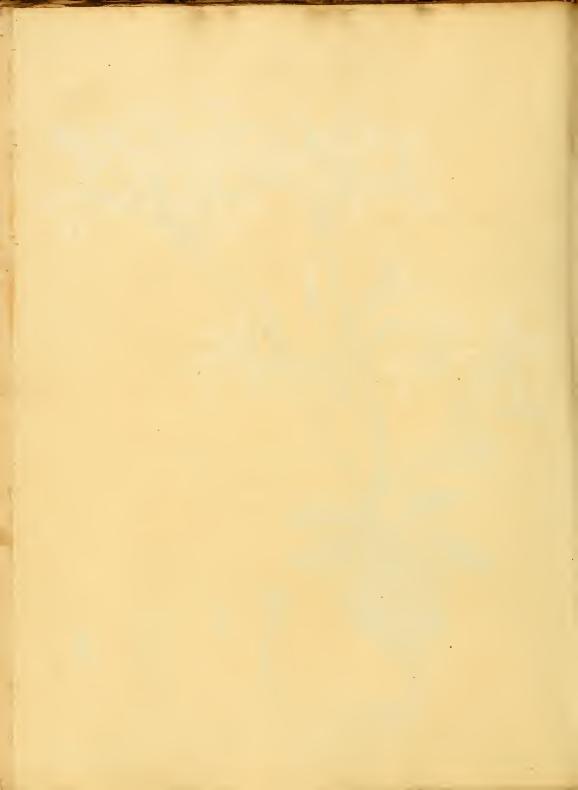
Geranium foliis fub-obovatis, craffiufculis, integerrimis, radiatis, huni adprefiis; calycibus monophyllis, laciniis ereĉtis; floribus pentandris, maximis, luteis; radice tuberofa. Geranium with leaves nearly obovate, thickifh, quite entire, placed in a ray about the ftem, and lying on the ground; cups of one leaf, the fegments erect; flowers with five fertile chives, very large and yellow; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Cup laid open, to fhew its hollow ftructure.
- 2. The Chives and Pointal, natural fize.
- 3. The Chives fpread open, to thew the number and fituation of the fertile ones.
- 4. The Pointal, magnified.

THE only plants of this fpecies of Geranium are to be found in the Clapham collection; they were among the laft, received by Mr. Hibbert from the Cape, in 1601. To affix any particular period as the exact feafon of its flowering, would be premature; as, the plant from which our figure was taken, in the month of Auguit, laft year, had been kept conflantly in the green-houfe; and, we must prefume, as the root arrived nearly dry, the regular feafon of its flowering must have been materially altered. It appears to flourifh in a light fandy foil. The propagation must be from the feeds, or from the root.





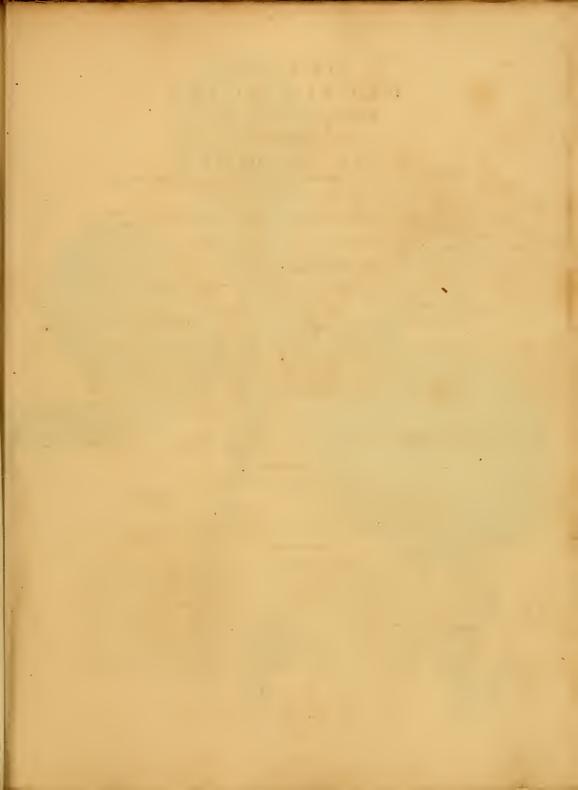


PLATE CCXXIII. CLUSIA FLAVA. Yellow-flowered Balfam-Tree.

CLASS XXIII. ORDER 1.

POLYGAMIA MONOECIA. Various difpofitions. Upon one plant.

GENERIC CHARACTER.

- CALYX. Perianthium imbricatum; foliolis concavis, perfittentibus, exterioribus gradatim minoribus.
- COROLLA. Petala 4, 5, 6, fubrotunda concava, craífa, cochleata.
- STAMINA. Filamenta plura, fimplicia, corolla breviora. Antheræ fimplices, apicis lateri adnatæ.
- PISTILLUM. Germen ovato-oblongum. Stylus nullus. Stigma stellatum, planum, obtufum, perfiftens.
- PERICARPIUM. Capfula ovata, fulcis exerata, locularis, valvis tum radiatim dehifcentibus.
- SEMINA numerofa, ovata, pulpa obtecta, affixa receptaculo columnari, angulofo.

Ols. Numerus in parte fructus differt a quatuor ad duodecim proportione obfervata in ftigmate, valvulis, loculis, &c. Flores alii a parte mafculina, alii a feminina fleriles funt. EMPALEMENT. Cup tiled; leaflets concave, remaining, the outer ones gradually finaller.

- BLOSSOM. Petals 4, 5, 6, roundith, concave, thick and thell-like.
- CHIVES. Threads many, fimple, fhorter than the blotlom. Tips fimple, growing to the fide of the point.
- POINTAL. Seed-bud oblong-egg-fhaped. Shaft none. Summit flarred, flat, obtufe, remaining.
- SEED-VESSEL. Capfule egg-fhaped, ftrongly furrowed, celled, the valves burfling into a ftarred form.
- SEEDS numerous, egg-fhaped, covered with pulp, fixed to an angular, columnar receptacle. *Oks.* The number in the parts of the fruit differs from four to twelve, according to the proportion obferved in the fummit, valves, cells, &c. Some of the flowers are tferile with refpect to the male organs, and others with refpect to the female ones.

SPECIFIC CHARACTER.

Clufia foliis aveniis; corollis tetrapetalis, luteis.

Balfam Tree with veinlefs leaves; bloffoms with four petals, and yellow.

REFERENCE TO THE PLATE.

- 1. A Flower complete.
- 2. A petal thewn from the infide.
- 3. A petal fhewn fideways.
- 4. The Pointal and Chives, one Chive detached, magnified.
- 5. The Pointal cleared of the Chives, the Seed-bud and Summit detached and magnified.

THE Balfam Tree is a native of all the Weft India Iflands, and has been deferibed by Plumier, Sloan, Jacquin, Browne, &c.; but no good figure of the plant, according with our ideas, has hitherto been given of it. The C. rofea, C. alba, and C. flava of Jacquin, the three various fpecies, are fail to grow to different heights, in the different Iflands; which we are led to think, are but varieties of the fame plant. Linnæus has taken them up as (pecies, are upon lis authority; although Jacquin himfelf allows, that the one he denominates *flava*, varies in its bloffoms to red and white. This plant does not grow to above the height of eight or nine feet, in this country, and feldom flowers. Our figure was taken laft year in September 1801, from a plant in the Stepney Collection. Miller fays it was cultivated by him in 1759; and had been introduced by Mr. Parker, of Croydon, in Surrey, from Barbadoes. It is readily propagated from cutings, and thrives in rich, dungy earth. A flight millake occurs, in the quotation from Biowne, in Martyn's Edition of the Dictionary; where, the petals are deferibed as forew-thegetal, Browne has it, " cochleata," or fhell-fhaped, a moft expressive term for the fhape of these petals.







PLATE CCXXIV.

GERANIUM REFLEXUM.

Reflexed-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Chives united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus, 5-coccus. One POINTAL. Five fummits. Fruit furnished with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis longe petiolatis, trifoliatis; foliolis lobato-incifis, recurvis; floribus umbellatis, pentandris; ftaminibus duobus fuperioribus ftigmatibufque reflexis; radice tuberofa. Geranium with leaves that have long foot-flalks, and three leaflets; leaflets gafh-lobed, and rolled back; flowers grow in umbels, have five fertile chives, with the two upper chives and the fummits reflexed; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The Chives and Pointal."
- 3. The Chives fpread open, magnified.
- 4. The Pointal, magnified.

This pretty Geranium, from the Cape of Good Hope, is another of those which were introduced by G. Hibbert, Efq. in the year 1800, through the medium of Mr. Niven. The root being tuberous, we judge that from a division of the finaller lobes it is to be increased. From the reflexed character, which pervades the whole plant, petals, leaves, parts of fructification, &c. we have adopted our specific title. The cultivation is the fame, as for the other tuberous species of this genus. Our figure was made at Clapham in the month of July 1801.







PLATE CCXXV.

GNIDIA OPPOSITIFOLIA.

Opposite-leaved Gnidia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX infundibuliformis, quadrifidus. Petala quatuor, calyci inferta. Semen unicum, fubbaccatum. EMPALEMENT funnel-fhaped, four-cleft. Petals four inferted into the empalement. One feed berry-like. See GNIDIA FINIFOLIA, Pl. LH. Vol. I.

SPECIFIC CHARACTER.

Gnidia foliis ovatis, oppofitis, concavis, tomentofis; floribus terminalibus, tomentofis. Gnidia with egg fhaped, oppofite, concave, downy leaves; flowers terminate the branches, and are downy.

REFERENCE TO THE PLATE.

- 1. A Flower complete.
- 2. The Bloffom fpread open, with the Chives in their place.
- 3. The fame, magnified.
- 4. The Seed-bud, Shaft and Summit.

THE Oppofite-leaved Gnidia is from the Cape of Good Hope, and muft be treated as a tender greenhoufe or dry flove plant; as, but a little excefs of wet, in the winter, is fure to deftroy it; even in fummer, much rain, if it is expofed to it for a few days, will overwhelm it. The Kew Catalogue mentions this fpecies to have been introduced in the year 1788, by Mr. F. Maflon. The plant grows to the height of three feet, with a very flender flem, and, often, lofes motof of its leaves to a confiderable height from the earth, which gives it rather a difagreeable appearance towards the lower part. A mixture of two-thirds loam, and one of fandy peat, is a foil it most approves. It is increafed by cuttings, made in the month of April, from the tender floots. Our figure was taken in July, from a plant in the Hibbertian Collection.







PLATE CCXXVI. MAGNOLIA PUMILA. Dwarf Magnolia.

CLASS XIII. ORDER VII. POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

CALYX. Perianthium triphyllum; foliolis ovatis, concavis, petaliformibus, deciduis.

- COROLLA. Petala novem, oblonga, concava, obtufa, bafi anguftiora.
- STAMINA. Filamenta numerofa, brevia, acuminata, compreffa, receptaculo communi piftillorum infra germina inferta. Antheræ lineares, margini filamentorum utrinque adnatæ.
- PISTILLA. Germina numerofa, ovato-oblonga, bilocularia, receptaculum clavatum tegentia. Styli recurvi, contorti, breviffimi. Stigmata longitudinalia styli, villofa.
- PERICARPIUM. Strobilus ovatus, tectus capfulis compreffis, fubrotundis, vix imbricatis, confertis, acutis, unilocularibus, bivalvibus, feffilibus, extrorfum dehifcentibus, perfiftentibus.
- SEMINA bina feu folitaria, fubrotunda, baccata, filo pendentia ex finu fingulæ fquamæ ftrobili.

- EMPALEMENT. Cup three-leaved; leaflets eggfhaped, concave, the form of the petals, falling off.
- BLOSSOM. Nine petals, oblong, concave, obtufe, narrower at the bafe.
- CHIVES. Threads numerous, fhort, tapered, flattened, inferted below the feed-buds into the common receptacle of the Pointals. Tips linear, fixed on fide to the margin of the threads.
- POINTALS. Seed-buds numerous, oblong-eggfhaped, two-celled, covering a club-fhaped receptacle. Shafts turned backward, twifted, very fhort. Summits grow out of the fhafts longitudinally, hairy.
- SEED-VESSEL. Cone egg-fhaped covered with capfules which are flattened, roundifh, fcarcely tiled, crowded, pointed, one-celled, two-valved, fitting close to the receptacle, fplitting from the outfide and remaining.
- SEEDS by twos or folitary, roundifh, like berries, hanging by a thread from the infide of each fcale of the cone.

SPECIFIC CHARACTER.

- Magnolia foliis elipticis, undulatis, acuminatis, fubglaucis; floribus nutantibus, albis; petalis carnofis, obovatis, concavis.
- Magnolia with eliptic, waved leaves, tapered to a point, rather glaucous; flowers hanging down and white; petals thick, inverfely egg-fhaped and concave.

REFERENCE TO THE PLATE.

- 1. One of the outer petals.
- 2. An inner petal.
- 3. The Chives and Pointals, on the receptacle.
- 4. The outfide of one of the Chives.
- 5. The infide of the fame.
- 6. The fame, magnified. 7. The Pointals.

THE Magnolia pumila, (as are, generally, all plants upon their first arrival from China,) has been hitherto treated as a hothoufe plant; by which means, a continued foliage has been preferved: but, from every appearance of the plant, it is by nature deciduous, and, certainly hardy enough to be pre-ferved in the greenhoufe, if not to bear the exposure of the open ground. It grows to the height of about two feet, flowers in the hot-houle about September or later, and is propagated by cuttings. The bloffoms are very fragrant, but of fhort duration. To the late J. Slater, Efq. of Laytonftone, we owe this plant; which was one of that rich cargo brought home in the Carnatic, for him, by Captain Connor, in the year 1793. Our figure was taken at the Hammerfmith nurfery. The accellion to this magnificent Genus has been confiderable within a very few years: to the fpecies formerly cultivated in Britain, viz. the grandiflora with its four varieties, the glauca and its two varieties, the acuminata and tripetala, are now added; the auriculata and maxima, from America; the pumila, fuscata and tomentosa or You-lang, from China; making in all, with the varieties, fifteen. The flort acquaintance we have with the three laft from China, or the knowledge of what part of that extensive country they are natives, does not enable us to decide, whether they will endure our winters; although we may on the two from America, as being hardy plants, or at least equally hardy with the grandi flora, being from the fame part of America





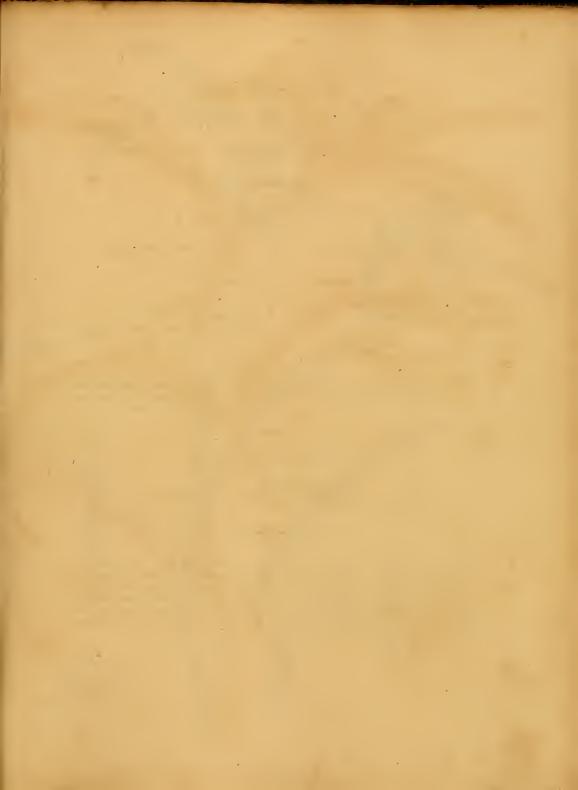


PLATE CCXXVII.

GLADIOLUS RINGENS. Var. multiflorus.

Gaping Gladiolus. Many-flowered Var.

CLASS III. ORDER L

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fex-partita, ringens. STAMINA adfcendentia.

BLOSSOM fix-divided, gaping. CHIVES afcending. See GLADIOLUS ROSEUS, Plate XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis fub-linearibus, coftatis; fioribus ringentibus cineriis, odoratiffimis; fcapo multifloro.

Gladiolus with nearly linear-ribbed leaves; bloffoms gaping, afh-coloured, and very fweet fcented; ftem many flowered.

REFERENCE TO THE PLATE.

1. The two-valved Sheath.

2. A Bloffom, with the chives in their place, fpread open.

3. The Pointal complete.

This is a fine variety of the Gladiolus ringens, given on Plate XXVII. Vol. I. of this work; the only fpecimen we have ever feen of it, is in the Hibbertian collection, from whence our figure was taken, laft year, 1801, in the month of May. It is a flrong variety, but we cannot confider the difference it exhibits, from our first figure, of fufficient prominence to warrant a specific diffinction. The bulbs were received at Clapham, in the autumn of 1800, from the Cape of Good Hope; they are rather delicate, and the treatment must be such as directed for the former variety of this species.







PLATE CCXXVIII. HIBISCUS MUTABILIS. Var. flore pleno.

Changeable-Rofe Hibifcus.

Double-flowered Var.

CLASS XVI. ORDER VI. MONADELPHIA POLYANDRIA. Threads united. Many Chives.

GENERIC CHARACTER.

CALYX. Perianthium duplex.

Exterius polyphyllum, perfiftens; foliolis linearibus, rarius monophyllum, multifidum.

Interius monophyllum, cyathiforme, femiquinquefidum, perfiftens; feu quinquedentatum, deciduum.

COROLLA. Petala quinque, fubrotundo-oblonga, bafi angustiora, patentia, tubo staminum inferne adnata.

STAMINA. Filamenta plurima, inferne coalita in tubum, fuperne (in hujus apice et fuperficie) divifa et laxa. Antheræ reniformes.

- PISTILLUM. Germen fubrotundum. Stylus filiformis, flaminibus longior, fuperne quinquefidus. Stigmata capitata.
- PERICARPIUM. Capfula quinquelocularis, quinquevalvis; diffepimentis contrariis, duplicatis.
- SEMINA folitaria feu plura, ovato-reniformia.

Ols. Capfula aliis ovata, aliis longa; calyx exterior 3-12-phyllus.

Hibifcus foliis cordatis, angulatis, quinquelobis, acuminatis, dentatis; calyce exteriore octophyllo; capíula villofa; caule arboreo; floribus plenis.

EMPALEMENT. Cup double.

The outer many leaved, permanent; leaflets linear, more rarely one-leaved, manycleft.

The inner one-leaved, cup-flaped, half fivecleft, permanent; or five toothed, and deciduous.

- BLOSSOM. Petals five, roundifh-oblong, narrower at the bafe, fpreading, fastened at bottom to the tube of the chives.
- CHIVES. Threads numerous, united at the bufe into a tube, at top (in its apex and furface) divided and loofe. Tips kidney-thaped.
- POINTAL. Seed-bud roundith. Shaft thread-fhaped, longer than the chives, at top five-cleft. Summits headed.
- SEED-VESSEL. Capfule five-celled, five-valved; partitions contrary, doubled.
- SEEDs folitary, or many, between egg and kidney-fhaped.

Ols. The capfule of fome fpecies is eggfhaped, of fome long; the outer cup, 3-12-leaved.

SPECIFIC CHARACTER.

Hibifcus with heart-fhaped leaves, angled, fivelobed, pointed and toothed; outer cup eight-leaved; capfule hairy; ftem growing to a tree; flowers double.

REFERENCE TO THE PLATE.

1. The double cup with the Seed-bud, Shaft, and Summits in their place.

2. The Threads cut and fpread open, with those which are perfect and have the tips, remaining; those

which give the plant the double flowered character being cut away; one tip detached and magnified. 3. The Seed-bud, cut transverfely to shew the perfect feeds in their cells.

BARNARD DICKINSON, Efg. of Monks-Houfe, near Devifes, Wilts, we believe to be, at prefent, the only poffetfor, in Britain, of this fine variety of Hibifcus mutabilis. The plants were produced in 1788, from fome Jamaica feeds, which were fown at Bowden, another adjoining feat of that gentleman, and where they have flowered for feveral years. Although the flowers are double; yet good feeds are pro-duced, which is common to moft plants of this natural order, fuch as Alcea Malva, &c. the fullnefs of the blotfoms being, as ufual, formed from fome of the chives becoming petals, many neverthelefs renaming perfect; which in there plants fixed and particularly diffind from the pointal, being feated on the upper part of the tube, formed by the connection of the lower part of the threads, leaving the pointal as perfect as in a fingle flower. It is also propagated by cutting, and thrives in rich earth. It may be confidered rather a tree, than fhrub, as even in this country, it acquires the height of from 15 to 20 feet. It is a native of Japan, China, and the Eaft Indies; where it is much effeemed for the extreme becuty of its flowers, as well as in our Weft India iflands, where it is also cultivated. The Single-flowered has been known in England above a century, having, fays the Kew Catalogue, been intro-duced by Mr. Bentinck in the year 1690. The fpecific title is allound on the fingular change of the flower, from white to flefh colour, before its decay, as fhewn in our figure; which was taken from a fine branch received in a perfect flate from Bowden in the month of November 1801, and obligingly communicated, to the author, by Mrs. Dickinfon.



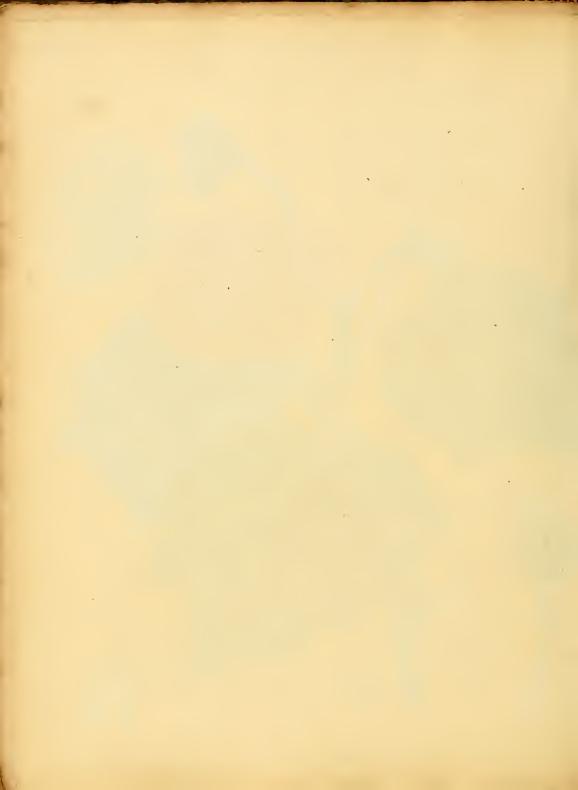




PLATE CCXXIX. MAGNOLIA FUSCATA.

Brown-stemed Magnolia.

CLASS XIII. ORDER VII. of Schreb. Gen. Plant.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 3-phyllus. Petala 6-12. Capfulæ 2-valves, imbricatæ. Semina baccata, pendula. CUP 3 leaved. Petals 6-12. Capfules 2-valved, tiled. Seeds, berries, pendulous. See MAGNOLIA PUMILA, Pl. 226. Vol. IV.

SPECIFIC CHARACTER.

Magnolia foliis elipticis, fenioribus glabris, junioribus ramulifque tomentofis, fufcatis; petalis interne fubalbidis, marginibus elegantifiime coloratis. Magnolia with eliptical leaves, the old ones fmooth, the younger as well as the fmall branches are downy, and browned; petals whitifh within, the margins elegantly coloured.

REFERENCE TO THE PLATE.

- 1. The outer fence of the flower, which falls off before the flower expands.
- 2. An outer petal of the bloffom.
- 3. A Chive, with the parts complete, before the pollen has been emitted, a little magnified.
- 4. The fame fhewn from the outfide.
- 5. A Chive flewn from the infide with the tips burft, magnified.
- 6. The Chives and Pointals, natural fize.
- 7. The Pointals, as they are placed on the columnar fhaft, the Chives being removed, natural fize.

OF all the Magnolias with which we are as yet acquainted, this fpecies is the moft elegant; whether for the growth of the plant, the brilliancy of the foliage, or the extreme delicacy, fragrance, and beauty of the flowers. It is a native of China; from whence it was firft introduced to us, in the year 1796, by T. Evans, Efq. of Stepney; from a plant in whofe collection, our figure was taken, this year, 1802, in the month of February, the general feafon of its flowering in this climate if kept in the hot-houfe; to which flation it has, as yet, been doomed, although, from the general character of the Genus, we thould be led to treat it more hardily. It is increafed by cuttings, and layers; but the firft is the best method, as, in the latter mode the branches do not take root under two years. The plant from which our drawing was made, did not exceed a foot and a half in height, which leads us to fuppofe it never becomes a large flrub, even in China. It thrives in leaf mould, and light loam. We believe this plant has not hitherto come under the review of any botanical author.







DODONÆA TRIQUETRA.

Three-fided Dodonæa.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium tetraphyllum, planum; foliolis ovatis, obtufis, concavis, deciduis. COROLLA nulla.

- STAMINA. Filamenta octo, breviffima. Antheræ oblongæ, arcuatæ, conniventes, longitudine calveis.
- PISTILLUM. Germen triquetrum, longitudine calycis. Stylus cylindricus, trifulcatus, erectus. Stigma fubtrifidum acutiufculum.

PERICARPIUM. Capfula trifulca, inflata, trilocularis; angulis membranaceis, magnis. SEMINA bina, fubrotunda.

Dodonæa foliis lanceolatis, utrinque attenuatis, glaberrimis; ramulis triquetris; floribus dioicis.

- EMPALEMENT. Cup four-leaved, flat; leaflets egg-fhaped, obtule, concave, falling off. BLOSSOM, none.
- CHIVES. Eight threads, very fhort. Tips oblong, curved, approaching, the length of the cup.
- POINTAL. Seed-bud three-fided, the length of the cup. Shaft cylindrical, three-furrowed, upright. Summit nearly three-cleft rather pointed.
- SEED-VESSEL. Capfule three-furrowed, fwelled out, three cells, angles skinny, large. SEEDs by twos, nearly round.

SPECIFIC CHARACTER.

Dodonæa with lance-fhaped leaves, tapered to both ends, very finooth; the finall branches three-fided; flowers with chives and pointals diffinet.

REFERENCE TO THE PLATE.

Male Flower.

- 1. The Empalement, magnified.
- 2. The Empalement and Chives, before the burfting of the tips, magnified.
- 3. The fame, when the tips have emitted the pollen, magnified.

Female Flower.

1. The Empalement, magnified.

- 2. The Empalement, feed bud, fhaft and furumit, magnified.
- 3. A ripe capfule, natural fize.
- 4. One of the divisions of the capfule.
- 5. A ripe feed, natural fize.

THE fpecies here figured of Dodonæa is from New Holland; where, Forfter fays he found it, as we have given it, with the chives and pointals diffinct; but, that the fame fpecies was hermaphrodite, when growing in New Zealand, which may perhaps be the fact, though we thould fulfpect, from fuch circumflance, they were different fpecies. Martyn in his Ed. of Miller's Dict mentions this plant, and throws it to the broad-leaved fpecies found in the tropical climates of America and Afa. Willdenow, in his Sp. Plant. Tom. 11. P. 1. p. 345, has made it a fpecies, without any obfervation on its parts of fructification; which leads us to fuppofe, he had not feen flowering fpecimens. It is as hardy as any greenhoufe plant we polfefs, but will not refift the feverity of our trofts; is cafily propagated by cuttings, and thrives in almoft any earth. It is fo very common in New Holland, that, fcarce a parcel of feeds has arrived from thene, but has contained fome of the feeds. The two figures were taken from two plants at the nurfery Hammerfmith.







PLATE CCXXXI.

CERBERA AHOUAI.

Oval-leaved Cerbera.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CONTORTA. Drupa monofperma. Corolla infundibuliformis. FLOWERS contorted. Pulpy feed-veffel, onefeeded. Bloffon funnel-fhaped. See Plate 130, Cerbera undulata, Vol. II.

SPECIFIC CHARACTER. s corollæ un- || Cerbera wit

Cerbera foliis ovatis, acutis, laciniis corollæ undulatis; calycis foliolis reflexis. Cerbera with egg-fhaped, pointed leaves; fegments of the blotlom waved; leaflets of the cup reflexed.

REFERENCE TO THE PLATE.

1. The Empalement.

2. A Bloffom cut open, the Chives in their place.

3. The Seed-bud, Shaft and Summit; with the fummit detached, magnified.

THE oval-leaved Cerbera is a native of the continent of South America, in Brazil and the other provinces within the tropics; therefore, muft be treated as a tender hothoufe plant. It is increafed by cuttings, delights moft in a rich foil, and flowers in July, or Auguft. It is faid to acquire the height of ten feet, in its native clime, but, with us, it feldom attains to three; becoming a handfome, bufhy thrub. The flowers have a faint fmell, as have moft of this natural order; the whole plant is replete with a whitift juice, of a moft deleterious quality; and the wood when rubbed emits a difagreeable odour. The fruit is confidered by the indians as a deally poifon againft which there is no antidet. Our figure was taken from a plant in the Hibbertian Collection, Clapham. Introduced to England, (or rather cultivated about that period) fays the Kew Catalogue, by Mr. Miller, in the year 1739.







PLATE CCXXXII.

IXIA CAPITATA. Var. Stellata,

Bunch-flowering Ixia. Var. St

Var. Star-flowered.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6 partita, patens, æqualis. Stigmata tria, erectiuículo-patula. BLOSSOM 6 divisions, fpreading, equal. Summits three, between upright and fpreading. See IXIA REFLEXA, Plate XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliolis enfiformibus, erectis, fenpo brevioribus; fioribus capitatis, contertis, pallide carneis; petalts bafi fiellatis. Ixia with fword-fhaped leaves, upright fhorter than the flem; flowers grow in heads, crowded, of a pale flefh-colour; petals flarred at the bafe.

REFERENCE TO THE PLATE.

- 1. The two valves of the fheath.
- 2. A flower cut open, the Chives remaining.
- 3. The Pointal.

As we cannot think this plant poffeffes fufficient ditlinctive character, to entitle it to a particular fpecific title, we have placed it as above; although we muft confefs that the root, in this plant, is very diffimilar from moft of the bunch-flowering fpecies. It is a very hardy bulb, and in no ways liable to rot, increasing very abundantly, and flowering, without any affiftance from heat, about the end of May. Our figure was taken at the Hammerfinith nurfery in 1799; to which it had been introduced, about four years previous.







PLATE CCXXXIII. MELANTHIUM VIRIDE.

Green-flowered Melanthium.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.

- COROLLA. Petala fex, ovato-oblonga, patentia, unguibus linearibus longioribus, perfiftentia.
- STAMINA. Filamenta fex, filiformia, erecta, longitudine corollæ, cui inferta fupra ungues. Antheræ globofæ.
- PISTILLA. Germen conicum, firiatum. Styli tres, diftincti, curvi. Stigmata obtufa.
- PERICARPIUM. Capfula ovata, trigona, trifulca, trilocularis, ex capfulis tribus introrfum unitis.

SEMINA plurima, compressa, femiovata.

EMPALEMENT, none.

- BLOSSOM. Six petals, oblong egg-fhaped, fpreading, with linear longer claws remaining.
- CHIVES. Threads fix, thread-fhaped, upright, the length of the bloffom into which they are inferted above the claws. Tips globular.
- POINTALS. Seed-bud conical, fireaked. Shafts three, diffinct, curved. Summits blunt.
- SEED-VESSEL. Capiule egg-fhaped, three-fided, three furrowed, three-celled, formed of three capfules united within.

SEEDS numerous, flattened, half egg-fhaped.

SPECIFIC CHARACTER.

Melanthium foliis ovato-lanceolatis, fcapo vaginantibus, erectis; corollis viridi-purpureis, reflexis. Melanthium with leaves between lance and eggfhaped, fheathing the fiem and upright; bloffoms greenifh-purple, reflexed.

REFERENCE TO THE PLATE.

- 1. A Petal with its Chive attached, magnified.
- 2. The Seed-bud, Shaft, and Summits, magnified.
- 3. The Seed-bud cut transversely, magnified.

THE Green flowered Melanthium was introduced to the Kew collection, by Mr. F. Maffon, in the year 1788, as we are informed by the catalogue of that garden, from the Cape of Good Hope. The plant from which our figure was taken, had been fent to the Clapham collection amongfl other bulbs which were received from Mr. Niven in the year 1500; it flowered the fucceeding year, when our drawing was made. We believe, at prefent, it is in no other collection than that of Mr. Hibbert; nor do we think, without a frefih fupply, it will be long feen in this country, as it has been often introduced, and as often loft; nor does it increafe with us by the root, and the feeds have not, as yet, matured in this country; it appears to grow luxuriantly in fandy peat earth, and flowers in July.







PLATE CCXXXIV.

PROTEA SPICATA.

Spike-flowered Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida feu 4-petala. Antheræ linearcs, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria. BLOSSOM 4-cleft or 4-petalled. Tips linear, inferted into the petals below the point. Proper cup none. Seeds folitary. See PROTEA FORMOSA, Plate XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis bipinnatis, fubfiliformibus, pinnulæ canaliculatæ, apice glandulofæ; capitula fpicata, quadriflora. Protea with twice-divided leaves nearly threadfhaped, fmall divifions channelled and glandular at the end; fmall heads in fpikes and four-flowered.

REFERENCE TO THE PLATE.

1. The Empalement.

- 2. One of the fmall heads of flowers, not yet expanded.
- 3. The fame, with the flowers open.
- 4. A flower taken from the general cup, with one of the petals detached, magnified.
- 5. The Pointal, the Summit detached, magnified.

FROM a plant now in flower, May 1802, in the Hibbertian collection, our figure was taken. It is one of those deferibed by Thunberg in his Differtatio de Protea, n. 11, and in his Prodromus 25, under the title we have given it; and which is, certainly, very appropriate; although many have the flowers growing in fpikes. We believe this is the first time it has flowered in Britain, and that, at prefent, it is very fearce; having been introduced by Meffrs. Lee and Kennedy in the year 1790. It is a hardy greenhouse plant, is increased by cuttings, and thrives in a fandy loam with a finall portion of fandy peat earth. Native of the Cape of Good Hope.







PLATE CCXXXV.

MIMOSA DISCOLOR.

Two-coloured leaved Mimofa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various difpofitions: Upon one plant.

ESSENTIAL GENERIC CHARACTER.

HERMAPH. Calyx 5-dentatus. Cor. 5-fida. STAMINA 5 feu plura. Pift. 1. Legumen. MASC. Calyx 5-dentatus. Cor. 5-fida. STAMINA 5, 10, plura. HERMAPH. Cup 5-toothed. Bloffom 5-cleft. CHIVES 5 or more. Pointal 1. A pod. MALE. Calyx 5-toothed. Bloffom 5-cleft. CHIVES 5, 10, or more.

SPECIFIC CHARACTER.

Mimofa inermis; foliis bipinnatis, fexjugis, bicoloribus; pinnis acutis, æqualibus; fpicis axillaribus; capitulis globofis; filiquis latiffimis, planis. Mimofa without fpines; leaves doubly winged, in fix pairs, and two coloured; wings fharp pointed and equal; fpikes grow from the infertion of the leaves; fmall heads globular; pods very broad and flat.

REFERENCE TO THE PLATE.

- I. The Empalement, natural fize.
- 2. The fame, magnified.
- 3. A Bloffom.
- 4. A Chive, magnified.
- 5. The Pointal natural fize, from an hermaphrodite flower.
- 6. The fame, magnified.

In the year 1788 the feeds of this plant were received, from New South Wales, by a number of perfons; and were raifed, the fame year, by most of those who fowed the feeds. The character of the plant from whence it derives its specific title is much loft in its advanced flate; but in the first two or three years of its growth, it is extremely powerful; the under part of the young leaves being of a bright purple. It is extremely difficult to propagate from cuttings; and it has not, as yet, perfected its feeds in England. It grows to the height of fix or feven feet; is a hardy green-house plant; and thrives most in fandy peat earth. Our figure was made from a very fine (pecimen, communicated by the Hon. W. H. Irby, in September 1801, from his elegant collection at the Parfonage, Farnham Royal, near Windfor, Bucks.







PLATE CCXXXVI.

HYPOXIS STELLATA. Var. flore allo.

Star-flowered Hypoxis. White Var.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, perfiftens, fupera. Capfula bafi anguftior. Spatha 2-valvis. BLOSSOM fixparted, remaining, above. Capfule narrower at the bafe. Sheath two valves. See Hypoxis fiellata. Pl, 101. Vol. II.

SPECIFIC CHARACTER.

Hypoxis (capo unifloro; foliis fublinearibus, laxis, ftriatis; petalis bafi maculatis; corolla intus alba. Hypoxis with but one bloffom on the flowerftem; leaves nearly linear, flexible and fcored; the petals fpotted at the bafe; bloffom white within.

REFERENCE TO THE PLATE.

- 1. A Petal of the Bloffom, fhewn from the outfide.
- 2. The Chives and Pointal.
- 3. One of the Chives.
- 4. The Pointal, cleared of the chives.

THIS moft brilliant variety of Hypoxis ftellata, is as old an inhabitant of our gardens as the other Var. figured in the 2d Vol. of the Repofitory, Pl. 101; it was likewife introduced by Mr. F. Maffon. The roots of this plant are rather more tender, or delicate, than thofe of the yellow variety; which makes it fearcer, and much lefs known. The nurfery, Hammerfmith, is the only place at which we have feen it; and, we believe, they have it not in Holland. The root from which our figure was taken, had been imported, from the Cape, in 1801. It flowers in April, and increafes by the root; fhould be planted in very light fandy peat earth, and removed from the pot foon after the flowers are decayed.







PLATE CCXXXVII. CYTISUS TOMENTOSUS.

Downy-leaved Cytifus.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two fets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum, breve, bañ obtufum; ore bilabiato; labio fuperiore bifido, acuminato; inferiore tridentato.

COROLLA papillionacea.

Vexillum ovatum, affurgens, laterioribus reflexis.

Alæ longitudine vexilli, rectæ, obtufæ.

Carina ventriculofa, acuminata.

- STAMINA. Filamenta diadelpha (fimplex et novemfidum) affurgentia. Antheræ fimplices.
- PISTILLUM. Germen oblongum. Stylus fimplex, aflurgens. Stigma obtufum.

PERICARPIUM. Legumen oblongum, obtufum, bafi attenuatum, rigidum.

SEMINA nonnulla, reniformia, compressa.

- EMPALEMENT. Cup one-leaved, bell-fhaped, fhort, blunt at the bafe; mouth two-lipped; upper lip two cleft, tapered; lower tip threecleft.
- BLOSSOM butterfly fhaped.

Standard egg-thaped, rifing upwards, turned back at the fides.

Wings the length of the flandard, flraight, blunt.

- Keel a little bellied, tapered.
- CHIVES. Threads in two fets (one fingle, the other nine-cleft) turned upwards. Tips fimple.
- POINTAL. Seed-bud oblong. Shaft fimple, turned upwards. Summit obtufe.
- SEED-VESSEL. Pod oblong, obtufe, tapered at the bafe, fliff.
- SEEDS a few, kidney-fhape, flattened.

SPECIFIC CHARACTER.

- Cytifus racemis lateralibus, erectis; ramis teretibus, divaricatis; foliolis ovatis, tomentofis; vexillo crenulato; corollis luteis.
- Cytifus with the bunches of flowers growing from the fides of the branches, which are round and ftraddle; leaflets egg-fhaped and downy; ftandard a little fcolloped; bloffoms yellow.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. The flandard.
- 3. One of the Wings.
- 4. The Keel.
- 5. The Empalcment, Chives, and Pointal, a little magnified.
- 6. The Seed-bud, magnified.
- 7. A ripe Pod.
- 8. The fame, fplit open, to expofe the fituation of the feeds.

THIS pretty Cytifus, a native of the Cape of Good Hope, was raifed from feeds at the Hammerfmith nurfery, in the year 1798. It is rather a weak, and loofe growing fhrub, attaining the height of a foot and a half, and flowering about August. It delights in a light foil, and is propagated with cafe by cuttings; it likewife perfects its feeds. The whole habit of the plant much more refembles Crotolaria than Cytifus; but the feed-vessel and empalement preclude its admission to that Genus.







PLATE CCXXXVIII. ROËLLA DECURRENS.

Decurrent-leaved Roella.

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

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, turbinatum, quinquepartitum, perfiftens; laciniis lanceolatis, acutis, dentatis, magnis.
- COROLLA monopetala, infundibuliformis, decidua; tubus calyce paulo brevior; limbus erecto-patens, quinquepartitus, calyce longior.

Nectarium e fquamis quinque, conniventibus, in fundo corollæ.

- STAMINA. Filamenta quinque, fubulata, nectario infidentia. Antheræ fubulatæ, conniventes, longitudine filamentorum, altitudine calycis.
- PISTILLUM. Germen oblongum, inferum. Stylus filiformis, longitudine ftaminum. Stigmata duo, oblonga, depreffa, patentia.
- PERICARPIUM. Capfula cylindracea, calyce brevior, coronata calyce patenti majoreque facto, bilocularis.
- SEMINA plurima, angulata.
- Obf. Campanulæ valde affinis.

- EMPALEMENT. Cup one leaf, top-fhaped, fivedivided, remaining; fegments lance-fhaped, pointed, toothed, large.ELOSSOM one petal, funnel-fhaped, deciduous,
- BLOSSOM ONE petal, funnel-fhaped, deciduous, tube a little fhorter than the cup; border between upright and fpreading, five-divided, longer than the cup. Hungweich formed of five forles, anuroach

Honey-cup formed of five fcales, approaching, at the bottom of the bloffom. CHIVES. Five threads, awl-fhaped, placed upon

- CHIVES. Five threads, avl-fhaped, placed upon the boney-cup. Tips awl-fhaped, approaching the length of the threads, the height of the cup. POINTAL. Seed-bud oblong, beneath. Shaft
- POINTAL. Seed-bud oblong, beneath. Shaft thread-fhaped, the length of the chives. Summits two, oblong, flattened, fpreading.
- SEED-VESSEL. Capfule cylindrical, florter than the cup, crowned with the fpreading cup which has become larger, two celled.
- SEEDS many, angled.
- Obf. This Genus is very nigh affined to campanula.

SPECIFIC CHARACTER.

Roëlla foliis lanceolatis, ciliatis, integerrimis, decurrentibus; floribus folitariis, pedunculis longiflimis, axillaribus. Roella with lance-fhaped leaves, fringed, quite entire, decurrent; flowers folitary, footfialks very long, growing from the bafe of the leaves clofe to the flem,

REFERENCE TO THE PLATE.

- 1. The Empalement, Chives, and Pointal, the bloffom removed.
- 2. A Bloffom cut on one fide, and fpread open.
- 3. One of the fcales of the Honey cup, with its Chive magnified.
- 4. The Fointal, cleared of the other parts of fructification.

As an annual, this is a moft beautiful little plant; but, although the feeds have been received feveral times, from the Cape of Good Hope, where it is native; and firft at the Royal Garden's, Kew, in 1787, fent by Mr. F. Maflon; yet, has it never been feen the fecond year; owing, we fuppofe, to the impracticability of procuring ripe feeds in our climate. Perhaps future trials, by different treatment, may meet with a happier iffue. The figure was taken at the Clapham Garden, in Auguft 1800; when the plant had apparently attained its greateft perfection; but unfortunately, no feeds ripened; and at prefent, we believe, there is no vertige of the plant in Britain. It appears to delight in fandy peat, and to be kept under cover, even in the fummer feafon.







PLATE CCXXXIX. GERANIUM SELINUM.

Rock-Parfley-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. FRUCTUS roftratus, penta-coccus. ONE POINTAL. Five Summits. FRUIT furnifhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM. Vol. 1. Pl. XII.

SPECIFIC CHARACTER.

Geranium foliis pinnatis, foliolis alternis, laciniatis, hirfutis; petala bina fuperiora refracta, 3 inferiora concava, conniventia, - recta; flaminibus 5 fertilibus; radice tuberofa. Geranium with winged leaves; leaflets alternate, ragged, and hairy; the two upper petals appearing broke back, the 3 lower concave, approaching and ftraight; five fertile chives; root tuberons.

REFERENCE TO THE PLATE.

1. The Empalement.

- 2. The Chives, cut open and magnified.
- 3. The Pointal and Seed-bud magnified.

GERANIUM felinum claims the priority of introduction, with us, to any of that numerous division, in this large family, which are tuberous rooted and femlefs, not including the G. trifte, G. lobatum, or G. prolificum; and of which, although we have given many figures, we fill pofiefs drawings of 18 handfome fpecies, befides numberlefs varieties. It was introduced in 1758 by Meffrs. Lee and Kennedy; is a hardy greenhoufe plant, being lefs fubject to rot, after the decay of the leaves, than any of its congeners; flowers freely about June, and is propagated by the root; the feed (fonctimes) ripens likewife. Our figure was taken from a plant, whofe root had been received at the Clapham Garden, in 1800. As all the plants figured in the Botanift's Repofitory, are titled with the commonly accepted names, if any, in Eugland; and, as many have been given under different names, in fome other publications, whence much confution; we fhall defer all attempt at fynonim, till the end of this Volume, when a copious *Index Synonimorum* will be publified, of all the plants figured in the work, for the ufe of thofe who wifh for fuch authorities.







PLATE CCXL.

GLADIOLUS CARNEUS.

Flesh-coloured Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. STAMINA adfcendentia. BLOSSOM fix divisions, gaping. CHIVES afcending. See GLADIOLUS ROSEUS, Pl. 11. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis enfiformibus, coftatis, glabris; floribus fecundis, cernuis, carneis; petalis tribus fuperioribus divergentibus, inferioribus fupra medium punctatis. Gladiolus with fword-fhaped leaves, ribbed, and fmooth; flowers pointing one way, nodding and flefh-coloured; the three upper petals diverge, the three lower are dotted upon the middle.

REFERENCE TO THE PLATE.

1. The two valves of the fheath.

2. The Bloffom fpread open, with the Chives in their place.

3. The Pointal, complete.

OUR prefent plant has a nigh affinity with G. communis, and indeed might, perhaps, be confidered as a variety of it; but, as upon a clofe examination this will be found to differ, in many refpects, we have adopted the name, quoted by Willdenow, from Jacquin, De la Roche, Burman, &c. It is a native of the Cape of Good Hope, and introduced, from thence, to us, in 1800. Our figure was made at the Hammerfinith Nurfery, this year, being the first of its flowering in this country. It is a very hardy bulb, and increafes freely. Flowers in May.



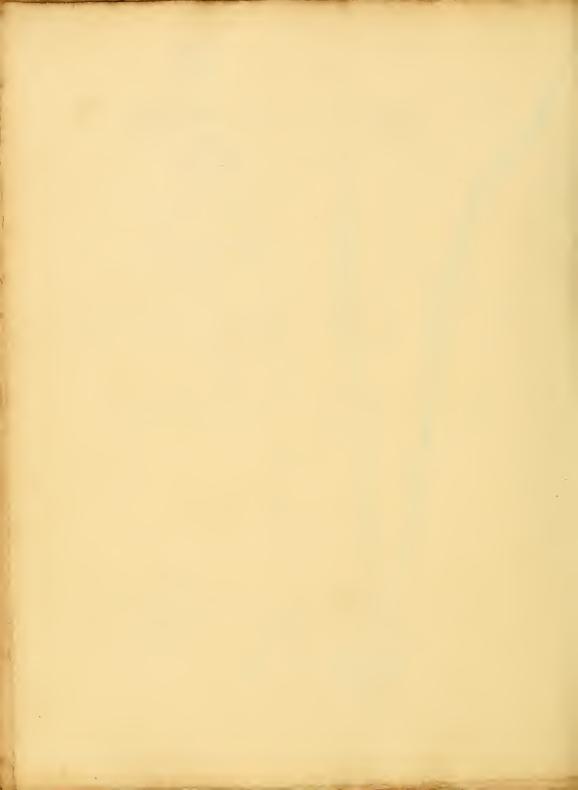




PLATE CCXLI.

GLADIOLUS ORCHIDIFLORUS.

Orchis-like-flowered Gladiolus.



CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. STAMINA adícendentia. BLOSSOM fix divitions, gaping. CHIVES afcending. See GLADIOLUS ROSEUS, Pl. II. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis linearibus; fcapo polyflachio; floribus fpicatis, fecundis; laciniis binis lateralibus corollæ latiffimis, fumma ereĉta, tribus inferioribus dependentibus, maculatis. Gladiolus with linear leaves; flower-ftem branched; flowers grow in fpikes, all from one fide; the two fide fegments of the bloffom are very broad, the top one upright, the three lower hang down, and are fpotted.

REFERENCE TO THE PLATE.

- 1. The two valves of the fheath.
- 2. A Bloffom fpread open, with the Chives in their place.
- 3. The Pointal, one of the divisions of the fummit magnified.



As a fingularity among its fellows, this Gladiolus ftands prominently diftinct; and the uncommon and curious formation of its flowers will, undoubtedly, counterbalance, in the eye of the botanift, what they want in brilliancy of colour. It is a hardy bulb, and appears to require only the ufual treatment of the hardier fpecies of the genus. The Clapham collection is, we believe, the only one in which it is to be found in England; to which it was introduced, by Mr. Niven, in the fpring of the year 1801, and where our drawing was made, this prefent year, in the month of March 1802.







PLATE CCXLII.'

XERANTHEMUM FASCICULATUM.

Bundled-leaved Everlasting-flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

Receptaculum paleaceum. Pappus fetaceus. Calyx imbricatus, radiatus; radio colorato. Receptacle chaffy. Feather briftly. Cup tiled, rayed; the ray colored. See XERANTHEMUM SPECIOCISSIMUM, Pl. LI, Vol. I.

SPECIFIC CHARACTER.

Xeranthemum foliis caulinis lineatibus fubteretibus, fafciculatis, longiffinis; floribus folitariis; fquamis calycinis lanceolatis, pallide-luteis. Everlafting-flower, with the flem leaves linear, roundifh, bundled, very long; flowers folitary; the fcales of the cup lance-fhaped, and pale yellow.

REFERENCE TO THE PLATE.

1. A fcale of the cup.

2. An hermaphrodite floret, with its feed, magnified.

3. A female floret, with its feed, magnified.

4. The Pointal of a female floret, magnified.

AMONGST the number of very beautiful plants introduced by Mr. Niven, and which now enrich that fund of botanical rarity, the Clapham collection, this fpecies of Xeranthemum does not fland the leaft confpicuous. Twelve years fince we poffetted but four fpccies of this genus, viz. X. fulgidum, X. retortum, X. veftitum, and X. fpeciociffimum; now they extend to fourteen. The others, as well as the foregoing, are all (but one, the X. lucidum of Port Jackfon, New South Walcs) from the Cape of Good Hope, and introduced to us from thence, by various hands, in the following order; X. proliferum, through Holland, by Meifrs, Lee and Kennedy; X. formofum and X. candicans by the fame, from Cape feeds; X. fetlamoides by Mrs. Goftling, of Hounflow; X. filiforme by Mr. Donn, of Cambridge; X. fafciculatum and X. truncatum by G. Hibbert, Efg. X. argenteum and X. fpirale by Montague Burgoyne, Efq. of Mark Hall, Effex. They are very fubject to damp in the leaves, from a confined air: therefore, fhould be kept in the window, or most airy part of the greenhoufe. The most fandy peat that can be procured is the beft for their growth. They may be all, thus, propagated by cuttings, taken off in the early part of the month of June; put thefe into a pot filled with fand, and covered by a bell-glafs the fize of the pot; plunge it in a north or east border, and let the whole be covered with a hand glafs, which muft be kept quite clofe till the cuttings are rooted; then the inner glafs muft be removed, and in about a week the pot may be taken from under the outer one, when the plants may be removed into fmall pots in about a fortnight. Our prefent plant feldom grows higher than two feet, of which, at leaft, one is the foot-flalks of the flowers; it continues in flower from March till September.







PLATE CCXLIII.

PROTEA LAGOPUS.

Woolly-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COBOLLA 4-fida feu 4-petala. Antherælineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria. BLOSSOM 4-cleft or 4-petalled. Tips linear, inferted into the petals below the point. Proper Cup none. Seeds folitary.

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

SPECIFIC CHARACTER.

Protea foliis bipinnatis, filiformibus; capitulis fpicatis, aggregatis, quadrifloris; corollis intus purpureis. Protea with doubly winged leaves, threadfhaped; fmall hcads grow in fpikes clofe together, four flowers in each; blotloms purple within.

REFERENCE TO THE PLATE.

1. The fcales of the cup of one of the fmall heads.

- 2. A fmall head of flowers, one of the flowers open, the reft not yet expanded.
- 3. A floret, with the petals expanded.
- 4. A petal, with its chive, magnified.

5. A Pointal, natural fize, with the fummit detached and magnified.

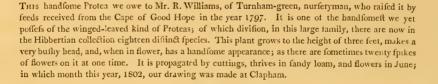








PLATE CCXLIV.

HEMEROCALLIS GRAMINEA.

Grafs-leaved Day-Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA campanulata; tubo cylindrico. STAMINA declinata. BLOSSON bell-fhaped; tube cylindrical. CHIVES declining. See HEMEROCALLIS CÆRULEA, Pl. VI. Vol. I.

SPECIFIC CHARACTER.

Hemerocallis foliis linearibus, carinatis, gramineis; petalis tribus interioribus majoribus undulatis, exterioribus minoribus, extus bruneis. Hemerocallis with linear leaves, keeled and graffy; the three inner petals larger, waved, the outer fmaller, brown on the outfide.

REFERENCE TO THE PLATE.

1. An outer leaf of the Bloffom, fhewn from the outfide.

2. The Chives and Pointal.

3. The Pointal and Seed-bud, cleared of the chives.

WE have little doubt but that this is the fpecies of Day-Lily known to botanifts, fince the days of Parkinfon and Gerarde, under the character of a fmall leaved variety of the Yellow Day-Lily, although it has been many years loft to the country. It is one among the many plants introduced by the late Dr. Sibthorpe, to the Oxford botanic garden. As a native of the northern parts of Europe, it is as hardy as either the H. flava or H. fulva, to both which fpecies it bears flrong affinity; although we conceive, fufficiently diffinit from either, to confiitute a fpecies; which however we fhould not have done, but that the plant is now known in our gardens, under our fpecific title. The flowers of this plant laft, in general, two or three days before they decay, are very fweet fcented, and as large as those of the H. fulva. It is increased as eafily as any of the genus, by parting the roots, and thrives in almost any foil.





PLATE CCXLV.

IXIA PUSILLA.

Dwarf blue Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6 partita, patens, æqualis. Stigmata tria, erectiuículo-patula.

BLOSSOM 6-divided, fpreading, equal. Summits three, between upright and fpreading. See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis fublinearibus, coftatis, craffis; fcapo bifloro, longitudine, foliorum; floribus diftantibus, cæruleis. Ixia with nearly linear leaves, ribbed, thick; flower-ftem two-flowered, the length of the leaves; flowers grow dittant, and are blue.

REFERENCE TO THE PLATE.

- 1. The two valves of the fheath.
- 2. A Flower cut open, with the Chives in their place.
- 3. The Pointal, one of the fummits detached and magnified.

THIS pretty little Ixia is quite new to our gardens, never having, as far as we can learn, been feen to flower before this year. It is the moft delicate in fhape and character of any we have as yet examined; and as we could not trace it as defcribed in any author, we have given it the trivial name it here bears. The figure exhibits a large (pecimen of the whole plant, which is too weak to fupport itfelf, although the leaves are thick and ftiff. Our drawing was made in the moth of April, from a plant in the Clapham collection, where only it is to be found; the roots having been fent from the Cape of Good Hope in the autumn of the preceding year. It appears to flourifh with the treatment Mr. Allen has given it, a dry futuation, planted in very fandy peat. From the confluction of the root, which has a hard fmooth fkin, we should be led to think its increase will not be very abundant.



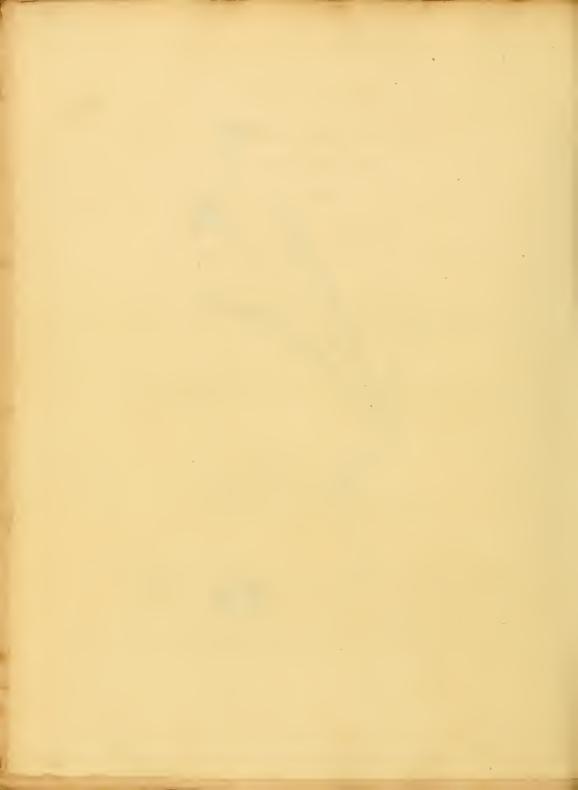




PLATE CCXLVI.

GERANIUM INCRASSATUM.

Fleshy-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. FRUCTUS roftratus, penta-coccus. ONE POINTAL. Five Summits. FRUIT furnifhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM. Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis carnofis, inequaliter pinnatis feu lobatis, laciniis tridentatis, obtufis; corollis faturate rubris, firiatis; floribus pentandris; radice tuberofa. Geranium with flefhy leaves, unequally winged or lobed, fegments three-toothed, blunt; bloffoms of a deep red, and fireaked; flowers with five fertile tips; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to fhew its tubular ftructure.

- 2. The Chives fpread open.
- 3. The Pointal, natural fize, with the fummits detached, magnified.

^o OUR figure, which exhibits a fmall plant, of this fuperb fpecies of tuberous Geranium, was taken in the month of June, this year, 1802, at Meffrs. Colville's nurfery, King's Road, Chelfea, and where it is fill in high perfection, this prefent month of July. We have every reafon to believe, from all the authorities we are mafters of, that this plant has not, till now, flowered in Europe. It forms a very large tuberous root, by the dividing of which it is to be propagated; as we fulpect the feeds will not ripen on this fpecies more than moft of its congeners. It has the fame manner with the reft of the tuberous fpecies, lofing its leaves in winter, when they are fubject to rot, if much watered. Appears to flourith in fandy peat, with a fmall portion of rotten dung.





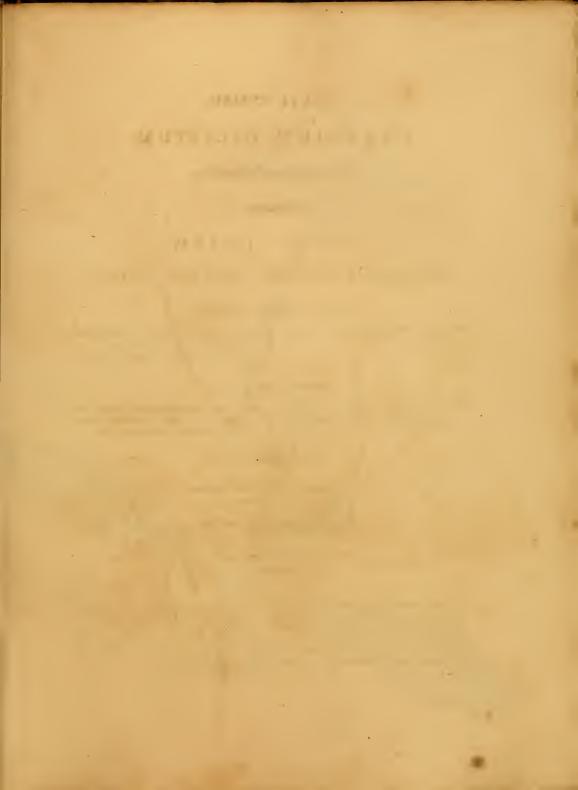


PLATE CCXLVII.

GERANIUM CILIATUM.

Fringed-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus, pentacoccus.

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

SPECIFIC CHARACTER.

Geranium foliis intigerrimis, concavis, lanceotis, marginibus ciliatis; floribus pentandris; radice tuberofa. Geranium with quite entire leaves, concave, lancefhaped, and fringed at the edge; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement.

2. The Chives fpread open, magnified.

3. The Pointal, magnified.

THE fingular fhape and number of the leaves of this plant, which are but two, large, concave, thickifth, between lance and egg-fhaped, and fringed at the edge, conflitute the moft effential specific difference it polieffes; the flowers, and other parts, much refemble many of its fellows. It is from the Cape of Good Hope, and introduced to us by Meffrs. Colvills, nurferymen, of the King's Road, Chelfea; who received it, from thence, at the fame time with the Geranium incraffatum, of our laft. For the treatment, and increase, we mult refer to any other of the tuberous kind of Geranium.







PLATE CCXLVIII.

PROTEA UMBELLATA.

Umbellated Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida feu 4-petala. Antherælineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria. BLOSSON 4 cleft or 4-petals. Tips linear, inferted into the petals below the point. Cup proper none. Seeds folitary.

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

SPECIFIC CHARACTER.

Protea foliis lineari-fpathulatis, glabris; capitulis terminalibus; bracteis multifidis; floribus luteis. Protea with linearly-fpathulate leaves, fmooth; heads of flowers terminate the branches; floral leaves many-cleft; flowers yellow.

REFERENCE TO THE PLATE.

1. One of the floral leaves or fcales of the general empalement, magnified.

2. A flower, magnified.

3. One of the heads of flowers, divefted of the fcales, or floral leaves.

4. The Pointal and feed bud, of one of the florets, magnified.

THE Protea umbellata has been cultivated in England fince the year 1777, at which time it was firft raifed from feeds; received from the Cape of Good Hope by Meffrs. Lee and Kennedy, Hammerfmith, at whole nurfery our figure was taken in the month of Auguft 1800. It is a very hardy plant, and not at all fubject to the very common fate of its congeners; that is, to damp in the leaves, or rot at the root in winter; is propagated by cuttings, to be made in the month of April or May, and treated as directed for the other Proteas. The plant feldom grows higher than three feet, and does not make many branches; but is of a lively green colour, both leaves and ftem. We have, as ufual, adopted the name this plant is generally known by, it having been fo named by the younger Linnaus in his Suppl. Plant. 118, and by Thunberg in his Differtatio de Protea, n. 34, and his Prodromus 26. But why or how a fmall, clofe head of flowers may be denominated an umbel we muft confefs our ignorance in this application of terms.



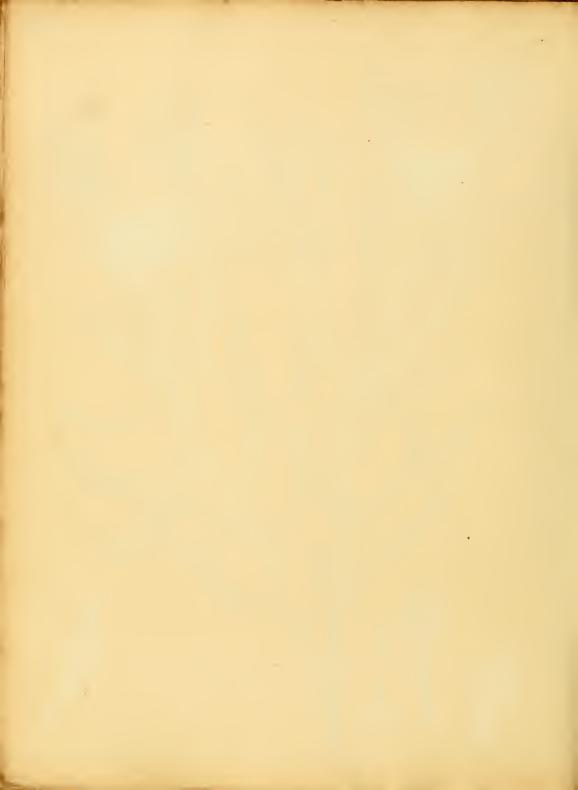




PLATE CCXLIX. PITCAIRNIA SULPHUREA.

Sulphur-coloured Pitcairnia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA, Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, femi-fuperum, tubulofum, bafi ventricofum, trifidum, perfiftens; laciniis lanceolatis, erectis.

- COROLLA tubulata, calyce duplo longior, marceffens, trifida, demum tripetala; laciniæ lineari-oblongæ, fuberectæ.
- STAMINA. Filamenta fex, filiformia. Antheræ oblongæ, erectæ.
- PISTILLUM Germen fuperum, ovato-triquetrum. Stylus filiformis longitudine ftaminum. Stigmata tria, contorta.
- PERICARPIUM. Capfula ovatis, obtufe triquetra, trilocularis; loculis fub-cylindraceis, fub-diflinctis.

SEMINA numerofa, alata, linearia.

EMPALEMENT. Cup one leafed, half fuperior, tubular, fwelling at the bafe, three-cleft; fegments lance-fhaped, erect.

- BLOSSOM tubular, twice the length of the cup, withering, three-cleft, at laft three petalled; fegments linearly-oblong, nearly upright.
- CHIVES. Threads fix, thread-fhaped. Tips oblong, erect.
- POINTAL. Seed-bud above, three-fided-eggfhaped. Shaft thread-fhaped the length of the chives. Summits three, twifted.
- SEED-VESSEL. Capfule egg-fhaped, bluntly three cornered, three valved; cells nearly cylindrical, not very diffinet.

SEEDS numerous, winged, linear.

SPECIFIC CHARACTER.

Pitcairnia foliis non fpinofis, flaccidis, longiffimis; corollis fulphureis. Pitcairnia with leaves without fpines, weak and very long; bloffoms fulphur coloured.

REFERENCE TO THE PLATE.

- 1. The Empalement and floral leaf.
- 2. One of the Petals fnewn from the infide to expose the Honey-cup at its bafe.
- 3. The Chives and Pointal.
- 4. The Pointal and Seed-bud, the three fummits detached and untwifted.
- 5. The Seed-veffel cut acrofs.

 T_{H15} fpecies of Pitcairnia was fent in the year 1799, from the ifland of St. Vincent, by Mr. Anderfon, to T. Evans, Efq. Stepncy; at whofe gardens the plant has flowered, for the firft time, in England this year, in the month of April, and at which time our figure was taken. The Pitcairnias are all natives of Weft India Iflands, and fland, as the link, between the Bromelia or Pine-apple plant, and the Tillandfia; to either of which Genera the firft fight of the leaves, only, would confign them. Five fpecies are now in Britain, and we do not doubt, but the fpecies are as numerous, as thofe of Tillandfia. The cultivation of all the fpecies is perfectly eafy, as they require no particular foil, or management, if kept in the hot-houfe; where they grow luxuriantly and throw out, from the roots, abundance of fuckers; which fhould be taken off, to encourage the flowering of the central fhoot.







PLATE CCL.

IXIA COLUMNARIS. Var. grandiflora.

Columnar-chived Ixia. Large flowered Var.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fex-petala, patens, æqualis. Stigmata tria, erectiufculo-patula.

BLOSSOM fix petals, fpreading, equal. Summits three, upright-fpreading. See IX1A REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia filamentis bafi cohærentibus; floribus fubcapitatis corollis purpureo-violaceis, maximis. Ixia with threads united at the bafe; flowers grow nearly headed; bloffoms purple violet, very large.

REFERENCE TO THE PLATE.

1. The two valves of the fheath.

- 2. An intire flower cut open in the tube only, which is extended nearly to the end of the threads.
- 3. The Chives cut open, magnified.
- 4. The Pointal complete, one of the Summits detached and magnified.
- 5. The Seed-veffel cut acrofs.

 W_E have nothing farther to fay upon this fine variety of the Columnar-chived Ixia than what has been faid on the other varieties of this fpecies; but, that it was introduced from Holland with the change-able coloured variety in 1799; and that it flowers the end of June; in which month our drawing was made, this year, at the Hammerfmith Nurfery.







PLATE CCLI.

LACHENALIA PURPUREO-CÆRULEO.

Sweet violet-colour'd Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, infera; petalis tribus interioribus longioribus.

STAMINA erecta. Capfula fubovata, trialata. Semina globofa. BLOSSOM 6-petals, beneath; the three inner petals the longeft.

CHIVES erect. Capfule nearly egg-fhaped, three winged. Seeds globular.

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

SPECIFIC CHARACTER.

Lachenalia corollis campanulatis, pedunculatis; petalis obtufis, revolutis; flaminibus corolla longioribus; foliis lanceolatis; floribus purpureo-cæruleis, odoratifimis. Lachenalia with the bloffoms bell-fhaped, and with foot-falks; petals obtufe and rolled back; chives longer than the bloffom; leaves lance-fhaped; flowers of a purplifh blue colour, and very fweet-fcented.

REFERENCE TO THE PLATE.

1. A flower fhewn from the outfide.

2. The fame fhewn from the infide.

3. The Pointal and feed-bud.

This very fine fpecies of Lachenalia, with its variety, have been figured by Prof. Jacquin in his Icones, and Collectanea; but whether from dried fpecimens or not we cannot determine. As yet there is no figure, of either, in any Britifh publication. Mr. Williams, of Turnham Green, nurferyman, was the first who had it to flower in this kingdom, and to his kindnefs in fending us a fine specimen, this year, in April, we are indebted for our prefent figure. It is equally hardy with the reft of the fpecies of the Genus, and propagates abundantly by the root; delights molt in a fandy peat foil.







PLATE CCLII.

HEBENSTREITIA AUREA.

Golden-flowered Hebenstreitia.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, tubulofum, membranaceum, emarginatum, fubtus longitudinaliter dehifcens.
- COROLLA monopetala, unilabiata; tubus cylindricus, calyce longior, latere inferiore ad dimidium dehifcens; limbus unilabiatus, adfcendens, planiufculus, quadrifidus, fubæqualis. STAMINA. Filamenta quatuor, horum duo priora
- STAMINA. Filamenta quatuor, horum duo priora fub fauce margini corollæ inferta, extantia; duo feriora, interiora, inferiora, reflexa ad latera. Antheræ lunares, compreflæ, extrorfum truncatæ.
- PISTILLUM. Germen minimum. Stylus filiformis, per fiffuram corollæreflexus. Stigma fimplex.
- PERICARPIUM. Capfula oblonga, unilocularis, bivalvis,
- SEMINA duo, oblonga, hinc convexa, trifulca, inde plana.

- EMPALEMENT. Cup one-leafed, tubular, membranaceous, notched at the end, folitting lengthways from beneath.
- BLOSSOM one-petalled, one-lipped; tube cylindric, longer than the cup, fplitting from the lower fide half way; border one-lipped, afcending, flattifh, four-cleft, the clefts nearly equal.
- nearly equal. CHIVES. Threads four, of which the upper pair is inferted into the edge of the bloffom under the throat, flanding out; the lower anterior pair is bent back to the fides. Tips crefcent-fhaped, flattifh, appearing cut off on the outfide.
- POINTAL. Seed-bud very finall. Shaft threadfhaped, bent back through the fiffure of the bloffom. Summit fimple.
- SEED-VESSEL. Capfule oblong, one-celled, twovalved.
- SEEDS two, oblong, convex on one fide, threefurrowed and flat on the other.

SPECIFIC CHARACTER.

- Hebenftreitia foliis linearibus, integris, fub-teretibus, obtufis, glabris; floribus congeftis, racemofis, aurantiis.
- Hebenftreitia with linear leaves entire, roundith, blunt, fmooth; flowers grow crowed together in long bunches, of a gold colour.

REFERENCE TO THE PLATE.

- 1. A flower.
- 2. The Empalement magnified.
- 3. A Bloffom cut open with the chives remaining attached, magnified.
- 4. The Pointal natural fize.
- 5, The fame, magnified.

The Hebenftreitias may all be reckoned as rather biennial plants than perennial furubs; they muft be increafed every year to keep up a fucceffion, which is a matter of no difficulty; as, if cuttings of any of the fpecies are put into fepatate fmall posts, and kept from the air by a hand-glafs, for about a month, they will become flowering plants by September, if the cuttings are made in May. Our prefent plant was introduced in 1796 by Meffrs. Lee and Kennedy, Hammerfmith, at whole nurfery the drawing was made this year in the month of March. They moftly flower in fpring, and autumn; the flowers are very fragrant at night. They are natives of the Cape of Good Hope.



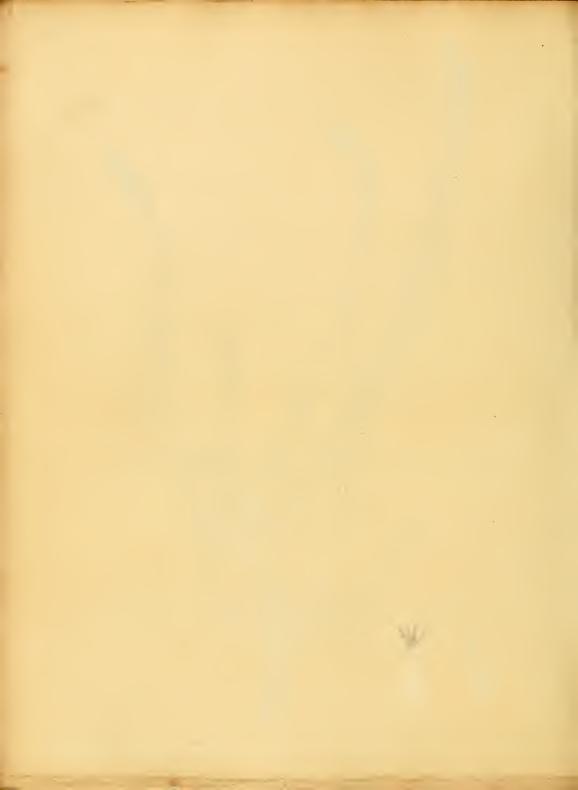




PLATE CCLIII.

TALINUM PATENS.

Panicled Purslane.

CLASS XI. ORDER I.

DODECANDRIA MONOGYNIA. Twelve Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium diphyllum, parvum, fupe-

- rum, apice compressum, persistens. COROLLA. Petala quinque, plana, erecta, ob-
- tufa, calyce majora. STAMINA. Filamenta multa, capillaria, corolla
- dimidio breviore. Antheræ fimplices.
- PISTILLUM. Germen fubrotundum. Stylus fimplex, brevis. Stigmata quinque, oblonga, longitudine ftyli.

PERICARPIUM. Capfula tecta, ovata, trivalvis. Receptaculum liberum.

SEMINA plurima, parva.

EMPALEMENT. Cup two-leaved, fmall, above, compressed at the tip, remaining.

- BLOSSON. Five petals, flat, fmooth, upright, blunt, larger than the empalement. CHIVES. Threads many, hair-like, fhorter by
- half than the bloffom. Tips fimple. POINTAL. Germ roundifh. Shaft fimple, fhort. Summits five, oblong, the length of the fhaft.

SEED-VESSEL. Capfule covered, egg-fhaped, three-valved. Receptacle free.

SEEDS numerous, fmall.

SPECIFIC CHARACTER.

Talinum foliis lanceolato ovatis, feffilibus, planis; panicula ramofa, terminali; floribus rubris.

Purflane with leaves between lance and eggfhaped, without foot-ftalks, flat; panicle branching and terminal; flowers red.

REFERENCE TO THE PLATE.

- 1. The Empalement and Pointal.
- 2. A Chive, magnified,
- 3. The Seed-bud, Shaft, and Summit.
- 4. The Seed-veffel nearly ripe, and the cup.
- 5. A ripe Capfule, cut transversely.
- 6. A Seed, magnified.

WE now exhibit a plant which may, perhaps, be known by many, under the name of Portulaca, rather than that of Talinum. But, as the adoption of this new formed genus, upon a division of the species which have capfules of a different confirmction, from the old generic character of Portulaca, feems generally to obtain, amongft modern botanifts; fuch as Juffieu, Cavanilles, Willdenow, &c. we fhall not diffent; although we, at the fame time, take the liberty to fay, from the particular tendency of the old genus Portulaca, to vary in moft parts of the flower, both as to number and character, we have taken up the prefent genus, but reloctantly. This plant is a native of the Weft Indies, and is, by fome, confidered as an annual; whilft by others it is treated of as a flrub; but, indeed, it partakes of both characters, in fome measure; for the stem generally decays down, near to the earth, and often the whole plant dies, after flowering. It grows to the height of two feet, half of which is formed of the flower item. It makes a very gay appearance about Auguft, and feeds abundantly. Our figure was taken from a plant in the collection of J. Vere, Efq. Kenfington Gore; where it flowers, annually, in the higheft perfection. Introduced, fays the Kew Catalogue, by Chevalier Murray, in the year 1776.



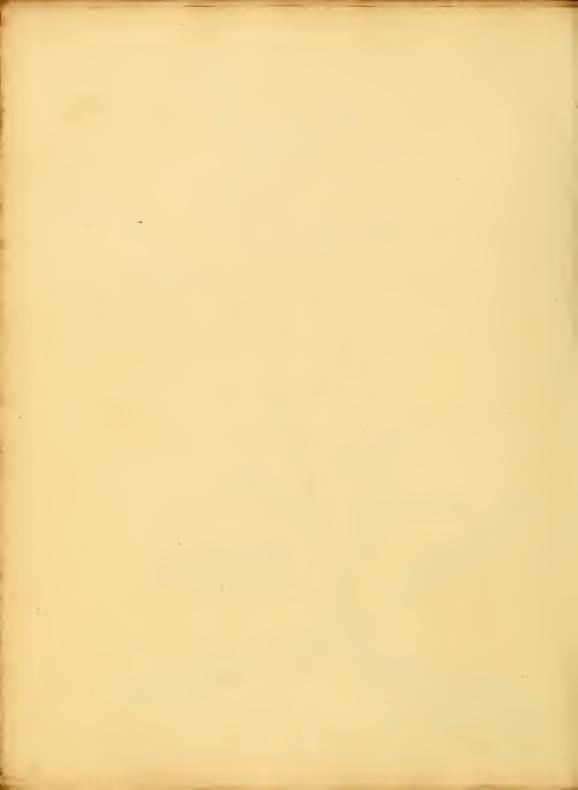




PLATE CCLIV.

GERANIUM PROCUMBENS.

Procumbent Geranium.



CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus, 5 coccus.

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

SPECIFIC CHARACTER.

Geranium caule fubcarnofo, profirato; foliis cordatis, lobatis, crenato-dentatis; calycibus pentaphyllis; floribus tetrandris, corollis irregularibus.

Geranium with the ftem rather flefhy,	and prof-
trate; leaves heart-fhaped, lobed,	between
fcolloped and toothed; cups with fi	ive leaves;
flowers with four fertile chives;	bloffoms
irregular.	

REFERENCE TO THE PLATE.

- 1. The Emplement.
- 2. The Chives fpread open, and magnified.
- 3. The Pointal, and Seed buds, magnified.

This pretty Geranium is rather a delicate plant, and muft be kept very dry in the winter; as, from the fituation of its branches, which are pretfed to the earth, and rather flefhy, they will be very apt to rot, if too often watered, or placed in a damp part of the green houfe. It was introduced in the the year 1781, by G. Hibbert, Efq. in whofe collection, only, we have as yet feen it. Mr. Allen informs us, that it is to be propagated as well by cuttings, as from the feeds, which it does not produce plentifully. It has the appearance, if we may judge by analogy, to be but a biennial, and not an abiding plant. It flowers in April and May, and thould be planted in light rich earth.

Here we have a botanical treat for the learned, who have adopted the new arrangement of this very vagarious tribe; for in this one plant are united fome of the moft effential characters of the three L'Heritierian Genera, which, jufily, formed but divifions of Linnxus's original genus; agreeing with Geranium and Erodium in the nectariferous cup; with Pelargonium in the blotform and feed; but differing from all three, in having but four fertile chives, with fix abortive ones. A fact afcert in d by the examination of above fifty flowers, taken from four different plants.



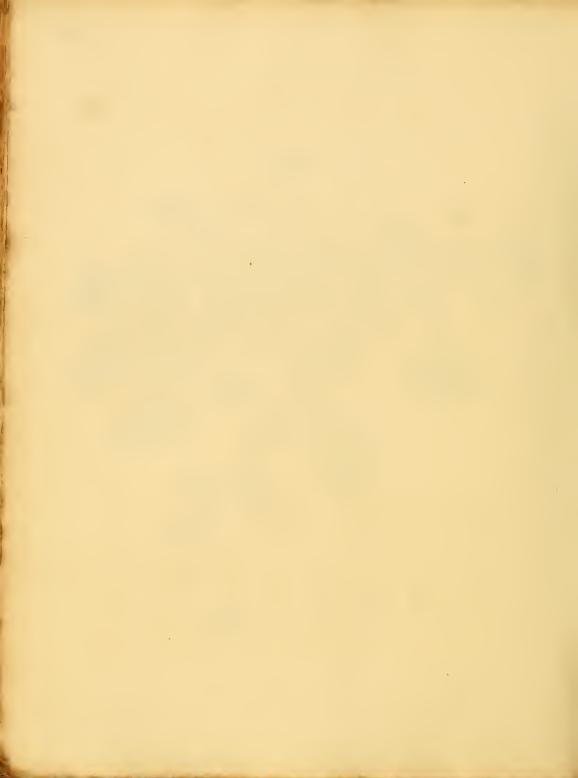




PLATE CCLV.

MORÆA NORTHIANA.

Northian Moræa.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA hexapetala; petala tria interiora patentia, anguítiora. Stigma trifidum. BLOSSOM fix petals; the three inner petals fpreading, narrower. Summit three-cleft.

See MORÆA TRICOLOR. Pl. LXXXIII. Vol. II.

SPECIFIC CHARACTER.

Moræa ſcapo foliiſque falcatis, glaberrimis, diftichis; floribus terminalibus; petalis tribus exterioribus ovatis, concavis, pendulis, tribus interioribus ſub-ere€tis, medio retrofra€tis, apicibus revolutis. Moræa with the flower-flem and leaves fcymitar-fhaped, very fmooth, pointing different ways; flowers terminal; the three outer petals egg fhaped, concave, hanging down, the three inner ones nearly erect, broke back about the middle, and rolled back at the ends.

REFERENCE TO THE PLATE.

- 1. The whole plant in miniature.
- 2. The outer valve of the fheath.
- 3. The inner valve of the fheath.
- 4. The Seed bud, Chives, and Pointal, as they ftand in the flower.
- 5. The Pointal only, the Chives being removed.

ABOUT the year 1789 this very fine fpecies of Moræa was introduced to our gardeus by the late, elegantly tafted Mrs. North, lady to the Right Hon, the Lord Bifhop of Winchefter; to whofe fervor and liberality in botanical purfuits we owe much of the prefent prevailing tafte for the fcience. The plant was brought to England by the Hon. Mr. F. North, on his return from Portugal; the only remnant of a number, which he had procured from the gardens of the late Queen of Portugal; immediately on its arrival it was configned, in a very fickly fate, to the care of Meffrs. Lee and Kennedy, Hammerfmith, who had the good fortune to recover it.

It is a native of the Brazils, flowers about July or Auguft, propagates itfelf by fuckers, which it makes from the root, fhould be planted in light rich earth, and fhould be treated as a tender hot-houfe plant. The leaves grow frequently to the length of two feet, or more; forming the appearance of a large fan; the flower-tlem proceeding from nearly the centre. The flowers furpafs, in delicacy and beauty of pencilling, any of this very handforme tribe, and are as transitory as beautiful, their duration being but of fix hours, at moft. It feldom happens that more than one flower is open at a time; but the plant from which our drawing was made, in 1797, at the Right Hon. the Marquis of Blandford's, then refident at Bill Hill, Berks, was in the higheft perfection we have ever hitherto feen it.









PLATE CCLVL

IXIA MACULATA. Var. minor, flore

purpureo.

Spotted-flowered Ixia.

Small I'ar. with a purple flower.

CLASS III. ORDER L

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, patens, æqualis. Stigmata tria, erectiufculo-patula.

BLOSSOM fix divisions, fpreading, equal. Summits three, between upright and fpreading.

SPECIFIC CHARACTER.

Ixia foliis enfiformibus, glabris, fcapo duplo brevioribus; floribus alternis, fub-fpicatis, minoribus, purpureis; petalis bafi obfcuris, ovatis, concavis; ftigmatibus bifidis.

Ixia with fword-fhaped leaves, fmooth, twice as fhort as the flower-ftem; flowers alternate, rather fpiked, fmaller, and purple; petals dark at the bafe, egg-fhaped, concave; fummits two-cleft.

REFERENCE TO THE PLATE.

1. The Empalement.

2. A Flower cut and fpread open.

3. The Seed-bud, Chives, and Summits, one fummit magnified.

THIS variety of Ixia bloffoms about June; and, like the reft of this species, continues in flower near a month. It is one of the hardieft, and certaineft blowers, amongst the whole genus, and propagates freely; no particular treatment is neceffary for it, but what has been often repeated for the management of these plants.



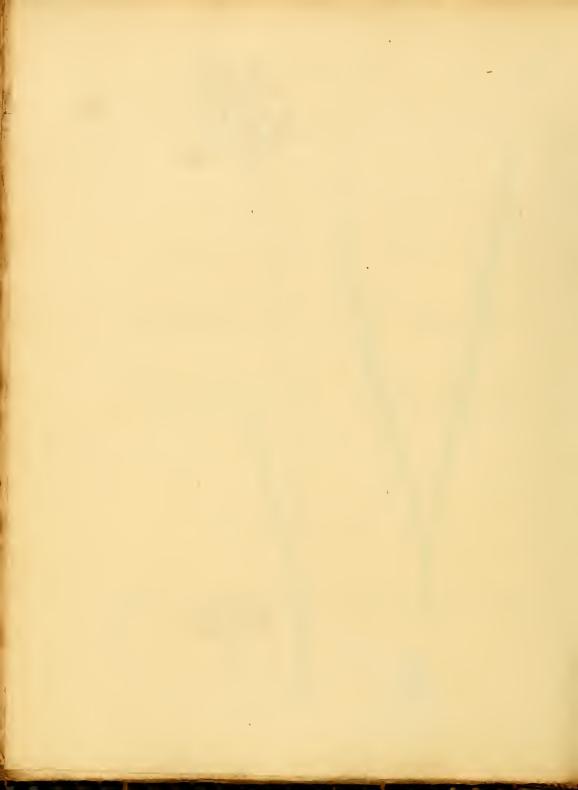




PLATE CCLVII.

FALKIA REPENS. Creeping Falkia.

CLASS V. ORDER II. PENTANDRIA DIGYNIA. Five Chives. Two Pointals.

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, fub-inflatum, corolla duplo brevius, quinquangulatum, quinquepartitum; angulis medio dilatatis, comprefiis extantibus; laciniis ovatis, acutis.
- COROLLA monopetala, campanulata, crenatodecem-partita; limbo patente.
- STAMINA Filamenta quinque, filiformia, tubo corollæ inferta, erecta, inæqualia, corolla breviora. Antheræ ovatæ, compreffæ.
- PISTILLA. Germen quatuor, fupera, glabra. Styli duo, capillares, divaricati, longitudine corollæ. Stigmata orbiculata, lanata.
- PERICARPIUM nullum. SEMINA quatuor, globofa, arillata, in fundo calycis.

- ENFALEMENT. Cup one leaf, a little inflated, fhorter by half than the bloffom, five-cornered, five-parted; the angles widened in the middle, flattened, flanding out; fegments egg-fhaped, pointed.
- BLOSSON one-petal, bell-fihaped, ten-parted by fcollops; border fpreading. CHIVES. Threads five, hair like, inferted into
- Chives. Threads five, hair like, inferted into the tube of the bloffom, erect, unequal, fhorter than the bloffom. Tips egg-fhaped, flattened.
- POINTALS. Seed-buds four, above, fmooth. Shafts two, hair-like, fraddling, the length of the bloftom. Summits orbicular, woolly. SEED-VESSEL none.
- SEEDS four, globular, covered by a coat, at the bottom of the cup.

SPECIFIC CHARACTER.

Falkia foliis cordatis, petiolis longifiimis; caule repente.

Falkia with heart-fhaped leaves, and very long foot-ftalks; creeping ftem.

REFERENCE TO THE PLATE.

1. The Cup.

- 2. A Bloffom fpread open, with the chives in their place.
- 3. A Chive magnified.
- 4. The Pointals, natural fize.
- 5. The fame, magnified.

This pretty little plant was firft found by Maffon and Thunberg, when on their journey together in the interior of the country of the Cape of Good Hope, and was named by Thunberg after Proteflor Falk of Peterfburgh. It was introduced to the Kew gardens in the year 1774. Much as it refembles Convolvulus, it fill has a greater affinity to Nolana in all its outward parts, but efpecially in the cup of the flower, and the fituation and character of the feeds. Although the plant is not thrubby, the ftems, which are wiry, do not die down in winter, but take root, if laid clofe to the earth. It is encreafed by parting the roots in May; thould be planted in fandy loam, and kept in the green-houfe, where it will blotfom in July or Auguft. Our figure is from a plant which flowered in the collection of J. Vere, Efq. Kenfington Gore.

It is rather fingular that the indefatigable, and generally accurate, Willdenow, fhould have continued this plant in the fixth clafs, when he had fuch authority, as may be found, page 325, Vol. I, in the Catalogue of the Kew Garden (where it unquefinably has flowered) for the removal of it to its proper one, the fifth. It is true, he had reafon to fuppofe, that no man would be rath enough to form a new Genus, without a due examination of the plant, on which he grounds his authority; and that, as Thunberg had discovered and named it, his authority was fufficient, and of greater weight than any other. But, unfortunately, in this inflance, for the tranfcriber, the defcriber has been miftaken, and has led his followers into error. Indeed, the whole plant in its habit and charafter has fo little affinity to any hexandrous genus, that, although Thunberg might have found a fingle flower, or even a whole plant, whofe flowers from four different plants), in fuch a cafe, as a botanift, he ought to have looked farther, before he made fo violent a decifion; and Willdenow ought to have taken it for granted the alteration would not have been made, but upon due confideration.







PLATE CCLVIII.

BANKSIA PRÆMORSA.

Bitten-ended-leaved Bankfia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Receptaculum commune elongatum, fquamofum. Corolla tetra-petala. Stamina limbo inferta. Capfula bivalvis, difperma, interjecto feminibus ditfepimento mobili. Semina alata.

- Common Receptacle elongated, fcaly. Bloffom of four petals. Chives inferted into the limb of the bloffom. Capfule two valves, two feeds, and a moveable partition between them. Seeds winged.
 - See BANKSIA SERRATA, Pl. LXXXII. Vol. II.

SPECIFIC CHARACTER.

Bankfia foliis cuneatis præmorfis, ferratis, fubtus albo-punctatis, fupra glabris; floribus externè purpureis. Bankfia with wedge-fhaped leaves, appearing bitten at the ends, fawed, dotted with white on the under part, fmooth on the upper; flowers purple on the outfide.

REFERENCE TO THE PLATE.

1. A Flower not yet expanded, with the germ at the bafe.

- 2. The fame open, the extremities of one of the petals magnified, to thew the fituation of the Chive in its place.
- 3. The Pointal complete, the fummit magnified.

THE first plants which were feen of this plant in England, were raifed from feeds, at the Royal Gardens, Kew, in 1788. It is a handfome growing thrub, and the plant from which our figure was made had grown to the height of feven feet; it having been planted in the confervatory of the Clapham collection, where it flowered, for the first time, this year, in July, continuing in high beauty near two months. It is a plant of most difficult increafe, rarely that it is to be propagated by cuttings; and the wood rots, if laid into the earth. A light foil, of fandy peat, and a fmall portion of fandy loam, appears most congenial to its growth. There are hopes, from the perfect flate of the cones, that ripe feeds may be procured in this country.



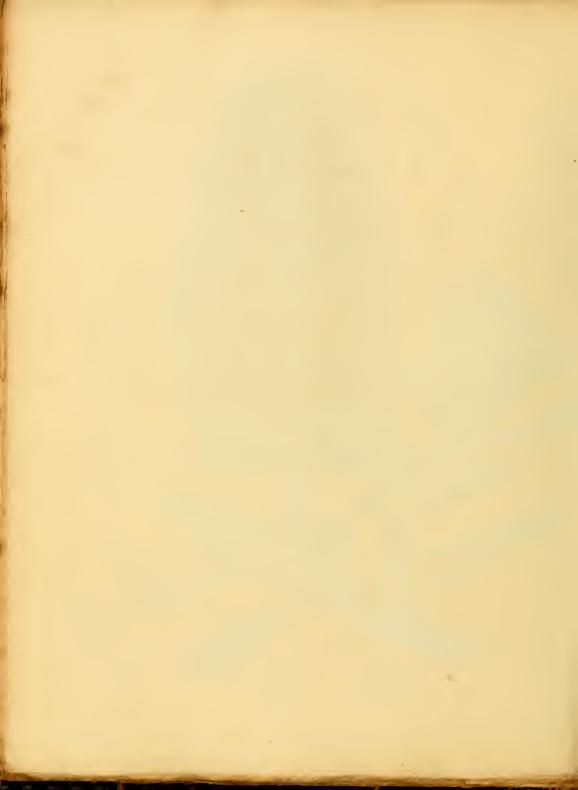




PLATE CCLIX. GERANIUM PILOSUM.

Hairy Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus roftratus, 5-coccus. ONE POINTAL. Five fummits. Fruit furnished with long awns, five dry berries. See GERANIUM GRANDIFLORUM. PL XII. VOL I.

SPECIFIC CHARACTER.

Geranium foliis pilofis, pinnatis; foliolis profundè laciniatis, acutis; umbella 4-6 flora; pedunculis calycibuíque pilofis; floribus pentandris; radice tuberofa. Geranium with hairy winged leaves; leaflets deeply torn, and tharp pointed; umbel from 4 to 6 flowers; foot-ftalks of the flowers and cups hairy; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement cut open, to fliew its tubular character.
- 2. The Chives and Pointal.
- 3. The Chives cut open, and magnified.
- 4. The Pointal, with the five Glands, or Honey-cups, at the bafe.
- 5. The fame, magnified.

This very pretty Geranium was introduced to the Clapham collection, in the year 1601, by Mr. Niven, from the Cape of Good Hope. It is as hardy as any of the family, which have tuberous roots; may be increased by cutting a portion off the old root, in fpring, and giving it the heat of the hot house, at that feason of the year. It rarely produces ripe feed; fo fays Mr. Allen the manager of the collection; and he recommends the planting of it in fandy peat earth.



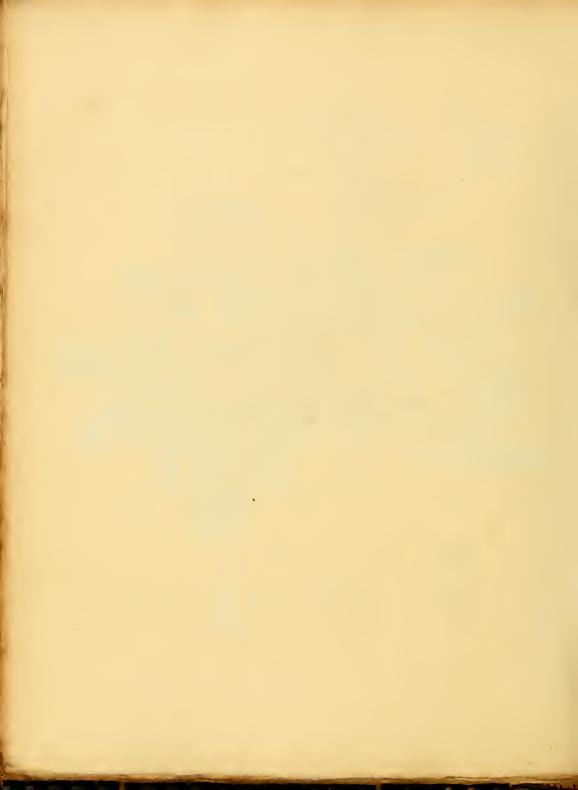




PLATE CCLX. ORNITHOGALUM ODORATUM.

Sweet-scented Star of Bethlehem.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.

- COROLLA. Petala fex, lanceolata, infra medium erecta, fupra medium patentia, perfiftentia, colorem demittentia.
- STAMINA. Filamenta fex, erecta, alterna bafi dilatata, corolla breviora. Antheræ fimplices.
- PISTILLUM. Germen angulatum. Stylus fubulatus, perfiftens. Stigma obtufum.
- PERICARPIUM. Capfula fubrotunda, angulata, trilocularis, trivalvis.
- SEMINA plura, fubrotunda.
- OBS. Filamenta in aliis plana, erecta, alterna apice trifido, media lacinia antherarum fufinente; in aliis alterna, fimplicia.

- EMPALEMENT none. BLOSSOM. Petals fix, lance-fhaped, below the middle upright, above the middle fpreading,
- remaining, lofing their colour. CHIVES. Six threads upright, each alternate one widening at the bafe, fhorter than the bloffom. Tips fimple.
- POINTAL. Seed-bud angular. Shaft awl-fhaped, remaining. Summit blunt.
- SEED-VESSEL. Capfule roundifh, angular, threecelled, three-valved.
- SEEDS many, roundifh.
- OBS. The threads in fome are flat and upright, the alternate ones trifid at top, the middle fegment fupporting the tip; in others the alternate ones are fimple.

SPECIFIC CHARACTER.

- Ornithogalum racemo elongato; filamentis fubulatis; petalis lanceolatis, obtufis, apice callofo-inflexis; foliis depreffis, linearibus, planis.
- Star of Bethlehem with the bunch of flowers lengthened; threads awl-fhaped; petals lance-fhaped, blunt, thick, and turned inwards at the point; leaves bent downward, linear, and fmooth.

REFERENCE TO THE PLATE.

- 1. A Flower prop.
- 2. The Chives and Pointal, the petals being removed.
- 3. The Pointal.
- 4. The fame, magnified.

THIS fpecies of Star of Bethlehem, from the Cape of Good Hope, is a rival in fragrance to the greatflowered, or Arabian fpecies, to which it is much affined in every part but the colour of the bloffom; which, in this, is yellowifh, and in that, it is white with a dark eye. It is rather a delicate bulb; and to make it flower, fhould be kept in the hot-houfe, where, it will bloffom about May or June. Our drawing was made from a plant which had been received, from the Cape, by Mr. Hibbert, the preceding year, 1SCO; and we much fear, what has been faid of the great-flowered fpecies, may be confidered as referential alfo to this; viz. that the bulbs never flower, but the first year after importation. We have not been able to trace the appearance of a flower, from any of the bulbs, this year, which has led us to this conjecture; indeed, many of the fpecies of this genus have this character; more particularly, thofe from Africa.

It has flowered at Vienna, and has been figured by Professor Jacquin in his Ic. Plant. rar. vol. ii. tab. 432.

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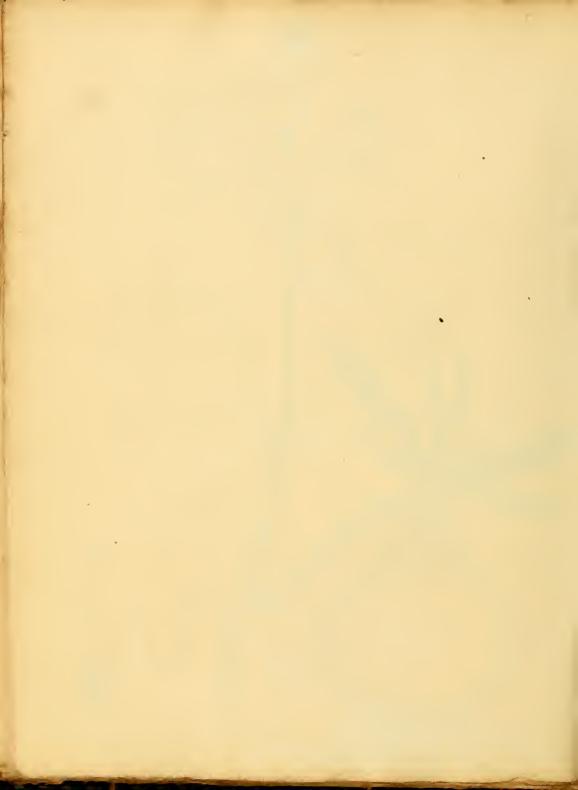




PLATE CCLXI. CAMERARIA LATIFOLIA. Baftard Mangeneel.

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

GENERIC CHARACTER.

- CALYX. Ferianthium quinquefidum, acutum, conniveus, minimum.
- COROLLA monopetala, infundibuliformis; tubus cylindricus, longus, bafi apiceque ventricofus; limbus quinquepartitus, planus; laciniis lanccolatis, obliquis.
- STAMINA. Filamenta quinque, minima, e medio tubi. Antheræ conniventes, filo longo terminatæ.
- PISTILLUM. Germina duo, cum appendicibus ad latera. Stylus cylindricus. Stigma capitatum, apice acutum, bifidum.
- PERICARPIUM. Folliculi duo, horizontaliter reflexi, oblongi, juxta latera bafeos utrinque lobum emittentes, uniloculares, univalves.
- SEMINA numerofa, ovata, membranæ majori ovatæ ad bafin infertæ, imbricata.

- EMPALEMENT. Cup five-cleft, pointed, converging, very fmall.
- BLOSSOM one-petal, funnel-fhaped; tube cylindrical, long, bellied out at the bafe and top, border five-parted, flat; fegments lancefhaped, oblique.
- CHIVES. Threads five, very fmall from the middle of the tube. Tips converging, terminated by a long thread.
- POINTAL. Seed-buds two, with lateral appendages. Shaft cylindrical. Summit headed, pointed at top, and two-cleft.
- SEED-VESSEL. Seed-pods two, horizontally reflexed, oblong, fending forth a lobe each way near the fide of the bafe, one-celled, one-valved.
- SEEDS numerous, egg-fhaped, inferted on the larger egg-fhaped membrane at the bafe, tiled.

SPECIFIC CHARACTER.

Cameraria foliis ovatis, nitidis, acuminatis, parallelo-coftatis; floribus corymbofis, terminalibus. Baftard Mangeneel with egg-fhaped leaves, fhining, tapered, and ribbed transversely; flowers grow in broad-topped spikes, terminal.

REFERENCE TO THE PLATE.

- 1. A Flower cut open, magnified, with the Chives in their place.
- 2. The Cup, magnified.
- 3. The Pointal and Cup, the fummit magnified.
- 4. One of the Seed-pods, natural fize.

 $T_{\rm HE}$ genus Cameraria, feems to have been rather haftily taken up by Plumier, as a diffinft genus from Nerium; for certainly, the fmall difference in the fhape of the feed-pod, in which confifts the whole diffinftive charafter of this genus, can hardly be thought of fufficient moment to that end. As we have found it, we leave it; but could not refrain from the foregoing remark, as it appears fo fingular, that amongft fo many who have published the plant, not one should have difference the fuer rounding neflaty, or honey-cup, to the mouth of the bloffom, and the long threads at the end of the tips; two fuch very powerful features, which diffinguish Neuium, from all the refl of this natural order.

It is a native of Jamaica, Cuba, and Domingo; grows to the height of thirty feet, and is confidered as a timber tree in those iflands. The whole plant is full of a milky juice, fimilar to what is found in most plants of this natural order. In England, it must be treated as a hot house plant; may be increased by cuttings; flowers in August, and should be planted in rich carth.

Our figure was taken from a plant in the Stepney collection, belonging to Thos. Evans, Efq.







PLATE CCLXII.

XERANTHEMUM SPIRALE.

Spiral-leaved Everlasting-Flower.

CLASS XIX. ORDER II.

SVNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals:

ESSENTIAL GENERIC CHARACTER.

Receptaculum poleacem Pappus setaceus. Ca- || Leceptacle chaffy. Feather briftly. Empalely x imbricatus, radiatus; milio colorato.

ment tiled, rayed: the ray coloured SeeX FRANTHENUM SPECIOCISSI MUM, Vol. T. PI. LT. 1

SPECIFIC CHARACTER.

Xeranthemum fuliis spimliter-imbricatis carinatis, fub. obliquis; floribus folitariis, maxi-

Everlasting Mower with spirally-tiled leaves, keeled, rather obliques flowers fulitary, very large.

REFERENCE TO THE PLATE.

1. An outer fcale of the Empalement,

2. An Hermaphrodite Floret, with the Feather of the Seed .

3. A Female Floret, a little magnified.

4. The Pointal, magnified .

This species of Everlassing Flower is very common near Cape Town; yet, till the year 1800, it has never been introduced to Britain. Montague Burgoyne, Elq. of Mark Hall, Effex, was the furst to procure feeds of it, and it has flowered with him, this year 1802. Our drawing was made in July, but the flower lafts near three months; it is the largeft of the genus we have as yet feen, and certainly one of the molt bequiful . All the species, from the Cape, are very liable to rot from damps, in the winter; they fnould be kept on an airy, dry shelf, as near the glass as possible, during the foggy months. They, in general, ripen feeds with us, but are with difficulty increased by cuttings; which should be made early in spring, planted in pots of sand, and kept quite dry for some time after they are planted. The grown plants thrive best in a very bondy post earth .







PLATE CCLXIII.

VACCINIUM STAMINIUM.

Green-wooded Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX fuperus. Corolla monopetala. Filamenta receptaĉulo inferta. Bacca quadrilocularis, polyfperma. CUP fuperior. Bloffom of one petal. Threads fixed to the receptacle. A berry with four cells and many feeds. SeeVaccinium arefostaphyllos, Vol. I. Pl. XXX.

SPECIFIC CHARACTER.

Vaccinium foliis oblongo-ovatis, acutis, integerrimis, fubtus fubglaucis; pedunculis nudis; antheris exfertis; floribus folitariis; flamina decem. Whortle berry with oblong-oval leaves, pointed, quite entire, and rather fea-green underneath; fruit-ftalks naked; tips without the bloffom; flowers folitary; ten chives.

REFERENCE TO THE PLATE.

1. A Flower complete.

2. The Chives and Pointal.

3. The Chives, Pointal, and Seed-bud, magnified.

THE fpecies here figured of Whortle-berry, according to the Kew cataloguc, was introduced, firft, from North America, to us, by Mr. William Young, in the year 1770. It is a hardy, deciduous fhrub; grows to the height of three fect; very bufly, with the flowers but thinly fcattered over it; they are white, and deeply cut in the border, which is rather inclined to fpread. It is increafed by layers; the berries feldom ripening in England. A light, fandy peat foil, with a fmall portion of loam, is the fitteft for its growth; and it acquires a higher degree of beauty, when fheltered from the fcorching rays of the fun, in fummer. Our figure was taken in June, 1801, at the nurfery of Meffrs Lee and Kennedy, from a plant which had been imported in February, the fame year, from Pennfylvania, North America.



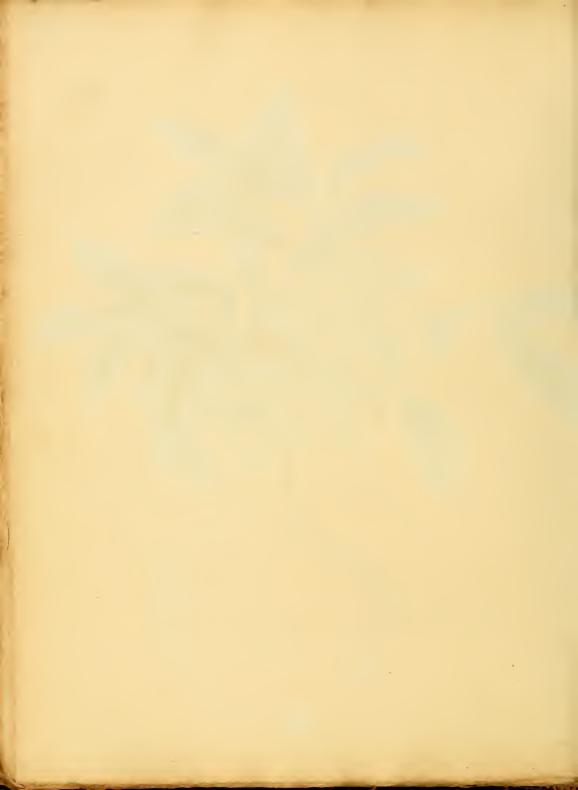




PLATE CCLXIV.

PROTEA GLOMERATA. Woolly-headed Protea.

CLASS IV. ORDER I. TETRANDRIA MONOGYNIA. Four Chives. One Pointal

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida feu 4-petala. Antheræ lineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria. BLOSSOM 4-cleft or 4 petals. Tips linear, inferted into the petals below the point. Cup proper, none. Seeds folitary. See PROTEA FORMOSA, Vol. I. Pl. XVII.

SPECIFIC CHARACTER.

Protea foliis bipinnatis, filiformibus; pedunculo communi elongato, nudo, pedicellis capitulis longioribus; corollis extus lanatis. Protea with doubly winged leaves, threadfhaped; common foot-ftalk lengthened, naked, partial foot-ftalks longer than the heads of flowers; bloffoms woolly without.

REFERENCE TO THE PLATE.

1. A Floret, natural fize.

2. The Bloffom, magnified.

3. The Pointal, natural fize, with the fummit detached, magnified.

4. A Cone, after the flowers have all fallen off.

In the year 1759, this fpecies of Protea was first raifed from feeds; received at the Hammerfmith nurfery from Vienna; they having been collected for the Emperor's gardens at Schonbrun, and from thence transmitted to Meffis. Lee and Kennedy. Many plants have fince been raifed, in different collections; and our prefent figure was made, from a fine fpecimen, in the Hibbertian collection. It is rather delicate when young, but not eafily defroyed when grown to a foot in height. It will attain to five or fix feet, and makes a very pretty appearance, when in full flower. It may be propagated by cuttings, but with difficulty, and mut be planted in light yellow loam.



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PLATE CCLXV. CYRTANTHUS OBLIQUUS. Oblique-leaved Cyrtanthus.

CLASS VI. ORDER 1. HEXANDRIA MONOGYNIA, Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum polyphyllum ; foliolis lanceolatis, perfiftentibus.

- COROLLA monopetala, clavata, curva, apice fexfida; laciniis ovato-oblongis, incurvis, concavis, tribus alternis apice glandulofis.
- STAMINA. Filamenta fex, tubo corollæ inferta, ereĉta, fubulata, corolla dimidio breviora. Antheræ fagitatæ, ereĉtæ, inclufæ.
- PISTILLUM. Germen inferum, obtufe-trigonum. Stylus filiformis, longitudine floris. Stigma obfolete-trifidum.
- PERICARPIUM. Capfula fubovata, trilocularis, trivalvis.

SEMINA plura, plana, oblonga, incumbentia.

Cyrtanthus foliis linearibus, obtufis planis, oblique flexis, floribus pendulis, tricoloratis. EMPALEMENT. Fence many-leaved; leaflets lance-fhaped, remaining.

- BLOSSOM one petal, club-fhaped, bent, fix-cleft at top; fegments oblong egg-fhaped, turned inwards and concave, the three outer ones glandular at the end.
- CHIVES. Six threads inferted into the tube of the bloffom, upright, awl-fhaped, half the length of the bloffom. Tips arrow-fhaped, upright, within the bloffom.
- POINTAL. Seed-bud beneath, obtufely threecornered. Shaft thread-thaped, the length of the flower. Summit obfcurely threecleft.
- SEED-VESSEL. Capfule nearly egg-fhaped, threecelled, three-valved.
- SEEDs many, flat, oblong, lying upon one another.

SPECIFIC CHARACTER.

Cyrtanthus with linear, obtufe leaves, flat, and bent obliquely; flowers hanging down and three-coloured.

REFERENCE TO THE PLATE.

- 1. Part of the Bulb, and the leaves of the plant in miniature.
- 2. A Flower, cut and fpread open, with the Chives in their place.
- 3. The Pointal and Seed-bud, natural fize, Summit magnified.

This moft beautiful, and rare plant, together with C. angufifolius, (the other fpecies) were introduced, in the year 1774, to the Kew Gardens, by Mr. F. Maffon, from the Cape of Good Hope. Monf. L'Heritier, when in England, procured drawings of both fpecies, and figured them in his Sertum Anglicum, tab. 15 and 16, under the names of Amaryllis cylindracea, and A. umbrella: but, as we have had formerly occafion to mention our objections, in following that gentleman in his alterations of accepted Genera, in this country; we have, in the prefent inflauce, chofe rather the authority of Martyn, Curtis, Willdenow, &c. in preference; who all have followed the Kew Catalogue in the name of this Genus. It is true, Thuuberg, in his Prodromus Plantarum Capenfium, P. 1. p. 50, has it fill under the Genus, Crinum; and, as Crinum pendulum, our prefent fubject, was known for many years. It is a very fearce plant, and is to be found but in few collections; the increafe being only from the root, and the importation of the bubbs has been but feldom. The feeds do not come to maturity with us, of this fpecies; although thofe of the C. angufifolius are conftantly perfected. It muft be treated as a dry flove plant, or kept on a thelf in the hot-houfe; fhould be planted in fandy loam, and have plenty of room in the pot. Flowers in July and Augufi.

From the choice collection of Joseph Cowper, Efq. of Clapton, we were obligingly favoured with the plant, from which this figure was taken.







PLATE CCLXVI.

PLATYLOBIUM OVATUM.

. Oval-leaved Flat-Pea.



DIADELPHIA DECANDRIA. Chives in two Sets. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX campanulatus, quinquefidus; laciniis duabus fupremis maximis, obtufis. Stamina omnia coalita. Legumen pedicillatum, compreffum, dorfo alatum, polyfpermum.

See PLATYLOBIUM SCOLOPENDRUM. Pl. CXCI. Vol. III.

SPECIFIC CHARACTER.

Platylobium foliis ovatis, glaberrimis, diftichis; floribus folitariis, axillaribus; ramis teretibus. Flat-Pea with egg-fhaped leaves, very fmooth and pointing oppofite ways; flowers grow folitary from the infertion of the leaves; branches cylinder-fhaped.

REFERENCE TO THE PLATE.

- 1. The Empalement of the Flower.
- 2. The Standard, or upper petal of the bloffom.
- 3. One of the Wings, or fide petals of the fame.
- 4. The two lower Petals, or Keel of the bloffom.
- 5. The Chives, magnified.
- 6. The Seed-bud, magnified.

This fpecies of Flat-Pea was brought from New South Wales, at the fame time as P. fcolopendrum, and P. lanceolatum, to which laft it has much affinity; but, we think, polfeffes a fufficient number of differing characters to conflitute a diffindt fpecies. It has not as yet been increafed, we believe, in Britain; any attempt, to that end, has hitherto proved abortive; from which circumfance the plants are at prefent fcarce, and are to be found in few collections. The fame treatment to preferve, and render the plant flourifhing, is required for this, as for the other fpecies. Our Drawing was made in 1801, at the Nurfery of Meffrs, Lee and Kennedy, Hammerfmith, who first introduced it.

CUP bell-fhaped, five-cleft; the two upper fegments very large and obtufe. The Chives all united. Pod on a foot-ftalk, comprefied, winged along the back, many feeded.



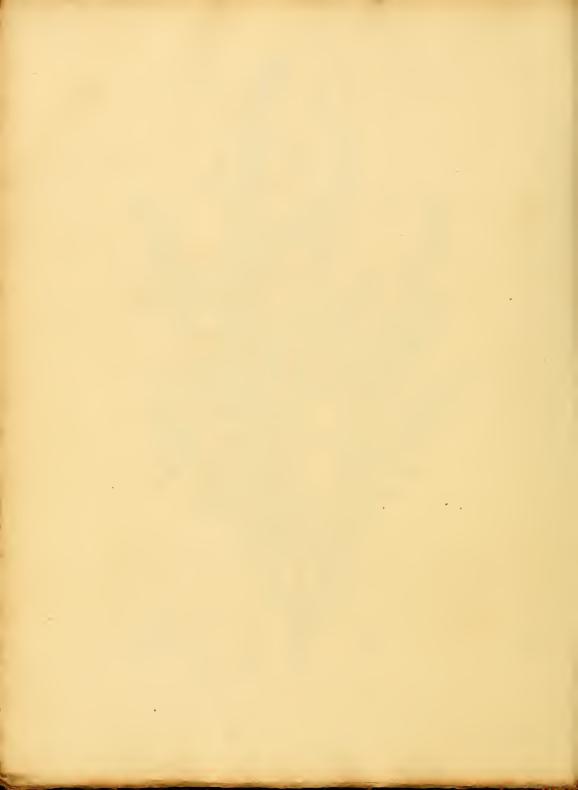




PLATE CCLXVII. JATROPHA PANDURÆFOLIA. Fiddle-leaved Phyfic-Nut.

CLASS XXI. ORDER VIII.

MONOECIA MONADELPIIIA. Chives and Pointals feparate. Threads united.

GENERIC CHARACTER.

Masculi flores.

CALYX. Perianthium vix manifestum.

- COBOLLA monopetala infundibuliformis; tubus breviflimus; limbus quinquepartitus, laciniis fubrotundis, patentibus, convexis, fubtus concavis.
- STAMINA. Filamenta decem, fubulata, in medio approximata, quinque alterna breviora, erecta, bafi connexa. Antheræ fubrotundæ, verfatiles.
- PISTILLUM. Rudimentum debile in fundo floris latet.
 - Feminei flores in eadem umbella cum Mafculis.

CALYX nullus.

COROLLA pentapetala, rofacea.

- PISTILLUM. Germen fubrotundum, trifuleatum.
- Styli tres, bifdi. Stigmata fimplicia. PERICARPIUM. Capfula fubrotunda, tricocca, trilocularis; loculis bivalvibus.

SEMINA folitaria, fubrotunda.

Male flowers.

EMPALEMENT. Cup fcarcely perceptible.

- ELOSSOM one petal, funnel-fhaped; tube very thort ; border five-patted ; fegments roundifh, fpreading, convex, concave beneath.
- CHIVES. Ten threads awl-fhaped, clofe together in the middle, the five alternate ones fhorter, upright, connected at the bafe. Tips roundifh, verfatile.
- POINTAL. A weak rudiment lies hid in the bottom of the flower.
- Female flowers in the fame umbel with the males.

EMPALEMENT none.

- BLOSSOM five-petalled, rofaccous.
- POINTAL. Seed-bud roundifh, three furrowed. Three flafts, two-cleft. Summits fimple.
- SEED-VESSEL. Capfule roundifh, three-feeded, three celled; cells with two valves.

SEEDs folitary, roundifh.

SPECIFIC CHARACTER.

Jatropha calyculata; foliis panduræformibus, apice acutis, bafi inequaliter acutè-lobatis; floribus atro coccineis.

Phyfic-Nut with a flower cup; fiddle-fhaped leaves, fharp-pointed at the end, and unequally fharp-lobed at the bafe; flowers deep crimfon.

REFERENCE TO THE PLATE.

- 1. The Cup and Pointal of a female flower.
- 2. The Cup and Chives of a male flower.
- 3. The Pointal and Seed-bud of a female flower, without the cup.

This plant, a native of the Ifland of Cuba, was imported from thence, by Mr. J. Frafer, King's Road, Chelfea, in the year 1801. It is, unquefitionably, as handfome a plant as any at prefent culti-vated in our hot-houfes, and its continuing to produce fresh unbels of flowers, during at leaft nine months of the year, renders it, perhaps, the molt definable. It grows to the height of near three feet, producing but few branches. The leaves are extremely irregular in their form, and, when the plant is in a fickly flate, the older ones are fubject to be flightly blotched, on the under fide. Few tropical plants that thrive with fo little heat, or care; neverthelefs, we have not any hopes, of its ever becoming a proper fubject for the green-houfe; but as yet our experience on that point will not permit us to decide upon it. It fhould be planted in a mixture of leaf mould, rotten dung, and loam; and may be propagated by entrings. From a plant at the Hammerfmith nurfery, ripe feeds have been procured this year; they have the exact appearance of the feeds of the leffer Palma Chrifti, but rather fmaller in fize and have the fame oily character. Indeed, there is fo little difference between fome fpecies of the Genus Ricinus, and Jatrophá, that botanifts have been puzzled where to place them. Our drawing was made from a plant in the collection of the Right Hon, the Marquis of Blandford, White Knights, Berkshire.



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PLATE CCLXVIII.

GLADIOLUS PLICATUS.

Plaited-leaved Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. Stamina adfeendentia. Bloffom fixdivided, gaping. Chives afcending. See GLADIOLUS ROSEUS, Pl.XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis enfiformibus, plicatis, villofis; corollis regularibus; fpatha trivalvi; fcapo laterali. Gladiolus with fword-fhaped leaves, plaited and hairy; bioffoms regular; fheath threevalved; flower-ftem lateral.

REFERENCE TO THE PLATE.

1. The three-valved Sheath.

2. A Bloffom fpread open, to fhew the fituation and direction of Tips.

3. The Pointal, and Seed-bud, one of the Summits magnified.

THE varieties, generally comprehended as fuch, of this fpecies of Gladiolus, are extended, in number, beyond any others with which we are, as yet, acquainted, of this extensive genus. Already, we have drawings of 22; and many more, certainly, there are, even in this kingdom; but we fhall content ourfelves with figuring, in the Bot. Rep. 3 or 4, of the moft curious. One of the varieties of this plant, has been in cultivation with us fince the year 1757, when it was raifed by Mr. Miller from Cape feeds. The one reprefented in our prefent figure, was received, from Holland, in the year 1794, by Meffrs. Lee and Kennedy, Hammerfmith; it is one of the hardieft, and fureft flowering varieties of the fpecies; for there are but few of them which bloffom freely. The bubbs fhould be planted in fandy peat, about October, and taken into the hot-houfe, or placed on a bot-bed, in January, to encourage a rapid and early growth; by which means, they are more frequently induced to throw out their flower ftems the beginning of April, which otherwife, often prove abortive. The roots fhould not be removed from the pots, till the leaves are fomewhat decayed.

This is the Glad. plicatus of Linn. Sp. Pl. p. 53; Thunb. Diff. de Glad. n. 24; Jac. Ic. Rar. 2, t. 237; of the Kew Cat. Vol. I. p. 63; Martyn's Miller, art. Glad. 5. and of Willdenow's Spe. Plant. T. 1. p. 220; yet, we cannot refrain from joining in opinion with the late Mr. Curtis that it approaches as near Ixia, as Gladiolus; for the Ixia rubro cyanea of the Bot. Mag. is but a variety of this fpecies. But we cannot fo readily *laboonify* our fenfes, with trifling changes, as to think, with a modern reforming author, that a new genus was neceffary, in this inflance, to reflify this part of the Species Plantarum, of the *incompetent 1 Linnaws*.







PLATE CCLXIX.

GERANIUM LACINIATUM.

Var. licolor.

Ragged-leaved Geranium.

Two coloured-flower Var.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus; pentacoccus. ONE POINTAL. Five Summits. FRUIT furnithed with long awns; five dry berries.

SPECIFIC CHARACTER.

Geranium foliis radicalibus integris laciniatifque; laciniis acutis; petiolis filiformibus; calycibus nonophyllis; flaminibus quinque fertilibus; radice tuberofa; floribus bicoloribus. Geranium with the leaves growing from the root entire and jagged; fegments pointed; foot-ftalks thread-fhaped; cups one-leaved; five fertile chives; root tuberous; flowers two-coloured.

REFERENCE TO THE PLATE.

1. The Empalement, a little magnified.

2. Chives, natural fize.

- 3. The fame, magnified and fpread open.
- 4. The Pointal and feed-bud, magnified.

This very handfome variety of the ragged-leaved geranium, is but little different from the purpleflowered Var. figured No. CCIV. of this work, Vol. III, except in the colour of the flowers, and that the leaves are rather more cut. It was introduced the fame year to the Hibbertian collection, flowers in the fame month and requires the fame treatment, as the above variety.





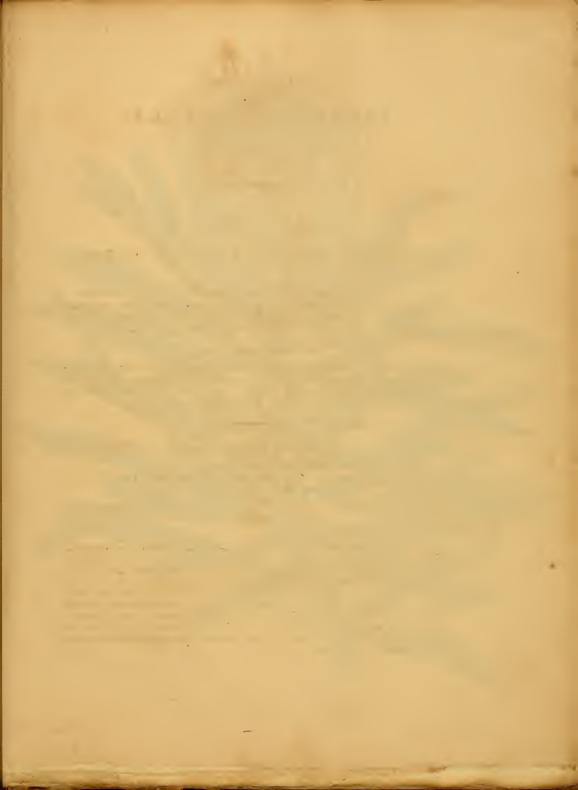


PLATE CCLXX.

PROTEA PULCHELLA.

Waved-leaved Protea.

CLASS IV. ORDER 1.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida feu 4-petala. Antheræ lineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria. BLO SSON 4-cleft or four petalled. Tips linear, inferted into the petals below the point. Cup proper, none. Seeds folitary.

SPECIFIC CHARACTER.

Protea foliis lanceolatis, undulatis, rubro marginatis, pilofis; fquamis calycis tricoloratis; capitulo erecto, terminali. Protea with lance-fhaped leaves, waved, margined with red and hairy; fcales of the cup three-coloured; flower head upright, and terminal.

REFERENCE TO THE PLATE.

1. A Floret complete with the feed-bud.

- 2. The four Petals of the fame, with the Tips fhewn at their ends.
- 3. Pointal and Seed-bud.

THIS Protea, from the Cape of Good Hope, merits the attention of thole who with to beautify their collections, with diffinguifhed objects; as, it flowers the third year from the feed, and is equally hand-fome with Protea mellifera. The cone for two months before it opens is extremely beautiful, and it is in flower nearly one more; and this, at a time when the plant has, fcarcely, attained a foot in height. It is not inclined to branch till it has flowered, but from the lower part of the cone the branches begin to extend. The leaves from their hairinefs have a whitift appearance, are finely edged with a light pink, and are flightly waved. It is propagated by cuttings, flould be planted in light fandy loam, and flowers in September. Our drawing was made from a plant in the Hibbertian collection; to which it was introduced by Mr. Niven, in the year 1799, amongft the firft feeds which were feet, by him, from the Cape.







PLATE CCLXXI. ASCLEPIAS GIGANTEA. Gigantic Swallow-wort, or Auricula tree.

CLASS V. PENTANDRIA DIGYNIA.

CALYX. Perianthium quinquefidum, acutum, parvum, perfiftens. COROLLA. Monopetala, plana vel reflexa, quin-

quepartita; laciniis ovato-acuminatis, levitèr cum fole flexis.

Nectaria quinque, tubo filamentorum infra antheras adnaia, carnofa feu cucullata, e fundo corniculum acutum introrfum flexum exferentia.

- STAMINA. Filamenta quinque, in tubum, bafi ventricofum, connata. Antheræ oblongæ, erectæ, biloculares, membrana inflexa, ftigmati incumbente terminatæ, utrinque ala revería deoríum lateficiente, fullen con-natus in corpuicula decem, obverfe-lan-ceolata, plana, in loculis antheræ depen-dentia e filis brevibus, fæpe flexuofis; quæ per paria annexa funt tuberculis quinque, cartilagineis, didymis, angulis ftigmatis, inter antheras, adhærentibus.
- PISTILLA. Germina duo, oblonga, acuminata. Styli duo, fubulati. Stigma utrifque commune, magnum, craffum, pentagonum, fupra apicibus antherarum tectum, medio umbilicatum.
- PERICARPIUM. Folliculi duo, magni, oblongi, acuminati, ventricofi, uniloculares, univalves.
- SENINA numerofa, imbricata, pappo coronata. Receptaculum membranaceum, liberum.

Asclepias foliis candidis, obovato-oblongis; petiolis brevisiimis; laciniis corollæ reflexis.

ORDER II.

Five Chives. Two Pointals.

GENERIC CHARACTER.

- EMPALEMENT. Cup five cleft, fharp, fmall, remaining.
- BLOSSOM one petal flat or reflexed, five-parted ; divisions pointedly egg-fhaped, flightly bending with the fun.

Honey-cups five, growing to the tube of the threads below the tips, flethy or hooded, protruding a fharp horn from the bottom which bends inwards.

- CHIVES. Five threads collected into a tube fwelling at the bate. Tips oblong, upright, two-celled, terminated by an inflex membrane laying on the fummit, having a reverfed wing on cach fide, growing broader downwards. The pollen is collected into ten fmall bodies inverfely lance-fhaped, flat, hanging down into the cells of the tips by thort threads, often flexible, which are fixed by pairs to five fkinny twin tubercules, adhering to the angles of the fummit, between .he tips,
- POINTALS. Seed-buds two, oblong, tapered. Shafts two, awl-fhaped. Summit common to both, large, thick, five-cornered, covered at top by the ends of the tips, umbilicate in the middle.
- SEED-VESSEL. Two pods, large, oblong, tapered, bellied, one celled, one valved.
- SEEDS numerous, tiled, crowned with a feather. Receptacle tkinny, free.

SPECIFIC CHARACTER.

Swallow-wort with whitened leaves, between inverfely egg-fhaped and oblong ; foot-flalks very thort; fegments of the bloffom reflexed.

REFERENCE TO THE PLATE.

I. The Emplement.

- 2. The Chives and Pointal, natural fize.
- 3. The Chives and Pointal, without the five outer feales or heney-cups, magnified.
- 4. One of the outer fcales, magnified.
- 5. One of the inner, upright fcales, which furround the feed-buds, magnified.

6. The Seed-buds, Shafts and Summit, with the chives attached to the fummit, magnified.

THE Gigantic Swallow-wort, a native of the East Indies, is a very tender hot-houfe plant; is very fubject to lofe its leaves in winter, and requires the affiltance of the bark-bed to keep it in perfection. In the Kew Catalogue, it is faid to have been cultivated fo long ago as the year 1090, at the Royal Gardens, Hampton Court. To render it vigorous and flourifluing, it fhould be planted in rich earth; composed of, one half rotten dung, and the other leaf mould and loam; and watered but sparingly in winter. It is feldom propagated but from feeds, which are frequently procured from the Eaff, and as often from the Weft Indies. In the illand of Jamaica, it is known by the name of the Auricula tree, where it attains to the height of fix or feven feet. Our drawing was taken from a moft magnificent fpccimen, obligingly fent us by Mrs. Methuen, (of which our figure reprefents but a finall fide bunch), meafuring above a foot in diameter. The plant, we believe the finelt in England, is in the collection of Paul Methuen, Efq. Cortham, Wilts.

Much as we are inclined to tread in the beaten path of our predeceffors, and, more particularly, that of the greatest luminary of this intricate science, Linnæus, yet can we, but with regret, forbear an alteration we think fo neceffary, in the claffification of this genus. That the clafs Gynandria may, or ought to be excluded from the twenty-four, we fhall not be forward to give our fuffrage, in conjunction with fome modern reformers; and, as they term themfelves, improvers upon the Linnæan f_{j} ftem; but, whill it is retained, this genus has fironger claims, in our opinion, upon it, than any which has hitherto been thrown to it. Indeed we had to claffed it, upon fuch grounds had formed its generic character; and had hopes, no one would have diffuted our polition as just, upon an in-fpection of the diffections annexed to the figure. Yet fearing, by fome, it might be confidered as a perplexing innovation; for innovation in all cafes is certainly more or lefs fo, the genus having patted the fcrutinifing ordeal of fo many botanifts; we have, reluctantly, for the prefent, given up what, neverthelefs, we thall confider as neceffary for fome bolder hand than ourfelves to undertake.







PLATE CCLXXII. EMBOTHRIUM LINEARE.

Narrow-leaved Embothrium.

CLASS IV. ORDER L

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Corolla tetrapetala. Stamina limbo petalorum inferta. Folliculus polyfpermus. Semina alata. EMPALEMENT none. Bloffom four-petalled. Chives inferted into the limb of the petals. A one-celled pod many feeded. Seeds winged.

See EMBOTHRIUM SERICEUM, Pl. C. Vol. II.

SPECIFIC CHARACTER.

Embothrium foliis linearibus, fubtomentofis, uninerviis; florum racemis axillaribus; corollis albis. Semina nuda. Embothrium with linear leaves rather downy, one-nerved; the fmall heads of flowers grow from the infertion of the leaves; the bloffoms white. Seeds naked.

REFERENCE TO THE PLATE.

1. A Flower, complete.

- 2. One of the petals, with the chive at the end.
- 3. The Seed-bud, Shaft, and Summit, magnified.
- 4. A ripe Seed-pod burft and empty.

5. A ripe Seed.

This fpecies of Embothrium was introduced to Britain at the fame time as the Silky Embothrium, of our fecond volume, plate 100; and has been confidered but as a third variety of it, by Dr. Smith, in his Firft Number of New Holland Botany, page 23. But the total difference in the habit of the plant, except in the fhape of the flowers, has induced us to give it a fpecific title. It grows to the height of five or fix feet, not very busy; abounding through the whole year in a fucceflion of flowers, which proceed from the young branches; ripe feed being produced upon the plant at the fame time. It fhould be planted in light fandy peat, and kept in a dry part of the green-houfe, as the younger branches are apt to fuffer from damps in the months of December and January. Our drawing was made at the Hammerfmith nurfury, in the year 1500, about the month of July.



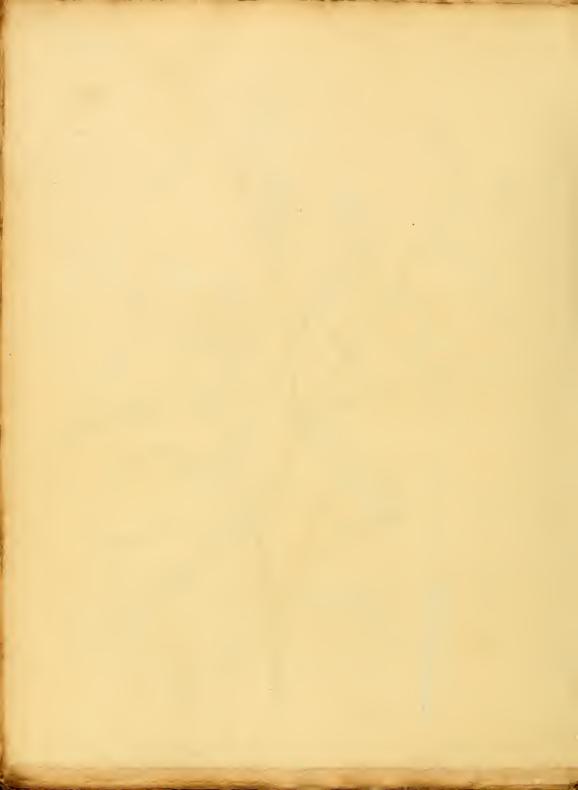




PLATE CCLXXIII.

LOBELIA PINIFOLIA.

Pine-leaved Lobelia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers fimple.

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, quinquedentatum, mininum, geronini circumnatum, marcefcens; denticulis fubæqualibus. COROLLA monopetala, irregularis; tubus cylin-
- draceus, calyce longior, fuperne longiudinaliter divifus; limbus quinquepartitus; laciniis lanceolatis, quarum fuperiores due minores, magis reflexæ, profundius divifæ, conffituentis labium fuperius; tres reliquæ inferiores magis patentes, fæpius majores.
- STAMINA. Filamenta quinque, fubulata, longitudine tubi petali. Antherae connatæ in cylindrum oblongum, bafi quinquefariam dehifcentem.
- PISTILLUM. Germen acuminatum, inferum. Stylus cylindraceus, longitudine flaminum. Stigma obtufum, hifpidum.
- PERICARPIUM. Capfula ovata, biloculariis, apice dehifcens, cincta calyce.

SEMINA plurima, minima.

- EMPALEMENT. Cup one leaf, five-toothed, very fmall, growing round the feed-bud, withering; toothlets nearly equal.
- BLOSSOM one petal, irregular; tube cylindric longer than the cup, divided longitudinally above; border five-parted; fegments lancefhaped, of which the two upper ones are finaller, more reflexed, deeper divided and form the upper lip; the three other lower ones fpread more, and often are larger.
- ones forcad more, and often are larger. CHIVES. Five threads, awl fhaped, the length of the tube of the petal. Tips joined together forming an oblong cylinder, fplitting into five divisions at the bafe.
- POINTAL. Seed-bud tapered, beneath. Shaft cylindrical the length of the chives. Summit blunt, hairy.
- SEED-VESSEL. Capfule egg-fhaped, two celled, fplitting at top, girt by the cup.

SEEDS numerous, imall.

SPECIFIC CHARACTER.

Lobelia foliis lanceolato-linearibus, confertis, integerriniis; denticulis calycinis longiffimis; floribus cæruleis. Lobelia with leaves between lance and linearfhaped, crowded together, and quite entire; toothlets of the cup very long; flowers blue.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Bloffom fpiead open, with the chives in their place.

3. A half ripe feed-pod.

- 4. The Pointal, with the fummit detached and magnified.
- 5. A tipe feed veffel, cut transversely.

ABOUT the year 1786, this plant was fent by Mr. F. Maffon, to the royal gardens at Kew; as we find it in the catalogue of that collection. Neverthelefs a fingle plant of it was not to be found in any of our botanic gardens, for their few years back; until the recent introduction of it, by Mr. Niven, to the Hibbertian Collection in 1780. It is a very delicate thrub; grows to the height of eighteen inches; branching but little, and producing moftly two flowers at the termination of each branch. It may be increased by cuttings, or from the feed, which ripens in this country; but, like moft of the fpecies of this genus, it is not a long lived plant. It approves moft of a light fandy peat, with a finall mixture of loam; and to be kept in rather a finall pot, in proportion to the general fize ufed for plants of the fame bignefs. Flowers in July.



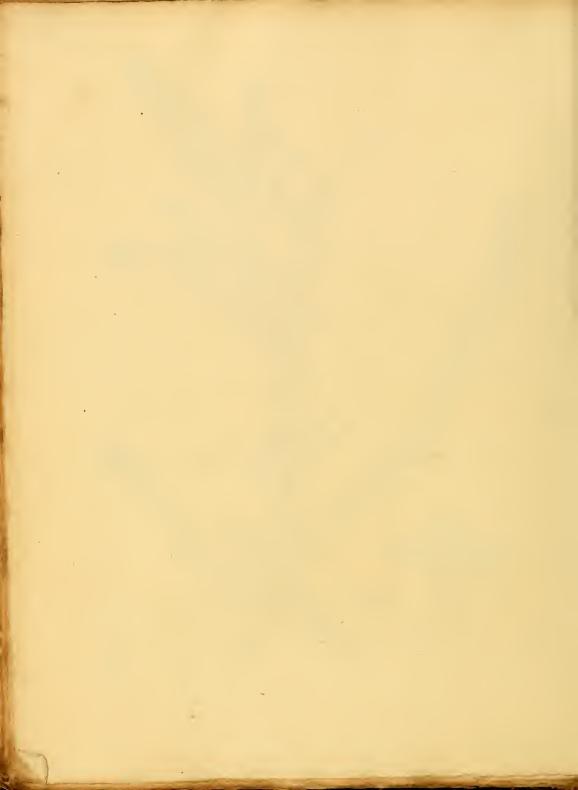




PLATE CCLXXIV.

ORNITHOGALUM LACTEUM.

Large White-flowered Star of Bethlehem.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, erecta, perfiftens, fupra medium patens. Filamenta bafi dilatata. Capfula 3-locularis. Semina fubrotunda, nuda.

- BLOSSOM 6-petals, upright, remaining, fpreading above the middle. Threads widened at the bafe. Capfule 3-celled. Seeds roundifh, naked.
- See Ornithogalum odoratum. Pl. CCLX. Vol. IV.

SPECIFIC CHARACTER.

Ornithogalum racemo longo; filamentis fubulatis, alternis fub-lanceolatis; braĉteis membranaceis, ovatis, pedunculo duplo brevioribus; foliis lanceolatis, acutis, ad oras villofis; floribus albidis. Star of Bethlehem with a long flower fpike; threads awl-fhaped, alternate ones nearly lance-fhaped; flower props fkinny, eggfhaped, twice as fhort as the fruit-flalk; leaves lance-fhaped, acute, finely haired at the edges; flowers white.

REFERENCE TO THE PLATE.

- 1. One of the Flower-props.
- 2. The Chives and pointal, the petals being removed.
- 3. The Seed-bud, Shaft, and Summit.

THIS fine fpecies of Star of Bethlehem, from the Cape of Good Hope, was first introduced to Britain, from thence by Lady Miller, of Froyle Place near Alton, Hampfhire, in the year 1796. It is a very hardy bulb, but does not flower every year, in this country. It will live with a very flight protection from the fevereft frofts in winter; fhould be planted in fandy loam; kept rather dry after the decay of the leaves; and only removed from its pot to renew the earth. It propagates by the root, and flowers in July. Our drawing was made from a plant which had been received from the Cape, in the Hibbertian Collection.







PLATE CCLXXV. GLADIOLUS RINGENS.

Var. undulatus.

Gaping-flowered Gladiolus. Waved-flowered Var.

CLASS III. ORDER L

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens. Stamina adfcendentia.

BLOSSOM fix divisions, gaping. Chives afcending. See GLADIOLUS ROSEUS, Pl. XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis linearibus, coftatis; floribus ringentibus, cineriis; petalis undulatis.

Gladiolus with linear leaves, ribbed; flowers gaping, afh coloured ; petals waved.

REFERENCE TO THE PLATE.

- 1. The two valves of the Empalement.
- 2. A Bloffom fpread open, with the chives in their place.
- 3. The Pointal, one of the divisions of the fummit magnified.

THE Clapham collection we believe to be the only one which, at prefent, poffeffes this handfome variety of the Gaping Gladiolus. It was introduced, from the Cape, by Mr. Niven in 1800. Our drawing was made in August of the above year, but its natural season of flowering, if we may judge by analogy, fhould be about May or June, at lateft. It increases by the root, and should be treated as a tender Gladiolus. The flower is without fmell.



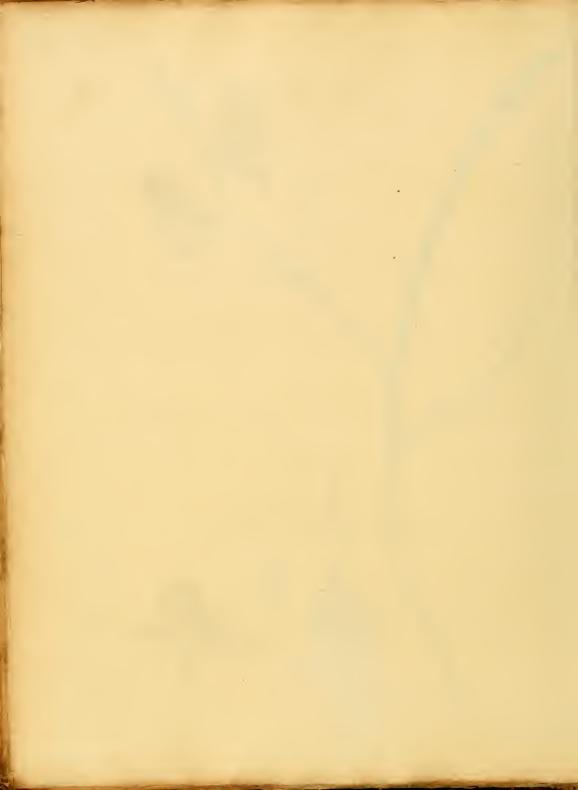




PLATE CCLXXVI. MONSONIA FILIA. Hairy-leaved Monfonia.

CLASS XVIII. ORDER II.

POLYADELPHIA DODECANDRIA. Threads in many Sets. Twelve Chives.

GENERIC CHARACTER.

- CALYX. Perianthium pentaphyllum erectum; foliolis lanceolatis, fub apice mucronatis, æqualibus, perfiftentibus.
- COROLLA. Petala quinque, obovata æqualia, flaccida, plicata, margine inequaliter dentata.
- STAMINA. Filamenta quindecim, erecta, connata in quinque corpora, e 3 fingula. Antheræ oblongæ, verfatiles.
- PISTILLUM. Germen pentagonum, breve. Stylus columnaris. Stigmata quinque, recurva, oblonga.
- PERICARPIUM nullum. Fructus roftratus, pentacoccus.
- SEMINA folitaria, arillata; arifta longifima demuni fpirali.

- EMPALEMENT. Cup five-leaved upright; leaflets lance-flaped, pointed at the end, equal, and remaining.
- BLOSSOM. Five petals, inverfely egg-fliaped, equal, flaccid, plaited, unequally toothed at the margin.
- CHIVES. Fifteen threads, upright, formed into five bodies, three to each. Tips oblong, verfatile.
- POINTAL. Seed-bud five-fided, flort. Shaft columnar. Five fummits, recurved and oblong.
- SEED-VESSEL none. Fruit furnified with long awns, five dry berries.
- SEEDS folitary, in a feed-coat with a very long awn, becoming fpiral.

SPECIFIC CHARACTER.

Monfonia foliis incifo-lobatis, hirfutis; lobis inequaliter dentatis.

Monfonia with deeply cut lobes, hairy; lobes unequally toothed.

REFERENCE TO THE PLATE.

- 1. The Empalement.
- 2. A Petal of the flower, flewn from the backfide.
- 3. A Petal of the flower, flewn from the infide.
- 4. The Chives and Pointal divefted of the petals.
- 5. The Chives fpread open, to fhew the number of diffinct bodies into which they are divided.
- 6. The Seed bud, Shaft, and Summits.
- 7. A Seed-bud cut transverfely.
- 8. One of the berries, taken from its coat, a little advanced to maturity.

THE Genus Monfonia was formed by Linnæus, in honour of the Right Hon. Lady Ann Monfon, whofe enthufiafin, in purfuing the fludy of natural hiftory, knew no bounds; and whofe liberal and foftering hand contributed more, perhaps, than any of her cotemporaries, by her encouragement and example, to the then incipient, but now to prevailing taffe for the fludy of Botany.

The Montonias are all natives of prevailing taffe for the fludy of Botany. The Montonias are all natives of the Cape of Good Hope; are rather herbaceous plants than flutus, at leaft, thofe generally denominated fuch; for although the Geranium fluoroum has been given to this genus, we have our doubts whether it ought not to remain with Geranium. They are hardy green-house plants, flower in the months of July and August; are propagated by the cutting finall portions from the roots; and ihould be planted in a mixture of fandy peat and loam. This fpecies was introduced by Meffrs. Lee and Kennedy in the year 1788. Our drawing was made from a plant in the Hibbertian collection.

It is rather frange that Thunberg in the fecond part of his Prod. Plant. Cap. published in 1800; and Wildenow in his Spec. Plant. volume the third, part 1, published the fame year, fhould both, in the clafification of this genus rather with to alter its clafs, as Schreber and Cavanilles had done before them, than give it, in their works, under the clafs and title where it was originally placed, by the founder of the genus; or take it up on the authority of the catalogue of the plants in the Kew gardens; where, unqueflionably, two fpecies, at leaft, had flowered antecedent to the publication of that work. But indeed both of them, have fo jumbled the different fynonims which they have adapted to the three fpecies known at prefent in our gardens under the names of M. fpeciofa, M. lobata, and M. filia, that it is nearly imposible to recognize in either publication the different plants under the charactered titles they bear with us. As for Thunberg, he has thrown them all to Geranium, under new fpecific names: and thus, has made his alteration complete. Wildenow indeed has but changed the clafs, and altered one fpecific title; but by new naming that which is our M. fpeciofa he has been obliged to give the name of fpecific to our prefent plant, and place the fpecific/*flin*, as given by Linnæus to this, as a fynonim to M. lobata, upon the authority of Cavanilles; who, we muß prefume, had never feen more than dried fpecimens of any fpecies of this genus. But however, we thall not pretend to clear up the bewildered fitte, in which we there find this tribe of plants; or attempt to throw any farther light on a fubject that feens to have been, fhort as it is, a complete puzzle to two fuch eminent botanifts; but merely flate our ideas, that we think thefe plants were fufficiently well arranged nuder the first affumed clafs, and equally readily to be known by their old fpecific titles.







PLATE CCLXXVII. PROTEA SPECIOSA.

Var. foliis glabris.

Smooth-leaved Shewy Protea.



CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives.

One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida feu 4-petala. Antheræ lineares, inferta petalis infra apicem. Calyx proprius nullus. Semina folitaria. BLOSSOM 4-cleft or 4 petals. Tips linear, inferted into the pctals below the point. Cup proper none. Seeds folitary. See PROTEA FORMOSA, Pl. XVII, Vol. I,

SPECIFIC CHARACTER.

Protea foliis lanceolatis, glabris; fquamæ calycinæ interiores barbatæ, apice incurvatæ, fuſcæ. Protea with lance-fhaped fmooth leaves; the inner fcales of the empalement are bearded, turned inward at the point and brown.

REFERENCE TO THE PLATE.

1. The Seed-bud and Pointal.

2. A Flower fpread open, with the tips in their places.

This fine variety of the Shewy Protea might, indeed, almoft país for a diffinet fpecies. It was introduced, to Britain, in the year 1794, by Mr. Williams, Nurferyman, of Turnham Green. The only living fpecimen in Britain, we believe, of this plant, is at prefent in the Hammerfmith collection. As yet no increafe has been produced from it, either by cuttings, or feeds; for although the plant flowers every year, and the feeds in the cone, or rather flower-cup, feem perfect, they never vegetate. It is a hardy, and handfome growing Protea, requiring little attention, and may be placed in any part of the green-houfe; grows about three feet high, very bufly, aud flowers near the month of October.



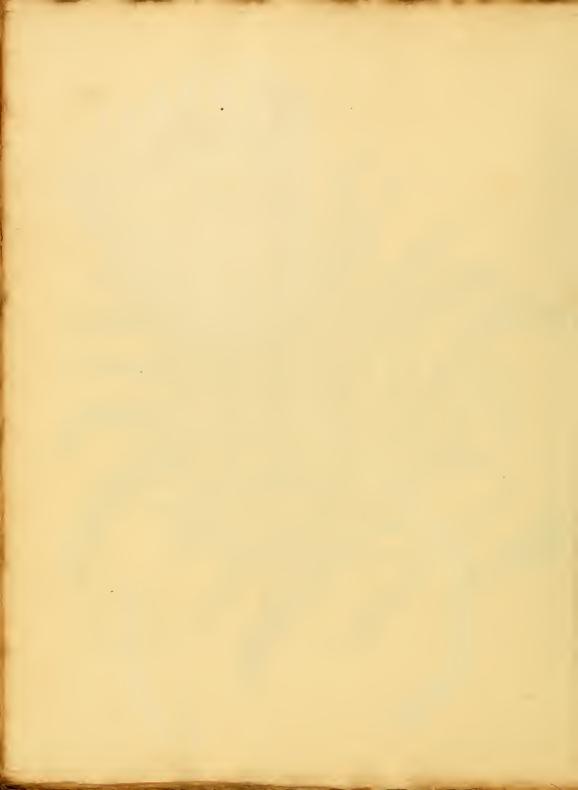




PLATE CCLXXVIII. MELALEUCA CORONATA.

Flax-leaved Melaleuca.

CLASS XVIII. ORDER IV.

POLYADELPHIA POLYANDRIA. Threads in many Sets. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquefidus, femifuperus. Petala quinque. Filamenta multa longifima, connata in quinque corpora. Piftillum unum. Capfula 3-locularis. CUP five-cleft, half above. Petals five. Threads numerous, very long, united into five bodies. Pointal 1. Capfule 3-celled.

See MELALEUCA ERICÆFOLIA, Pl. 175. Vol.III.

SPECIFIC CHARACTER.

Melaleuca foliis oppofitis, lanceolatis, enerviis, glaberrimis; floribus feffilibus, ad bafin ramulorum confertis; filamentis pinnatis, incurvatis, purpureis. Melaleuca with oppofite, lance-fhaped leaves, without nerves and very fmooth; flowers grow clofe to the branches, and crowded together at their bafe; threads winged, turned inward, and purple.

REFERENCE TO THE PLATE.

- 1. The Empalement and Seed-bud.
- 2. The fame, fhewn in a front view.
- 3. A Petal.
- 4. One of the five bundles of Chives, magnified.
- 5. The Seed-bud with the fhaft remaining, the cup cut off.

This fingularly delicate little plant, a native of Botany Bay, was first raifed from feeds in this country by Mr. I. Fairbairne of the Phyfic Gardens, Chelfea, in the year 1792. It is rather more tender than most of the plants we have, as yet, received from thence; requires to be kept in a dry and airy part of the green-houfe and watered but feldom, in the winter. It grows to the height of about two feet, perfects its feeds, and may be increafed by cuttings; fhould be planted in very fandy peat earth, and kept in a finall pot proportionally to its fize. Our figure was taken from the branch of a plant, in the confervatory, at the Hammerfinith Nurfery, in the month of August, 1800.



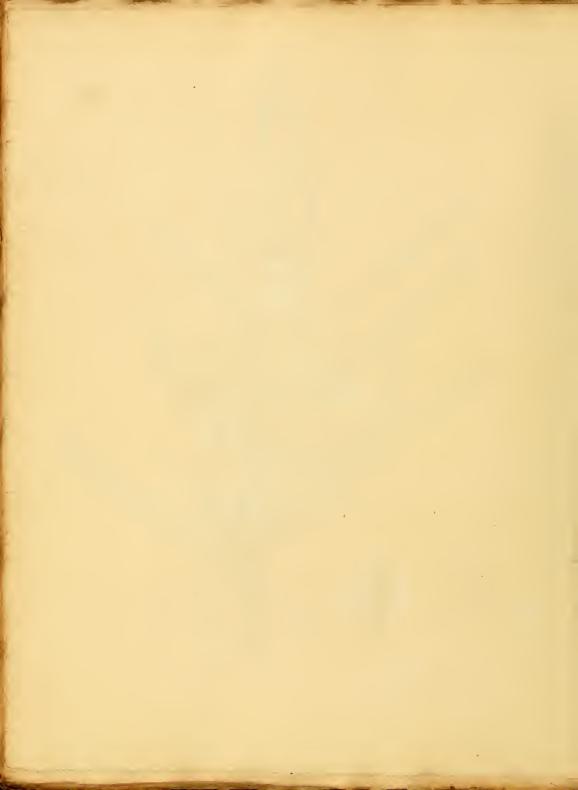




PLATE CCLXXIX.

XERANTHEMUM FASCICULATUM.

Var. flore allo.

Bundle-leaved Everlafting-flower. White Var.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA, Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

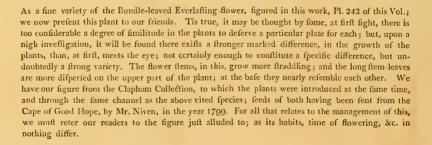
RECEPTACULUM paleaceum. Pappus fetaceus. Calyx imbricatus, radiatus; radio colorato. RECEPTACLE chaffy. Feather briftly. Cuptiled, with a ray; the ray coloured. See XERANTHEMEM SPECIOSISSIMUM, Pl. LI. Vol. I.

SPECIFIC CHARACTER.

Xeranthemum foliis caulinis linearibus, fubteretibus, fafciculatis, longifilimis; floribus folitariis; fquamis calycis lanceolatis, albis. Everlafting.flower with the ftem-leaves linear, roundifh, bundled, very long; flowers folitary; fcales of the cup lance-fhaped and white.

REFERENCE TO THE PLATE.

- 1. An Hermaphrodite Floret, with its feed, magnified.
- 2. A Female Floret, with its feed, magnified.
- 3. The Pointal from a Female Floret, magnified.





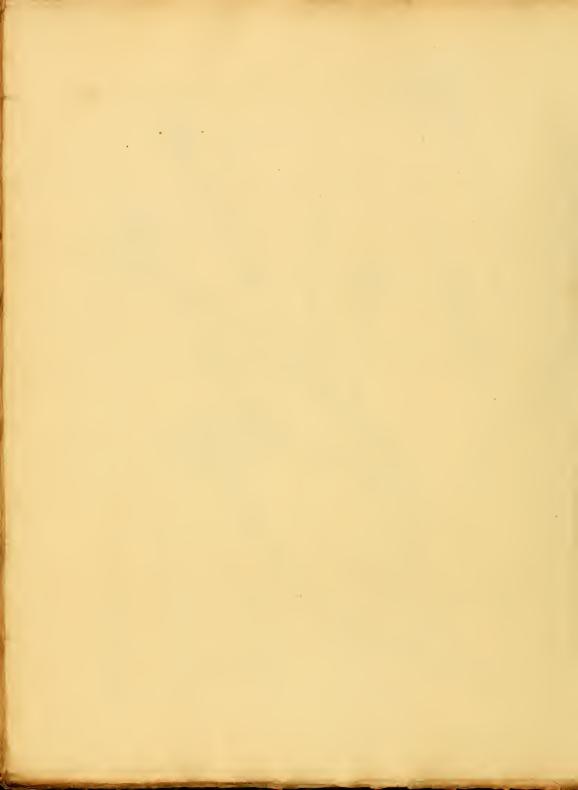




PLATE CCLXXX. PERSOONIA LATIFOLIA.

Broad leaved Perfoonia.

CLASS IV. ORDER I. TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Petala 4, baín veríus fiaminifera. Glandulæ 4 ad baín germinis. Stigma obtuíum. Drupa monofperma. EMPALEMENT none. Petals four, fupporting the chives near the bafe. Four glands at the bafe of the feed bud. Summit blunt. A pulpy berry with one feed.

See PERSOONIA LANCEOLATA, PL. LXXIV. Vol. 11.

SPECIFIC CHARACTER.

Perfoonia foliis fubovatis, utrinque glabris, eraffiufculis, uninerviis; petiolis brevibus, tortis. Perfoonia with leaves approaching to inverfelyegg-fhaped, fmooth on both fides, thickith, one-nerved; foot-flaks flort and twifted.

REFERENCE TO THE PLATE.

- 1. A Flower.
- 2. One of the Petals, with its Chive.
- 3. The Pointal and Seed-bud.
- 4. The fame, magnified.
- 5. The receptacle, with the four glands at the bafe of the Seed-bud, magnified.

THE very exact conformation of the flower in this, when compared with the other two fpecies of the genus, already figured in this work; is a circumflance but feldom to be found, in plants, where the whole habit is fo totally different in each fpecies, as we here find it. This plant, until it flowered, was confidered as a fpecies of *Conchium*, (one of the Genera made by Dr. Smith from Bankfia,) as nigheft in appearance to fome fpecies of that Genus. It has flowered, for the first time in England, in the month of October, 1802. The plant being fet in the confervatory at the Hammerfmith-Nurfery, the flowers have continued to fucceed each other, progreffively, upon the young branches, without intermiffion, as the fhoot grows, from the bafe of cach leaf. It is with great difficulty raifed by cuttings; but, from every appearance, feed will be procured in this country; as the feed-buds have already become pretty large, and feeds of the other fpecies have matured with us. It was first raifed from feed, communicated by Colonel Paterson, from Port Jackfon, New South Wales, in the year 1795. Sandy loam, or a mixture of fandy peat and loam, is the foil it moft approves.







PLATE CCLXXXI. METROSIDERA HIRSUTA. Hairy Metrofidera.

CLASS XIL ORDER I. ICOSANDRIA MONOGYNIA. Twenty Chives. One Pointal.

GENERIC CHARACTER.

- CALYX. Perianthium monophyllum, quinquefidum, femifuperum.
- COROLLA. Petala quinque, coneava, fubfeffilia, decidua.
- STAMINA longiffima, libera, filiformia. Antheræ incumbentes.
- PISTILLUM. Germen turbinatum, fundo calveis adnatum. Stylus filiformis, crectus. Stigma fimplex.
- PERICARPIUM. Capfula campanulata, 3 fcu 4 locularis, 3 feu 4 valvis.

SEMINA plurima, rotundato-angulata.

- EMPALEMENT. Cup one-leaved, five cleft, half above.
- BLOSSOM. Five petals, concave, nearly feffile, falling off.
- CHIVES very long, free, thread-fhaped. Tips lying on the threads.
- POINTAL. Seed-bud top-fhaped, growing to the bottom of the cup. Shaft thread-fhaped, upright. Summit fimple,
- SEED-VESSEL. Capfule bell-fhaped, 3 or 4 celled, 3 or 4 valved.

SEEDS many, roundedly-angular.

SPECIFIC CHARACTER.

Metrofidera foliis oppofitis, bafi cordatis, amplexicaulibus; ramulis, pedunculis, calycibufque pilis rubro-fufcis tectis.

Metrofidera with oppofite leaves, heart-fhaped at the bafe and embracing the ftem; fmall branches, flower-ftems, and flower-cups covered with reddifh-brown hairs.

REFERENCE TO THE PLATE.

- 1. The Seed-bud and Cup, divefted of the Petals and Chives.
- 2. One of the fegments of the Cup, fhewn from the under fide,
- 3. A Chive magnified.
- 4. A Seed-bud cut transversely.

ALTHOUGH little can be faid in favour of the flowers of this plant, yet the fingularity of its foliage excites our attention, as very diffinet from all its congeners. It grows with us to the height of fix or feven feet; at which fize, it produces its bloffoms. The first plants were raifed from feeds in the year 1787 at the garden of the late Dr. Pitcairne at Iflington. It is increased by cuttings, after the ufual mode made ufe of for propagating Botany Bay plants; that is to fay, by placing the cuttings in the heat of a hot-houle, or hot-bcd, early in the month of March, till they are rooted. It is a hardy green-house plant when old, but rather delicate when young. Our figure was began from a plant in the Hibbertian collection, which flowered in the month of August, 1800; and finished from one at the Hammerfmith Nurfery, in November, 1802. A fhort apology may be thought neceffary for our retaining the original mode of terminating the uame of this Genus, rather than as it is given by moft authors at present. Our plea is that only of priority, and the name under which the plants have been known, in our gardens, thefe 30 years; fince, indeed, Sir J. Banks's return from the South Seas. A flight miftake we wifh likewife to notice, in the etymology of the word Metrofideros, as given by Dr. Martyn in his edition of Miller's Dictionary; it is there faid to be thus derived, $M\eta \rho \alpha$, medulla, the heart or pith of a tree, and $\sigma i \delta \eta \rho \sigma s$ iron; fuppofing the heart of the trees to posses the hardness, or colour of iron. Now the true idea on which the name of the Genus was founded, is the fhape and hardness of the feed-veffel, thus; Melpov a measure and ridypos iron, as the appearance of the capfule, when ripe, will fully juffify.







PLATE CCLXXXII. GERANIUM SPATHULATUM.

Var. curviflorum.

Spatula-leaved Geranium. Curled-flowered Var.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roftratus, 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 integerrimis, fpathulatis, fubciliatis; calycibus monophyllis; petalis recurvatis; ftaminibus quinque fertilibus; radice tuberofa. Geranium with quite entire leaves, fpatulafhaped, flightly fringed; cups one-leaved; petals recurved; five fertile chives, root tuberous.

REFERENCE TO THE PLATE.

- 1. The Empalement magnified.
- 2. The Chives fpread open.
- 3. The Pointal natural fize.
- 4. The fame magnified.

THIS fine variety of the Spatula-leaved Geranium is, as yet, only to be found, in the Hibbertian collection. Its date in Britain is the fame as the G. fpathulatum, of this work, plate 152, Vol. III. We ihould not have confidered the curved character of the petals, alone, a fufficient groundwork to conflitute, even a variety; but the flight fringe which may be difcovered on the leaves of our prefent plant, and not in the fmalleft degree to be traced in the other, determined this to be, in our opinion, deferving notice, at leaft as a variety. For the treatment and culture of the plant, fee G. punctatum of the Botanift's Repofitory, plate 60, Vol. I. which may well ferve for this.







PLATE CCLXXXIII. POGONIA GLABRA.

Smooth-leaved Pogonia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Two Chives. On

One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA monopetala; tubus ad faucem pilofus. Stamina fupra medium corollæ inferta. Stigma concavum, declinatum. Nux quadrilocularis. BLOSSOM one petal; tube hairy at the mouth. Chives inferted into the middle of the bloffom. Summit concave, declined. Nut four-celled.

SPECIFIC CHARACTER.

Pogonia foliis eliptico-lanceolatis, glabris; floribus pendulis, minutis, albis. Pogonia with leaves eliptically lance-fhaped, fmooth; flowers hanging down, fmall and white.

REFERENCE TO THE PLATE.

1. The Empalement, magnified.

2. A Bloffom cut open, with the Chives in their place.

3. A Chive, magnified.

4. The Pointal and Seed-bud, natural fize.

5. The fame magnified.

This plant from New Holland, is rather more delicate than moft of those we posses from that country; as it is apt to lose its leaves if exposed either to damps, or much cold. It was first raised in the year 1790, by the late Mr. Robertson, of Stockwell; is easily propagated by cuttings, and flowers in January, or February. The other species figured in this work, Plate 212, and our prefent plant, are the only two yet known of this genus. They require a very light fandy loam, or peat foil, to make them flourish. The P. glabra does not grow more than three feet high and flowers the first year from cuttings. Our figure was taken at the Hammersmith Nurfery.







PLATE CCLXXXIV. CHIOCOCCA RACEMOSA.

Opposite-leaved Snowberry-tree.

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

GENERIC CHARACTER.

CALYX. Perianthium quinquedentatum, fuperun, perfiftens.

- COROLLA monopetala, infundibuliformis; tubus longus, patens; limbus quinquepartitus; laciniis æqualibus, acutis, reflexis.
- STAMINA. Filamenta quinque, filiformia, longitudine corollæ. Antheræoblongæ, erectæ.
- PISTILLUM. Germen inferum, fubrotundum, compreffum. Stylus filiformis, longitudine flaminum. Stigma fimplex, obtufum.
- PERICARPIUM. Bacca fubrotunda, comprefta, coronata calyce, bilocularis.

SEMINA duo, fubrotunda, compreffa, diftantia.

Chiococca foliis oppofitis, ovatis, acuminatis; ramis horizontalibus; floribus racemofis, pendulis. EMPALEMENT. Cup five-toothed, above aud remaining. ELOSSOM one petal, funnel-fliaped; tube long,

fpreading; border five divided; fegments equal, pointed and reflexed.

- CHIVES. Five threads, hair-like, the length of the blofform. Tips oblong, upright.
- POINTAL. Seed bud beneath, roundifh, flattened. Shaft thread-fhaped, the length of the chives. Summit fimple, blunt.
- SEED-VESSEL. A roundifl berry, flattened, crowned with the permanent cup, twocelled.
- SEEDS two, roundifh, flattened, and at a diftance from each other.

SPECIFIC CHARACTER.

Snowberry-tree with oppofite leaves, egg-fhaped, tapered; branches grow horizontal; flowers grow in bunches hanging down.

REFERENCE TO THE PLATE.

- 1. The Empalement, natural fize.
- 2. The fame, magnified.
- 3. A Flower.
- 4. The Chives and Pointal, natural fize.
- 5. The fame magnified:

THE Snowberry-tree is a native of Jamaica, and fome of the other Weft India iflands; requiring the temperature of the hothoufe to preferve it; growing to the height of four or five feet; but the flem being too weak to fupport itfelf, muft be affifted. It is propagated by cuttings, and delights in a rich foil. We are informed in Miller's Dictionary, treating of this plant, that it was introduced to us, in the year 1729, by Mr. Warner, of London; and that it was cultivated, in the garden of Mr. Sherard, at Eltham, about that time. The root of this plant is ufed medicinally, and has a very bitter, acrid tafte. It is a very free blowing plant, flowering the firft year from the cuttings; but but never produces its fine white berries in this country, which conflitute its greateft beauty, and whence its generic title. Our figure was made from a plant in the Hammerfmith Collection. Flowers in September.





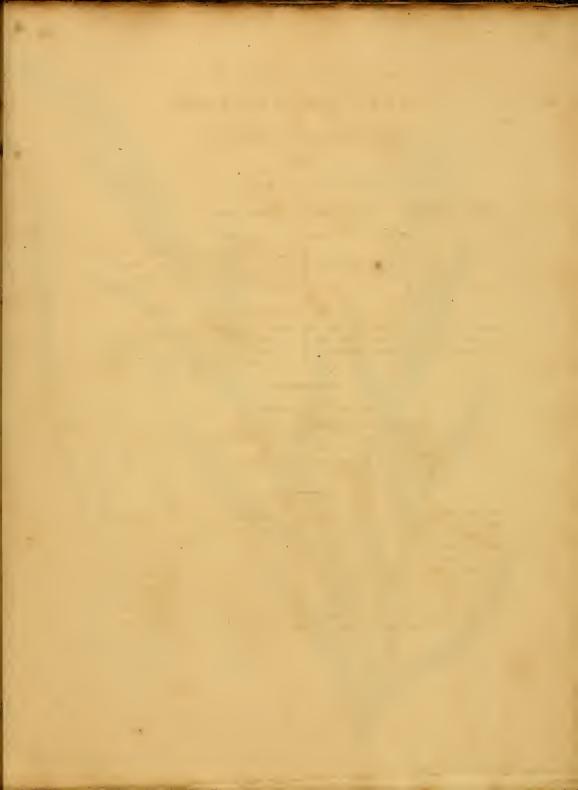


PLATE CCLXXXV. FERRARIA VIRIDIFLORA.

Green-flowered Ferraria.

CLASS XVI. ORDER I.

MONADELPHIA TRIANDRIA. Threads united. Three Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Spathæ unifloræ. PETALA fex, undulato-crifpata. Stigmata cucullata. Capfula 3-locularis, infera. ONE POINTAL. Sheaths one-flowered. PETALS fix, waved and crifped. Summits cowled. Capfule three-celled beneath. See FERBARIA PAVONIA, Pl. CLXXVIII. Vol.III.

SPECIFIC CHARACTER.

Ferraria foliis diftichis, vaginantibus, coftatis; petalis lanceolatis æqualibus, interioribus immaculatis, anguftioribus, virefcentibus. Ferraria with leaves pointing oppofite ways fheathing the fiem and ribbed; petals lancefhaped, equal, the inner ones without fpots, narrower and greenifh.

REFERENCE TO THE PLATE.

- 1. The Seed bud, Chives and Pointal.
- 2. One of the Chives, a little magnified, as feen from the infide.
- 3. The fame feen from the outfide.
- 4. The Seed-bud, Shaft and Summits, the Chives removed.
- 5. One of the Summits magnified.

OUR figure reprefents the Moræa Ferrariola of Jacquin's Collectanea 4. p. 141; but, as we conceive Ferraria a good, and diftind genus, we have not followed either him, or Thunberg, who has likewife thrown thefe plants to Moræa. At first fight we did not think this plant possible of fufficient diftinctive character to be treated as a different species from the F. undulata; but upon closer inspection found it to vary nearly in every part; in the shape of the flower, the leaves and the root. The singular character of this, and the other Cape Ferrarias, of making but one growth in two, and fometimes three years; is hardly to be traced in any other plants, but confantly fo in thefe. They produce their flowers about July, the feason of their flowering; the flowers are as transitory as those of the F. pavonia; that is to fay, the duration of about fix hours. Our figure was taken from a plant in the Hibbertian Collection, which flowered in the month of July 1802. The Ferrarias all propagate by the root; and should be planted in fandy peat mixed with a fmall portion of loam.





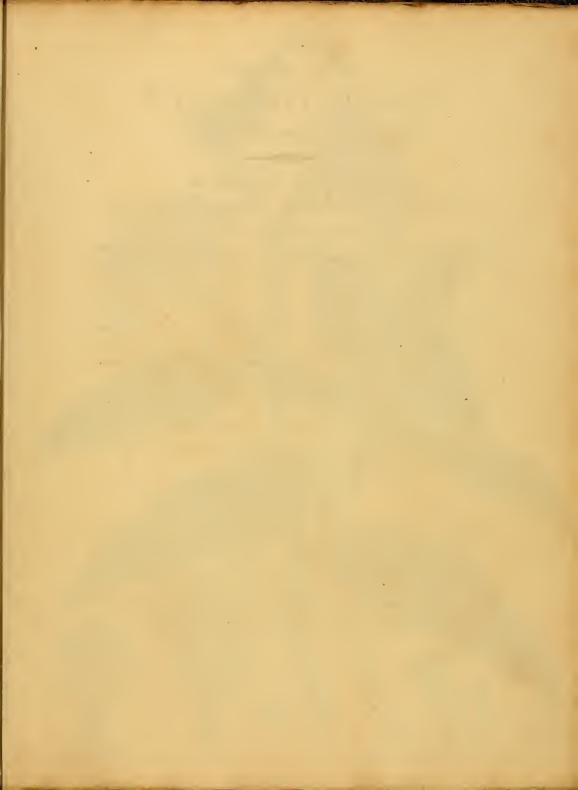


PLATE CCLXXXVI. HIBISCUS PATERSONIUS.

Norfolk Ifland Hibifcus.

CLASS XVI. ORDER VI.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX duplex; exterior polyphyllus. Stigmata 5. Capfula 5-locularis, polyfperma. EMPALEMENT double; outer one many-leaved. Five Summits. Capfule five-celled, manyfeeded.

See HIBISCUS MUTABILIS, PL.CCXXVIII. Vol. IV.

SPECIFIC CHARACTER.

Hibifcus foliis acuminato-lanceolatis, coriaceis, fupra punctatis, fubtus tomentofis; floribus axillaribus; calycibus monophyllis, quinquedentatis. Hibifcus with tapering lance-fhaped leaves, leathery, dotted above and downy underneath; flowers grow from the infertion of the leaves; cups one-leaved, five-toothed.

REFERENCE TO THE PLATE.

1. The Cup with its foot-ftalk.

2. The columnar part of the Chives cut open, the pointal taken away.

3. The Pointal.

4. A tkinny membrane, which furrounds the feed-bud at the bafe.

5. A ripe capfule, with the enlarged cup attached.

- 6. The fame, cut through the middle horizontally.
- 7. A ripe feed.

THE Norfolk Island Hibifcus is a tender greenhoufe plant; was introduced to Britain, in the year 1792, having been raifed from feeds communicated by Col. Paterfon, then flationed on that Island. It attains the height of 12 feet, or more, becoming a finall tree; may be increased readily from cuttings, and should be planted in a mixture of loam and fandy peat. Our figure is from a specimen received from the Right Hon. Lord Viscount Courtenay, in whose collection at Powderham, near Exeter, it flowered for the first time in the year 1800; and where also the feeds ripened.

We have no doubt but this plant belongs to the Genus Lagunæa, of Schreber; but as he propofes himfelf, and as L'Heritier as juftly obferves, the fimplicity of the cup is not a fufficient ground, on which to found a new genus; fo we have rather given our prefent fubject, the name under which it is in general known, than adopt a title for it which is acknowledged by the author, as rather unwarrantable.





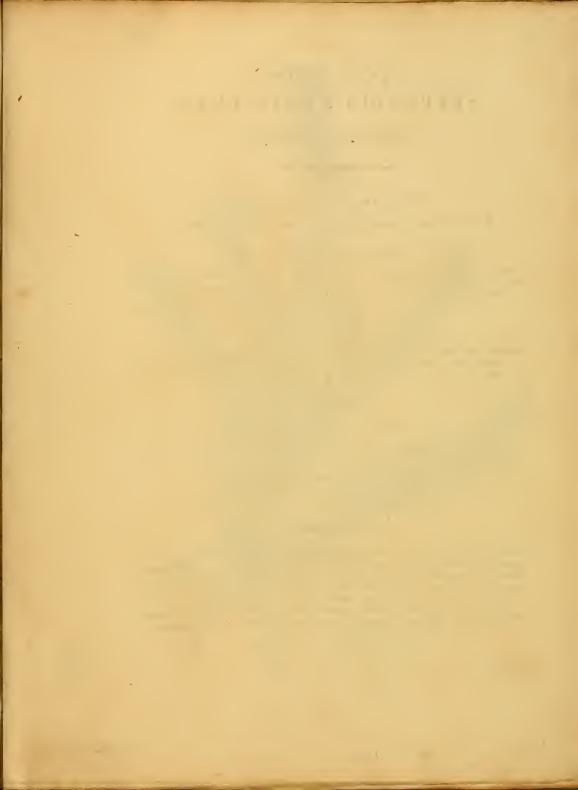


PLATE CCLXXXVII. STYPHELIA PARVIFLORA.

Small-flowered Styphelia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus. Corolla tubulofa. STAMINA fauci inferta. Drupa quinquelocularis. Semina bina. EMPALEMENT tiled. Bloffom tubular. CHIVES inferted into the mouth of the bloffom. A five celled berry. Seeds by twos. See STYPHELIA TRIFLORA, Pl. LXXII. Vol. I.

SPECIFIC CHARACTER.

Styphelia foliis lanceolatis, oppofitis; floribus capitatis terminalibus; corollis minutis, albis. Styphelia with lance-fhaped, oppofite leaves; flowers terminate the branches in heads; bloffom finall and white.

REFERENCE TO THE PLATE.

- 1. The Empalement magnified.
- 2. A Flower, natural fize.
- 3. The fame, magnified.
- 4. A Bloffom, cut open, with the Chives attached.
- 5. The Pointal, natural fize.
- 6. The fame, magnified.

THIS Styphelia, as are all the known fpecies of the genus, is a native of New Holland, and was amongft the firft plants which were raifed from feeds from that country. It is a hardy greenhoufe plant; grows very bufly, handfome in its foliage, and feldom exceeds two feet in height. It is propagated by cuttings, made from the tender fhoots, about the month of April; and treated as directed for other plants natives of the fame clime. Should be planted in fandy peat earth.

Our figure was taken from a fpecimen communicated by Mr. Cuff, from his felect collection at Teddington, Middlefex; where it flowered, we believe, for the first time in England, last year, in the month of August, 1802.





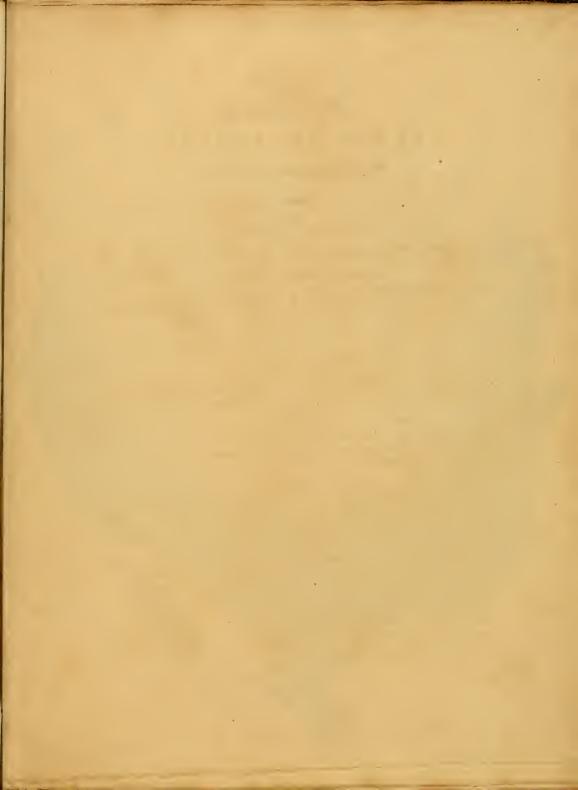


PLATE CCLXXXVIII.

PROTEA CYNAROIDES.

Artichoke-like-flowered Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA quadrifida feu quadripetala. Antheræ lineares, infertæ petalis infra apicem. Calyx proprius nullus. SEMINA folitaria. BLOSSOM four-cleft or four petals. Tips linear, inferted into the petals below the point. Empalement proper none.

SEEDS folitary.

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

SPECIFIC CHARACTER.

Protea foliis fuborbiculatis, glaberrimis; petiolis longifiimis; fquamulis calycinis lanceolatis, apice carinatis. Protea with nearly orbicular leaves, and very fmooth; footftalks very long; feales of the cup lance-fhaped, keeled at the point.

REFERENCE TO THE PLATE.

1. A Floret fpread open, with the Chives in their places.

2. The Pointal and Seed-bud.

To the Right Hon. the Earl of Coventry we are indebted for the figure of this fuperb plant; it having flowered in his Lordfhip's rich, and extensive collection at Croome, Worcefterfhire, this prefent February, 1803, for the first time, in England; his Lordfhip did us the favour to order the flower to be cut, and fent to London; where it arrived, without the least injury, and continued in perfection many days.

The magnificence of this fpecies of Protea, can be but poorly expressed within the limited bounds of our publication; we have, neverthelefs, endeavoured to do it all the justice within our grafp. A confiderable part of the lustre of the flower is loft, from the small portion of the leaves which could be introduced; as the contrasted beauty of the fine broad shining leaves, which form, as it were, a nidus, or ground wood for the bloffom, contribute, fo much, to heighten the beauty of the whole.

The Protea cynaroides is a hardy greenhoufe plant, was introduced to Britain, in 1792, by Meffrs. Lee and Kennedy, Hammerfmith, from the Cape of Good Hope. May be increafed by cuttings, taken off the lower part of the plant; where they floot out in clufters to the length of an inch or more, and muft be treated as has already been directed for Proteas in general. The plant, even at the Cape, feldom grows higher than 18 inches, or two feet.





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			Lottom	G. H.	Bulb.	May.
		Aristea major	Spike-flowered Ariflea	G. H.	Herb.	July.
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	192	Antholyza fulgens	Refulgent-flowered Antholyza	G. H.	Bulb.	May.
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	199	Camellia japonica. Var. fl. rub. pleno	Double Red Camellia.	G.H.	Shrub.	January,
	200	Melaleuca hypericifolia	St. John's-wort-leaved Melaleuca,	G. H.	Shrub.	September.
	201	Aizoon canarienfe	Purflane-lcaved Aizoon Sawed-leaved Samyda	H. H. H. H.	Herb.	July.
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	205 206 207 208	Platylobium lanceolatum, Dracæna borcalis Mimofa longifolia Lafiopetalum ferrugineum	Lance-fhaped-leaved Flat-Pea. Oval-leaved Draczena, Long-leaved Mimofa. Rufty Woolly-blofform.	G. H. 11ar. G. H. G. H.	Herb. Shrub. Shrub.	July. March. March.
	205 206 207 208 208	Platylobium lanceolatum, Dracæna borealis Mi nofa longifolia Lafopetalum ferrugineum Geranium melananthum	Lance-fhaped-leaved Flat-Pea Oval-leaved Dracena, Long-leaved Mimofa. Rufty Woolly-bloffom. Black-flowered Geranium.	G. H. Har. G. H. G. H. H. H.	Herb. Shrub. Shrub. Shrub.	July. March. March. June.
	205 206 207 208 209 209	Platylobium laaccolatum, Dracæna borcalis Miraofa longifolia Lafiopetalum ferrugineum Geranium melananthum Antholyza Æthiopica	Lance-fhaped-leaved Flat-Pea Oval-leaved Dracena. Long-leaved Mimoía. Rufty Woolly-blofform. Black-flowered Geranium. Broad-leaved Antholyza	G. H. Har. G. H. G. H. H. H. G. H.	Herb. Shrub. Shrub. Shrub.	July. March. March. June.
	205 206 207 208 209 210 211	Platylobium laaceolatum, Dracena borcalis Mi nofa longifolia Lafopetalum ferrugineum Geranium melananthum Antholyza Æthiopica Luia columnaris, Var. verficolor	Lance-fhaped-leaved Flat-Pea Oval-leaved Dracena Long-leaved Mimofa Ruity Woolly-blofform. Black-flowerd Geranium Broad-leaved Antholyza. Columnar-chived Nzia. Chanceable d. Far.	G. H. Har. G. H. G. H. H. H. G. H. G. H.	Herb. Shrub. Shrub. Shrub. Bulb. Bulb.	July, March, March, June, July, June,
	205 206 207 208 209 210 211	Platylobium laaceolatum, Dracena borcalis Mi nofa longifolia Lafopetalum ferrugineum Geranium melananthum Antholyza Æthiopica Liai columnaris, Var. verficolor	Lance-fhaped-leaved Flat-Pea Oval-leaved Dracena Long-leaved Mimofa Ruity Woolly-blofform. Black-flowerd Geranium Broad-leaved Antholyza. Columnar-chived Nzia. Chanceable d. Far.	G. H. Ilar. G. H. G. H. H. H. G. H. G. H. G. H.	Herb. Shrub. Shrub. Shrub. Bulb. Bulb. Shrub.	July. March. March. June. July. June. September.
	205 206 207 208 209 210 211 212 213	Platylobium lanceolatum, Dracena borcalis, Mi nofa longifolia Lafiopetalum ferugineum Geranium melananthum. Antholyza Abthiopica, Luia columaris, Var. verficolor, Pogonia debilis, Luia columaris, Var. latifolia,	Lance-fhaped-leaved Flat-Pea Oval-leaved Dracena Long-leaved Mimofa Ruity Woolly-blofform Black-flovered Geranium Hroad-leaved Antholyza Columnar-chived Jxia. Changeableft, Far, Twining Pogonia Columnar-chived Jxia. Broad-leaved Far,	G. H. Ilar. G. H. G. II. H. H. G. H. G. H. G. H. G. H.	Herb. Shrub. Shrub. Shrub. Bulb. Bulb. Bulb.	July, March, March, June, July, June, September, June,
	205 206 207 208 209 210 211 212 212	Platylobium laaceolatum,	Lance-thaped-leaved Flat-Pea Oval-leaved Dracena, Long-leaved Mimola Ruity Woolly-blofform. Black-flowered Geranium. Broad-leaved Antholyza. Columnar-chived Jxia. Changeable fl. Far. Twining Pogonia Columnar-chived Jxia. Broad-leaved Far. Rofemary-like Wefteringia	G. H. Ilar. G. H. G. H. H. H. G. H. G. H. G. H. G. H. G. H.	Herb, Shrub, Shrub, Shrub, Bulb, Bulb, Shrub, Shrub,	July, March, March, June, July, June, September, June, September,
	205 206 207 208 209 210 211 212 213 214 215	Platylobium lanceolatum, Dracena borcalis, Mi nofa longifolia Lafiopetalum ferugineum Geranium melananthum. Antholyza Abthiopica, Luia columaris, Var. verficolor, Pogonia debilis, Luia columaris, Var. latifolia,	Lance-fhaped-leaved Flat-Pea Oval-leaved Dracena Long-leaved Mimofa Ruity Woolly-blofform Black-flovered Geranium Hroad-leaved Antholyza Columnar-chived Jxia. Changeableft, Far, Twining Pogonia Columnar-chived Jxia. Broad-leaved Far,	G. H. Ilar. G. H. G. H. G. H. G. H. G. H. G. H. G. H. G. H. G. H.	Herb, Shrub, Shrub, Shrub, Bulb, Bulb, Shrub, Shrub, Shrub,	July, March, March, June, July, June, September, June,

ERRATA.

Plate 153, Order, dele polygamia.
163, Sp. Ch. lin. 2, cenetalibus, lege, genitalibus.
171, Sp. Ch. lin. 2, longiore, lege, longior.
175, Sp. Ch. lin. 2, enervits, lege, servits.
Ref. lin. 1, for, one which, read, one of arbicb.
184, Gen. Ch. Necht. lin. 1, exterium, lege, setterius.
185, Sp. Ch. lin. 2, longior, lege, longior.
186, Sp. Ch. lin. 2, longior, lege, longior.
197, Gen. Ch. Stam. lin. 2, a furentia, lege affurgentia.
197, Gen. Ch. Stam. lin. 2, etcloctern, lege, quindecim.
200, Sp. Ch. lin. 2, uninervits, lege, uninervit.
201, Gen. Ch. Stam. lin. 2, octodecern, lege, defaction.
205, Order, for Pointals, read, Pointal. Gen. Ch. Pift. lin. 2, ftaminium, lege, faminum.
207, Sp. Ch. lin. 1, poft, integris, inf. (.)
210, Sp. Ch. lin. 2, corolla, lege, corolla.

INDEX

TO THE PLANTS CONTAINED IN VOL. IV.

Plate	917	Paffiflora maliformis	And fuil 1 Define 0			
	218	Embothrium buxifolium	Apple-fruited Paffion-flower			
	219	Gladiolus cufpidatus, Var. petaliscrispis	Box-leaved Embothrium	G. H.	Shrub.	September.
	220	Maffouia forbra	Spear-fpotted Gladiolus, V. with crifped petals	6.11.	Bulb.	May.
	221	Maffonia fcabra	Rough-Icaved Maffonia	G.H.	Buib.	March.
	222	Wurmbea capenfis, Var. 6	Cape Wurmbea, Var. 2	G. II.	Bulb.	May.
	223	Geranium radiatum Clufia flava	Rayed-leaved Geranium	G. H.	Tlerb.	July.
	223		Vellow-flowcred Balfam-tree	н. н.		September.
	224	Geranium reflexum	Reflexed-leaved Geraniun:	G. II.	Herb.	July.
	225	Gnidia oppofitifolia	Oppofite-leaved Guidia	G. H.	Shrub.	April.
	220	Magnolia pumila	Dwarf Magnolia	G. II.	Shrub.	September.
	228	Gladiolus ringens, Var. multiflorus	Gaping Gladiolus, many flowered Var	G. H.	Shrub. Shrub. Bulb. Shrub.	May.
	228	Hibifcus mutabilis, Var. flore pleno	Changeable-rofe Hibifcus, Double flow. Var.	11. 11.	Shrub.	November.
	229	Magnolia fufcata	Brown-ftemed Magnolia			April.
	230	Dodonæa triquetra	Three-fided Dodonæa			
	231	Cerbera Ahouai	Oval-leaved Cerbera			
	232	Ixia capitata, Var. stellata	Bunch-flowering Ixia, Star-flowered Var	G H.		May.
		Melanthium viride	Green-flowered Melanthium	G. H.		July.
	234 235	Protea fpicata	Spike-flowered Protea Two-coloured-leaved Mimofa			May.
	235 230	Mimofa difcolor	I wo-coloured-leaved Mimota		Shrub.	September.
		Hypoxis ftellata, Var. flore albo	Star-flowered Hypoxis, White Variety	G. 11.		April.
	237	Cytifus tomentolus	Downy-leaved Cytifus			Auguft.
	$238 \\ 239$	Roëlla decurrens	Decurrent leaved Roella	G. II.		Anguft.
	239	Geranium felinum	Rock-parfley-leaved Geranium	G.H.		June.
	240	Gladiolus carneus	Flefh-coloured Gladiolus.	G. 11.		May.
	241	Gladiolus orchidiflorus	Orchis-like-flowered Gladiolus	G. 11.		March.
		Xeranthemum fafciculatum	Bundled-leaved Everlafting-flower		Shrub	May.
	243	Protea lagopus	Woolly-Jeaved Protea			
	244	Hemerocallis graminea	Grafs-leaved Day-Lily	Har.	Herb.	June.
	245	Ixia pufilla	Dwarf-blue Ixia	G. H.		April.
	246	Geranium incraflatum	Flefhy-leaved Geranium	G. H.		July.
	247	Geranium ciliatum	Fringed-leaved Geranium		Herh.	July.
	248	Protea umbellata	Umbellated Protea		Shrub.	August.
	249	Pitcaimia fulphurea	Sulphur-coloure ! Pitcairnia		Heib.	April.
	250	Ixia columnaris, Var. grandiflora	Columnar-chived Ixia, Large-flowered Var.	G. H.	Bulb.	June.
	251	Lachenalia purpurco cærulea	Sweet violet-coloured Lachenalia	G. H.	Bulb.	April.
	252	Hebenstreitia aurea	Golden-flowered Hebenftreitia		Shrub.	Auguft.
	253	Talinum patens	Panicled Purflane		Am.	Auguft
	254	Geranium procumhens	Procumbent Geranium		Shrub.	
	255	Moræa Northiana	Northian Moræa		Herb.	July.
	256	Ixiamaculata, Var. minor, flo. purpareo	Spotted-flowered Ixia, Small Var. purp. flo.	G. 11.		June.
	257	Falkia repens	Creeping Falkia		Herb.	Auguft.
	258	Bankfia præmorfa	Bitten-ended-leaved Banklia	G. II.	Shrub.	
	259	Geranium pilofum	Hairy Geranium		Herb.	July.
	260	Ornithogalum odoratum	Sweet-feented Star of Bethlehem		Bulh.	June.
	261	Cameraria latifolia	Baftard Mangeneal		Shrub.	Auguft.
	262	Xeranthemum fpirale	Spiral-Icaved Everlafting-flower			
	263	Vaccinium ftaminium	Green-wooded Whortle-berry	Har.	Shrub,	
	264	Protea glomerata	Woolly-headed Protea		Bulb.	Auguft. July.
	265	Cyrtanthus obliqua	Oblique-leaved Cyrtanthus			
	266	Platylobium ovatum	Oval-leaved Flat-Pea.		Shrub.	
	267	Jatropha panduræfolia	Fiddle-leaved Phyfic Nut	C 11	Shrub. Bulb.	May.
	268	Gladiolus plicatus	Plaited-leaved Gladiolus Ragged-leaved Geranium, Two-coloured-	0, 11.	Duid.	may.
	269	Geramum facilitatum, var. occitor	Rogen Var	GШ	Heib.	July.
	270	Protea pulchella	flower Var	G. 11	Shunh	September
	270	Afclepias gigantea	Gigantic Swallow-wort	11. H	Shrub	Auguft.
		Embothrium lineare	Narrow-leaved Entbothrium	G. 11.	Shrub.	July.
	273	Lobelia pinifolia	Pine-Jeaved Lobelia	G. 11.	Shrub.	July.
	274	Ornithogalum Iacteum	Large White-flowered Star of Bethlehem .	G. 11.	Bulb.	July.
	275	Gladiolus ringens, Far. undulatus	Gaping-flowered Gladiolus, Haved-flowered			
	~/ 0	channel of this gailing i and an and an and the	Var	G. 11.	Bulb.	June.
	276	Monfonia filia	Hairy-leaved Monfonia	G H	Harb	Inte
	277	Protea fpeciola, Var. foliis glabris	Smooth-leaved thewy Protes	G. H.	Shrub.	October.
	278	Melaleuca coronata	Flax-leaved Melalenca	G. 11.	Shiub.	Auguft.
	270	Xerauthemum fasciculatum, Var. fl. al.	Bundle-leaved Everlafting-flower, WhiteFar	G. 11.	Shrub.	October. August. August. November.
	250	Perfoonia Jatifolia		G, 11,	Shrub.	November.
	291	Metrofidera hirfuta	Hairy Metrofidera	G. H.	Shrub.	November.
	282	Geranium fpathulatum, Var, curvillo.	Spitula-leaved Geramum, Curled-flo, Var	G. 11.	Herb.	November. July,
	283	Pogonia glabra	Smooth-leaved Pogonia	G. H.	Shrub.	March,
	284	Chiococca racemofa	Oppofite-leaved Snowberry-tree		Shrub.	
	285	Ferraria viridifiora	Green-flowcred Ferraria	G. 11.	Eufb.	July.
	250	Hibifeus Paterfonius	Nortolk Illand Hibifeus	G. H.	Shrub.	Auguft.
	287	Styphelia parviflora	Small-llowered Styphcha	G. 11	Shruh.	May.
	258	Protea cynaroides	Attichoke-like flowered Piotea			January.

ERRATA.

Plate 217, Paffiflora maliformis. For Plate CCVII, put, CCXVII.
218, To No. 1 and 2 of the reference to the plate, add, magnified.
226, Gen. Char. Chives, line 4, for, fixed on fide, read, *fixed on each fide*.
233, For, Order I, read, Order III, for monyoynia, read, *tritygrina*, and for One Pointal, read, Three Pointals. Blofforn, after claws put a comma.
235, Englifth name. For, two coloured leaved, read, *two-coloured-leaved*.
246, Char. Spec. line 2, dele (2), poft *longitudine*.
257, Gen. Char. Pift. Pro Germen, lege, *Germina*.
270, Specific Char. line 3, for flower head, read, *flower-head*.
276, Gen. Char. Corolla. Poft obovata pone comma.
282, Geranium fpathulatum, for, Plate CCLXX, put, CCLXXXII.

