Vol. 1.

of the

Botanists Repository

Comprising

Colour'd Engravings

of

New and Rare Plants

ONLY

With Botanical Descriptions &c.

in

Latin and English,

after the

Linnæan System

by

H. Andrews

Botanical Painter Engraver &c.

THE

BOTANIST'S REPOSITORY,

FOR

NEW, AND RARE PLANTS.

CONTAINING

COLOURED FIGURES

OF SUCH PLANTS, AS HAVE NOT HITHERTO APPEARED IN ANY SIMILAR PUBLICATION;

WITH ALL THEIR ESSENTIAL CHARACTERS, BOTANICALLY ARRANGED, AFTER THE SEXUAL SYSTEM OF THE CELEBRATED LINNÆUS:

IN ENGLISH, AND LATIN.

TO EACH DESCRIPTION IS ADDED,

A SHORT HISTORY OF THE PLANT,

AS TO ITS TIME OF FLOWERING, CULTURE, NATIVE PLACE OF GROWTH, WHEN INTRODUCED, AND BY WHOM.

THE WHOLE EXECUTED BY

HENRY ANDREWS,

AUTHOR OF THE COLOURED ENGRAVINGS OF HEATHS, IN FOLIO.

LONDON:

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AND PUBLISHED BY THE AUTHOR, N° 5, KNIGHTSBRIDGE.

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1797.

TO THE PUBLIC.

Owing to the extended and liberal encouragement experienced by the Author, in his publication of the coloured Engravings of Heaths, now far advanced; and being willing to avail himſelf of the moment in which every branch of the Science of Botany is moſt particularly patronized; he has undertaken this work, with the hopes (if its merits ſhall deſerve it,) his endeavours, in this his ſecond eſſay, may meet with ſimilar ſucceſs.

The Drawings from which the Engravings will be made, ſhall all be taken from living ſpecimens, by the Author; and the diſſection made whilſt the flower is freſh, that the true characters, of the parts of fructification, may be the better aſcertained.

On each Plate will be given the Diſſections as taken in the drawings, numbered in reference to the Letter-preſs; the whole coloured to imitate drawings, as near as ſuch a work will admit.

The appropriate Characters of every plant will be in Latin and Engliſh; the detail in Engliſh only. As the ſexual ſyſtem of Linnæus is the only one that will be conſidered in this work, the greateſt regard will be had not to deviate from his principles, or arrangements, as to Claſs, Order, Generic or Specific Characters. All matter neceſſary to illuſtrate the ſubject, ſuch as name, native place of growth, time of flowering, and culture, will be added.

The Letter-preſs will be printed by T. Bensley, on a fine wove Paper, Quarto ſize, to correſpond with the Engravings, of which each Number will contain Three; the price Two Shillings and Sixpence. When a ſufficient number ſhall be publiſhed to form the Firſt Volume, an engraved Title-page, &c. will be given gratis, to complete them for binding.

In entering upon a Work, which is deſigned chiefly to conſiſt of thoſe Plants which have been the lateſt introduced to this kingdom; it has been thought fit, in giving a ſpecimen of it in the firſt Number, to figure an old, but very rare, Alpine, which from its ſcarcity (to moſt cultivators) muſt at leaſt be a new face, although the name may be familiar to many; that in the continuation, when a plant of equal rarity and beauty ſhall preſent itſelf, the purchaſers may not think it a deviation from the original plan.

PREFACE.

The utility of this undertaking at a crisis, when the taste for Botanical pursuits so universally prevails, will, it is presumed, be readily admitted by all those engaged in them, whether as theorists, collectors, or cultivators. Such a work, under the immediate direction of some principal leader in the science, of this country, has been a desideratum of long expectance; but either from the great expence necessarily incurred, before any adequate return could be made, or from the trouble attendant on publications, where colouring forms so considerable a part, as yet, every similar attempt has proved abortive. The Bot. Mag. of Mr. Curtis, a work of singular merit in its way, has occasionally furnished, it is true, a few specimens of new plants; but the greatest part, as its title-page indicates, consists of those well known, common plants, long cultivated in our gardens; the direct reverse of the proposals and intentions of the author, in the prosecution of this. From a wish to prevent confusion, it was a determined principle at the outset of the work, not to give any generic or specific synonims; but to follow the most generally accepted names, of known and named plants, without a cavil, of our best English botanists, or cultivators, if no flagrant error was perceptible, according to the Linnæan system: being satisfied, nothing contributed so much to repress the ardour of young botanists as the difficulty of affixing the right name to those plants, which, (from a captious desire in every publisher, to foist in something of his own coinage, upon the most trifling supposed difference,) have undergone several changes of title. If the plant was a certain novelty, with us, to have followed the sexual system, without a schism; upon that truly grand and comprehensive scale of nature; when the formation of a new genus was necessary; if not, to refer it to some one already made, if such was to be found, in any orthodox author: the specific name to be formed from some opposed, leading feature, in the habits of the different species of the genus. But although such were the Author's intentions, when he entered on this business, yet, from a wish to oblige many of the supporters of the work, who have signified a wish that synonims should be given, an alphabetical Index, with all the various Synonims collated from the best authorities, shall be printed separate for the use of those who may wish for such an addition.

As a fair excuse for the Author, (who throws himself upon the candour of the Public,) in extenuation of the inaccuracies which have, and will necessarily occur in the prosecution of the work, it is just to say, that the difficulties to be encountered, and of which none but those engaged in similar concerns can form any adequate idea, are incalculable; arising chiefly from the nature of a monthly publication, composed entirely of novelty, which cannot be anticipated, and of course, so very little time can be allotted for revisal or correction. To remedy as far as possible such slips, a list of Erratæ will be given, with the Index, at the close of each volume.

Knightsbridge, Oct. 1799.

ERRATA, VOL. I.

Plate 2. Springalia, lege, *Sprengelia*. Bloſſ. one leaf, read, *one petal*.
Peri. 4-valvis, 4-locul. l. 5-val. 5-loc. S. V. 4 val. 4 cells, r. 5 val. 5 cells.
3. Cor. æquila, l. *æqualia*. Emp. Sheath, r. *Sheaths*.
7. Calyx, multiflorium, l. *multiflorum*.
9. Calyx, diciduis, l. *deciduis*. Stam. acumenatæ, l. *acuminatæ*.
11. Sp. Ch. poſt roſeis, inſ. (,).
12. Ord. II. r. IV. Seeds, become, r. *becomes*.
14. Emp. cup, r. *ſheath*. Poin. put (,) after beneath.
15. Standard, cut, r. *cup*.
20. Sem. acumenatæ, l. *acuminatæ*.
23. Bloſſ. after ſpreading, put (,). No. 2 of Ref. put (*the*) before chives.
25. Sp. Ch. poſt plenis, inſ. (,).
27. Ord. II. r. IV.
30. Line 6th of Deſcr. leave out (*not*).
37. Ord. II. r. IV.
41. Bloſſ. one leaf, r. *one petal*; divided into ſix, r. *with ſix diviſions*.
47. Stam. poſt ſubulata, inſ. (,).
65. Emp. fruit-ſtalks, r. *fruit-ſtalk*.
67. Deſcr. line 2d, for makes an addition to, r. *makes one of*.

Cortusa Matthioli

PLATE I.

CORTUSA MATTHIOLI.

Alpine Sanicle.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquefidum, persistens; laciniis obtusis, concavis.

COROLLA. Monopetala, rotata, quinquepartita, lacinias sub-rotundis, ad quarum basin prominent tubercula quinque.

STAMINA. Filamenta quinque brevia. Antheræ bipartitæ, oblongæ, erectæ, exteriori parte affixæ.

PISTILLUM. Germen ovatum. Stylus filiformis. Stigma simplex.

PERICARPIUM. Capsula ovata-oblonga, utrinque longitudinaliter sulcata, unilocularis, apice quinquevalvi, valvularum marginibus involutis.

SEMINA numerosa, oblonga, scabra.

EMPALEMENT. Cup with five divisions, permanent; the segments blunt, and concave.

BLOSSOM. One leaf, wheel-shaped, five divisions; segments nearly round, having five prominent tubercles at their base.

CHIVES. Five short threads. Tips divided in two, oblong, upright, and fixed to the blossom by their backs.

POINTAL. Seed-bud egg-shaped. Shaft thread-shaped. Summit simple.

SEED-VESSEL. Capsule oblong egg-shaped, channelled on each side, of one cell, the top has five valves, which are turned inward at their margins.

SEEDS many, oblong, and rough.

SPECIFIC CHARACTER.

Corolla, foliis cordatis, laciniatis, petiolatis; calycibus corolla brevioribus.

Sanicle, with heart-shaped jagged leaves that have foot-stalks; empalements shorter than the blossoms.

REFERENCE TO THE PLATE.

1. The Empalement, and Fruit-stalk.
2. The Blossom cut, and spread open, to expose the situation of the Chives.
3. The Pointal, magnified.

THIS beautiful little herbaceous plant, a native of the Germanic Alps, was known to, and described by all the elder, as well as modern botanical theorists; yet till this time, has there not been one just representation of it. Having been nearly lost to us for a number of years, it may be considered as deserving a place amongst those plants we desire rarely as a specimen of such it has been given. It delights much in shade; is perfectly hardy; thrives best in a light but pure soil; as dung, or other mixtures, are apt to rot the roots when in a state of inaction; flowering in May, and June, and producing seeds. But the surest mode of propagation is by the root, which may be divided with success about September.

Cortusa Matthioli

PLATE I.

CORTUSA MATTHIOLI.

Alpine Sanicle.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquefidum, perſiſtens; laciniis obtuſis, concavis.

COROLLA. Monopetala, rotata, quinquepartita, laciniis ſub-rotundis, ad quarum baſin prominent tubercula quinque.

STAMINA. Filamenta quinque brevia. Antheræ bipartitæ, oblongæ, erectæ, exteriori parte affixæ.

PISTILLUM. Germen ovatum. Stylus filiformis. Stigma ſimplex.

PERICARPIUM. Capſula ovata-oblonga, utrinque longitudinaliter ſulcata, unilocularis, apice quinquevalvi, valvularum marginibus involutis.

SEMINA numeroſa, oblonga, ſcabra.

EMPALEMENT. Cup with five diviſions, permanent; the ſegments blunt, and concave.

BLOSSOM. One leaf, wheel-ſhaped, five diviſions, ſegments nearly round, having five prominent tubercles at their baſe.

CHIVES. Five ſhort threads. Tips divided in two, oblong, upright, and fixed to the bloſſom by their backs.

POINTAL. Seed-bud egg-ſhaped. Shaft thread-ſhaped. Summit ſimple.

SEED-VESSEL. Capſule oblong egg-ſhaped, channelled on each ſide, of one cell, the top has five valves, which are turned inward at their margins.

SEEDS many, oblong, and rough.

SPECIFIC CHARACTER.

Cortuſa, foliis cordatis, laciniatis, petiolatis; calycibus corolla brevioribus.

Sanicle, with heart-ſhaped jagged leaves that have foot-ſtalks; empalements ſhorter than the bloſſoms.

REFERENCE TO THE PLATE.

1. The Empalement, and Fruit-ſtalk.
2. The Bloſſom cut, and ſpread open, to expoſe the ſituation of the Chives.
3. The Pointal, magnified.

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Springalia incarnata.

PLATE II.

SPRINGALIA INCARNATA.

Star-flowered Springalia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers ſimple.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, perſiſtens.

COROLLA. Monopetala, quinquefida, rotata, laciniis acuminatis.

STAMINA. Filamenta quinque, linearia, receptaculo inſerta. Anthoræ piloſæ, erectæ, cohærentes in cylindrum.

PISTILLUM. Germen ſuperum, turbinatum. Stylus filiformis. Stigma obtuſum.

PERICARPIUM. Capſula quadrivalvis, quadrilocularis.

SEMINA plurima, minima, rotunda.

EMPALEMENT. Cup one leaf, cut into five ſegments, and remaining.

BLOSSOM. One leaf, cut into five ſegments, wheel-ſhaped, the diviſions ſharp pointed.

CHIVES. Five threads, linear, fixed into the receptacle. Tips hairy, upright, united into a cylinder.

POINTAL. Seed-bud above, turban-ſhaped. Shaft thread-ſhaped. Summit blunt ended.

SEED-VESSEL. Capſule four valves, four cells.

SEEDS many, ſmall, and round.

SPECIFIC CHARACTER.

Springalia, foliis alternis, amplexicaulibus, mucronatis; corollis ſub-ſolitariis, incarnatis, rigidis, micantibus.

Springalia, with alternate leaves, embracing the ſtem, and ſharp pointed; blooſoms moſtly ſingle, fleſh-coloured, harſh, and ſhining.

REFERENCE TO THE PLATE.

1. The Empalement, (natural ſize).
2. The Bloſſom divided from the Empalement.
3. The Chives, Pointal, and Seed-bud, (magnified).
4. The Seed-veſſel, and Pointal, (magnified).

THE Springalia, muſt certainly rank among the moſt beautiful of the various new genera which have been introduced from New Holland; the delicacy, brilliancy, and number, of its bloſſoms render it particularly attractive, while their extreme permanency adds greatly to its merits: the flowers being of ſuch ſingular durability, as to retain nearly the ſame appearance when the ſeeds are perfected, as at their firſt opening. The figure before us, was taken from a plant in the nurſery garden of Meſſrs. Lee and Kennedy, Hammerſmith, who raiſed it from ſeeds about three years ſince, and where it has flowered thoſe two ſucceſſive years. The Botany-bay plants, (as they are generally called) are beſt protected in the greenhouſe; but although this is ſufficiently hardy for ſuch treatment, yet its ſituation muſt be dry, being very ſuſceptible of damps, flouriſhing beſt in ſandy peat earth; continues flowering through the whole ſummer; and propagates eaſily by cuttings. The characters, and habit of this genus, have ſtood all the plants from New Holland, being perfectly new; there was a neceſſity to form a freſh generic name for it; which has been done by the eminent Dr. J. E. Smith, botanic phyſician, and preſident of the Linnean Society.

Springalia incarnata.

PLATE II.

SPRINGALIA INCARNATA.

Star-flowered Springalia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers ſimple.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, perſiſtens.	EMPALEMENT. Cup one leaf, cut into five ſegments, and remaining.
COROLLA. Monopetala, quinquefida, rotata, laciniis acumenatis.	BLOSSOM. One leaf, cut into five ſegments, wheel-ſhaped, the diviſions ſharp pointed.
STAMINA. Filamenta quinque, lineares, receptaculo inſerta. Antheræ piloſæ, erectæ, conatæ in cylindrum.	CHIVES. Five threads, linear, fixed into the receptacle. Tips hairy, upright, united into a cylinder.
PISTILLUM. Germen ſuperum, turbinatum. Stylus filiformis. Stigma obtuſum.	POINTAL. Seed-bud above, turban-ſhaped. Shaft thread-ſhaped. Summit blunt ended.
PERICARPIUM. Capſula quadrivalvis, quadrilocularis.	SEED-VESSEL. Capſule four valves, four cells.
SEMINA plurima, minima, rotunda.	SEEDS many, ſmall, and round.

SPECIFIC CHARACTER.

Springalia, foliis alternis, amplexicaulibus, mucronatis; corollis ſub-ſolitariis, incarnatis, rigidis, micantibus.	Springalia, with alternate leaves, embracing the ſtem, and ſharp pointed; bloſſoms moſtly ſingle, fleſh-coloured, harſh, and ſhining.

REFERENCE TO THE PLATE.

1. The Empalement, (natural ſize).
2. The Bloſſom divided from the Empalement.
3. The Chives, Pointal, and Seed-bud, (magnified).
4. The Seed-veſſel, and Pointal, (magnified).

THE Springalia, muſt certainly rank among the moſt beautiful of the various new genera which have been introduced from New Holland; the delicacy, brilliancy, and number, of its bloſſoms render it particularly attractive, whilſt their extreme permanency adds greatly to its merits; the flower being of ſuch ſingular durability, as to retain nearly the ſame appearance when the ſeeds are perfected, as at their firſt opening. The figure before us, was taken from a plant in the nurſery garden of Meſſrs. Lee and Kennedy, Hammerſmith, who raiſed it from ſeeds about three years ſince, and where it has flowered theſe two ſucceſſive years. The Botany-bay plants, (as they are generally called) are beſt preſerved in the greenhouſe; but although this is ſufficiently hardy for ſuch treatment, yet its ſituation muſt be dry, being very ſuſceptible of damps, flouriſhing beſt in ſandy peat earth; continues flowering through the whole ſummer; and propagates eaſily by cuttings. The characters, and habit of this genus, like almoſt all the plants from New Holland, being perfectly new, there was a neceſſity to form a freſh generic name for it; which has been done by the deſervedly eminent Dr. J. E. Smith, botanical profeſſor, and preſident of the Linnæan Society.

Springalia incarnata

Neottia speciosa

PLATE III.

NEOTTIA SPECIOSA.

Flesh-coloured Neottia.

CLASS XX. ORDER II.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix simplex

COROLLA. Petala quinque, longitudine æquila, angustè-lanceolata, erecta.

Nectarium monophyllum, indivisum, acuminatum, intra petala interiora positum. basin styli semiamplectens, erectum, superne patulum.

STAMINA. Filamenta duo, ex limbo styli dorsali orta, lanceolata. Antheræ duæ, lineares, longæ, locatæ in loculum filamenti.

PISTILLUM. Germen inferum, curvatum, sulcatum, inferne attenuatum. Stylus crassus, adnatus labio superiori nectarii. Stigma obsoletum.

PERICARPIUM. Capsula unilocularis, carnosa, longissima, trivalvis.

SEMINA numerosa, minutissima.

EMPALEMENT. Sheath scattered. Fruit-stalk simple.

BLOSSOM. Petals five, of equal length, of a narrow spear-shape, and upright.

Honey-cup one leaf, undivided, sharp pointed, placed between the two inner petals, half embracing the base of the shaft; upright, spreading at the top.

CHIVES. Two threads, rising out of the back of the shaft, spear-shaped. Tips two, linear, long, placed in the cells of the threads.

POINTAL. Seed-bud beneath, curved, furrowed, tapering at the base. Shaft thick, growing to the upper lip of the honey-cup. Summit indistinct.

SEED-VESSEL. Capsule with one cell, fleshy, very long, three valves.

SEEDS numerous, very small.

SPECIFIC CHARACTER.

Neottia, foliis radicalibus, undulatis, lato-lanceolatis, basi attenuatis; floribus confertis, spicatis, incarnatis, speciosissimis.

Neottia, with leaves growing from the root, waved, of a broad spear-shape, tapered at the base; flowers pressed together in a spike, flesh-coloured, and most beautiful.

REFERENCE TO THE PLATE.

1. A Blossom, Seed-bud, and Sheath, (natural size).
2. The Seed-bud, and three Petals of the Blossom; the two inner cut out, to shew the position of the Honey-cup, (natural size).
3. Seed-vessel, and Honey-cup magnified; shewing the situation, and shape of the Chives, within the Honey-cup.
4. The same magnified; shewing the situation of the Pointal, at the back of the Honey-cup.

PROFESSOR Jacquin of Vienna, having figured the Neottia in the third volume of his Collectanea, with justice has determined it a new genus, and given it the name it here bears; the whole habit of the plant being entirely dissimilar to any old genera. It certainly must be placed somewhere near Limodorum, or Epidendron, from either of which, however, it stands perfectly distinct. This is the only species yet in England, and was introduced from the Island of Jamaica, about the year 1793, by the Hon. Mrs. Barrington. The drawing from which the present figure is taken, was made (by her kind permission) from a plant in the extensive collection of the Hon. Lady Archer, Ham-common. Like all plants from that island, it requires the heat of a pine-stove, and rich earth, to make it flourish; is increased by the root, and flowers in the early part of the year.

Neottia spiralis

PLATE III.

NEOTTIA SPECIOSA.

Flesh-coloured Neottia.

CLASS XX. ORDER II.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix simplex

COROLLA. Petala quinque, longitudine æquila, anguste-lanceolata, erecta.

Nectarium monophyllum, indivisum, acuminatum, intra petala interiora positum, basin styli semiamplectens, erectum, superne patulum.

STAMINA. Filamenta duo, ex limbo styli dorsali orta, lanceolata. Antheræ duæ, lineares, longæ, locatæ in loculum filamenti.

PISTILLUM. Germen inferum, curvatum, sulcatum, inferne attenuatum. Stylus crassus, adnatus labio superiori nectarii. Stigma obsoletum.

PERICARPIUM. Capsula unilocularis, carnosa, longissima, trivalvis.

SEMINA numerosa, minutissima.

EMPALEMENT. Sheath scattered. Fruit-stalk simple.

BLOSSOM. Petals five, of equal length, of a narrow spear-shape, and upright.

Honey-cup one leaf, undivided, sharp pointed, placed between the two inner petals, half embracing the base of the shaft, upright, spreading at the top.

CHIVES. Two threads, rising out of the back of the shaft, spear-shaped. Tips two, linear, long, placed in the cells of the threads.

POINTAL. Seed-bud beneath, curved, furrowed, tapering at the base. Shaft thick, growing to the upper lip of the honey-cup. Summit indistinct.

SEED-VESSEL. Capsule with one cell, fleshy, very long, three valves.

SEEDS numerous, very small.

SPECIFIC CHARACTER.

Neottia, foliis radicalibus, undulatis, lato-lanceolatis, basi attenuatis; floribus confertis, spicatis, incarnatis, speciosissimis.

Neottia, with leaves growing from the root, waved, of a broad spear-shape, tapered at the base; flowers pressed together in a spike, flesh-coloured, and most beautiful.

REFERENCE TO THE PLATE.

1. A Blossom, Seed-bud, and Sheath, (natural size).
2. The Seed-bud, and three Petals of the Blossom; the two inner cut out, to shew the position of the Honey-cup, (natural size).
3. Seed-vessel, and Honey-cup magnified; shewing the situation, and shape of the Chives, within the Honey-cup.
4. The same magnified; shewing the situation of the Pointal, at the back of the Honey-cup.

PROFESSOR Jacquin of Vienna, having figured the Neottia in the third volume of his Collectanea, with justice has determined it a new genus, and given it the name it here bears; the whole habit of the plant being entirely dissimilar to any old genera. It certainly must be placed somewhere near Limodorum, or Epidendron, from either of which, however, it stands perfectly distinct. This is the only species yet in England, and was introduced from the island of Jamaica, about the year 1793, by the Hon. Mrs. Barrington. The drawing from which the present figure is taken, was made (by her kind permission) from a plant in the extensive collection of the Hon. Lady Archer, Ham-common. Like all plants from that island, it requires the heat of a pine-stove, and rich earth, to make it flourish; is increased by the root, and flowers in the early part of the year.

Rhododendron dauricum.

PLATE IV.

RHODODENDRON DAURICUM.

Dauric Rhododendron.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX quinquepartitus, persistens.
COROLLA. Monopetala, rotato infundibuliformis: limbo patente; laciniis rotundatis.

STAMINA. Filamenta decem, filiformia, longitudine corollæ, declinata. Antheræ ovales.
PISTILLUM. Germen pentagonum, retusum. Stylus filiformis, longitudine corollæ. Stigma obtusum.
PERICARPIUM. Capsula ovata, quinquelocularis.
SEMINA numerosa, minima, linearia.

EMPALEMENT of five divisions, and remaining.
BLOSSOM. One leaf, of a roundish funnel-shape: the limb spreading, and its segments rounded.
CHIVES. Ten hair-like threads, the length of the blossom, bent downward. Tips oval.
POINTAL. Seed-bud five-sided, and dented. Shaft thread-shaped, the length of the blossom. Summit blunt-ended.
SEED-VESSEL. Capsule oval, five-celled.
SEEDS many, small, and linear.

SPECIFIC CHARACTER.

Rhododendron, foliis glabris utrinque nudis, petiolis longissimis; corollis violaceis, foliis amplioribus, rotatis.

Rhododendron, with smooth leaves, naked on both sides, and long foot-stalks; the blossoms light purple, larger than the leaves, and wheel-shaped.

REFERENCE TO THE PLATE.

1. The Blossom, (natural size).
2. The Chives, and Pointal, (natural size); one also detached, (magnified).
3. The Seed-vessel, and Pointal, (magnified).

ALTHOUGH this shrub has been described, and is well known to botanists, it has not, till within these very few years, been seen in Great Britain. It is a perfectly hardy plant, being a native of the coast of the Black and Caspian seas, and parts adjacent, from whence it has been conveyed to Petersburgh by Dr. P. Pallas, and figured by him in his Flora Rossica. Mr. Bath was the person who brought it to England, on his return from Russia. The flowers begin to appear in the month of March, continuing through April and May. As yet (from its scarcity) the best method of cultivating it can scarcely be known; but it seems to like a sheltered situation, and light soil. Like most of the genus, and has been increased by layers. The drawing was made from a plant at the nursery of Messrs. Lee and Kennedy, Hammersmith.

Rhododendron dauricum.

PLATE IV.

RHODODENDRON DAURICUM.

Dauric Rhododendron.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX quinquepartitus, perſiſtens.

COROLLA. Monopetala, rotato-infundibuliformis: limbo patente; laciniis rotundatis.

STAMINA. Filamenta decem, filiformia, longitudine corollæ, declinata. Antheræ ovales.

PISTILLUM. Germen pentagonum, retuſum. Stylus filiformis, longitudine corollæ. Stigma obtuſum.

PERICARPIUM. Capſula ovata, quinquelocularis.

SEMINA numeroſa, minima, lineares.

EMPALEMENT of five diviſions, and remaining.

BLOSSOM. One leaf, of a roundiſh funnel-ſhape: the limb ſpreading; and its ſegments rounded.

CHIVES. Ten hair-like threads, the length of the bloſſom, bent downward. Tips oval.

POINTAL. Seed-bud five-ſided, and dented. Shaft thread-ſhaped, the length of the bloſſom. Summit blunt-ended.

SEED-VESSEL. Capſule oval, five-celled.

SEEDS many, ſmall, and linear.

SPECIFIC CHARACTER.

Rhododendron, foliis glabris utrinque nudis, petiolis longiſſimis; corollæ violaceæ, foliis ampliores, rotatæ.

Rhododendron, with ſmooth leaves, naked on both ſides, and long foot-ſtalks; the bloſſoms light purple, larger than the leaves, and wheel-ſhaped.

REFERENCE TO THE PLATE.

1. The Bloſſom, (natural ſize).
2. The Chives, and Pointal, (natural ſize); one tip detached, (magnified).
3. The Seed-veſſel, and Pointal, (magnified).

ALTHOUGH this ſhrub has been deſcribed, and is well known to botaniſts, it has not, till within theſe very few years, been ſeen in Great Britain. It is a perfectly hardy plant, being a native of the coaſt of the Black and Caſpian ſeas, and parts adjacent; from whence it has been conveyed to Peterſburg by Dr. P. Pallas, and figured by him in his Flora Ruſſica. Mr. Buſh was the perſon who brought it to England, on his return from Ruſſia. The flowers begin to appear in the month of March, continuing through April and May. As yet (from its ſcarcity) the beſt method of cultivating it can ſcarcely be known; but it ſeems to like a ſheltered ſituation, and light ſoil, like moſt of the genus; and has been increaſed by layers. The drawing was made from a plant, at the nurſery of Meſſrs. Lee and Kennedy, Hammerſmith.

Gladiolus longiflorus

Drawn, Engraved & Published as the Act directs by R. Sweet, No 2 Fox Hill Bridge.

PLATE V.

GLADIOLUS LONGIFLORUS.

Long-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.

COROLLA, sexpartita, ringens. Petala oblonga, omnia unguibus in tubum conata.

STAMINA. Filamenta tria, subulata, divisuris alternis petalorum inserta. Antheræ oblongæ.

PISTILLUM. Germen inferum. Stylus simplex, longitudine staminium. Stigma trifidum, concavum.

PERICARPIUM. Capsula oblonga, obtusa, trilocularis, trivalvis.

SEMINA plura, subrotunda.

ENVELOPMENT. Sheath two valves.

BLOSSOM, cut into six segments, and gaping. Petals oblong, having all their claws connected into a tube.

CHIVES. Three threads, awl-shaped, fixed into each alternate division of the petals. Tips oblong.

POINTAL. Seed-bud beneath. Shaft simple, the length of the chives. Summit divided in three, and concave.

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

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Gladiolus, foliis ensiformibus, plicatis, villosis; corollis tubiformibus, longissimis, petalis undulatis, reflexis.

Gladiolus, with sword-shaped, plated, hairy leaves; blossoms trumpet-shaped, and very long; petals waved, and bent back.

REFERENCE TO THE PLATE.

1. A Blossom cut open, to shew the situation, and insertion of the Threads; the Threads, and Tips, remaining attached.
2. The Seed-bud, Shaft, and its Summit.

This species of Gladiolus, (as are most of the genus) is a native of the Cape of Good Hope, about Table Mountain; where the roots of Ixia, Antholyza, Gladiolus, &c. form a chief part of the food of the inhabiting monkies. It came to England amongst many other roots and seeds of beautiful and rare plants, collected by J. Pringle, Esq. of the island of Madeira, when on an excursion at the Cape; and sent by him to Messrs. Lee and Kennedy, of Hammersmith. Like most bulbs, it has its period of rest; during which, it should be kept without moisture, but whilst growing, requires abundance; flowering about June, or July, and producing good seeds. It should be treated as a greenhouse plant, and planted in light sandy earth. Like the Crocus, the old root perishing, a number of fresh ones are produced, which may, (if thought necessary) be kept out of the ground two or three months.

Gladiolus longiflorus

Drawn, Engraved & Published on the 1st Nov. 1806
by H. Andrews, No. 36, Old Bond Street

PLATE V.

GLADIOLUS LONGIFLORUS.

Long-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.

COROLLA, ſexpartita, ringens. Petala oblonga, omnia unguibus in tubum conata.

STAMINA. Filamenta tria, ſubulata, diviſuris alternis petalorum inſerta. Antheræ oblongæ.

PISTILLUM. Germen inferum. Stylus ſimplex, longitudine ſtaminium. Stigma trifidum, concavum.

PERICARPIUM. Capſula oblonga, obtuſa, trilocularis, trivalvis.

SEMINA plura, ſubrotunda.

EMPALEMENT. Sheath two valves.

BLOSSOM, cut into ſix ſegments, and gaping. Petals oblong, having all their claws connected into a tube.

CHIVES. Three threads, awl-ſhaped, fixed into each alternate diviſion of the petals. Tips oblong.

POINTAL. Seed-bud beneath. Shaft ſimple, the length of the chives. Summit divided in three, and concave.

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

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Gladiolus, foliis enſiformibus, plicatis, villoſis; corollis tubiformibus, longiſſimis; petalis undulatis, reflexis.

Gladiolus, with ſword-ſhaped, plated, hairy leaves; bloſſoms trumpet-ſhaped, and very long; petals waved, and bent back.

REFERENCE TO THE PLATE.

1. A Bloſſom cut open, to ſhew the ſituation, and inſertion of the Threads; the Threads, and Tips, remaining attached.
2. The Seed-bud, Shaft, and its Summit.

THIS ſpecies of Gladiolus, (as are moſt of the genus) is a native of the Cape of Good Hope, about Table Mountain; where the roots of Ixia, Antholyza, Gladiolus, &c. form a chief part of the food of the inhabiting monkies. It came to England amongſt many other roots and ſeeds of beautiful and rare plants, collected by J. Pringle, Eſq. of the iſland of Madeira, when on an excurſion at the Cape; and ſent by him to Meſſrs. Lee and Kennedy, of Hammerſmith. Like moſt bulbs, it has its period of reſt; during which, it ſhould be kept without moiſture, but whilſt growing, requires abundance; flowering about June, or July, and producing good ſeeds. It ſhould be treated as a greenhouſe plant, and planted in light ſandy earth. Like the Crocus, the old root periſhing, a number of freſh ones are produced, which may, (if thought neceſſary) be kept out of the ground two or three months.

Hemerocallis candida.

Drawn, Engraved & Published as the Act directs Dec.r 1st 1791
by Nathaniel Ch. Haughton sculp.

PLATE VI.

HEMEROCALLIS CÆRULEA.

Blue Day Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Nullus.

COROLLA, sexpartita, infundibuli-campanulata.

STAMINA. Filamenta sex, subulata, longitudine corollæ, declinata; superiora breviora. Antheræ oblongæ, incumbentes, assurgentes.

PISTILLUM. Germen sulcatum, superum. Stylus filiformis, longitudine et situ staminum. Stigma obtuse-trigonum, assurgens.

PERICARPIUM. Capsula trigona, trilocularis, trivalvis.

SEMINA plurima, subrotunda.

EMPALEMENT. None.

BLOSSOM, has six segments, of a funnel bell-shape.

CHIVES. Six awl-shaped threads, the length of the blossom, bent downwards, the upper ones the shortest. Tips oblong, turned to their sides, and turned up at the ends.

POINTAL. Seed-bud furrowed, and grooved. Shaft thread-shaped, of the length and position of the chives. Summit blunt, three-cornered, turned up at the point.

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

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Hemerocallis, follis cordatis, petiolatis; corollis cæruleis.

Day Lily, with leaves that are heart-shaped, and have foot-stalks; the blossoms blue.

REFERENCE TO THE PLATE.

1. The Chives, and Pointal, as placed in the blossom.
2. The Seed-bud, Shaft, and Summit.
3. A Seed of the shape and size when ripe.

The variety of character exhibited in this new species of Hemerocallis, so different from its congeners, in foliage, flower, and seed, would almost justify us in a generic division accordingly; if we were not withheld, by that strong rule of Linnæus (from which it will be a leading feature of this work, not to swerve) not to increase the number of genera, but where absolutely necessary. This species, as well as a white variety, which has been figured by Kempfer, and mentioned since him by Weildenow, in his new Species Plantarum, under its present denomination, is native of China, and introduced to our gardens from thence, by G. Hibbert, Esq. at Clapham, from whose most extensive and beautiful collection this specimen was taken. It is as yet collected as a hothouse plant, where it flowers in the spring months, perfecting its seeds; perhaps when better known, it may be found, like many Chinese plants, to bear our climate. It is propagated as well by parting its roots, as from the seeds.

Hemerocallis cærulea.

Engraved & Published as the act directs Dec.r 1st 1831
by R. Ladbrooke Nº 5 Keyslewright.

PLATE VI.

HEMEROCALLIS CÆRULEA.

Blue Day Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Nullus.	EMPALEMENT. None.
COROLLA, ſexpartita, infundibuli-campanulata.	BLOSSOM, has ſix ſegments, of a funnel bell-ſhape.
STAMINA. Filamenta ſex, ſubulata, longitudine corollæ, declinata; ſuperiora breviora. Antheræ oblongæ, incumbentes, aſſurgentes.	CHIVES. Six awl-ſhaped threads, the length of the bloſſom, bent downwards; the upper ones the ſhorteſt. Tips oblong, fixed by their ſides, and turned up at the ends.
PISTILLUM. Germen ſulcatum, ſuperum. Stylus filiformis, longitudine et ſitu ſtaminium. Stigma obtuſe-trigonum, aſſurgens.	POINTAL. Seed-bud furrowed, and above. Shaft thread-ſhaped, of the length and poſition of the chives. Summit bluntly three-cornered, turned up at the point.
PERICARPIUM. Capſula trigona, trilocularis, trivalvis.	SEED-VESSEL. Capſule three-ſided, three cells, three valves.
SEMINA plurima, ſubrotunda.	SEEDS many, nearly round.

SPECIFIC CHARACTER.

Hemerocallis, foliis cordatis, petiolatis; corollis cæruleis.	Day Lily, with leaves that are heart-ſhaped, and have foot-ſtalks; the bloſſoms blue.

REFERENCE TO THE PLATE.

1. The Chives, and Pointal, as placed in the Bloſſom.
2. The Seed-bud, Shaft, and Summit.
3. A Seed of the ſhape and ſize when ripe.

THE variety of character exhibited in this new ſpecies of Hemerocallis, ſo different from its congeners, in foliage, flower, and ſeed; would almoſt induce us to think like Gærtner, a generic diviſion neceſſary; if we were not withheld, by that ſtrong rule of Linnæus, (from which, it will be a leading feature of this work, not to ſwerve) not to increaſe the number of genera, but where abſolutely neceſſary. This ſpecies, as well as a white variety, which has been figured by Kæmpfer; and continued ſince him by Welldenow, in his new Species Plantarum, under its preſent denomination; is a native of China, and introduced to our gardens from thence by G. Hibbert, Eſq of Clapham, from whoſe moſt extenſive and beautiful collection this ſpecimen was taken. It is as yet cultivated as a hothouſe plant, where it flowers in the ſpring months, perfecting its ſeeds: perhaps when better known, it may be found, like many Chineſe plants, to bear our climate. It is propagated as well by parting its roots, as from the ſeeds.

Primula Cortusoides.

Drawn, Engraved & Published by the Rev. Sowerby Jun.
by Dr. Andrews & Longman & Rees.

PLATE VII.

PRIMULA CORTUSOIDES.

Siberian Primrose.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum polyphyllum, umbellam cingens, minimum. Perianthium monophyllum, tubulosum, pentagonum, quinquedentatum, acutum, erectum, persistens.

COROLLA. Monopetala. Tubus cylindraceus, longitudine calycis, terminatus collo parvo hemisphærico. Limbus patens, semiquinquefidus; laciniis obcordatis, obtusis. Faux pervia.

STAMINA. Filamenta quinque, brevissima, intra collum corollæ. Antheræ acuminatæ, erectæ, conniventes, inclusæ.

PISTILLUM. Germen globosum. Stylus filiformis, longitudine calycis. Stigma globosum.

PERICARPIUM. Capsula tecta, longitudine fere perianthii, unilocularis, dehiscens apice decemfido.

SEMINA numerosa, subrotunda. Receptaculum ovato-oblongum, liberum.

EMPALEMENT. Fence of many leaves, surrounding the flowers, very small. Cup one leaf, tubular, five-cornered, five-toothed, sharp, upright, permanent.

BLOSSOM. One petal. Tube cylindrical, the length of the cup, terminated by a short hemispherical mouth. Border spreading, half cut into five divisions, the segments inversely heart-shaped, blunt. Mouth open.

CHIVES. Five threads, very short, within the neck of the blossom. Tips sharp, upright, approaching, within the tube.

POINTAL. Seed-bud globular. Shaft thread-shaped, the length of the cup. Summit globular.

SEED-VESSEL. Capsule enclosed, nearly as long as the cup, of one cell, opening at the top with ten teeth.

SEEDS numerous, roundish. Receptacle egg-oblong, and loose.

SPECIFIC CHARACTER.

PRIMULA foliis petiolatis, incisis, [illegible] scapo [illegible] umbella [illegible].

PRIMROSE, with [illegible] leaves [illegible] and [illegible] flowers [illegible] larger [illegible].

REFERENCE TO THE PLATE.

1. Cup, and Tube [illegible].
2. [illegible] to show the situation of the Chives, and the internal Pointal.
3. [illegible] magnified.

THE [illegible] Siberia [illegible] if planted out. [illegible] flowers in June, and July.

Primula Cortusoides.

PLATE VII.

PRIMULA CORTUSOIDES.

Siberian Primrose.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum polyphyllum, multiflorium, minimum. Perianthium monophyllum, tubulatum, pentagonum, quinquedentatum, acutum, erectum, persistens.

COROLLA. Monopetala. Tubus cylindraceus, longitudine calycis, terminatus colo parvo hemisphærico. Limbus patens, semi-quinquefidus; laciniis obcordatis, obtusis. Faux pervia.

STAMINA. Filamenta quinque, brevissima, intra collum corollæ. Antheræ acumenatæ, erectæ, conniventes, inclusæ.

PISTILLUM. Germen globosum. Stylus filiformis, longitudine calycis. Stigma globosum.

PERICARPIUM. Capsula teres, longitudine fere perianthii, unilocularis, dehiscens apice decem dentato.

SEMINA numerosa, subrotunda. Receptaculum ovato-oblongum, liberum.

EMPALEMENT. Fence of many leaves, including several flowers, and small. Cup one leaf, tubular, five-sided, five-toothed, sharp, upright, and remaining.

BLOSSOM. One petal. Tube cylindrical, the length of the cup, terminated by a short hemispherical neck. Border spreading, half cut into five divisions; the segments are inversely heart-shaped, and blunt. Mouth open.

CHIVES. Five threads, very short, within the neck of the blossom. Tips pointed, upright, approaching, within the tube.

POINTAL. Seed-bud globular. Shaft thread-shaped, the length of the cup. Summit globular.

SEED-VESSEL. Capsule cylindrical, nearly as long as the cup, of one cell, opening at the top, with ten teeth.

SEEDS numerous, and roundish. Receptacle oblong egg-shaped, and loose.

SPECIFIC CHARACTER.

Primula, foliis petiolatis, cordatis, sub-lobatis, crenatis; corollis lætè purpureis.

Primrose, whose leaves have foot-stalks, are heart-shaped, slightly lobed, and scolloped; blossoms of a bright purple.

REFERENCE TO THE PLATE.

1. The Cup, and Fruit-stalk.
2. A Blossom cut open, to shew the situation of the Chives, and its internal formation.
3. The Seed-bud, Shaft, and Summit, (magnified).

THIS species of Primrose is figured by Gmelin, in his Flora Siberica. It was in the year 1794, that the seeds of this plant were sent by Professor P. Pallas, from Siberia, to Messrs. Lee and Kennedy, of Hammersmith; at whose nursery the drawing of this most charming plant was made: though a native of so cold a clime, it seems with difficulty to endure the severity of ours; thriving best in a pot, under any slight shelter, or a very dry situation if planted out: it is increased by the root, which should be parted in March; and flowers in June, and July.

Gladiolus alatus

Drawn Engraved & Published as the Act
Jan 1st 1790 by H. Roberts No 5 Sherrard St

PLATE VIII.

GLADIOLUS ALATUS

Wing-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Stamens, One Pistil.

GENERIC CHARACTER.

Calyx. Spathe simple.

Corolla. Irregular, unequal. Three petals, erect, connected with the calyx.

Stamens. Filaments very slender, inserted upon the petals, erect. Anthers erect, longer.

Pistil. Germen inferior, turbinate. Style simple, erect, longer than the stamens. Stigma trifid, recurved.

Pericarpium. Capsule obtuse, angular, trilocular, trivalve.

Seeds. Numerous, roundish.

ESSENTIAL CHARACTER.

Spathe simple. Corolla irregular, unequal. Three petals, connected with the calyx. Stamens very slender, longer than the petals. Style simple, longer than the stamens. Stigma trifid, recurved.

EXPLANATION OF THE FIGURE.

1. The spathe, or sheath of the flower-stem, with the bulb, and upper part of the root, as it appears in the Ground.
2. The flower, pistil, and stamens, as in the Plate, but magnified.

Two species of this genus, although so nearly allied, that some have considered them as one, nevertheless, notwithstanding their frequency, have generally been considered as distinct species. It is of an exotic nature, requiring a warm situation, and a light soil, which it will do very well in, if the bulbs be taken up every year, and kept dry in the house. From this circumstance, it is difficult to ascertain the time of its flowering, for although it does not flower every year, yet it does so sufficiently, even some years that we have, in a warm situation, been having flowered, which is the reason we do not find it there recorded. It is mentioned by Linnæus, in his Species Plantarum, under the name it here bears, and by Miller, in his Gardener's Dictionary, under the name of Gladiolus Cardinalis, and others under various synonyms. This figure was taken from a specimen in Messrs. Lee and Kennedy's, Lady Ann's Nurseries, Hammersmith.

Gladiolus

Drawn Engraved & Published as the Act
Jan. 1st. 1798 by H. Andrews No. 5 Knightsbridge

PLATE VIII.

GLADIOLUS ALATUS.

Wing-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.	EMPALEMENT. Sheath two valves.
COROLLA, ſexpartita, ringens. Petala oblonga, omnia unguibus in tubum conata.	BLOSSOM, of ſix diviſions, and gaping. Petals oblong, having their claws formed into a tube.
STAMINA. Filamenta tria, ſubulata, diviſuris alternis petalorum inſerta. Antheræ oblongæ.	CHIVES. Three awl-ſhaped threads, fixed into the alternate diviſions of the petals. Tips oblong.
PISTILLUM. Germen inferum. Stylus ſimplex, longitudine ſtaminium. Stigma trifidum, concavum.	POINTAL. Seed-bud beneath. Shaft ſimple, the length of the chives. Summit cut into three, and concave.
PERICARPIUM. Capſula oblonga, obtuſa, trilocularis, trivalvis.	SEED-VESSEL. Capſule oblong, blunt ended, three cells, three valves.
SEMINA plura, ſubrotunda.	SEEDS many, nearly round.

SPECIFIC CHARACTER.

Gladiolus, foliis enſiformibus, coſtatis; petalis lateralibus latiſſimis.	Gladiolus, with ſword-ſhape, ribbed leaves; the ſide petals of the bloſſom the broadeſt.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement, with the Chives, detached from the Petals, as they ſtand in the Bloſſom, and apparently attached to each other; with the natural poſition of the Pointal.
2. The Chives, Pointal, and Seed-bud; one of the diviſions of the Summit magnified.

THIS ſpecies of Gladiolus, although ſo ſcarce with us, is certainly one of the moſt common found near Cape Town; and, notwithſtanding its extreme beauty, has been overlooked by moſt collectors; who, from its great frequency, have generally conſidered it as forming, undoubtedly, part of every collection of exotics. It is of an extreme delicate nature, and overmuch wet eaſily deſtroys it; differing from moſt Cape bulbs, in requiring a light loamy earth, and the aſſiſtance of a dry ſtove, to make it flower well; which it will do by ſuch aid, about May, or June; ſeldom producing ſeeds, and propagating but ſlowly by the root. From the fugitive character of this plant, it is difficult to aſcertain the firſt cultivator; for although it does not appear amongſt the Gladiolus in the Hortus Kewenſis, it muſt undoubtedly have come into that immenſe collection at different periods, but never flowered; which is the reaſon we do not find it there deſcribed, which has been done by Linnæus, in his Species Plantarum, under the name it here bears; as well as by Plukenet, in his Phyto graphia, and others under various ſynonims. This figure was taken from a plant that flowered at Meſſrs. Lee and Kennedy's in 1796.

Atragene Capensis.

Published as the Act directs June 1st 1799 by W. Curtis
No 5 Boughton Row

PLATE IX.

ATRAGENE CAPENSIS.

Cape Atragene.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

CALYX. Perianthium tetraphyllum; foliolis ovalibus, patentibus, obtusis, deciduis.

COROLLA. Petala duodecim, linearia, basi angustissima, obtusa, patula.

STAMINA. Filamenta plurima, brevissima. Antherae oblongae, erumpentes.

PISTILLUM. Germina plurima oblonga. Styli villosi. Stigmata simplicia, longitudine antherarum.

PERICARPIUM. Nullum.

SEMINA plurima, dehiscentia in capitulum pilosum.

ENVELOPE. Cup four-leaved, which are oval, spreading, blunt, and deciduous.

BLOSSOM. Petals twelve, linear, narrowest at base, blunt, and spread open.

CHIVES. Threads many, very short. Tips oblong, pointed.

POINTALS. Seed-buds numerous, oblong. Shafts hairy. Summits simple, the length of the tips.

SEED-VESSEL. None.

SEEDS many, terminating in a hairy ball.

SPECIFIC CHARACTER.

Atragene, foliis ternatis, foliolis lacinis, dentatis, rigidis, flore incarnato, feminibus.

Atragene, with three divisions; the leaves divisions jagged, toothed, and stiff; the flower flesh-coloured, and feminiferous.

REFERENCE TO THE PLATE.

1. A Petal cut off close to the receptacle.
2. The Fruit-stalk, Chives, and Pointals; the Chives thrown to one side, to expose the situation of the Pointals; one tip magnified.
3. A head of the fruit when ripe.

THIS plant has been considered by Burmann, Hermann, and other Cape botanists, as an Anemone, to which genus it certainly may as easily be referred as Atragene: but as it has been clearly defined by Linnæus, under that genus, we have not hardiness enough to dispute his authority. It is (as the trivial name implies) a native of the Cape of Good Hope, but at some considerable distance within land: whence it requires a dry stove to preserve it, suffering much from damps. It is only since the year 1798, that this plant has been found in our greenhouses, being then introduced by Messrs. Lee and Kennedy, nurserymen, where it has flowered and perfected seeds, which seems to be the only means of propagating it; the soil it prefers is a mixture of peat and loam; flowering about March, or April.

Atragene Capensis.

Pub. as the Act directs June 1st 1799 by Th. Brooks
No. 8 Houghton Place.

PLATE IX.

ATRAGENE CAPENSIS.

Cape Atragene.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

CALYX. Perianthium tetraphyllum; foliolis ovalibus, patentibus, obtusis, diciduis.

COROLLA. Petala duodecim, linearia, basi angustissima, obtusa, patula.

STAMINA. Filamenta plurima, brevissima. Antheræ oblongæ, acumenatæ.

PISTILLUM. Germina plurima oblonga. Styli villosi. Stigmata simplicia, longitudine antherarum.

PERICARPIUM. Nullum.

SEMINA plurima, desinentia in caudam pilosam.

EMPALEMENT. Cup four-leaved, which are oval, spreading, blunt, and deciduous.

BLOSSOM. Petals twelve, linear, narrowest at base, blunt, and spread open.

CHIVES. Threads many, very short. Tips oblong, pointed.

POINTAL. Seed-buds numerous, oblong. Shafts hairy. Summits simple, the length of the tips.

SEED-VESSEL. None.

SEEDS many, terminating in a hairy tail.

SPECIFIC CHARACTER.

Atragene, foliis ternatis; foliolis incisis, dentatis, rigidis; flore incarnato, semipleno.

Atragene, with three divisions; the smaller divisions jagged, toothed, and harsh; the flower flesh-coloured, and semidouble.

REFERENCE TO THE PLATE.

1. A Petal cut off close to the receptacle.
2. The Fruit-stalk, Chives, and Pointals; the Chives thrown to one side, to expose the situation of the Pointals; one tip magnified.
3. A Seed of the size when ripe.

THIS plant has been considered by Burmann, Hermann, and other Cape botanists, as an Anemone, to which genus it certainly may as easily be referred as Atragene: but as it has been clearly described by Linnæus, under that genus, we have not hardiness enough to dispute his authority. It is (as the trivial name implies) a native of the Cape of Good Hope, but at some considerable distance within land; whence it requires a dry stove to preserve it, suffering much from damps. It is only since the year 1795, that this plant has been found in our greenhouses; being then introduced by Messrs. Lee and Kennedy, nurserymen, where it has flowered and perfected seeds; which seems to be the only means of propagating it: the soil it prefers is a mixture of peat and loam; flowering about March, or April.

Aristea cyanea.

PLATE X.

ARISTEA CYANEA.

Blue-flowered Ariſtea.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves, laceræ, perſiſtentes.

COROLLA, hexapetala, oblonga, æqualia, obcordata, perſiſtentia, patens.

STAMINA. Filamenta tria, erecta, ſubulata. Antheræ ſub-ſimplices, magnæ.

PISTILLUM. Germen inferum. Stylus filiformis, erectus. Stigma trifidum, concavum, reflexum.

PERICARPIUM. Capſula oblonga, triquetra, trilocularis, loculis compreſſis, trivalvis.

SEMINA plura, compreſſa, ſcabrida, ſub-ſemicircularia.

EMPALEMENT. Sheath two valves, ragged, and remaining.

BLOSSOM, of ſix petals, oblong, equal, inverſely heart-ſhaped, remaining, ſpreading.

CHIVES. Three threads, upright, awl-ſhaped. Tips almoſt ſimple, and large.

POINTAL. Seed-bud beneath. Shaft thread-ſhaped and erect. Summit cut into three, concave and reflected.

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

SEEDS many, flat, rough, nearly ſemicircular.

SPECIFIC CHARACTER.

Ariſtea, foliis enſiformibus, radicalibus; floribus capitatis, cyaneis.

Ariſtea with ſword-ſhaped leaves growing from the root; the flowers grow in heads, and are of a bright blue.

REFERENCE TO THE PLATE.

1. A Valve of the Sheath ſpread open.
2. The Chives, Pointal, and Seed bud, (magnified.)
3. A perfect Seed, (magnified.)

THE Ariſtea is a native of the Cape of Good Hope, and has been deſcribed under various ſynonyms; by Plukenett as a Gramen, by Petiver as Bermudiana Capenſis, and by Van Royen, Burmann, and Linnæus, as an Ixia. But although differing from Linnæus is againſt the fixed intention of this undertaking, where there is a poſſibility of avoiding it; yet in this inſtance of alteration he muſt have acquieſced, having undoubtedly never ſeen the plant himſelf. The bloſſom, ſeed-veſſel, ſeeds, habit, root, and growth, of the plant, ſo totally differ from the character of Ixia, &c. that we have not heſitated, in accepting the name given it in the Hortus Kewenſis; where, it is ſaid to have been introduced, to that collection, by Mr. F. Maſſon in 1774; though no ſpecific deſcription is given of it; from which we may conjecture, it never flowered there. The figure here given, was taken from a plant which flowered at Meſſrs. Lee and Kennedy's, in 1797. The Ariſtea being rather a delicate plant, requires an airy, warm ſituation in the greenhouſe, flowering readily about the month of July, or Auguſt; requiring to be kept in a ſmall pot, the ſoil a light loam. It propagates by ſeeds, and ſlips.

Gladiolus roseus.

PLATE 76.

GLADIOLUS ROSEUS.

Rose-coloured Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pistil.

GENERIC CHARACTER.

Corolla. Petals six, nearly equal. Petals oblong, spreading, of unequal breadth.

Stamens. Filaments three, filiform, distinct, shorter than the corolla. Anthers oblong.

Pistil. Germen three-sided, inferior, oblong, longer than stamens. Stigma trifid, recurved.

Pericarpium. Capsule oblong, obtuse, trilocular, trivalvular.

Seeds. Many, compressed.

Footstalks. Sheath two valved.

Receptacle. Of the children and grandchildren. Petals oblong, having their claws formed into a tube.

Corolla. Three sword-shaped threads stem into the alternate divisions of the petals. Tube oblong.

Pistil. Seed-bud, germen. Short simple, the length of the chives. Summit cut into three, reflexed.

Seed-vessel. Capsule oblong, blunt-sided, three cell, three valves.

Seeds. Many, round.

SPECIFIC CHARACTER.

Calyxless. Petals lanceolate, rolling inwards, equal, undivided. Footstalks rolled inwards.

Glaucous. Leaves sword-shaped, nerved, reflexed, and hairy. Stalkless leaves, with leaves sheathed.

REFERENCE TO THE PLATE.

1. The Germen of the Pistil.
2. A Flower, the Petals of which are taken off, to shew the situation of the Threads, the Filaments, and the remaining Germen.
3. The Seed-bud, Pistil, and Summit magnified.
4. A Seed-vessel, with the Seeds, as in Tribe.

Four other beautiful species of Gladiolus, native of very warm climes, have been cultivated in England, for the year 1797. It was first flowered, in the collection of Mr. Cox, Mr. Parkes's, Fulham, and has since received a place in the gardens. Hitherto, from whence this species was taken. Professor Jacquin has given a plate, in his Icones Rariorum, representing, from a dried specimen, a fine figure given an idea of the excellency of the original plant. The Engraver of the Flowers, added to the figure, the leaves of the Gladiolus, and made it in the highest rank of its congeners. To preserve the plant, the following Gladiolus, as soon as the frost begins to decay, it should be taken from the pot, and kept dry, in a cabinet. Where it should be replanted, and treated as other Cape bulbs. It may easily by offsets, and increase also in the same manner as Tulips.

Geranium grandiflorum.

Pub.d as the Act directs 1st Jan.y 1818 by H. Nelson
No. 5 Hungerford Bridge

PLATE XII.

GERANIUM GRANDIFLORUM.

Largeſt flowered Crane's-bill.

CLASS XVI. ORDER II.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum: foliolis ovatis, acutis, concavis, perſiſtentibus.

COROLLA. Petala quinque, obcordata, ſeu ovata, patentia, magna.

STAMINA. Filamenta decem, ſubulata, corolla breviora. Antheræ oblongæ, verſatiles.

PISTILLUM. Germen quinquangulare, roſtratum. Stylus ſubulatus, ſtaminibus longior, perſiſtens. Stigmata quinque, reflexa.

PERICARPIUM nullum. Fructus pentacoccus, roſtratus.

SEMINA ſolitaria, reniformia, ſæpe arillata; Ariſta longiſſima, demum ſpirali.

EMPALEMENT. Cup five leaves: leaves egg-ſhaped, ſharp pointed, concave, and permanent.

BLOSSOM. Five petals, inverſely heart-ſhaped, or egg ſhaped, ſpreading, and large.

CHIVES. Ten threads, awl-ſhaped and ſhorter than the bloſſom. Tips oblong, eaſily turned round.

POINTAL. Seed-bud five-angled, and beaked. Shaft awl-ſhaped, longer than the chives and remaining. Five reflexed ſummits.

SEED-VESSEL none. Fruit five dry berries, beaked.

SEEDS, ſolitary, kidney-ſhaped, often furniſhed with a dry huſky coat, and a very long awn, which become ſpiral.

SPECIFIC CHARACTER.

Geranium, calycibus monophyllis, foliis quinque-lobis, glabris, dentatis; floribus ampliſſimis, ſub-albidis.

Geranium, empalements of one leaf; leaves five-lobed, ſmooth, and toothed; the flowers very large, nearly white.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to ſhew its tubular ſtructure.
2. The Chives, and Pointal, as placed in the flower, (natural ſize.)
3. The Shaft, Summits, and Seed-bud, (magnified.)

OF all the ſpecies of this numerous tribe, introduced to us, from the Cape of Good Hope, this ſtands ſingularly pre-eminent; whether for delicacy of foliage, or beauty of flower, of which, the moſt finiſhed drawing would convey but a faint idea. The figure before us, was taken from a plant in the valuable collection of G. Hibbert, Eſq. Clapham; from whom we underſtand, that it was ſent in 1794 to the Royal Gardens at Kew, by Mr. F. Maſſon. To keep this plant in a flouriſhing condition, it ſhould be kept in a window of the ſtove, in winter, as the heat of a greenhouſe is ſcarce ſufficient at that ſeaſon. It flowers in July, or Auguſt, and requires the ſoil generally uſed for Geraniums, a mixture of rotten dung, and loam; being eaſily propagated by cuttings.

To diſſent from moſt of the late publications on the ſcience of Botany, may ſeem preſuming; yet, when it ſhall be conſidered, that we take Linnæus for our ſole guide, where that great maſter has inconteſtibly fixed a Generic character, to a tribe of plants, which undoubtedly, came clearly under his inſpection; from his dictates, ours muſt emanate, although his authority may be queſtioned by others. If any good reaſons had been found, to diſunite a Genus, which nature has ſo palpably diſtinguiſhed throughout all its numerous ſpecies; he certainly, who had minutely examined ſo many, would not in his factitious Syſtem have allied them; though nature had apparently ſo done. We muſt therefore, after him, think no Generic diviſion neceſſary. For the ſake of correctneſs, where a Genus is ſo extended in its ſpecies as Geranium, Erica, &c. are; the conformity of particular parts, may form a ſecondary arrangement, as we find it conſtantly in Linnæus; the Heaths, from the ſhape of their tips, the Geraniums, from the number of fertile Chives; which a French Botaniſt of the name of L'Heritier, has thought of ſufficient moment to create two new Genera on, Erodium and Pelargonium, retaining the old name Geranium for thoſe only, with ten perfect Chives. Monſ. L'Heritier and his followers muſt, therefore, forgive us for ranking one of his Pelargoniums under the old ſtandard.

Epidendrum cochleatum.

PLATE XIII.

EPIDENDRUM COCHLEATUM.

Purple [illegible] Epidendrum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. [illegible] Pointal. Two Chives.

GENERIC CHARACTER.

Calyx. Spathæ vagæ. Spadix simplex. Perianthium nullum.

Corolla. Petala quinque, oblonga, angustiora, patentissima.

Nectarium basi tubulatum, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], labio brevissimo, [illegible] [illegible] [illegible] [illegible].

Stamina. Filamenta duo, brevissima, pistillo insidentia. Antheræ tectæ labio superiore nectarii.

Pistillum. Germen tenue, longum, contortum, inferum. Stylus brevissimus, adnatus labio superiori nectarii. Stigma obliteratum.

Pericarpium. Siliqua longissima, teres, [illegible].

Semina numerosa, minutissima.

[illegible]. [illegible] [illegible]. Fruit-stalk [illegible].

[illegible]. Five petals, [illegible], narrow, and [illegible].

[illegible] [illegible] [illegible] the [illegible], [illegible] [illegible] between the lower petals, [illegible] [illegible] [illegible] the upper [illegible] [illegible] [illegible], the [illegible] [illegible] [illegible].

[illegible]. Two [illegible] [illegible] on the [illegible]. [illegible] [illegible] the upper lip of the [illegible].

[illegible]. Seed-bud [illegible] [illegible] [illegible] and beneath. [illegible] [illegible] [illegible] the upper lip of the [illegible]. [illegible].

[illegible]. [illegible] [illegible] [illegible] [illegible].

Seeds [illegible] [illegible].

SPECIFIC CHARACTER.

Epidendrum foliis oblongis, geminis, glabris, bulbo insidente; scapo multifloro; nectario cucullato, purpureo.

Epidendrum with [illegible] [illegible] [illegible] [illegible], [illegible], [illegible], [illegible] [illegible] [illegible]; [illegible] [illegible]; [illegible] [illegible] and purple.

REFERENCE TO THE PLATE.

1. The [illegible], without the Honey-cup, divided to show the situation of the Chives and Pointal, which are covered by the Honey-cup.
2. The Honey-cup.
3. The Tips.
4. The Seed-bud.

Of all plants, none furnish a more agreeable [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] singular construction of the whole flower, leads the observer [illegible] [illegible] [illegible] [illegible] [illegible] animal life: particularly amongst the Orchis, and Ophris. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and butterflies are [illegible] shaped in the honey-cup. [illegible] [illegible] [illegible] [illegible] [illegible] from its place of growth, being [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] other plants, which [illegible] [illegible] [illegible] [illegible] of the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] by planting it in a [illegible] [illegible] wood, and loam. [illegible] [illegible] [illegible] [illegible] [illegible] taken, was a present to [illegible] Lee and Kennedy from the [illegible] [illegible] [illegible] [illegible] it from Dr. Dancer's [illegible] [illegible] [illegible], of which island it is a native, [illegible] [illegible] [illegible] in the Stove. It is propagated by dividing the bulbs.

Epidendrum cochleatum.

Published by the Proprietors March 1st 1815 by R. Ackermann
No. 101 Strand.

PLATE XIII.

EPIDENDRUM COCHLEATUM.

Purple flowered Epidendrum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix ſimplex. Perianthium nullum.

COROLLA. Petala quinque, oblonga, longiſſima, patentiſſima.

Nectarium baſi tubulatum, turbinatum; intra petala deorſum poſitum, ore obliquo, bifido: ſuperiori labio breviſſimo, trifido; inferiori in acumen producto.

STAMINA. Filamenta duo, breviſſima, piſtillo inſidentia. Antheræ tectæ labio ſuperiore nectarii.

PISTILLUM. Germen tenue, longum, contortum, inferum. Stylus breviſſimus, adnatus labio ſuperiori nectarii. Stigma obſoletum.

PERICARPIUM. Siliqua longiſſima, teres, carnoſa.

SEMINA numeroſa, minutiſſima.

EMPALEMENT. Sheaths ſcattered. Fruit-ſtalk ſimple. Cup none.

BLOSSOM. Five petals, oblong, of a great length, and ſpreading much.

Honey-cup tubular at the baſe, turban-ſhaped, placed between the lower petals, mouth oblique and divided: the upper lip very ſhort, cut into three diviſions; the lower terminating in a point.

CHIVES. Two very ſhort threads, fixed on the pointal. Tips covered by the upper lip of the honey-cup.

POINTAL. Seed-bud ſlender, long, twiſted, and beneath. Shaft very ſhort, fixed to the upper lip of the honey-cup. Summit blunt.

SEED-VESSEL. Pod very long, round, and fleſhy.

SEEDS numerous, extremely ſmall.

SPECIFIC CHARACTER.

Epidendrum foliis oblongis, geminis, glabris, bulbo innatis; ſcapo multifloro; nectario cordato, purpureo.

Epidendrum with oblong leaves growing by pairs, ſmooth, riſing from the bulb; ſtalk many flowered; honey-cup heart-ſhaped and purple.

REFERENCE TO THE PLATE.

1. The Bloſſom, without the Honey-cup; diſpoſed to ſhew the ſituation of the Chives, and Pointal, which are covered by the Honey-cup.
2. The Honey-cup.
3. The Tips.
4. The Summits.

OF all plants, none furniſh a more agreeable ſpeculation to the Botaniſt, than thoſe of this claſs; the ſingular conſtruction of the whole flower, leads the obſerver to form analogous compariſons from it to animal life: particularly amongſt the Orchis, and Ophris, of our own country; where bees, flies, lizzards, and butterflies are accurately ſhaped in the honey-cup. The Genus Epidendrum, takes its Generic title from its place of growth, being what Botaniſts term paraſitical, that is, growing on another plant; which is the caſe, with moſt of the ſpecies of this Genus: yet is cultivated here with ſucceſs, by planting it in a mixture of rotten wood, and loam. A plant, from which this figure was taken, was a preſent to Meſſrs. Lee and Kennedy from the Honourable Mrs. Barrington, who received it from Dr. Dancer's botanical garden Jamaica, of which iſland it is a native; therefore muſt be kept in the ſtove. It is propagated by dividing the bulbs.

Ixia reflexa.

PLATE XIV.

IXIA REFLEXA.

Reflex flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathes bivalves, oblongs, persistent, gemina distinguentia.

COROLLA. Petala sex, oblonga, aequalia, hypogynia.

STAMINA. Filamenta tria, subulata corolla brevioria, sita aequalia. Antherae simplices.

PISTILLUM. Germen inferum, ovatum, striatum. Stylus simplex, erectus, longitudine staminum. Stigma trifidum, erecti-patentes.

PERICARPIUM. Capsula subovata, triquetra, trilocularis, loculis compressis, trivalvis.

SEMINA subrotunda, glabra.

CALYPTRA. Cup two valved, oblong, remaining, and dividing the feedal coats.

BLOSSOM. Six oblong petals of an equal length, and spoon-shaped.

CHIVES. Three awl-shaped threads, shorter than the blossom, placed equally. Tops simple.

POINTAL. Seed-bud beneath egg-shaped, and three-sided. Shaft simple, upright, the length of the chives. Summit with three, and thickish.

SEED-VESSEL. Capsule, nearly egg-shaped, three sided, three cells, pressed together, three valves.

SEEDS skinny, nearly round.

SPECIFIC CHARACTER.

Ixia floribus spicatis reflexis; foliis ensiformibus, glabris.

Ixia, with flowers growing in a spike, and bent backward; leaves sword-shaped and smooth.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement (magnified).
2. The Blossom.
3. The Chives (magnified).
4. The Pointal (magnified).

This genus exhibits greater diversity, either in the figure, or colour of the blossoms, of its various species than Ixia; the extreme delicacy of their colours, rendering it absolutely necessary to protect them both from wind and rain; even watering them over their heads (as is usual with greenhouse plants), at once destroys their brilliancy. The bulbs of this species were gathered at the Cape, by J. Pringle, Esq. from whom they were sent to Messrs. Lee and Kennedy in 1795, at which nursery they flowered the ensuing spring, when this figure was taken. No particular treatment is necessary for this plant, other than what is given to Cape bulbs in general, viz. an airy situation, and light soil. It propagates by seeds, and by the roots.

Ixia reflexa.

PLATE XIV.

IXIA REFLEXA.

Reflex flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves, oblongæ, perſiſtentes, germina diſtinguentes.

COROLLA. Petala ſex, oblonga, æqualia, lanceolata.

STAMINA. Filamenta tria, ſubulata, corolla breviora, ſitu æqualia. Antheræ ſimplices.

PISTILLUM. Germen inferum, ovatum, triquetrum. Stylus ſimplex, erectus, longitudine ſtaminum. Stigma trifidum, craſſiuſculum.

PERICARPIUM. Capſula ſubovata, triquetra, trilocularis, loculis compreſſis, trivalvis.

SEMINA ſubrotunda, plurima.

EMPALEMENT. Cup two valves, oblong, remaining, and dividing the ſeed-buds.

BLOSSOM. Six oblong petals of an equal length, and ſpear-ſhaped.

CHIVES. Three awl-ſhaped threads, ſhorter than the bloſſom, placed equally. Tips ſimple.

POINTAL. Seed-bud beneath egg ſhaped, and three-ſided. Shaft ſimple, upright, the length of the chives. Summit cut into three, and thickiſh.

SEED-VESSEL. Capſule, nearly egg-ſhaped, three-ſided, three cells, preſſed together, three valves.

SEEDS many, nearly round.

SPECIFIC CHARACTER.

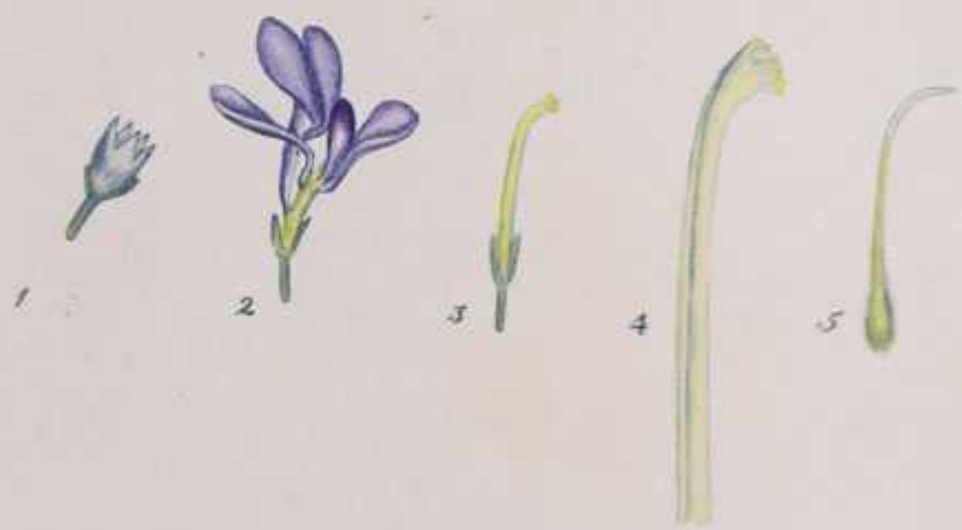
Ixia floribus ſpicatis, reflexis; foliis enſiformibus, glabris.

Ixia, with flowers growing in a ſpike, and bent backward; leaves ſword-ſhaped, and ſmooth.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement (magnified).
2. The Bloſſom.
3. The Chives (magnified).
4. The Pointal (magnified).

No genus exhibits greater diverſity, either in the figure, or colour of the bloſſoms, of its various ſpecies than Ixia; the extreme delicacy of their colours, rendering it abſolutely neceſſary to protect them both from wind and rain; even watering them over their heads (as is uſual with greenhouſe plants), at once deſtroys their brilliancy. The bulbs of this ſpecies were gathered at the Cape, by J. Pringle, Eſq. from whom they were ſent to Meſſrs. Lee and Kennedy in 1795, at whoſe nurſery they flowered the enſuing ſpring, when this figure was taken. No particular treatment is neceſſary for this plant, other than what is given to Cape bulbs in general, viz, an airy ſituation, and light ſoil. Is propagated by ſeeds, and by the roots.



Anthyllis Erinacea

PLATE XV.

ANTHYLLIS ERINACEA.

Blue Broom of Spain.

CLASS XVII. ORDER III.

DIADELPHIA DECANDRIA. Chives in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, oviformi-oblongum, parum inflatum, villosum; ore quinquedentato, inæquali; persistens.

COROLLA papilionacea:

Vexillum longius, lateribus reflexis, ungue longitudine calycis.

Alæ duæ, oblongæ, vexillo breviores.

Carina compressa, longitudine alarum, alis similis.

STAMINA. Filamenta decem, connata, afferentia. Antheræ simplices.

PISTILLUM. Germen oblongum. Stylus simplex, adscendens. Stigma obtusum.

PERICARPIUM. Legumen subrotundum, tectum intra calycem, minimum, bivalve.

SEMEN unum, alterumve.

CUPALEMENT. Cup of one leaf, oblong egg-shaped, a little swelled, and hairy; mouth cut into five unequal teeth; permanent.

BLOSSOM, butterfly-shaped.

Standard longer, sides bent back, the claws as long as the cup.

Wings two, oblong, shorter than the standard.

Keel compressed, as long as the wings, and like them.

CHIVES. Ten threads, connected, rising upwards. Tips simple.

POINTAL. Seed-bud oblong. Shaft simple, ascending. Summit blunt.

SEED-VESSEL. Pod roundish, covered by the cup, very small, of two valves.

SEEDS. One or two.

SPECIFIC CHARACTER.

Anthyllis fruticosa, spinosa; foliis simplicibus; floribus ex cæruleo purpurascentibus.

Broom, shrubby, and covered with prickles; leaves simple; blossoms of a purplish blue.

REFERENCE TO THE PLATE.

1. The Cup.
2. A Blossom, the cup taken off to shew the exact situation and shape of its various parts.
3. The Chives, as they inclose the pointal (natural size.)
4. The Threads magnified, and cut open, to shew their tubular shape.
5. The Pointal, magnified.

Owing to the difficulty in propagating and preserving those plants, although frequently introduced to us, and well known; yet are they more scarce to be found, in our best collections, than plants of seemingly more difficult acquisition. This species of Anthyllis has been mentioned under various synonyms by most botanical authors from Clusius downwards. Mr. T. Johnson, in his edition of Gerard of 1633, has given a description of this plant from Clusius, and a cut; both of which are excellent (considering the then infant state of the art of engraving), under the title of Genista spinosa humilis; Dwarf Furze. It is termed Erinacea by Clusius (says he), from the Spanish name of the hedge-hog, Erizo, of which country it is a native, in the kingdom of Valencia: from which we might infer, that, like other plants of that country, it would live through our winters; which is not the case. It must be kept as a greenhouse plant, and watered but sparingly. The soil it prefers is a light loam; is propagated by cuttings, and flowers in April, or May.

Anthyllis Erinacea.

PLATE XV.

ANTHYLLIS ERINACEA.

Blue Broom of Spain.

CLASS XVII. ORDER III.

DIADELPHIA DECANDRIA. Chives in two ſets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ovato-oblongum, parum inflatum, villoſum; ore quinquedentato, inæquali; perſiſtens.

COROLLA papilionacea:

Vexillum longius, lateribus reflexis, ungue longitudine calycis.

Alæ duæ, oblongæ, vexillo breviores.

Carina compreſſa, longitudine alarum, alis ſimilis.

STAMINA. Filamenta decem, connata, aſſurgentia. Antheræ ſimplices.

PISTILLUM. Germen oblongum. Stylus ſimplex, adſcendens. Stigma obtuſum.

PERICARPIUM. Legumen ſubrotundum, tectum intra calycem, minimum, bivalve.

SEMEN unum, alterumve.

EMPALEMENT. Cup of one leaf, oblong egg-ſhaped, a little ſwelled, and hairy; mouth cut into five unequal teeth; permanent.

BLOSSOM, butterfly-ſhaped.

Standard longer, ſides bent back, the claws as long as the cut.

Wings two, oblong, ſhorter than the ſtandard.

Keel compreſſed, as long as the wings, and like them.

CHIVES. Ten threads, connected, riſing upwards. Tips ſimple.

POINTAL. Seed-bud oblong. Shaft ſimple, aſcending. Summit blunt.

SEED-VESSEL. Pod roundiſh, covered by the cup, very ſmall, of two valves.

SEEDS. One or two.

SPECIFIC CHARACTER.

Anthyllis fruticoſa, ſpinoſa; foliis ſimplicibus; floribus ex cæruleo purpuraſcentibus.

Broom, ſhrubby, and covered with prickles; leaves ſimple; bloſſoms of a purpliſh blue.

REFERENCE TO THE PLATE.

1. The Cup.
2. A Bloſſom, the cup taken off to ſhew the exact ſituation and ſhape of its various parts.
3. The Chives, as they incloſe the pointal (natural ſize.)
4. The Threads magnified, and cut open, to ſhew their tubular ſhape.
5. The Pointal, magnified.

OWING to the difficulty in propagating and preſerving ſome plants, although frequently introduced to us, and well known; yet are they more ſcarce to be found, in our beſt collections, than plants of ſeemingly more difficult acquiſition. This ſpecies of Anthyllis has been mentioned under various ſynonyms by moſt botanical authors from Cluſius downwards. Mr. T. Johnſon, in his edition of Gerard of 1633, has given a deſcription of this plant from Cluſius, and a cut; both of which are excellent (conſidering the then infant ſtate of the art of engraving), under the title of Geniſta ſpinoſa humilis; Dwarf Furze. It is termed Erinacea by Cluſius (ſays he), from the Spaniſh name of the hedge-hog, Erizo, of which country it is a native, in the kingdom of Valencia: from which we might infer, that, like other plants of that country, it would live through our winters; which is not the caſe. It muſt be kept as a greenhouſe plant, and watered but ſparingly. The ſoil it prefers is a light loam; is propagated by cuttings, and flowers in April, or May.

Azalea Pontica.

PLATE III.

AZALEA PONTICA

Yellow Pontic Azalea.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. One Stamen. One Pistil.

GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinquepartitum, persistens, erectum, parvum, per florem.

Corolla. Monopetala, campanulata, inferior, quinquefida, laciniarum latiores ovatae, flexilis.

Stamina. Filamenta quinque, filiformia, receptaculo collocata, liberi. Antherae simplices.

Pistillum. Germen ovatum. Stylus filiformis, longitudine corollae, persistens, per totum stamen.

Pericarpium. Capsula ovata, quinquelocularis, quinquevalvis.

Semina plurima, compressa.

Obs. Figura parum in alios indeterminata, et alias companulatae ovatae, flexilis longitudine corollae.

SPECIFIC CHARACTER.

Samples. Odlin [illegible] Bradbury [illegible] Brothers about [illegible] Chinese [illegible] gallinae decidentes.

Calyx. Perianthium monophyllum, quinquepartitum, persistens, erectum, parvum, per florem.

Corolla. Monopetala, campanulata, inferior, quinquefida, laciniarum latiores ovatae, flexilis.

Stamina. Filamenta quinque, filiformia, receptaculo collocata, liberi. Antherae simplices.

Pistillum. Germen ovatum. Stylus filiformis, longitudine corollae, persistens, per totum stamen.

Pericarpium. Capsula ovata, quinquelocularis, quinquevalvis.

Semina plurima, compressa.

Obs. Figura parum in alios indeterminata, et alias campanulatae ovatae, flexilis longitudine corollae.

SPECIFIC CHARACTER.

Samples. Odlin [illegible] Bradbury [illegible] Brothers about [illegible] Chinese [illegible] gallinae decidentes.

EXPLANATION TO THE PLATE.

1. The Stamens, natural size.
2. The Chinese Brothers appear within the [illegible].
3. The sheet with Stamens.
4. A Stamen [illegible] magnified.

PLATE XVI.
AZALEA PONTICA.
Yellow Pontic Azalea.

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

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum, acutum, erectum, parvum, persistens.

COROLLA. Monopetala, campanulata, limbus quinquefidus: laciniarum lateribus inflexis.

STAMINA. Filamenta quinque, filiformia, receptaculo inserta, libera. Antheræ simplices.

PISTILLUM. Germen ovatum. Stylus filiformis, longitudine corolla, persistens. Stigma obtusum.

PERICARPIUM. Capsula ovata, quinquelocularis, quinquevalvis.

SEMINA plurima, compressa.

OBS. Figura petali in aliis infundibuliformis, in aliis campaniformis est; stamina in quibusdam declinata longissima.

EMPALEMENT. Cup one leaf with five divisions, sharp pointed, upright, small, and permanent.

BLOSSOM. One petal, bell-shaped, margin five-cleft: segments with the edges bent inwards.

CHIVES. Threads five, thread-shaped, fixed to the receptacle, and loose. Tips simple.

POINTAL. Seed-bud egg-shaped. Shaft thread-shaped, the length of the blossom, permanent. Summit blunt.

SEED-VESSEL. Capsule egg-shaped, with five cells, and five valves.

SEEDS many, and flat.

OBS. The shape of the petal in some is funnel-shaped, in others bell-shaped; the chives in some are bent downward, and very long.

SPECIFIC CHARACTER.

Azalea, foliis ovato-oblongis, pilosis, alternis; floribus amplissimis, luteis; staminibus longissimis, declinatis.

Azalea, with oblong egg-shaped leaves, hairy, and alternate; flowers very large, and yellow; chives very long, and bent downward.

REFERENCE TO THE PLATE.

1. The Empalement, (natural size.)
2. The Chives as they appear within the blossom.
3. The Seed-bud, Shaft, and Summit.
4. A Capsule cut horizontally, exposing the number of its cells.

AMERICA has furnished our gardens with an extensive variety of beautiful shrubs; amongst them, the Azaleas hold a distinguished place; some for the beauty, others for the fragrance, of their blossoms: the present species far surpasses all of them for both. It is a native of the coast of the Black Sea, or Pontus Euxinus, through the whole of its extent, on the Asiatic side, from the city of Trebisonde; from whence its trivial name. That a plant of such extreme beauty, and sweetness, should so long have been a stranger to our European gardens, though known to, and described by, so many botanical travellers, must seem matter of wonder; but still it is an uncontested fact. Mons. Tournefort, in his Voyage to the Levant, has given an ample description of it, under the title of Chamærhododendros Pontica maxima, mespili folio, flore luteo; where he says, it grows to the height of seven or eight feet, and that the flowers are of a most exquisite flavour. Dr. P. Pallas, in his Flora Rossica, has likewise figured, and described it, under the name it here bears; but apparently his drawing was made from a dried specimen, as the brilliancy of the flower is by no means preserved; but it is to him we are indebted for this fine plant. In his voyage to the Crimea and countries adjacent, in 1792. he procured the seeds of this, amongst many other valuable and rare plants; parcels of most of which were sent by him to Messrs. Lee and Kennedy, Hammersmith; by whom plants were raised of it, and many other sorts, the next year. It is a deciduous shrub, extremely hardy, and blows early in the spring; is propagated, like other Azaleas, by layers and seeds; grows best in peat earth, with a small portion of loam.

Protea formosa

PLATE XVII.
PROTEA FORMOSA.
Coronet Protea.

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

GENERIC CHARACTER.

CALYX. Perianthium commune, imbricatum; ſquamis inæqualibus, perſiſtentibus.
Proprium nullum.

COROLLA tetrapetala. Petala ſæpe cohærentia, ſæpius diviſa, lineari-oblonga: unguibus erectis, limbo patenti.

STAMINA. Filamenta nulla. Antheræ quatuor, lineares, vel oblongæ, ſub apice limbi corollæ inſertæ.

PISTILLUM. Germen ſuperum, oblongum. Stylus filiformis, corolla longior. Stigma ſimplex, clavatum.

PERICARPIUM nullum. Calyx patens, induratus, vix mutatus.

SEMINA ſolitaria, ſubrotunda, vel compreſſa.

RECEPTACULUM commune nudum, villoſum, paleaceum, vel conus.

EMPALEMENT. Cup common, ſcaled; ſcales unequal, and remaining.
Proper none.

BLOSSOM four-leaved. Petals frequently adhering, oftener divided, of a linear oblong ſhape: claws upright, border ſpreading.

CHIVES. Threads none. Tips four, linear, or oblong, fixed within the border of the bloſſom.

POINTAL. Seed-bud above, and oblong. Shaft thread-ſhaped, longer than the bloſſom. Summit ſimple, and club-ſhaped.

SEED-VESSEL none. Cup ſpreading, hard, and ſcarcely changing.

SEEDS ſolitary, nearly round, or flat.

RECEPTACLE the common, is naked, hairy, chaffy, or a cone.

SPECIFIC CHARACTER.

Protea, foliis lanceolatis, pubeſcentibus; caule villoſo; flore aurantio flavo; ſemine ſubrotundo, glabro, magnitudine piſi majoris.

Protea, with lance-ſhape downy leaves; ſtem hairy; bloſſom orange yellow; ſeed nearly round, ſmooth, the ſize of a large pea.

REFERENCE TO THE PLATE.

1. The Flower complete, as it ſtands on the Receptacle.
2. The Bloſſom expanded, to ſhew the ſituation of the Chives.

OF all the varied genera of plants which decorate that mine of botanical riches, the Cape of Good Hope, and the adjacent country, no one ſtands more conſpicuous than Protea. Few travellers who have not noticed the ſingularity and beauty of their foliage; indeed they are of ſuch extreme brilliancy, that no one, however indifferent to botanical reſearches, can paſs them unobſerved; foreſts of them being ſo numerous, the Protea Argentea, or Silver Tree, produces almoſt the only wood of the country; growing to the height of thirty or forty feet. But although the leaves of this numerous tribe are moſtly beautiful, many of their bloſſoms are but trifling, except in the eye of the botaniſt: the Protea Formoſa, however, is one amongſt many which ſtand as powerful exceptions: the great beauty of this charming plant has induced us to adopt the trivial name it here bears. It has been introduced to the Royal Gardens at Kew by Mr. F. Maſſon, botanical collector to his preſent Majeſty; from whoſe liberal patronage the ſcience of Botany has of late been brought into ſuch general eſtimation. This ſpecies, from the downy character of the whole plant, is apt to damp, if not kept in an airy ſituation in winter; though the warmth of a common greenhouſe is quite ſufficient for its protection. It is with difficulty propagated by cuttings; and has not hitherto perfected its ſeeds in this kingdom. Our drawing was made from a plant which flowered in the nurſery of Meſſrs. Lee and Kennedy, in the year 1796, about the month of Auguſt.

Cornus alba.

PLATE XVIII.

CORREA ALBA.

White Correa.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quadridentatum, campanulatum, erectum, perſiſtens.

COROLLA. Petala quatuor, oblonga, concava, apice reflexa, marginibus craſſis.

STAMINA. Filamenta octo, erecta, filiformia, receptaculo inſerta.

PISTILLUM. Germen turbinatum, ſuperum. Stylus filiformis, longitudine ſtaminium. Stigma obtuſum.

PERICARPIUM. Capſula coriacea, lanata, quadrilocularis, quadrivalvis.

SEMINA quatuor, ſolitaria, ſubrotunda.

EMPALEMENT. Cup of one leaf, five-toothed, bell-ſhaped, upright, and permanent.

BLOSSOM. Four petals, oblong, concave, reflexed at the end, and thick at the edges.

CHIVES. Eight threads, upright, thread-ſhaped, and fixed into the receptacle.

POINTAL. Seed-bud turban-ſhaped, and above. Shaft thread-ſhaped, the length of the chives. Summit blunt.

SEED-VESSEL. Capſule leathery, and woolly, four cells, four valves.

SEEDS four, ſolitary, and nearly round.

SPECIFIC CHARACTER.

Correa, foliis ſubrotundis, ſupra tomentoſis, ſubtus lanigeris; floribus terminalibus, quaternis, albidis.

Correa, with leaves nearly round, downy on the upper ſurface, woolly on the under ſurface; flowers terminate the branches by fours, and are white.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives, and Pointal.
3. A Thread, and Tip, (magnified.)
4. The Shaft and Summit, (magnified.)

THE Correa is a native of Port Jackſon, in New Holland, and commonly termed a Botany-bay plant: it was firſt raiſed in the year 1793, from ſeeds which were given by Sir Joſeph Banks, Bart. to J. Vere, Eſq. of Kenſington-gore, and from a plant in whoſe collection our figure was taken. It receives its generic title from Mr. Joſeph Correa de Serra, a native of Portugal; a gentleman of very diſtinguiſhed talents as a man of ſcience in general, and botany in particular. Of this genus there are as yet but few ſpecies diſcovered; the Alba grows to a ſhrub of the height of four or five feet, woody and tough; both ſtem and leaves are covered with a thick flannelly ſubſtance, particularly the under ſide of the leaves, which gives the whole plant a whitiſh appearance. It continues to flower through the months of April, May, and June; may be propagated eaſily by cuttings, ſhould be kept as a hardy greenhouſe plant, and thrives beſt in peat earth.

Gladiolus versicolor.

PLATE XIX.

GLADIOLUS VERSICOLOR.

Changeable Gladiolus.

CLASS III. ORDER I.

[illegible] *MONOGYNIA.* Three Chives. One Pistil.

GENERIC CHARACTER.

[illegible] Petals oblonga, [illegible] obtusa.

[illegible] divisioni [illegible] Antheræ ob[illegible]

[illegible] Stylus simplex, [illegible] Stigma trifidum

[illegible] oblonga, obtusa, tri-[illegible]

Empalement. Sheath two valved.

Blossom, of six divisions and gaping. Petals oblong, having their claws formed into a tube.

Chives. Three awl-shaped threads, fixed into the alternate divisions of the petals. Tips oblong.

Pistil. Seed-bud beneath. Shaft slender, the length of the chives. Summit cut into three, and concave.

Seed-vessel. Capsule oblong, blunt-ended, three cells, three valves.

Seeds many, nearly round.

SPECIFIC CHARACTER.

[illegible] floribus [illegible]

Gladiolus, with linear ensiform leaves; flowers very large, and changeable.

REFERENCE TO THE PLATE.

[illegible] of the Empalement.

[illegible] and Seed-bud: one of the divisions of the Summit magnified.

[illegible] natural size, in its tunic.

[illegible] given it by Sir Isaac Newton, our present subject (as did the prism) [illegible] Gladiolus versicolor might, like the camelion, equally be a subject of con[illegible] from its blossom at different periods of the same day; for, strange to tell! [illegible], and continues to change from that colour till it becomes Light Blue by [illegible] night it regains its pristine colour; and this change is effected diurnally, whilst [illegible] but upon the decay, the change is but powerful, gradually fading in a [illegible] however, does not take place in less than nine or ten days. This is the only [illegible] coloured, to regain the colour that has once forsook it. A drawing was begun [illegible] morning, but before it was finished the plant was so much changed in colour [illegible] necessity for taking a second day to complete it. The bulb of this plant [illegible] of Good Hope by J. Pringle, Esq. of Madeira, in 1792, amongst many others, [illegible], of Hammersmith, where the drawing was made. It flowers about the [illegible] by the root or feeds, and thrives best in peat earth.

Gladiolus versicolor.

PLATE XIX.

GLADIOLUS VERSICOLOR.

Changeable Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves.	EMPALEMENT. Sheath two valves.
COROLLA, ſexpartita, ringens. Petala oblonga, omnia unguibus in tubum connata.	BLOSSOM, of ſix diviſions, and gaping. Petals oblong, having their claws formed into a tube.
STAMINA. Filamenta tria, ſubulata, diviſuris alternis petalorum inſerta. Antheræ oblongæ.	CHIVES. Three awl-ſhaped threads, fixed into the alternate diviſions of the petals. Tips oblong.
PISTILLUM. Germen inferum. Stylus ſimplex, longitudine ſtaminum. Stigma trifidum concavum.	POINTAL. Seed-bud beneath. Shaft ſimple, the length of the chives. Summit cut into three, and concave.
PERICARPIUM. Capſula oblonga, obtuſa, trilocularis, trivalvis.	SEED-VESSEL. Capſule oblong, blunt-ended, three cells, three valves.
SEMINA plura, ſubrotunda.	SEEDS many, nearly round.

SPECIFIC CHARACTER.

Gladiolus, foliis lineari-cruciatis; floribus maximis, verſicoloribus.	Gladiolus, with linear croſs ſhaped leaves; flowers very large, and changeable.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. The Pointal, and Seed-bud; one of the diviſions of the Summit magnified.
3. A ripe Seed, natural ſize, in its tunic.

THAT colour bears the character given it by Sir Iſaac Newton, our preſent ſubject (as did the priſm) adds another proof. The Gladiolus verſicolor might, like the camelion, equally be a ſubject of contention, to thoſe who have ſeen its bloſſom at different periods of the ſame day; for, ſtrange to tell! it is brown in the morning, and continues to change from that colour till it becomes light blue by night. During the night it regains its priſtine colour; and this change is effected diurnally, whilſt the flower is in its vigour; but upon the decay, the change is leſs powerful, gradually fixing in a dark brown; which, however, does not take place in leſs than nine or ten days. This is the only flower, we have ever noticed, to regain the colour that has once forſook it. A drawing was began about ten o'clock in the morning, but before it was finiſhed the plant was ſo totally altered in colour that there was an abſolute neceſſity for taking a ſecond day to complete it. The bulbs of this plant were ſent from the Cape of Good Hope by J. Pringle, Eſq. of Madeira, in 1794, amongſt many others, to Meſſrs. Lee and Kennedy, of Hammerſmith, where the drawing was made. It flowers about the month of June; is increaſed by the root or ſeed; and thrives beſt in peat earth.

Echium grandiflorum.

PLATE XX.

ECHIUM GRANDIFLORUM.

Large-flowered Viper's Bugloss.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum, erectum persistens; laciniis subulatis erectis.

COROLLA. Monopetala, campanulata. Tubus brevissimus. Limbus erectus, sensim ampliatus, quinquefidus obtusus; laciniis saepius inaequalibus; superioribus duabus longioribus, infimis minoribus, acutis, reflexis. Faux pervia.

STAMINA. Filamenta quinque, subulata, longitudine corollae, declinata, inaequalia. Antherae oblongae, incumbentes.

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

PERICARPIUM nullum. Calyx rigidior, in sinu seminis fovens.

SEMINA quatuor, subrotunda, oblique acumenata.

EMPALEMENT. Cup with five divisions, upright, permanent; segments awl-shaped, upright.

BLOSSOM. One petal, bell-shaped. Tube very short. Border gradually widening, with five clefts, blunt. Segments oftenest unequal, the two upper ones the longest; the lower ones smaller, sharp, and reflexed. The mouth open.

CHIVES. Five threads, awl-shaped, the length of the blossom, declined, and unequal. Tips oblong, fixed sideways to the threads.

POINTAL. Seed-buds four. Shaft thread-shaped, the length of the chives. Summit blunt, two-cleft.

SEED-VESSEL none. The cup growing more harsh, contains the seeds.

SEEDS four, roundish, obliquely tapering.

SPECIFIC CHARACTER.

Echium, foliis nitidis, lanceolatis, hispidis; caule fruticoso; corollis maximis, aequalibus, rubris.

Viper's Bugloss, with shining, lance-shaped, hairy leaves; stem shrubby; blossoms very large, equal, and red.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to expose the situation of the Chives.
3. The Shaft and its Summit magnified.
4. A ripe seed.

THE Echium Grandiflorum is a native of the Cape of Good Hope, was sent from thence by Mr. F. Masson to the Royal Gardens at Kew, about the year 1791. The superior beauty of this species to the rest of its congeners makes it considered as a valuable greenhouse plant, although its intrinsic merit is sufficient to ensure it that character; the rich green of its foliage, contrasted to the colour of the blossoms, gives to each a singular brilliancy. It is rather a tender greenhouse plant, grows about two feet high, and becomes naked at the lower part of the stem; is with difficulty propagated by cuttings, seldom perfecting its seeds; thrives best in rich earth, and flowers in April and May. The drawing was made from a plant in the collection of the Marquis of Blandford, Bill-hill, Berks.

Echium grandiflorum.

PLATE XX.

ECHIUM GRANDIFLORUM.

Large-flowered Viper's Bugloſs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum, erectum perſiſtens; laciniis ſubulatis erectis.

COROLLA. Monopetala, campanulata. Tubus breviſſimus. Limbus erectus, ſenſim ampliatus, quinquefidus obtuſus; laciniis ſæpius inæqualibus; ſuperioribus duabus longioribus, infimis minoribus, acutis, reflexis. Faux pervia.

STAMINA. Filamenta quinque, ſubulata, longitudine corollæ, declinata, inæqualia. Antheræ oblongæ, incumbentes.

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

PERICARPIUM nullum. Calyx rigidior, in ſinu ſemina fovens.

SEMINA quatuor, ſubrotunda, oblique acumenata.

EMPALEMENT. Cup with five diviſions, upright, permanent; ſegments awl-ſhaped, upright.

BLOSSOM. One petal, bell-ſhaped. Tube very ſhort. Border gradually widening, with five clefts, blunt. Segments oftener unequal, the two upper ones the longeſt; the lower ones ſmaller, ſharp, and reflexed. The mouth open.

CHIVES. Five threads, awl-ſhaped, the length of the bloſſom, declined, and unequal. Tips oblong, fixed ſideways to the threads.

POINTAL. Seed-buds four. Shaft thread-ſhaped, the length of the chives. Summit blunt, and two-cleft.

SEED-VESSEL none. The cup growing more harſh, contains the ſeeds.

SEEDS four, roundiſh, obliquely tapering.

SPECIFIC CHARACTER.

Echium, foliis nitidis, lanceolatis, hiſpidis; caule fruticoſo; corollis maximis, æqualibus, rubris.

Viper's Bugloſs, with ſhining, lance-ſhaped, hairy leaves; ſtem ſhrubby; bloſſoms very large, equal, and red.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom cut open, to expoſe the ſituation of the Chives.
3. The Shaft and its Summit magnified.
4. A ripe ſeed.

THE Echium Grandiflorum is a native of the Cape of Good Hope, was ſent from thence by Mr. F. Maſſon to the Royal Gardens at Kew, about the year 1791. The ſuperior beauty of this ſpecies to the reſt of its congenors makes it conſidered as a valuable greenhouſe plant, although its intrinſic merit is ſufficient to enſure it that character; the rich green of its foliage, contraſted to the colour of the bloſſoms, gives to each a ſingular brilliancy. It is rather a tender greenhouſe plant, grows about two feet high, and becomes naked at the lower part of the ſtem; is with difficulty propagated by cuttings, ſeldom perfecting its ſeeds; thrives beſt in rich earth, and flowers in April and May. The drawing was made from a plant in the collection of the Marquis of Blandford, Bill-hill, Berks.

Vereia crenata

PLATE XXI.

VEREIA CRENATA.

Scolloped-leaf Vereia.

CLASS VIII. ORDER IV.

OCTANDRIA TETRAGYNIA. Eight Chives. Four Pointals.

GENERIC CHARACTER.

CALYX. Perianthium tetraphyllum, foliolis lanceolatis, concavis, erectis, acutis, persistentibus.

COROLLA monopetala, ventricosa; limbus patens, revolutus quadripartitus; laciniis ovatis, acuminatis.

Nectaria quatuor; singulum squamula debilis, minima, singulo germini ad basin extrorsum inserta.

STAMINA. Filamenta octo, brevia, quorum quatuor medio, quatuor vero ad basin corollæ adnatæ. Antheræ subrotundæ simplices.

PISTILLUM. Germina quatuor, oblonga, desinentia in stylos subulatos. Stigmata obtusa.

PERICARPIUM. Capsulæ quatuor, ovatæ acuminatæ, rectæ, trigonæ, longitudinaliter sutura introrsum dehiscentes.

SEMINA plurima minima.

EMPALEMENT. Cup four leaved, which are lance-shaped, concave, upright, sharp-pointed, and permanent.

BLOSSOM of one leaf, big bellied, border spreading, rolled back, and divided into four egg-shaped, pointed segments.

Honey-cups four, each consisting of a small slight scale, fixed on the outside the base of each seed-bud.

CHIVES. Eight short threads, four of which are fixed to the middle, and four to the base of the blossom. Tips nearly round, and single.

POINTAL. Four seed-buds, oblong, ending in awl-shaped shafts. Summits blunt.

SEED-VESSEL. Four capsules, egg-shaped, tapering, upright and three sided, opening inwards along the seam.

SEEDS many, very small.

SPECIFIC CHARACTER.

VEREIA, foliis oppositis, crenatis, patentibus; racemis longissimis laxis; floribus luteis.

Vereia, with opposite, scolloped, spreading leaves; very long loose spikes, and yellow flowers.

REFERENCE TO THE PLATE.

1. The Empalement, (natural size.)
2. A Blossom cut open to shew the situation of the Chives.
3. The Seed-vessel, Shafts, and Summits, with the scales of the Honey-cups, as they stand in the blossom, (magnified.)
4. One Capsule of the Seed-vessel detached.

This genus of Plants must class with Linnæus's natural order of Succulents, nearly approaching Crassula in habit; but as the Sexual System is the basis of our theory, we cannot admit it under that or any other yet described genus; we have therefore named it after James Vere, Esq. long and well known for his extended and liberal patronage to the professors and cultivators of the science, in whose beautiful and select collection at Kensington Gore, the present species, has for the first time, flowered in this kingdom. Mr. Anderson the gardener informs us, that this plant is a native of Sierra Leone; from whence it was sent to England, by Professor Eld. Elfzelius, in the year 1793; but he has treated it as a tender hot-house plant, keeping it constantly in the tan bed, by which means he has made it flower, but from every appearance of the plant, we should be led to think the common treatment of hot-house Succulents would answer for this. It is easily propagated by cuttings; grows to the height of three or four feet, having when in flower the appearance of a middle sized shrub; blows in the winter months, and thrives best in rich mould.

Vicia cremita

PLATE XXI.

VEREIA CRENATA.

Scolloped-leaf Vereia.

CLASS VIII. ORDER IV.

OCTANDRIA TETRAGYNIA. Eight Chives. Four Pointals.

GENERIC CHARACTER.

CALYX. Perianthium tetraphyllum, foliolis lanceolatis, concavis, erectis, acutis, persistentibus.

COROLLA monopetala, ventricosa; limbus patens, revolutus quadripartitus; laciniis ovatis, acuminatis.

Nectararia quatuor; singulum squamula debilia, minima, singulo germini ad basin extrorsum inserta.

STAMINA. Filamenta octo, brevia, quorum quatuor medio, quatuor vero ad basin corollæ adnatæ. Antheræ subrotundæ simplices.

PISTILLUM. Germina quatuor, oblonga, desinentia in stylos subulatos. Stigmata obtusa.

PERICARPIUM. Capsulæ quatuor, ovatæ acuminatæ, rectæ, trigonæ, longitudinaliter futura introrsum dehiscentes.

SEMINA plurima minima.

EMPALEMENT. Cup four leaved, which are lance-shaped, concave, upright, sharp-pointed, and permanent.

BLOSSOM of one leaf, big bellied; border spreading, rolled back, and divided into four egg-shaped, pointed segments.

Honey-cups four, each consisting of a small slight scale, fixed on the outside the base of each seed-bud.

CHIVES. Eight short threads, four of which are fixed to the middle, and four to the base of the blossom. Tips nearly round, and simple.

POINTAL. Four seed-buds, oblong, ending in awl-shaped shafts. Summits blunt.

SEED-VESSEL. Four capsules, egg-shaped, tapering, upright and three sided, opening inwards along the seam.

SEEDS many, very small.

SPECIFIC CHARACTER.

Vereia, foliis oppositis, crenatis, patentibus; racemis longissimis laxis; floribus luteis.

Vereia, with opposite, scolloped, spreading leaves; very long loose spikes, and yellow flowers.

REFERENCE TO THE PLATE.

1. The Empalement, (natural size.)
2. A Blossom cut open to shew the situation of the Chives.
3. The Seed-vessel, Shafts, and Summits, with the scales of the Honey-cups, as they stand in the blossom, (magnified.)
4. One Capsule of the Seed-vessel detached.

THIS genus of Plants must class with Linnæus's natural order of Succulents, nearly approaching Crassula in habit; but as the Sexual System is the basis of our theory, we cannot admit it under that or any other yet described genus; we have therefore named it after James Vere, Esq. long and well known for his extended and liberal patronage to the professors and cultivators of the science; in whose beautiful and select collection at Kensington Gore, the present species, has for the first time, flowered in this kingdom. Mr. Anderson the gardener informs us, that this plant is a native of Sierra Leone; from whence it was sent to England, by Professor Eld. Elfzelius, in the year 1793; that he has treated it as a tender hot-house plant, keeping it constantly in the tan bed, by which means he has made it flower; but from every appearance of the plant, we should be led to think the common treatment of hot-house Succulents would answer for this. It is easily propagated by cuttings; grows to the height of three or four feet, having when in flower the appearance of a middle sized shrub; blows in the winter months, and thrives best in rich mould.

Goodenia calendulacea.

PLATE XXII.

GOODENIA CALENDULACEA.

Cape Marygold-leaved Goodenia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

Calyx. Perianthium quinque[illegible] [illegible], [illegible].

Corolla monopetala, [illegible] longitudinaliter [illegible] genitalia exserens; limbo quinquefido, [illegible].

Stamina. Filamenta quinque, [illegible] Antheræ lineares.

Pistillum. Germen inferum. Stylus simplex. Stigma [illegible], ciliatum.

Pericarpium. Capsula oblonga, bilocularis, [illegible]; dissepimentum parallelo.

Semina plura, [illegible].

Cup. [illegible] five-cleft, short, and remaining.

Blossom of one petal, cleft longitudinally on the upper side, exposing the organs of fructification; border five-cleft, leaning one way.

Chives. Five, [illegible] inserted into the receptacle. Tips linear.

Pointal. Seed-bud beneath. Shaft simple. Summit [illegible] shaped, and fringed.

Seed-vessel. Capsule oblong, two cells, and two valves, partition parallel to the valves.

Seeds many and rough.

SPECIFIC CHARACTER.

Goodenia, foliis obovatis, crassis, [illegible] [illegible] [illegible], caulibus.

Goodenia with [illegible] egg-shaped, thick, rough [illegible] close to the [illegible], and [illegible].

REFERENCE TO THE PLATE.

1. A Flower with all its parts complete.
2. A Blossom without the organs of fructification.
3. The Chives, Pointal, and Seed-bud (magnified).

[illegible] all natives of New Holland, and received their generic name of Dr. J. E. Smith, [illegible] in honour of the Rev. Dr. Goodenough, whose [illegible] dissertation [illegible] the Linnean Society, [illegible] botanist. The species of this genus [illegible] they are [illegible] [illegible] and the present species [illegible] the [illegible] Linnean Transactions. This plant, though [illegible] [illegible] [illegible] [illegible] [illegible]. It [illegible] [illegible] [illegible] [illegible] Colonel Paterson [illegible] [illegible] [illegible] [illegible].

PLATE XXII.

GOODENIA CALENDULACEA.

Cape Marygold-leaved Goodenia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quadrifidum, ſuperum, perſiſtens.	EMPALEMENT. Cup four-cleft, above, and remaining.
COROLLA monopetala, ſupra longitudinaliter fiſſa, genitalia exſerens; limbo quinquefido, ſecundo.	BLOSSOM of one leaf, cleft longitudinally on the upper ſide, expoſing the organs of fructification; border five-cleft, leaning one way.
STAMINA. Filamenta quinque, receptaculo inſerta. Antheræ lineares.	CHIVES. Five threads fixed into the receptacle. Tips linear.
PISTILLUM. Germen inferum. Stylus ſimplex. Stigma urceolatum, ciliatum.	POINTAL. Seed-bud beneath. Shaft ſimple. Summit pitcher-ſhaped, and fringed.
PERICARPIUM. Capſula oblonga, bilocularis, bivalvis; diſſepimento parallelo.	SEED-VESSEL. Capſule oblong, with two cells, and two valves; partition parallel to the valves.
SEMINA plura, ſcabrida.	SEEDS many and rough.

SPECIFIC CHARACTER.

Goodenia, foliis obovatis, craſſis, ſcabridis; floribus axilaribus, cæruleis.	Goodenia with inverſely egg-ſhaped, thick rough leaves; flowers ſitting cloſe to the ſtem, and blue.

REFERENCE TO THE PLATE.

1. A Flower with all its parts complete.
2. A Bloſſom without the organs of fructification.
3. The Chives, Pointal, and Seed-bud (magnified).

THE Goodenias are all natives of New Holland, and received their generic name of Dr. J. E. Smith, Preſident of the Linnæan Society; in honour of the Rev. Dr. Goodenough, whoſe valuable diſſertation on the Britiſh ſpecies of Carex, does him the higheſt honour, as a botaniſt. The ſpecies of this genus (as yet diſcovered) are ten, from which we may infer that they are numerous; thoſe only yet introduced to Britain are, the lævigata, ovata, and the preſent ſpecies; the others are deſcribed by the Preſident, in the ſecond volume of the Linnæan Tranſactions. This plant, though not to be ranked amongſt the handſomeſt productions of that country, ſo replete with novelty, is yet poſſeſſed of ſufficient merit to give it a place in our collections of greenhouſe plants, flowering about the month of Auguſt; delighting moſt in an airy ſituation, and light ſoil. It is eaſily propagated by cuttings. Our figure was taken from a plant which flowered at the Hammerſmith nurſery, in 1797; where it had been raiſed from ſeeds, communicated by Colonel Paterſon, then commanding at Port Jackſon; to whoſe aſſiduous labours in collecting ſeeds, &c. the cabinets and collections of our natural hiſtorians are ſo very much indebted.

Ixia capitata
var. crata

PLATE XXIII.

TRICA CAPITATA. Fam. [illegible]

[illegible] Fam. Fur. [illegible] Fam. [illegible]

CLASS III. ORDER I.

[illegible] MONOECIA. [illegible]

ESSENTIAL GENERIC CHARACTER.

[illegible]

SPECIFIC CHARACTER.

[illegible]

REFERENCES TO THE PLATE.

[illegible]

[illegible]

[illegible]

PLATE XXIII.

IXIA CAPITATA. *Var. ovata.*

Bunch-flowering Ixia. Var. Egg-ſhaped purple Petals.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6 petala, patens, æqualis. Stigmata 3, erectiuſculo-patula.	BLOSSOM ſix petals, ſpreading equal. Summits three, nearly upright, ſpreading. See Ixia reflexa, Plate XIV.

SPECIFIC CHARACTER.

Ixia, foliis radicalibus, enſiformibus; floribus capitatis, confertis, purpureis, petalis baſi obſcuris.	Ixia with leaves growing from the root, and ſword-ſhaped; bloſſoms in cloſe bunches, purple, and dark at the baſe.

REFERENCE TO THE PLATE.

1. The two ſheaths of the Empalement.
2. A flower cut open, to ſhew the inſertion of Chives.
3. The Chives as attached to the tubular part of the bloſſom, the border cut off (magnified).
4. The Shaft, Summits, and Seed-bud (magnified).

THIS fine ſpecies of Ixia, a native of the Cape of Good Hope, was introduced to our collections about the year 1795, by Meſſrs. Lee and Kennedy, nurſerymen; they having raiſed it from ſeeds received by them, from the Royal Gardens at Vienna; is certainly amongſt the tendereſt of its tribe: the root, being extremely ſubject to injury by wet, it ſhould be dried as ſoon as it has done flowering. It is one of the earlieſt Ixias in bloom, being in high perfection about the middle of April; is increaſed but ſlowly by the root, thriving beſt in very ſandy peat, or ſand only. The figure here given was drawn from a plant which flowered at the nurſery, Hammerſmith, in 1798, for the firſt time.

Cineraria aurita

PLATE IV.

CINERARIA ATRIPLICIFOLIA

Atriplex-leaved Cineraria.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Flos mixtus. Superfluous flowers.

GENERIC CHARACTER.

Calyx. Compositus, simplex, polyphyllus, 8-10-phyllus, aequalis.

Corolla. Compositae, radiatae. Corollulae hermaphroditae, aequales, monopetalae, in disco. Feminae ligulatae, numero fere corum calycis in radio.

Proprie Stamina quinque, infundibuliformia; Antherae antrorsae, erectae.

Feminae ligulatae, bilaciniatae, apice denticulatae.

Semina. Filamenta quinque, filiformia bevia. Antherae cylindraceae, tunicatae, apice mucronatae.

Pistillum, hermaphroditae. Germen oblongum. Stylus filiformis, longitudine fere corollae. Stigmata duo erectiusculae.

Feminae. Germen oblongum. Stylus filiformis, brevis. Stigmata duo, oblonga, obtusiuscula, revoluta.

Pericarpium nullum. Calyx immutatus.

Semen. Corollulae solitaria, oblonga, striatum, apice truncatum. Pappus pilosus, caducus.

Receptaculum nudum, planiusculum.

SPECIFIC CHARACTER.

Cineraria. Stirpis caulinis, dentatis, pinnatis, foliolis subpinnatifidis, petiolis aureis; Radicibus pinnatisectis.

Cineraria with heart-shaped, indented, hairy leaves, purple underneath, the footstalks having lobes, the flowers yellow.

REFERENCE TO THE PLATE.

1. The Farmplacement (natural size).
2. A floret of the ray (magnified).
3. A floret of the disk (magnified).
4. The Chives, Pointal, and Seed-bud of a floret of the disk (magnified).

In the last Angust of Monf. L'Heritier, this species of Cineraria has been described and figured under the specific character of Cineraria, from the botanic garden at Kew, where, according to the catalogue, it was first introduced by Mr. F. Masson, from the Canary Islands, about 1777; and by which specific it has hitherto been titled: but from what appearance or part of the plant, he could determine it thusly, will not be easy to determine; from our idea of colour, it might as well have named it blue. Finding, therefore, a specific character certainly more fixed in the leaf, we have taken the liberty of altering Cineria to Atriplicifolia; though that would not have been done, (as nothing is more contrary to our sentiments, than altering any published name) if there had been any shadow of affinity to the plant in that title. This is respectfully the handsomest species of Cineria yet known, growing to the height of near three feet if encouraged. The specimen from which this figure was taken, and which was seen till March, by the author, by Mr. James Lyndle, King's road, Chelsea, had produced three flos. By night it is extremely fragrant, continuing to discharge from the guards of Tobacco, till August, feeding about briefly, by which it may be propagated, producing many seedlings, as by the suckers which are thrown up from the roots, thriving well in light mould or peat.

PLATE XXIV.

CINERARIA AURITA.

Two-coloured-leaved Cineraria.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis, ſimplex; polyphyllus; foliolis æqualibus.

COROLLA. Compoſita, radiata. Corollulæ hermaphroditæ, æquales; numeroſæ, in diſco. Femineæ ligulatæ, numero foliorum calycis in radio.

Propria hermaphroditi, infundibuliformis; limbo quinquefido, erecto.

Feminea ligulata, lanceolata, apice denticulata.

STAMINA. Filamenta quinque, filiformia brevia. Antheræ cylindracea, tubuloſa, apice quinquefida.

PISTILLUM, hermaphroditis. Germen oblongum. Stylus filiformis, longitudine ſtaminum. Stigmata duo erectiuſcula.

Feminei: Germen oblongum. Stylus filiformis, brevis. Stigmata duo, oblonga, obtuſiuſcula, revoluta.

PERICARPIUM nullum. Calyx immutatus.

SEMINA hermaphroditis ſolitaria, linearia, quadrangula. Pappus piloſus, copioſus.

RECEPTACULUM nudum, planiuſculum.

EMPALEMENT. Common, ſimple; of many leaves; ſmall leaves equal.

BLOSSOM. Compound, radiate. Florets with chives and pointals equal; numerous in the centre. Florets with only pointals ligulate; equal in number to the leaves in the circumference of the empalement.

Individuals with chives and pointals funnel-ſhaped; border five-cleft, upright.

Individuals with pointals only, ligulate, lance-ſhaped, toothed at the point.

CHIVES. Five threads, thread-ſhaped and ſhort. Tips forming a hollow cylinder, with five clefts at the top.

POINTAL of florets with chives and pointals. Seed-bud oblong. Shaft thread-ſhaped, the length of the chives. Summits two, a little upright.

Of florets with pointals only. Seed bud oblong. Shaft thread-ſhaped, and ſhort. Summits two, oblong, rather blunt, and rolled back.

SEED-VESSEL none. Cup not changing.

SEEDS of florets with chives and pointals, ſolitary, linear and four-ſided. Feather, hairy, abundant.

RECEPTACLE naked, rather flat.

SPECIFIC CHARACTER.

Cineraria, foliis cordatis, dentatis, piloſis, ſubtus purpuraſcentibus; petiolis auritis: floribus purpureis.

Cineraria with heart-ſhaped, indented, hairy leaves, purple underneath; the footſtalks having lobes: the flowers purple.

REFERENCE TO THE PLATE.

1. The Empalement (natural ſize).
2. A floret of the ray (magnified).
3. A floret of the diſk (magnified).
4. The Chives, Pointal, and Seed-bud of a floret of the diſk (magnified).

IN the Sert. Anglic. of Monſ. L'Heritier, this ſpecies of Cineraria has been deſcribed and figured under the ſpecific character of Cruenta, from the botanic garden at Kew; where, according to the catalogue, it was firſt introduced by Mr. F. Maſſon, from the Canary Iſlands, about 1777; and by which ſpecific it has hitherto been titled: but from what appearance or part of the plant, he could denominate it bloody, will not be eaſy to determine; from our idea of colour, he might as well have named it blue. Finding, therefore, a ſpecific character certainly more fixed in the leaf, we have taken the liberty of altering Cruenta to Aurita; though that would not have been done, (as nothing is more contrary to our ſentiments, than altering any publiſhed name) if there had been any glimpſe of affinity to the plant in that title. This is unqueſtionably the handſomeſt ſpecies of Cineraria yet known, growing to the height of near three feet if encouraged. The ſpecimen from which this figure was taken, and which was ſent laſt March to the author, by Mr. James Colville, King's road, Chelſea, had attained that ſize. By night it is extremely fragrant, continuing its bloſſoms from the month of February, till Auguſt; ſeeding abundantly, by which it may be propagated, producing many varieties; or by the ſuckers which are thrown up from the roots; thriving beſt in light mould or peat.

Camellia Japonica.

PLATE XXV.

CAMELLIA JAPONICA. *Var. Flore albo pleno.*

Double white Camellia.

CLASS XVI. ORDER V.

MONODELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus, polyphyllus: foliolis interdum majoribus. || EMPALEMENT tiled, of many leaves: the inner leaves the largeſt.

SPECIFIC CHARACTER OF *VAR.*

Camellia floribus ampliſſimis, plenis albidis. || Camellia with large double white flowers.

THIS we may be conſidered by ſome, as deviating from the botanical rule we preſcribed to ourſelves, at the outſet of this work, not to figure any flower, but what could be ſyſtematically aſcertained; double flowers, &c. having loſt thoſe conſtituent characters neceſſary to the Sexual Syſtem; yet having ſeen this moſt delightful plant in bloom laſt year, the temptation was too powerful to be reſiſted, for giving a figure of it in the Botaniſt's Repoſitory. This fine variety of the Camellia, was firſt imported from China about the year 1792, by Captain Conner of the Carnatic Eaſt-indiaman, for the gardens of the late I. Slater, Eſq. a gentleman of moſt indefatigable ſpirit, for the introduction of new plants to this kingdom; indeed, it is to him we owe moſt of the plants received from China within thoſe few years; he having procured a catalogue to be printed of all the deſcribed Chineſe plants in that language, with the deſcriptions tranſlated, and by various hands tranſmitted it to that country. The firſt plants in this kingdom, of the double white Camellia, are now in the collection of Sir Joſeph Banks, Bart. P. R. S. This, like the others of this genus, we may conſider of ſufficient hardineſs to reſiſt our winters; being a native of the Japaneſe iſles, where, as well as in China, it was ſeen by Thunberg. As yet (from its ſcarcity) that cannot be aſcertained; but from the eaſy method by which it is propagated by cuttings, we are in hopes it ſoon may. It is at preſent cultivated as a hot-houſe plant, where certainly it will be always ſeen in the greateſt perfection; the flowers being of ſo delicate and brilliant a white, their beauty is eaſily deſtroyed, even by watering. Flowers the autumnal months, and thrives beſt in rich loam.

Camellia Japonica.

PLATE XXV.

CAMELLIA JAPONICA. *Var. Flore albo pleno.*

Double white Camellia.

CLASS XVI. ORDER V.

MONODELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus, polyphyllus: foliolis interioribus majoribus. || EMPALEMENT tiled, of many leaves: the inner leaves the largeſt.

SPECIFIC CHARACTER OF *VAR.*

Camellia floribus ampliſſimis, plenis albidis. || Camellia with large double white flowers.

THOUGH it may be conſidered by ſome, as deviating from the botanical rule we preſcribed to ourſelves, at the outſet of this work, not to figure any flower, but what could be ſyſtematically aſcertained; double flowers, &c. having loſt thoſe conſtituent characters neceſſary to the Sexual Syſtem; yet having ſeen this moſt delightful plant in bloom laſt year, the temptation was too powerful to be reſiſted, for giving a figure of it in the Botaniſt's Repoſitory. This fine variety of the Camellia, was firſt imported from China about the year 1793, by Captain Connor of the Carnatic Eaſt-indiaman, for the gardens of the late I. Slater, Eſq. a gentleman of moſt indefatigable ſpirit, for the introduction of new plants to this kingdom; indeed, it is to him we owe moſt of the plants received from China within theſe few years; he having procured a catalogue to be printed of all the deſcribed Chineſe plants in that language, with the deſcriptions tranſlated, and by various hands tranſmitted it to that country. The fineſt plants in this kingdom, of the double white Camellia, are now in the collection of Sir Joſeph Banks, Bart. P. R. S. This, like the others of this genus, we may conſider of ſufficient hardineſs to reſiſt our winters; being a native of the Japaneſe iſles, where, as well as in China, it was ſeen by Thunberg. As yet (from its ſcarcity) that cannot be aſcertained; but from the eaſy method by which it is propagated by cuttings, we are in hopes it ſoon may. It is at preſent cultivated as a hot-houſe plant, where certainly it will be always ſeen in the greateſt perfection; the flowers being of ſo delicate and brilliant a white, their beauty is eaſily deſtroyed, even by watering. Flowers in the autumnal months, and thrives beſt in rich loam.

Crassula odoratissima.

PLATE XXVI.

CRASSULA ODORATISSIMA.

Sweet-scented Crassula.

CLASS V. ORDER V.

PENTANDRIA PENTAGYNIA. Five Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, foliolis lanceolatis, canaliculato-concavis, erectis, acutis, conniventibus in tubum, persistentibus.

COROLLA. Petala quinque, unguibus longis, linearibus, rectis, conniventibus, reflexo-patentibus.

Nectaria quinque, singulum squamula minima, emarginata basi germinis extrorsum annexa.

STAMINA. Filamenta quinque, subulata, longitudine tubi, unguibus corollæ inserta. Antheræ simplices.

PISTILLUM. Germina quinque, oblonga, acuminata, desinentia in styles subulatos, longitudine staminum. Stigmata obtusa.

PERICARPIUM. Capsulæ quinque, oblongæ, acuminatæ, rectæ, compressæ, longitudinaliter introrsum dehiscentes.

SEMINA plura, parva.

EMPALEMENT. Cup of five leaves; the small leaves are lance-shaped, concave and channelled, upright, sharp, formed into a tube, and remaining.

BLOSSOM. Petals five, claws long, linear, upright, joined together, bent back, and spreading.

Honey-cups five, each consisting of a small scale notched at the end, and fixed on the outside the bottom of each seed-bud.

CHIVES. Five threads, awl-shaped, the length of the tube, fixed into the claws of the blossom. Tips simple.

POINTALS. Seed-buds five, oblong, pointed, ending in awl-shaped shafts, the length of the chives. Summits blunt.

SEED-VESSEL. Five capsules, oblong, pointed, upright, pressed together, and opening inwards along the seams.

SEEDS, many, small.

SPECIFIC CHARACTER.

Crassula foliis oppositis, amplexicaulibus, ciliatis, linearibus; floribus capitatis, odoratissimis, luteis.

Crassula with opposite leaves that embrace the stem, fringed and linear; the flowers grow in bunches, are sweet-scented and yellow.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open to shew the insertion of the threads.
3. One Petal of the blossom.
4. The five Pointals as they stand in the blossom, with their honey-cups attached to the bottoms of the Seed buds.
5. One Pointal (magnified).

The Crassula Odoratissima is a native of the Cape of Good Hope, was introduced to our gardens about the year 1794, but did not flower till 1798. The scent of this plant at night is so very powerful, that by many it may be deemed almost offensive, though by others it is considered as most agreeable; the flavour is nearly allied to the tuberose. This is not a very showy plant, growing about a foot high, and flowers from March, till May or June. It is most easily propagated by cuttings, lives in the common greenhouse with very little care, and in almost any sort of earth. This figure was taken at Messrs. Lee and Kennedy's, nurseryman, Hammersmith, where the plant was first raised.

Crassula odoratissima.

PLATE XXVI.

CRASSULA ODORATISSIMA.

Sweet-ſcented Craſſula.

CLASS V. ORDER V.

PENTANDRIA PENTAGYNIA. Five Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum; foliolis lanceolatis, canaliculato-concavis, erectis, acutis, conniventibus in tubum, perſiſtentibus.

COROLLA. Petala quinque, unguibus longis, linearibus, rectis, conniventibus, reflexo-patentibus.

Nectaria quinque; ſingulum ſquamula minima, emarginata baſi germinis extrorſum annexa.

STAMINA. Filamenta quinque, ſubulata, longitudine tubi, unguibus corollæ inſerta. Antheræ ſimplices.

PISTILLUM. Germina quinque, oblonga, acuminata, deſinentia in ſtylos ſubulatos, longitudine ſtaminum. Stigmata obtuſa.

PERICARPIUM. Capſulæ quinque, oblongæ, acuminatæ, rectæ, compreſſæ, longitudinaliter introrſum dehiſcentes.

SEMINA plura, parva.

EMPALEMENT. Cup of five leaves; the ſmall leaves are lance-ſhaped, concave and channelled, upright, ſharp, formed into a tube, and remaining.

BLOSSOM. Petals five, claws long, linear, upright, joined together, bent back, and ſpreading.

Honey-cups five, each confiſting of a ſmall ſcale notched at the end, and fixed on the outſide the baſe of each ſeed-bud.

CHIVES. Five threads, awl-ſhaped, the length of the tube, fixed into the claws of the bloſſom. Tips ſimple.

POINTAL. Seed-buds five, oblong, pointed, ending in awl-ſhaped ſhafts, the length of the chives. Summits blunt.

SEED-VESSEL. Five capſules, oblong, pointed, upright, preſſed together, and opening inwards along the ſeam.

SEEDS, many, ſmall.

SPECIFIC CHARACTER.

Craſſula foliis oppoſitis, amplexicaulibus, ciliatis, linearibus; floribus capitatis, odoratiſſimis, luteis.

Craſſula with oppoſite leaves that embrace the ſtem, fringed and linear; the flowers grow in bunches, are ſweet-ſcented and yellow.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom cut open to ſhew the inſertion of the threads.
3. One Petal of the bloſſom.
4. The five Pointals as they ſtand in the bloſſom, with their honey-cups attached to the bottom of the Seed-buds.
5. One Pointal (magnified).

THE Craſſula Odoratiſſima is a native of the Cape of Good Hope, was introduced to our gardens about the year 1794, but did not flower till 1796. The ſcent of this plant at night is ſo very powerful, that by many it may be deemed almoſt offenſive, though by others it is conſidered as moſt agreeable; the flavour is nearly affined to the tuberoſe. This is not a very ſhewy plant, growing about a foot high, and flowers from March, till May or June. It is moſt eaſily propagated by cuttings, lives in the common greenhouſe with very little care, and in almoſt any ſort of earth. This figure was taken at Meſſrs. Lee and Kennedy's, nurſerymen, Hammerſmith, where the plant was firſt raiſed.


1
2
Gladiolus ringens.
Var. omnino idenla.

PLATE XXVII.

GLADIOLUS RINGENS. *Var. cinereo odorato.*

Gaping Ash-coloured sweet Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-partita, ringens.
Stamina adscendentia.

Corolla six-divisions, gaping.
Chives ascending.
See Plate XI.

SPECIFIC CHARACTER.

Gladiolus foliis linearibus, nervosis, floribus ringentibus, cinereis, odoratissimis.

Gladiolus with linear, ribbed leaves; the flowers gaping, ash-coloured and very sweet-scented.

REFERENCE TO THE PLATE.

1. The two Valves of the Empalement.
2. A Blossom cut open to expose the insertion of the Chives.
3. The Pointal, the Summit magnified.
4. [illegible]

This [illegible] a most pleasing novelty in the greenhouse; although extremely scarce, [illegible] but from its great delicacy has been [illegible] lost. The plants [illegible] in England, have been imported from Holland, from the collection of [illegible] purchased the largest collection ever [illegible] The Gladiolus [illegible] that a single plant is sufficient to scent [illegible] therefore should be [illegible] as soon as the flower is gone. Is propagated [illegible] the bulb after flowering. [illegible] height.

PLATE XXVII.

GLADIOLUS RINGENS. *Var. cinereo odorato.*

Gaping Aſh-coloured ſweet Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, ringens.	BLOSSOM ſix diviſions, gaping.
STAMINA adſcendentia.	CHIVES aſcending. See Plate XI.

SPECIFIC CHARACTER.

Gladiolus foliis linearibus, coſtatis; floribus ringentibus, cineriis, odoratiſſimis.	Gladiolus with linear, ribbed leaves; the bloſſoms gaping, aſh-coloured, and very ſweet-ſcented.

REFERENCE TO THE PLATE.

1. The two ſheaths of the Empalement.
2. A Bloſſom cut open to expoſe the inſertion of the Chives.
3. The Pointal (one Summit magnified).
4. A Seed in its coat.

THIS moſt deſirable Gladiolus, is not a perfect novelty in the greenhouſe; although extremely ſcarce, it has been introduced to us conſtantly from the Cape of Good Hope, but from its great delicacy has been repeatedly loſt. The plants now in England, have been imported from Holland, from the collection of Meſſrs. Voorhelm and Co. who about the year 1793, purchaſed the largeſt collection ever formed at the Cape, from a Frenchman who had been many years reſident there. The Gladiolus ringens about mid-day has the flavour of violets ſo powerfully, that a ſingle plant is ſufficient to ſcent a whole greenhouſe. It is with difficulty preſerved from rotting at the root; therefore ſhould be grown in very ſandy peat, and ſhould be expoſed to dry as ſoon as the flower is gone. Is propagated by the root, or by ſeed, which may be procured by great care not to over-water the bulb after flowering; but herein there is great danger.


Geranium elegans.
1
2
3

PLATE XXVIII.

GERANIUM ELEGANS.

Round-leaved Geranium.

CLASS XVI. ORDER II.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNIA. Stigmata 5. Fructus rostratus, 5-coccus.	One POINTAL. Five Summits. Fruit furnished with long awns, 5 dry berries. See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium pedunculis multifloris, calycibus monophyllis, foliis orbiculatis, ferratis rigidis, petiolis longissimis, caule herbaceo.	Geranium, the fruit-stalks supporting many flowers; cups of one leaf; the leaves round, sawed, and harsh, with very long foot-stalks; stem herbaceous.

REFERENCE TO THE PLATE.

1. The Impalement cut open, to shew its tubular shape to its base.
2. The Chives, and Pointal, natural size.
3. The Pointal, magnified.

THIS truly elegant species of Geranium was introduced to us from the Cape of Good Hope, in the year 1795, being raised from seeds, received from thence by Messrs. Lee and Kennedy, in whose collection it flowered for the first time this year, about the latter end of May, and from which specimen this figure was taken. It is one of those that have in general seven fertile tops, and, therefore, must be placed under Mr. L'Heritier's genus Pelargonium, by those who follow his new arrangement. It is a hardy plant, and requires only a common greenhouse for its protection, where it will seed; which seems to be the readiest mode of propagating it, as it produces but very few branches; thriving best in rich earth.

PLATE XXVIII.

GERANIUM ELEGANS.

Round-leaved Geranium.

CLASS XVI. ORDER II.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus roſtratus, 5-coccus.	One POINTAL. Five Summits. Fruit furniſhed with long awns, 5 dry berries. See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium pedunculis multifloris; calycibus monophyllis, foliis orbiculatis, ſerratis rigidis, petiolis longiſſimis; caule herbaceo.	Geranium, the fruit-ſtalks ſupporting many flowers; cups of one leaf; the leaves round, ſawed, and harſh, with very long foot-ſtalks; ſtem herbaceous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to ſhew its tubular ſhape to its baſe.
2. The Chives, and Pointal, natural ſize.
3. The Pointal, magnified.

THIS truly elegant ſpecies of Geranium was introduced to us from the Cape of Good Hope, in the year 1795; being raiſed from ſeeds, received from thence, by Meſſrs. Lee and Kennedy, in whoſe collection it flowered for the firſt time this year, about the latter end of May, and from which ſpecimen this figure was taken. It is one of thoſe that have in general ſeven fertile tips, and, therefore, muſt be placed under Mr. L'Heritier's genus Pelargonium, by thoſe who follow his new arrangement. It is a hardy plant, and requires only a common greenhouſe for its protection, where it will ſeed; which ſeems to be the readieſt mode of propagating it, as it produces but very few branches; thriving beſt in rich earth.


Ixia spicata.

PLATE XXIX.

IXIA SPICATA. *Var. viridi nigra.*

Sea-green spiked Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Males. One Female.

ESSENTIAL GENERIC CHARACTER.

Corolla: 6 petala, patens, æqualis. Stamina 3, anotliofenio-parata.	Blossom six petals, spreading, equal. Stamens three, inside upright, opposite the less petals. Tab. XIX.

SPECIFIC CHARACTER.

Ixia foliis linearibus, ensiformibus; corolla ovata, petalis laxè obtectis; spicis longissimis	Ixia with linear, sword leaves, green-nigrous; the half of the petals [illegible] very long

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REFERENCES TO THE PLATE.

1. The two fronds of the flagelement.
2. A flower cut open, to show its tubular corolla, and the insertion of the stamens at the mouth.
3. The Pistil complete, one of its Stamens magnified.

The singularity of colour exhibited in this very fine species of Ixia, the extraordinary length of the spikes, the flowers of which are usually all expanded at the same time, and which grow sometimes to the length of a foot, or more, will certainly entitle it to a place in every collection of exotics. We are indebted to the Hollanders for this plant, as they first introduced it from the Cape, and it from them we received it but a few years since. It is amongst the hardiest and most [illegible] this genus, requiring a small degree of heat when near blowing, to make the flowers [illegible] bulbs thriving best in peat earth; propagating itself by the bulb, and flowering during the months of May and June.


Iscne spicata.

PLATE XXIX.

IXIA SPICATA. *Var. viridi nigra.*

Sea-green ſpiked Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6 petala, patens, æqualis.	BLOSSOM ſix petals, ſpreading, equal.
STIGMATA 3, erectiuſculo-patula.	SUMMITS three, nearly upright, ſpreading. See IXIA REFLEXA, Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis linearibus, coſtatis; corolla viridi, petalis baſi obſcuris; ſpicis longiſſimis.	Ixia with linear, ribbed leaves; green bloſſom, the baſe of the petals dark; ſpikes very long.

REFERENCE TO THE PLATE.

1. The two ſheaths of the Empalement.
2. A Bloſſom cut open, to ſhew its tubular character, and the inſertion of the Chives at the mouth.
3. The Pointal complete, one of its Summits magnified.

THE ſingularity of colour exhibited in this very fine ſpecies of Ixia, the extraordinary length of the ſpikes, the flowers of which are moſtly all expanded at the ſame time; and which grow ſometimes to the length of a foot, or more; will certainly entitle it to a place in every collection of exotics. We are indebted to the Hollanders for this plant, as they firſt introduced it from the Cape; and it is from them we received it but a few years ſince. It is amongſt the hardieſt, and eaſieſt propagated of this genus; requiring a ſmall degree of heat when near blowing, to make the flowers expand with luſtre; thriving beſt in peat earth; propagating itſelf by the bulb; and flowering during the months of May and June.

Vaccinium Arctostaphyllus.

PLATE XXX.

VACCINIUM ARCTOSTAPHYLLUS.

Madeira Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ſuperum, perſiſtens.

COROLLA. Monopetala, campanulata, quadrifida, laciniis revolutis.

STAMINA. Filamenta octo, ſimplicia. Antheræ bicornes, dorſo ariſtis duabus patentibus inſtructæ, apice dehiſcentes.

PISTILLUM. Germen inferum. Stylus ſimplex, ſtaminibus longior. Stigma obtuſum.

PERICARPIUM. Bacca globoſa, umbilicata, quadrilocularis.

SEMINA pauca, parva.

EMPALEMENT. Cup very ſmall, above, and permanent.

BLOSSOM. One petal, bell-ſhaped, four-cleft; ſegments rolled back.

CHIVES. Eight threads, ſimple. Tips with two horns, and furniſhed with two ſpreading awns at the back, opening at the points.

POINTAL. Seed-bud beneath. Shaft ſimple, longer than the chives. Summit blunt.

SEED-VESSEL. A globular berry, with a hollow dimple, and four cells.

SEEDS few, and ſmall.

SPECIFIC CHARACTER.

Vaccinium, floribus racemoſis, foliis ſerratis, ovatis, acutis, caule arboreo.

Whortle-berry, with flowers growing in bunches; leaves ſlightly [illegible], egg-ſhaped, and pointed; ſtem woody.

REFERENCE TO THE PLATE.

1. The Empalement, Pointal, and [illegible], the bloſſom removed.
2. A Chive magnified.
3. The Shaft, and its Summit, magnified.
4. A ripe Berry [illegible].

[illegible] are the difficulties which occur in arranging plants according to any yet invented ſyſtem; [illegible] the ſame [illegible] in the ſmall [illegible], yet that is ſometimes the caſe. The plant before [illegible] in habit, fruit, &c. ſeemingly perfectly allied to Vaccinium, and from which characters [illegible] placed under that genus, yet we doubt whether if Linnæus had examined the flower himſelf, he [illegible] it under the name it here bears, and we have no doubt of its being the plant [illegible], he would not have placed it in Octandria; for certainly it has in every inſtance ten chives, [illegible] of the [illegible] the threads attached to the bloſſom. But, as it is [illegible] as little as poſſible to confuſe, by the introduction of new names [illegible] known by eſtabliſhed, and generally accepted ones, though erroneous from [illegible] in the author who firſt publiſhed them; we ſhall attempt no alteration but [illegible] in the very glaring [illegible], being thoroughly convinced of the [illegible] of [illegible] one name for each plant. The Vaccinium Arctoſtaphyllus is a native of the iſland of Madeira, where it grows to a conſiderable height. It has not been many years cultivated in our gardens, having been introduced to us firſt by Mr. F. Maſſon about the year 1780. The winters in [illegible] for it, therefore ſhould be protected, although it will ſurvive [illegible]. It is beſt preſerved in a pot, and kept as a greenhouſe plant, where it is very ornamental; flowering about the months of July and Auguſt; thriving beſt in light ſandy loam, or peat; and is propagated by cuttings, or the ſeed, which it produces in abundance.

Vaccinium Arctostaphyllus.

PLATE XXX.

VACCINIUM ARCTOSTAPHYLLUS.

Madeira Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium minimum, ſuperum, perſiſtens.

COROLLA. Monopetala, campanulata, quadrifida; laciniis revolutis.

STAMINA. Filamenta octo, ſimplicia. Antheræ bicornes, dorſo ariſtis duabus patentibus inſtructæ, apice dehiſcentes.

PISTILLUM. Germen inferum. Stylus ſimplex, ſtaminibus longior. Stigma obtuſum.

PERICARPIUM. Bacca globoſa, umbilicata, quadrilocularis.

SEMINA pauca, parva.

EMPALEMENT. Cup very ſmall, above, and permanent.

BLOSSOM. One petal, bell-ſhaped, four-cleft; ſegments rolled back.

CHIVES. Eight threads, ſimple. Tips with two horns, and furniſhed with two ſpreading awns at the back, opening at the points.

POINTAL. Seed-bud beneath. Shaft ſimple, longer than the chives. Summit blunt.

SEED-VESSEL. A globular berry, with a hollow dimple, and four cells.

SEEDS few, and ſmall.

SPECIFIC CHARACTER.

Vaccinium, floribus racemoſis; foliis crenulatis, ovatis, acutis; caule arboreo.

Whortle-berry, with flowers growing in bunches; leaves ſlightly ſcollopped, egg-ſhaped, and pointed; ſtem woody.

REFERENCE TO THE PLATE.

1. The Empalement, Pointal, and Chives; the bloſſom removed.
2. A Chive (magnified).
3. The Shaft, and its Summit (magnified).
4. A ripe Berry (natural ſize).

NUMEROUS are the difficulties which occur in arranging plants according to any yet invented ſyſtem; and although the ſexual fails in the feweſt inſtances, yet that is ſometimes the caſe. The plant before us, although in habit, fruit, &c. ſeemingly perfectly allied to Vaccinium, and, from which characters, it has been placed under that genus, yet we doubt whether if Linnæus had examined the flower himſelf, (as he has accepted it under the name it here bears, and we have no doubt of its being the plant intended;) he would not have claſſed it in Octandria; for certainly it has in every inſtance ten chives, with the border of the bloſſom of five ſegments; the threads attached to the bloſſom. But, as it is the profeſſed intention of this work as little as poſſible to confuſe, by the introduction of new names for plants already known by eſtabliſhed, and generally accepted ones; though erroneous from incorrectneſs, or otherwiſe, in the author who firſt publiſhed them; we ſhall attempt an alteration but rarely, and that cautiouſly, or for very glaring reaſons; being thoroughly convinced of the difficulty of retaining only one name for each plant. The Vaccinium Arctoſtaphyllus is a native of the iſland of Madeira, where it grows to a conſiderable height: it has not been many years cultivated in our gardens; having been introduced to us firſt by Mr. F. Maſſon about the year 1786. The winters in common of this climate are too ſevere for it, therefore ſhould be protected, although it will ſurvive a mild one: it is beſt preſerved in a pot, and kept as a greenhouſe plant, where it is very ornamental; flowering about the months of July and Auguſt; thriving beſt in light mould, or peat; and is propagated by cuttings, or the ſeed, which it produces in abundance.

Berbonia cordata.

PLATE XXXI.

BORBONIA CORDATA.

Heart-leaved Borbonia.

CLASS VIII. ORDER II.

DIADELPHIA DECANDRIA. [illegible] Ten Stamens [illegible]

[illegible]

CALYX. *Perianthium* [illegible] *tubum*, turbinatum, [illegible] laciniis lanceolatis, [illegible] *aequalibus.*

COROLLA. *pentapetala papilionacea.* *Vexillum* reflexum, [illegible] longitudine.

Alae [illegible] unguiculatae, [illegible]

Carina [illegible], [illegible]

STAMINA. Filamenta decem, [illegible] decem, superne longitudinaliter [illegible] et [illegible] affurgentia. Antherae [illegible].

PISTILLUM. Germen [illegible] villosum, adfcendens. Stigma [illegible] *acuminatum.*

PERICARPIUM. Legumen [illegible] ovatum, uniloculare, [illegible] [illegible] reniformia.

[illegible]

Folia. Folia folitis cordata, [illegible] [illegible]

[illegible]

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]

The Borbonia cordata, which [illegible] Species Plantarum, page [illegible] [illegible] of the genus, are [illegible] rather a naked appearance [illegible] appearance of the [illegible] [illegible] but few [illegible] [illegible] of July, in full [illegible] [illegible] may be raised [illegible] [illegible] The Borbonia [illegible] very light dry earth, [illegible] by the seed, which may be [illegible]

1 Berber

PLATE XXXI.

BORBONIA CORDATA.

Heart-ſhape leaved Borbonia.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two ſets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, turbinatum, corolla dimidio brevius; laciniis lanceolatis, acuminatis, ſubæqualibus.

COROLLA pentapetala papilionacea.
Vexillum reflexum, obtuſum, ungue calycis longitudine.
Alæ ſemicordatæ, vexillo paulo breviores.
Carina dipetala, lunulata, obtuſa.

STAMINA. Filamenta decem, coalita in cylindrum, ſuperne longitudinaliter dehiſcentem, apicibus aſſurgentia. Antheræ parvæ.

PISTILLUM. Germen ſubulatum. Stylus breviſſimus, adſcendens. Stigma obtuſum, emarginatum.

PERICARPIUM. Legumen ſubrotundum, acuminatum, uniloculare, ſpina mucronatum.

SEMINA reniformia.

EMPALEMENT. Cup one leaf, cut into five ſegments, turban-ſhaped, ſhorter by half than the bloſſom; ſegments lance-ſhaped, pointed, nearly of the ſame length.

BLOSSOM of five leaves, butterfly-ſhaped.
Standard bent back, blunt, the claw the length of the cup.
Wings half heart-ſhaped, a little ſhorter than the ſtandard.
Keel of two leaves, half moon-ſhaped, and blunt.

CHIVES. Threads ten, joined in a cylinder, ſplitting at the upper ſide, turned up at the ends. Tips ſmall.

POINTAL. Seed-bud awl-ſhaped. Shaft ſhort, turned up at the end. Summit blunt, and bordered.

SEED-VESSEL. Shell roundiſh, pointed, of one cell, and pointed with a ſpine.

SEEDS kidney-ſhaped.

SPECIFIC CHARACTER.

Borbonia foliis cordatis, multinerviis, integerrimis.

Borbonia with heart-ſhaped leaves, many-nerved, and very entire.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Standard, or upper petal of the Bloſſom.
3. A Wing, or ſide petal of the Bloſſom.
4. The Keel, or lower petals of the Bloſſom.
5. The Pointal and Chives, natural ſize.
6. The Seed-veſſel, attached to the Empalement.

THE Borbonia cordata, with its various ſynonyms, may be found in the ſecond volume of Linnæus's Species Plantarum, page 994, from whence our ſpecific character is copied. This plant, as well as moſt of the genus, are ſubject to loſe their leaves from the lower part of the ſtem, which gives it rather a naked appearance when not in flower; but that is amply compenſated by the very handſome appearance of its magnificent bunch of yellow bloſſoms. It grows to the height of three or four feet, producing but few branches. This figure was taken from a plant ſent to the author, about the beginning of July, in full bloom, by Mr. Colville, nurſeryman, of the King's Road, Chelſea; who informs him that he raiſed it about the year 1795, from ſeeds which he had received from the Cape of Good Hope. The Borbonias are moſtly hardy greenhouſe plants, and delight in light earth; either peat, or very light dungy earth: they are in general difficult to propagate by cuttings; the ſureſt method is by the ſeed, which they for the moſt part perfect in this climate.

Anthelyxe ringens.

PLATE XXXII.

ANTHOLYZA RINGENS.

Gaping Antholyza.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

Calyx. Spathæ bivalves, alternatæ, floribus difficilioribus, persistentes.

Corolla. Petalum unicum e tubo tensim dilatatum in faucem compressam, ringentem.

Nectarium. Filamenta tria, longa, tenuia, subtubo superiori. Antheræ acutæ.

Pistillum. Germen inferum. Stylus filiformis, et longitudine staminum superiorum. Stigma trifidum, capillare, reflexum.

Pericarpium. Capsula subrotunda, trilocularis, trivalvis.

Semina plura, triangularia.

Empalement. Sheath of two valves, alternate, dividing the flowers, and abiding.

Blossom. One petal, widening in the tube, flattened at the mouth, and gaping.

Chives. Three threads, long, thin, and placed under the upper lip of the blossom. Tips sharp.

Pointal. Seed-bud beneath. Shaft thread-shaped, in the same place, and of the same length of the upper chives. Summit cut into three hair-like divisions, which are bent back.

Seed-vessel. Capsule nearly round, three cells, three valves.

Seeds many, triangular.

SPECIFIC CHARACTER.

Antholyza corollæ labiis divaricatis; fauce compressa.

Antholyza with the lips of the blossom in various directions; the mouth flattened.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to shew the insertion of the Chives.
3. The Pointal (natural size).

Notwithstanding this species of Antholyza is not new in our gardens, yet has it been seen in flower but by [illegible] as it blows so seldom, though the roots are by far the largest of any of the genus. The bulb from which this figure was taken, had received a little assistance from heat early in the season, and [illegible] was (apparently) brought into flower. It is a native of the Cape of Good Hope, has [illegible] the appearance of a common flag in the foliage, growing to the height of three feet, or more; [illegible] the same earth as Ixias, propagates by the root, or seed, and flowers in the month of June; [illegible] time a drawing was made from a plant then in bloom at the Hammersmith nursery.


1
2
3
Anthelyx ringens.

PLATE XXXII.

ANTHOLYZA RINGENS.

Gaping Antholyza.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves, alternatæ, flores diſtinguentes, perſiſtentes.

COROLLA. Petalum unicum e tubo ſenſim dilatatum in faucem compreſſam, ringentem.

STAMINA. Filamenta tria, longa, tenuia, ſublabio ſuperiori. Antheræ acutæ.

PISTILLUM. Germen inferum. Stylus filiformis, ſitu et longitudine ſtaminum ſuperiorum. Stigma trifidum, capillare, reflexum.

PERICARPIUM. Capſula ſubrotunda, trilocularis, trivalvis.

SEMINA plura, triangularia.

EMPALEMENT. Sheath of two valves, alternate, dividing the flowers, and abiding.

BLOSSOM. One petal, widening in the tube, flattened at the mouth, and gaping.

CHIVES. Three threads, long, thin, and placed under the upper lip of the bloſſom. Tips ſharp.

POINTAL. Seed-bud beneath. Shaft thread-ſhaped, in the ſame place, and of the ſame length of the upper chives. Summit cut into three hair-like diviſions, which are bent back.

SEED-VESSEL. Capſule nearly round, three cells, three valves.

SEEDS many, triangular.

SPECIFIC CHARACTER.

Antholyza corollæ labiis divaricatis; fauce compreſſa.

Antholyza with the lips of the bloſſom in various directions; the mouth flattened.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom cut open, to ſhew the inſertion of the Chives.
3. The Pointal (natural ſize).

ALTHOUGH this ſpecies of Antholyza is not new in our gardens, yet has it been ſeen in flower but by few, as it blows ſo ſeldom; though the roots are by far the largeſt of any of the genus. The bulb from which this figure was taken, had received a little aſſiſtance from heat early in the ſeaſon, and by that means was (apparently) brought into flower. It is a native of the Cape of Good Hope, has much the appearance of a common flag in the foliage, growing to the height of three feet, or more; requires the ſame earth as Ixias, propagates by the root, or ſeed, and flowers in the month of June; at which time a drawing was made from a plant then in bloom at the Hammerſmith nurſery.

Diosma latifolia

PLATE XXXIII.

DIOSMA LATIFOLIA.

Broad-leaved Diosma.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum; laciniis tenuibus, acutis, persistentibus; basi plana.

COROLLA. Petala quinque, ovata, obtusa, sessilia, erecto-patula.

Nectarium coronæ forma, excavatum, quinquefidum, obtusum, germini impositum.

STAMINA. Filamenta quinque, subulata. Antheræ subovatæ, erectæ.

PISTILLUM. Germen coronatum nectario. Stylus simplex, longitudine staminum. Stigma obsoletum.

PERICARPIUM. Capsulæ quinque, ovato-acuminatæ, compressæ, margine introrsum coalitæ, apicibus distantes, suturâ superiori dehiscentes.

SEMINA solitaria, oblonga.

Arillus elasticus, hinc dehiscens; singulum involvens semen.

EMPALEMENT. Cup of four divisions; segments thin, sharp, and permanent; smooth at the base.

BLOSSOM. Five petals, egg-shape, blunt, sitting close, erect, and open.

Honey-cup crown-shaped, hollow, with five divisions, blunt, fixed on the seed-buds.

CHIVES. Five threads, awl-shaped. Tips nearly egg-shaped, upright.

POINTAL. Seed-bud crowned by the honey-cup. Shaft simple, the length of the chives. Summit blunt.

SEED-VESSEL. Five capsules, egg-shaped, pointed, flattened, joined together by the inner edge, the points standing apart, splitting at the upper suture.

SEEDS solitary, oblong.

Seed-coat elastic, splitting from hence, and inclosing a single seed.

SPECIFIC CHARACTER.

Diosma, foliis oppositis serratis, ovalibus, latissimis; floribus terminalibus, albidis, sessilibus.

Diosma with opposite leaves, sawed, oval, and very broad; flowers terminal, white, and sitting close to the branches.

REFERENCE TO THE PLATE.

1. A Blossom complete.
2. The Chives and Pointal, with the surrounding Seed-buds and Honey-cups.
3. The Pointal, natural size, with the Empalement attached.
4. The same magnified.
5. A Seed taken from its coat.

THERE are few genera of plants more deserving our notice than Diosma; the fragrance of the leaves of most of the species, and the beauty of the flowers of others, has rendered them so common, (being easily propagated by cuttings) that few collections but have a number of the different species. They are all very hardy greenhouse plants, the present species excepted; this, requiring a dry situation, and rather more warmth than the rest. It was sent to the royal gardens at Kew, about the year 1791, by Mr. F. Masson, to whose industry botany stands so much indebted. Of all the Diosmas this is the highest grower, aspiring to three or four feet, or more, if encouraged; delights in peat earth, and flowers about the month of August.

Diosma latifolia.

PLATE XXXIII.

DIOSMA LATIFOLIA.

Broad-leaved Dioſma.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum; laciniis tenuibus, acutis, perſiſtentibus; baſi plana.

COROLLA. Petala quinque, ovata, obtuſa, ſeſſilia, erecto-patula.

Nectarium coronæ forma, excavatum, quinquefidum, obtuſum, germini impoſitum.

STAMINA. Filamenta quinque, ſubulata. Antheræ ſubovatæ, erectæ.

PISTILLUM. Germen coronatum nectario. Stylus ſimplex, longitudine ſtaminum. Stigma obſoletum.

PERICARPIUM. Capſulæ quinque, ovato-acuminatæ, compreſſæ, margine introrſum coalitæ, apicibus diſtantes, ſutura ſuperiori dehiſcentes.

SEMINA ſolitaria, oblonga.

Arillus elaſticus, hinc dehiſcens; ſingulum involvens ſemen.

EMPALEMENT. Cup of four diviſions; ſegments thin, ſharp, and permanent; ſmooth at the baſe.

BLOSSOM. Five petals, egg-ſhape, blunt, ſitting cloſe, erect, and open.

Honey-cup crown-ſhaped, hollow, with five diviſions, blunt, fixed on the ſeed-buds.

CHIVES. Five threads, awl-ſhaped. Tips nearly egg-ſhaped, upright.

POINTAL. Seed-bud crowned by the honey-cup. Shaft ſimple, the length of the chives. Summit blunt.

SEED-VESSEL. Five capſules, egg-ſhaped, pointed, flattened, joined together by the inner edge, the points ſtanding apart, ſplitting at the upper ſuture.

SEEDS ſolitary, oblong.

Seed-coat elaſtic, ſplitting from hence, and incloſing a ſingle ſeed.

SPECIFIC CHARACTER.

Dioſma, foliis oppoſitis, ſerratis, ovalibus, latiſſimis; floribus terminalibus, albidis, ſeſſilibus.

Dioſma with oppoſite leaves, ſawed, oval, and very broad; flowers terminal, white, and ſitting cloſe to the branches.

REFERENCE TO THE PLATE.

1. A Bloſſom complete.
2. The Chives and Pointal, with the ſurrounding Seed-buds and Honey-cups.
3. The Pointal, natural ſize, with the Empalement attached.
4. The ſame magnified.
5. A Seed taken from its coat.

THERE are few genera of plants more deſerving our notice than Dioſma; the fragrance of the leaves of moſt of the ſpecies, and the beauty of the flowers of others, has rendered them ſo common, (being eaſily propagated by cuttings) that few collections but have a number of the different ſpecies. They are all very hardy greenhouſe plants, the preſent ſpecies excepted; this, requiring a dry ſituation, and rather more warmth than the reſt. It was ſent to the royal gardens at Kew, about the year 1791, by Mr. F. Maſſon, to whoſe induſtry botany ſtands ſo much indebted. Of all the Dioſmas this is the higheſt grower, aſpiring to three or four feet, or more, if encouraged; delights in peat earth, and flowers about the month of Auguſt.

Chelone nutlioides

PLATE XXXIV.

CHELONE RUELLIOIDES.

Scarlet Chelone.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

Calyx. Perianthium monophyllum, quinquedentatum, brevissimum, persistens, laciniis rotundis, ovatis.

Corolla. Monopetala, ringens; tubus cylindraceus, brevissimus; faux [illegible], oblonga, [illegible], supra planus. Labium clausum [illegible]; labium superius [illegible], emarginatum; imbus inferior cum superiori fere aequale; lacviline trifidum.

Stamina. Filamenta quatuor, sub tubo corollae insertae, quorum duo longiora paulo longiora; antherae incumbentes.

Pistillum. Germen solitum. Stigma [illegible] intus imperfecte [illegible] per-

Pericarpium. Capsula [illegible] longitudine fere [illegible]. Stigma persistens.

Capsula ovata, [illegible] calyce

[illegible] intus [illegible] margine [illegible]

Semina. Cup one leaf, five divisions very short, persistent; [illegible] upright and egg-shaped.

Corolla. One petal, gaping, tube cylindrical, very short; mouth formed, oblong, rounded on the upper, and flat on the lower part; under lipped, and finally, upper lip blunt, rounded; lower lip nearly as long as the upper, [illegible] divided into three at the end.

Chives. Threads four, lie under the upper part of the blossom, of which the two side ones are a little longer than the others. They swell sideways to the threads.

The rudiments of a fifth thread, like a hairy pistil is placed equal with, and between the upper chives.

Pistil. Seed-vessel egg-shaped. Short thread-shaped, of the same length, and place as the chives. Summit blunt.

Seed-vessel. Capsule egg-shaped, two cells longer than the compartment.

Seeds. many, nearly round, fixed at the edge by a thin film.

SPECIFIC CHARACTER.

[illegible] with [illegible] spatheolate, [illegible] leaves on the lower part of the stem, and [illegible] shaped, opposite ones as the upper. Stalkless hanging down, [illegible] toothed, the [illegible] bearded.

REFERENCE TO THE PLATE.

1. A leaf from the lower part of the Stem.
2. The Inflorescence.
3. A Flower cut open, to show the situation of the Chives, and the imperfect rudiments of a fifth.
4. The Seed-vessel, and Pistil, (natural size).

The Chelone Ruelloides is a native of Chili, South America, and was introduced to the royal gardens at Kew in the year 1791, by Mr. Menzies, the son of the governor to the King of Spain, who was then in England, and big Sandwich's fleet. It is (generally) a hardy plant, and fit to endure the open borders, but, as yet, we have not had a sufficient trial to ascertain it; hitherto it has been treated as a greenhouse plant. Being herbaceous, it is propagated by parting the roots, which should be done in spring, about the month of March. The proper season of its flowering cannot yet be determined, as it has only gone [illegible] position [illegible]. The plant from which this figure was made was in full blossom in the gardens of G. Hibbert, Esq. Clapham, in the month of June 1795, where it was then in flower, for the first time in this country. The soil it seems to thrive in most, is a compo- [illegible] of loam, and rotten dung.

Chelone rufiroides

PLATE XXXIV.

CHELONE RUELLIOIDES.

Scarlet Chelone.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum, breviſſimum, perſiſtens; laciniis erectis, ovatis.

COROLLA monopetala, ringens; tubus cylindraceus, breviſſimus; faux inflata, oblonga, ſupra convexa, infra plana; limbus clauſus parvus; labium ſuperius obtuſum, emarginatum; limbus inferius cum ſuperiori fere æquale, læviſſime trifidum.

STAMINA. Filamenta quatuor, ſub dorſo corollæ recondita, quorum duo lateralia paulo longiora; antheræ incumbentes.

Rudimentum quinti filamenti, mucronis inſtar, intra ſuperius ſtaminum par.

PISTILLUM. Germen ovatum. Stylus filiformis, ſitu, et longitudine ſtaminum. Stigma obtuſum.

PERICARPIUM. Capſula ovata, bilocularis, calyce longior.

SEMINA plurima, ſub rotunda, margine membranaceo cincta.

EMPALEMENT. Cup one leaf, five diviſions very ſhort, permanent; ſegments upright and egg-ſhaped.

BLOSSOM. One petal, gaping; tube cylindrical, very ſhort; mouth ſwelled, oblong, rounded on the upper, and flat on the lower part; border ſhut, and ſmall; upper lip blunt, bordered; lower lip nearly as long as the upper, ſlightly divided into three at the end.

CHIVES. Threads four, hid under the upper part of the bloſſom; of which the two ſide ones are a little longer than the others. Tips fixed ſideways to the threads.

The rudiment of a fifth thread, like a ſharp point is placed equal with, and between the upper chives.

POINTAL. Seed-veſſel egg-ſhaped. Shaft thread-ſhaped, of the ſame length, and place as the chives. Summit blunt.

SEED-VESSEL. Capſule egg-ſhaped, two cells longer than the empalement.

SEEDS many, nearly round, bound at the edge by a thin ſkin.

SPECIFIC CHARACTER.

Chelone foliis inferioribus ſpathulatis, glabris; ſuperioribus lanceolatis, oppoſitis; corollis cernuis, coccineis; labiis inferioribus barbatis.

Chelone with ſpathulate, ſmooth leaves on the lower part of the ſtem; and lance-ſhaped, oppoſite ones on the upper; bloſſoms hanging down, and ſcarlet; the lower lips bearded.

REFERENCE TO THE PLATE.

1. A Leaf from the lower part of the Stem.
2. The Empalement.
3. A Bloſſom cut open, to ſhew the ſituation of the Chives, and the imperfect rudiments of a fifth.
4. The Seed-veſſel, and Pointal, (natural ſize).

THE Chelone Ruellioides is a native of Chili, South America, and was introduced to the royal gardens at Kew in the year 1793, by Mr. Boutelow, the ſon of the gardener to the King of Spain, who was then in England purſuing his botanical ſtudies. It is (apparently) a hardy plant, and fit to endure the open borders, but, as yet, we have not had a ſufficient trial to aſcertain it; hitherto it has been treated as a greenhouſe plant. Being herbaceous, it is propagated by parting the roots, which ſhould be done in ſpring, about the month of March. The proper ſeaſon of its flowering cannot well be determined, as it has undergone ſuch various treatment. The plant from which this figure was made was in full bloom at the gardens of G. Hibbert, Eſq. Clapham, in the month of June 1797, where it was ſeen to flower, for the firſt time in this country. The ſoil it ſeems to thrive in moſt, is a compoſition of loam, and rotten dung.

Ixia crispifolia
Var. flore cæruleo.

PLATE XXXV.

IXIA CRISPIFOLIA. *Var. flore cæruleo.*

Crisped-leaved Ixia. Blue Variety.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pistil.

ESSENTIAL GENERIC CHARACTER.

[illegible] Stigmata 3.	Blossom six petals, spreading equal. Summits three, nearly upright, and spreading. See IXIA MONADELPHA, Plate XIV.

SPECIFIC CHARACTER.

[illegible] ramosus, flexuosus, [illegible] sub-umbellatis, cæru-	Ixia with crisped leaves; flower-stem branched, waved, and a span high; flowers grow in partial umbels, and are blue.

REFERENCE TO THE PLATE.

1. [illegible] of the Blossom.
2. [illegible] cut open, to shew the insertion of the Chives.
3. [illegible] (magnified).
4. The Pistil, one of the divisions of the Summit detached, and magnified.

[illegible] of Ixia, is one amongst the many given by the Dowager Lady De Clifford, to [illegible] Hammersmith, in the year 1791; at which time, her ladyship had just [illegible] present from the Cape. It is described by Thunberg, in his Dissertatio de Ixia, [illegible] The root of this plant is of a most curious shape, having the appearance of being [illegible] the whole; it is very delicate, is easily destroyed by moisture, therefore (except [illegible] should be kept very dry; it propagates by the root, the old one generally producing [illegible] the month of June, or July, but requires the warmth of a moderate hothouse to [illegible] other Cape bulbs, it should be planted in sandy peat.

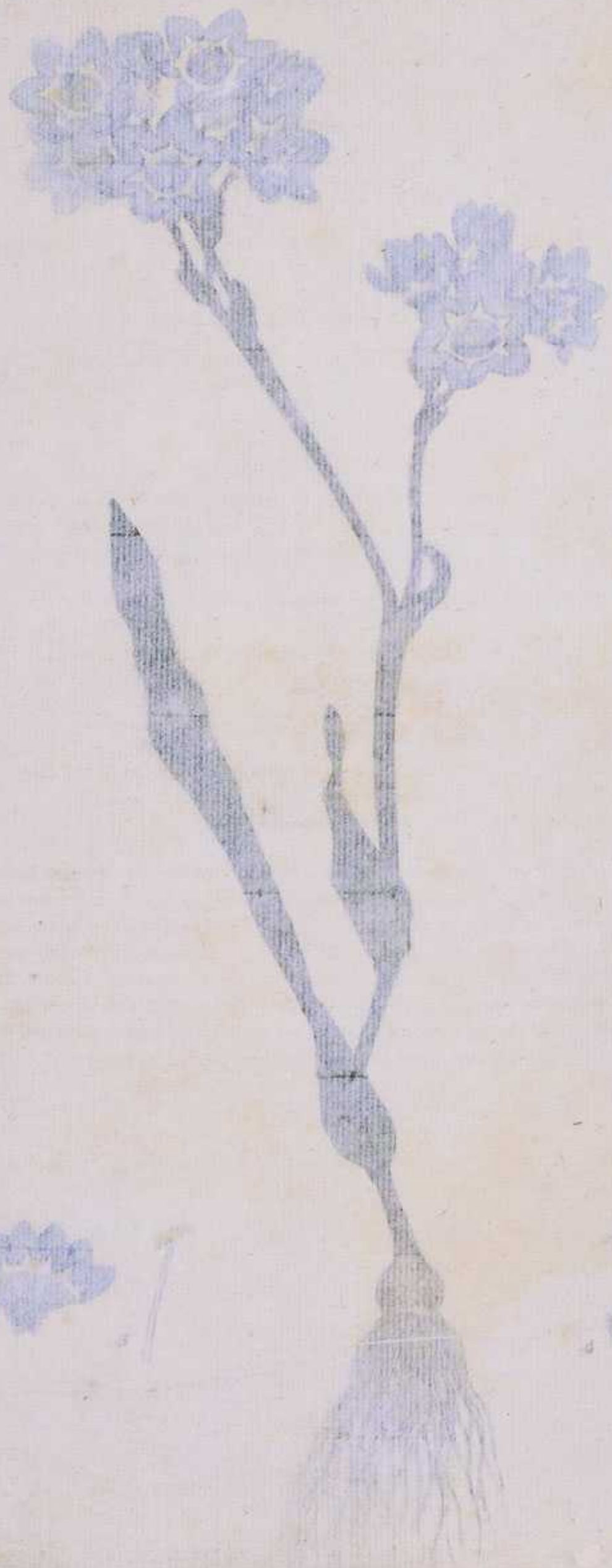

PLATE XXXV.

IXIA CRISPIFOLIA. *Var. flore cæruleo.*

Crisped-leaved Ixia. Blue Variety.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata 3, erectiusculo-patula.	BLOSSOM six petals, spreading equal. Summits three, nearly upright, and spreading. See IXIA REFLEXA, Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis crispis; scapus ramosus, flexuosus, spithamæus; floribus sub-umbellatis, cæruleis.	Ixia with crisped leaves; flower-stem branched, waved, and a span high; flowers grow in partial umbels, and are blue.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. A Blossom cut open, to shew the insertion of the Chives.
3. A Chive (magnified).
4. The Pointal, one of the divisions of the Summit detached, and magnified.

THIS singular species of Ixia, is one amongst the many given by the Dowager Lady De Clifford to Messrs. Lee and Kennedy Hammersmith, in the year 1794; at which time, her ladyship had just received the bulbs in a present from the Cape. It is described by Thunberg, in his Dissertatio de Ixia, published in 1783. The root of this plant is of a most curious shape, having the appearance of being the half, rather than the whole; it is very delicate, is easily destroyed by moisture, therefore (except when in flower) should be kept very dry; it propagates by the root, the old one generally producing two; flowering about the month of June, or July, but requires the warmth of a moderate hothouse to expand its blossoms. Like other Cape bulbs, it should be planted in sandy peat.

Rhododendron punctatum

Pub.d as the Act directs Oct.r 1.1811
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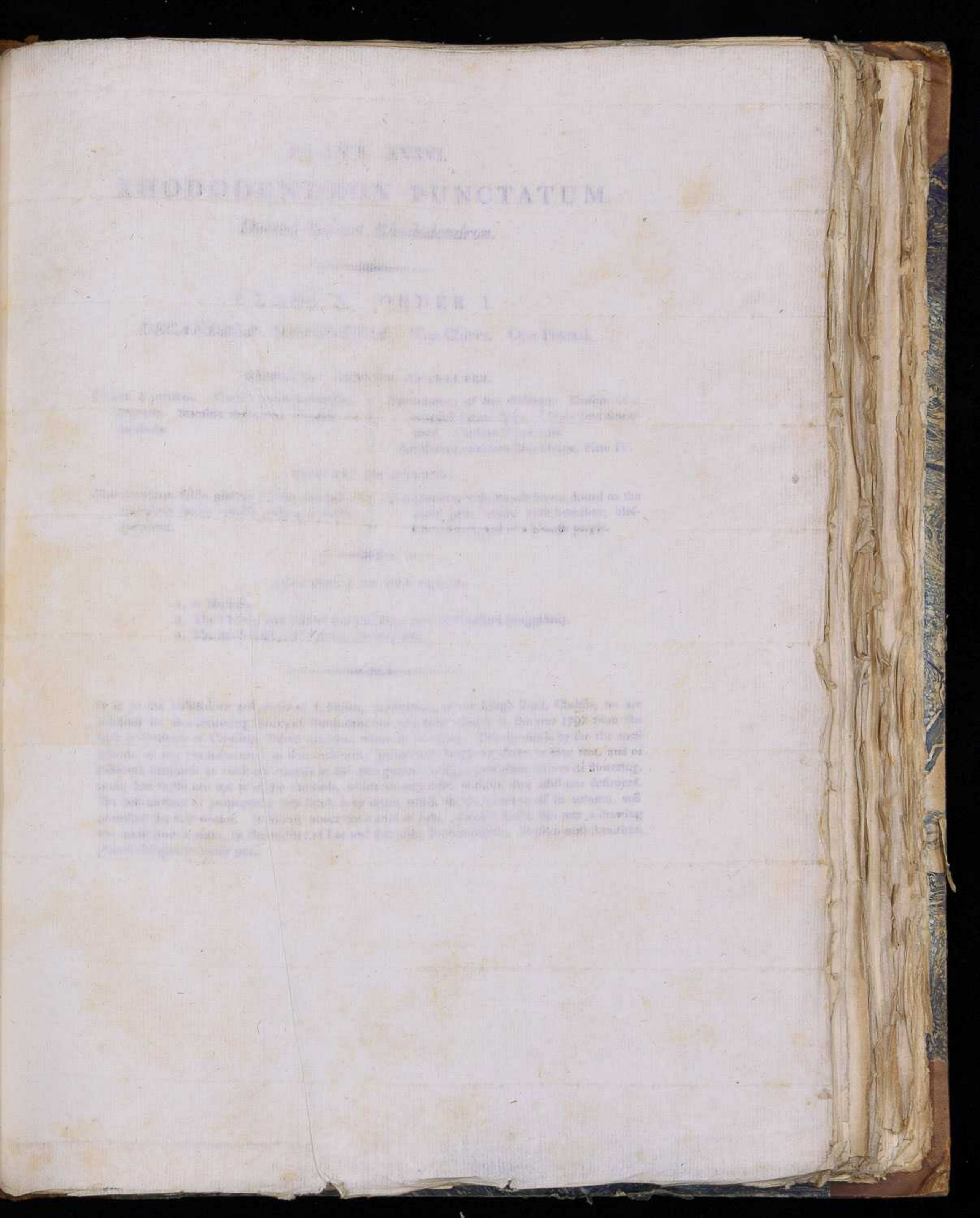

PLATE XXXVI.

RHODODENDRON PUNCTATUM.

Dotted-leaved Rhododendron.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-partitus. Corolla rotato-infundibuliformis. Stamina declinata. Capſula 5-locularis.	EMPALEMENT of five diviſions. Bloſſom of a rounded funnel-ſhape. Chives bent downward. Capſule of five cells. See RHODODENDRON DAURICUM, Plate IV.

SPECIFIC CHARACTER.

Rhododendron foliis glabris, ſubtus punctatis; viminibus laxis; corollis criſpis, violaceo-purpureis.	Rhododendron with ſmooth leaves, dotted on the under part; ſlender looſe branches; bloſſoms criſped, and of a blueiſh purple.

REFERENCE TO THE PLATE.

1. A Bloſſom.
2. The Chives, and Pointal (natural ſize); one tip detached (magnified).
3. The Seed-veſſel, and Pointal, (natural ſize).

IT is to the induſtrious reſearches of J. Fraſier, nurſeryman, of the King's Road, Chelſea, we are indebted for this charming ſpecies of Rhododendron, who introduced it in the year 1792 from the back ſettlements of Carolina, North America, where it is native. This ſpecies is by far the moſt delicate of any yet diſcovered on that continent; grows to the height of three, or four feet, and of ſufficient hardineſs to reſiſt our winters in the open ground; a ſlight protection inſures its flowering, as our late froſts are apt to injure the buds, which are very often without that aſſiſtance deſtroyed. The beſt method of propagating this ſhrub is by layers, which ſhould be taken off in autumn, and protected the firſt winter. It flowers about the month of July, at which ſeaſon this year a drawing was made from a plant, in the nurſery of Lee and Kennedy, Hammerſmith. It (like moſt American plants) delights in ſandy peat.

Geranium fragile.

PLATE XXVII.

GERANIUM FRAGILE.

Brittle-ſtalked Geranium.

CLASS XVI. ORDER II.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNIA. Stigmata 5. Fructus roſtratus, 5-coccus.	ONE POINTAL. Summits five. Fruit furniſhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium foliis carnoſis, planitiis; caulis fruticoſus, ramoſus, fragilis; petalis linearibus, pedunculis erectis.	Geranium with fleſhy winged leaves; ſtem ſhrubby, branched and brittle; petals linear, fruit-ſtalks upright.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to ſhew its tubular ſhape to its base.
2. The Chives, and Pointal, (natural ſize).
3. The Pointal, (magnified).

THE Geranium fragile has in general ſeven fertile tips, and thus comes under Linnæus's firſt arrangement, and Monſ. L'Heritier's Genus Pelargonium. It is a native of the Cape of Good Hope, and was introduced by Meſſrs. Lee and Kennedy in the year 1792. This plant ſeldom grows more than a foot high, but during the months of July, Auguſt, and September, it is covered with Bloſſoms, which are of a pale yellow, ſtriped at the bottom with red, ſtanding nearly upright. It is rather a tender plant, requiring a dry ſtove, or hothouſe, to preſerve it in winter, being very ſubject to damp in the leaves; is eaſily propagated by cuttings, and thrives beſt in rich mould.

Geranium fragile.

PLATE XXXVII.

GERANIUM FRAGILE.

Brittle-ſtalked Geranium.

CLASS XVI. ORDER II.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus roſtratus, 5-coccus.	ONE POINTAL. Summits five. Fruit furniſhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium foliis carnoſis, pinnatis; caulis fruticoſus, ramoſus, fragilis; petalis linearibus, pedunculis erectis.	Geranium with fleſhy winged leaves; ſtem ſhrubby, branched and brittle; petals linear, fruit-ſtalks upright.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to ſhew its tubular ſhape to its baſe.
2. The Chives, and Pointal, (natural ſize).
3. The Pointal, (magnified).

THE Geranium fragile has in general ſeven fertile tips, and thus comes under Linnæus's firſt arrangement; and Monſ. L'Heritier's Genus Pelargonium. It is a native of the Cape of Good Hope, and was introduced by Meſſrs. Lee and Kennedy in the year 1792. This plant ſeldom grows more than a foot high, but during the months of July, Auguſt, and September, it is covered with bloſſoms, which are of a pale yellow, ſtriped at the bottom with red, ſtanding nearly upright. It is rather a tender plant, requiring a dry ſtove, or hothouſe, to preſerve it in winter, being very ſubject to damp in the leaves; is eaſily propagated by cuttings, and thrives beſt in rich mould.

Gladiolus precox.
Var flore rubro

PLATE XXXVIII.

GLADIOLUS PRÆCOX. *Var. flore rubro.*

Red early-flowering Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, ringens.	BLOSSOM six divisions, gaping.
STAMINA adscendentia.	CHIVES ascending.
	See Plate XL. GLADIOLUS ROSEUS.

SPECIFIC CHARACTER.

Gladiolus foliis ensiformibus, apicibus tortis, lineari-cruciatis; corollis sub-campanulatis rubris; petalis acuminatis.	Gladiolus with sword-shaped leaves, twisted at the ends, linear, and cross-shaped; blossoms nearly bell-shaped, and red; petals sharp-pointed.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. A Blossom cut open, to expose the situation of the Chives.
3. The Pointal, one of the Summits magnified.
4. A Seed.

Of all the species of this numerous Genus, this is the first to expand its blossoms, seldom flowering later than April, is extremely hardy, never requiring the warmth of a greenhouse for its protection, although a native of the Cape. About the year 1791, the bulbs of this plant were purchased of Messrs. Voorhelm, and Co. of Haarlem, in Holland, by Messrs. Lee and Kennedy, Hammersmith, at whose nursery it has repeatedly flowered, and where this figure was taken. It is propagated by the root, as other Gladiolus, and requires the same earth, a light sandy peat.

Gladiolus precox.
Var flore rubro

PLATE XXXVIII.

GLADIOLUS PRÆCOX. *Var. flore rubro.*

Red early-flowering Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, ringens.	BLOSSOM ſix diviſions, gaping.
STAMINA adſcendentia.	CHIVES aſcending.
	See Plate XI. GLADIOLUS ROSEUS.

SPECIFIC CHARACTER.

Gladiolus foliis enſiformibus, apicibus tortis, lineari-cruciatis; corollis ſub-campanulatis, rubris; petalis acuminatis.	Gladiolus with ſword-ſhaped leaves, twiſted at the ends, linear, and croſs-ſhaped; bloſſoms nearly bell-ſhaped, and red; petals ſharp-pointed.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. A Bloſſom cut open, to expoſe the ſituation of the Chives.
3. The Pointal, one of the Summits magnified.
4. A Seed.

OF all the ſpecies of this numerous Genus, this is the firſt to expand its bloſſoms, ſeldom flowering later than April; is extremely hardy, ſcarce requiring the warmth of a greenhouſe for its protection, although a native of the Cape. About the year 1791, the bulbs of this plant were purchaſed of Meſſrs. Voorhelm, and Co. of Haarlem, in Holland, by Meſſrs. Lee and Kennedy, Hammerſmith, at whoſe nurſery it has repeatedly flowered, and where this figure was taken. It is propagated by the root, as other Gladiolus, and requires the ſame earth, a light ſandy peat.

Echium ferocissimum

PLATE XXXIX.

ECHIUM FEROCISSIMUM.

Prickly Viper's Bugloss.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA irregularis, fauce nuda.	BLOSSOM irregular, mouth naked. See ECHIUM GRANDIFLORUM, Plate XX.

SPECIFIC CHARACTER.

Echium caule fruticoso; ramis, foliisque aculeatis; floribus spicatis, violaceis; corollis sub-æqualibus.	Viper's Bugloss, with a shrubby stem; branches and leaves covered with sharp prickles; flowers growing in spikes, and violet coloured; blossoms nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to shew the insertion of the Chives in the tube.
3. The Shaft and its Summit, magnified.

ALTHOUGH there are few species of this genus, but are rough, or hairy; yet this by far exceeds any of them, or almost any other plant not actually spiny, for its extreme roughness to the touch; nevertheless it is a very handsome showy greenhouse plant, growing to the height of two feet, and blowing freely. It is a native of the Cape of Good Hope, and was introduced by Messrs. Lee and Kennedy in 1794, at whose nursery it flowered for the first time, this year, in the month of July. The only method of propagating the Cape Echiums is by cuttings, and that is done with great difficulty; of course, this, as well as the other species, are very scarce; they delight most in rich light mould.

Echium ferocissimum

PLATE XXXIX.

ECHIUM FEROCISSIMUM.

Prickly Viper's Bugloſs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA irregularis, fauce nuda.

BLOSSOM irregular, mouth naked.
See ECHIUM GRANDIFLORUM, Plate XX.

SPECIFIC CHARACTER.

Echium caule fruticoſo; ramis, foliiſque aculeatis; floribus ſpicatis, violaceis; corollis ſub-æqualibus.

Viper's Bugloſs, with a ſhrubby ſtem; branches and leaves covered with ſharp prickles; flowers growing in ſpikes, and violet coloured; bloſſoms nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom cut open, to ſhew the inſertion of the Chives in the tube.
3. The Shaft and its Summit, magnified.

ALTHOUGH there are few ſpecies of this genus, but are rough, or hairy; yet this by far exceeds any of them, or almoſt any other plant not actually ſpiny, for its extreme coarſeneſs to the touch; nevertheleſs it is a very handſome ſhewy greenhouſe plant, growing to the height of two feet, and blowing freely. It is a native of the Cape of Good Hope, and was introduced by Meſſrs. Lee and Kennedy in 1794; at whoſe nurſery it flowered for the firſt time, this year, in the month of July. The only method of propagating the Cape Echiums is by cuttings, and that is done with great difficulty; of courſe, this, as well as the other ſpecies, are very ſcarce: they delight moſt in rich light mould.

Chelone campanulata.

PLATE XL.

CHELONE CAMPANULOIDES.

Bell-flowered Chelone.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-partitus. Rudimentum filamenti quinti inter ſupremos ſtamina. Capſula bilocularis.	Empalement of five diviſions. The rudiment of a fifth thread is found placed between the upper chives. Capſule of two cells. See Plate XXXIV. Chelone Ruellioides.

SPECIFIC CHARACTER.

Chelone foliis oppoſitis, ſeſſilibus, acuminatis, profunde ſerratis; corollis campanulatis, purpureis.	Chelone with oppoſite leaves ſitting cloſe to the ſtem, tapering to the point, and deeply ſawed; bloſſoms bell-ſhaped, and purple.

REFERENCE TO THE PLATE.

1. A Bloſſom cut open, to ſhew the ſituation of the four Chives, and ſtation of the fifth imperfect thread.
2. The Pointal, (natural ſize).
3. The Seed-veſſel, with the Empalement and Shaft ſtill remaining attached.

This ſpecies of Chelone is of the ſame date in our gardens as the Chelone Ruellioides, and was introduced through the ſame medium: it is a native of Mexico in South America; will make a pretty addition to our greenhouſe exotics; and is deſcribed and engraved by A. J. Cavanilles, in his firſt volume of Spaniſh plants. It ſeems to thrive beſt in rich, dungy earth, and is eaſily propagated by cuttings, or ſeeds; of which latter it produces abundance; but does not appear to be long lived. The plant from which this figure was taken, flowered (as we ſuppoſe for the firſt time in England) in the collection of B. Robertſon, Eſq. of Stockwell in Surry, and kindly communicated by him to the author.

Chelone campanulata.

PLATE XL.

CHELONE CAMPANULOIDES.

Bell-flowered Chelone.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-partitus. Rudimentum filamenti quinti inter ſuprema ſtamina. Capſula bilocularis.	EMPALEMENT of five diviſions. The rudiment of a fifth thread is found placed between the upper chives. Capſule of two cells. See Plate XXXIV. CHELONE RUELLIOIDES.

SPECIFIC CHARACTER.

Chelone foliis oppoſitis, ſeſſilibus, acuminatis, profunde ſerratis; corollis campanulatis, purpureis.	Chelone with oppoſite leaves fitting cloſe to the ſtem, tapering to the point, and deeply ſawed; bloſſoms bell-ſhaped, and purple.

REFERENCE TO THE PLATE.

1. A Bloſſom cut open, to ſhew the ſituation of the four Chives, and ſtation of the fifth imperfect thread.
2. The Pointal, (natural ſize).
3. The Seed-veſſel, with the Empalement and Shaft ſtill remaining attached.

THIS ſpecies of Chelone is of the ſame date in our gardens as the Chelone Ruellioides, and was introduced through the ſame medium: it is a native of Mexico in South America; will make a pretty addition to our greenhouſe exotics; and is deſcribed and engraved by A. J. Cavanilles, in his firſt volume of Spaniſh plants. It ſeems to thrive beſt in rich, dungy earth, and is eaſily propagated by cuttings, or ſeeds; of which latter it produces abundance; but does not appear to be long lived. The plant from which this figure was taken, flowered (as we ſuppoſe for the firſt time in England) in the collection of B. Robertſon, Eſq. of Stockwell in Surry, and kindly communicated by him to the author.

Lachenalia pendula.

PLATE XLI.

LACHENALIA PENDULA.

Drooping-flowered Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

Calyx, nullus.

Corolla monopetala, cylindracea, sexpartita: tubus gibbus; laciniis tribus exterioribus brevioribus.

Stamina. Filamenta sex, subulata, longitudine corollæ, inserta basi laciniarum corollæ. Antheræ oblongæ, incumbentes.

Pistillum. Germen trigonum, trisulcum. Stylus simplex, corolla paulo longior. Stigma obtusum.

Pericarpium. Capsula triquetra, trilocularis, trivalvis.

Semina plurima, globosa.

Empalement, none.

Blossom one leaf, cylindrical, divided into six; tube gouty; the three outer divisions the shortest.

Chives. Threads six, awl-shaped, the length of the blossom, fixed into the base of the divisions of the blossom. Tops oblong, laying on the threads.

Pointal. Seed-bud three-sided, three-furrowed. Shaft simple, a little longer than the blossom. Summit blunt.

Seed-vessel. Capsule three-sided, three cells, three valves.

Seeds many, globular.

SPECIFIC CHARACTER.

Lachenalia foliis longissimis, ovato-oblongis, immaculatis; corollis speciosissimis, maximis, trilobatis, pedunculatis, cernuis.

Lachenalia with very long egg-shaped oblong leaves, without spots; blossoms very showy, large, three-coloured, having foot-stalks, and nodding.

REFERENCE TO THE PLATE.

1. A Flower spread open, to shew the insertion of the Chives.
2. The same, exhibiting the character of the outer Petals.
3. The Pointal, natural size.

The genus Lachenalia is certainly an infringement on Hyacinthus; the small distinction on which this genus is founded can, at most, be considered not of sufficient consequence to form a specific character, as thought Linnæus: the son of Professor Jacquin has thought otherwise, having called it after a botanist of the name of De la Chenal, and under which it is now generally known, therefore we have not replaced it under its old title, though we have authority of such weight to corroborate our opinion. The Lachenalias are natives of the Cape of Good Hope, yet are of so hardy a nature as to require no further protection than shelter from the severe frosts. Our species is the handsomest yet known, flowering about September; was, according to the Kew catalogue, introduced there by Mr. [illegible] in the year 1774. It was from a plant in the extensive collection of G. Hibbert, Esq. Clapham [illegible] (to whose kind communications the author acknowledges himself much indebted), that [illegible] was taken, the latter end of September this year. No plant is more easy or certain to increase, for the young offsets are produced in such abundance from the old bulb, which delights [illegible] well, but its flowering is not so certain.

Lacunaria panamensis.

PLATE XLI.

LACHENALIA PENDULA.

Drooping-flowered Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA monopetala, cylindracea, ſexpartita; tubus gibbus; laciniis tribus exterioribus brevioribus.

STAMINA. Filamenta ſex, ſubulata, longitudine corollæ, inſerta baſi laciniarum corollæ. Antheræ oblongæ, incumbentes.

PISTILLUM. Germen trigonum, triſulcum. Stylus ſimplex, corolla paulo longior. Stigma obtuſum.

PERICARPIUM. Capſula triquetra, trilocularis, trivalvis.

SEMINA plurima, globoſa.

EMPALEMENT. none.

BLOSSOM one leaf, cylindrical, divided into ſix; tube gouty; the three outer diviſions the ſhorteſt.

CHIVES. Threads ſix, awl-ſhaped, the length of the bloſſom, fixed into the baſe of the diviſions of the bloſſom. Tips oblong, laying on the threads.

POINTAL. Seed-bud three-ſided, three-furrowed. Shaft ſimple, a little longer than the bloſſom. Summit blunt.

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

SEEDS many, globular.

SPECIFIC CHARACTER.

Lachenalia foliis longiſſimis, ovato-oblongis, immaculatis; corollis ſpecioſiſſimis, maximis, tricoloratis, pedunculatis, cernuis.

Lachenalia with very long egg-ſhaped oblong leaves, without ſpots; bloſſoms very ſhewy, large, three-coloured, having foot-ſtalks, and nodding.

REFERENCE TO THE PLATE.

1. A Flower ſpread open, to ſhew the inſertion of the Chives.
2. The ſame, exhibiting the character of the outer Petals.
3. The Pointal, natural ſize.

THE genus Lachenalia is certainly an infringement on Hyacinthus; the ſmall diſtinction on which this new genus is founded can, at moſt, be conſidered but of ſufficient conſequence to form a ſpecific character, ſo thought Linnæus: the ſon of Profeſſor Jacquin has thought otherwiſe, having called it after a botaniſt of the name of De la Chenal; and under which it is now generally known; therefore we have not replaced it under its old title, though we have authority of ſuch weight to corroborate our opinion. The Lachenalias are natives of the Cape of Good Hope, yet are of ſo hardy a nature as to require no farther protection than ſhelter from the ſevere froſts. Our ſpecies is the handſomeſt yet known, flowering about September; was, according to the Kew catalogue, introduced there by Mr. F. Maſſon in the year 1774. It was from a plant in the extenſive collection of G. Hibbert, Eſq. Clapham Common (to whoſe kind communications the author acknowledges himſelf much indebted), that this figure was taken, the latter end of September this year. No plant is more eaſy or certain to increaſe than this; the young offsets are produced in ſuch abundance from the old bulb, which delights in a light ſoil; but its flowering is not ſo certain.

Orchis ciliaris.

PLATE XIII.

ORCHIS CILIARIS.

Fringed Orchis.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix simplex. Perianthium nullum.

COROLLA. Petala quinque, tria exteriora; duo interiora sursum coniventia in galeam.

Nectarium monophyllum, a latere inferiore inter divisuram petalorum receptaculo affixum. Labio superiore erecto, brevissimo. Labio inferiore magno, patente, lato. Tubo postice cerniformi, nutante.

STAMINA. Filamenta duo, tenuissima, brevissima, pistillo insidentia. Antheræ obovatæ, erectæ, tectæ duplicatura biloculari labii superioris nectarii.

PISTILLUM. Germen oblongum, contortum, inferum. Stylus adnatus labio superiori nectarii, brevissimus. Stigma compressum, obtusum.

PERICARPIUM. Capsula oblonga, unilocularis, tricarinata, trivalvis; sub carinis trifariam debiscens, apice et basi cohærens.

SEMINA numerosa, minima.

EMPALEMENT. Sheaths scattered. Fruit-stalk simple. Cup none.

BLOSSOM. Petals five; three outer ones; two inner ones approaching upwards in form of a helmet.

Honey-cup one leaf, fixed by the lower side to the receptacle betwixt the division of the petals. Upper lip upright, and very short. Lower lip large, spreading, broad. Tube standing behind, shaped like a horn, and hanging down.

CHIVES. Two threads, very slender, and very short, fixed on the pointal. Tips inversely egg-shaped, upright, covered by a folding of the upper lip of the honey-cup, forming two cells.

POINTAL. Seed-bud oblong, twisted, and beneath. Shaft fixed to the upper lip of the honey-cup, very short. Summit flattened, and blunt-ended.

SEED-VESSEL. Capsule oblong, of one cell, three keels, three valves; splitting in three places under the keels; fastened at the point, and the base.

SEEDS numerous, very small.

SPECIFIC CHARACTER.

Orchis radicibus subpalmatis, expansis; nectarii labio lanceolato, ciliato, cornu torto, longissimo; floribus luteis.

Orchis with roots nearly hand-shaped, spreading; lip of the honey-cup lance-shaped, and fringed, horn twisted, very long; flowers yellow.

REFERENCE TO THE PLATE.

1. The Honey-cup with its Horn.
2. The upper Petal.
3. A side Petal.
4. One of the inner Petals.
5. The Chives, and Pointal attached to the horn of the Honey-cup.
6. The Chives, and Pointal, magnified; with the Chives drawn from their cells.

THIS handsome Orchis is a native of North America, and is found in all the states from Virginia as far north as Canada: it has been treated of by Ray, Morison, Gronovius, Bauen, Linnæus, and others; but although so long known by name, it was not introduced to our gardens before the year 1796; having been sent that year from Philadelphia by Mr. J. Lyons, from the gardens of J. Hamilton, Esq. to Messrs. Lee and Kennedy, Hammersmith; at whose nursery it flowered this year, in the month of July, when the drawing was made. It is a hardy herbaceous plant, thriving best in a shady border, and should be planted in a mixture of loam and peat earth. The propagation of this plant, like most of the genus, is difficult, the seeds being too small to be collected, and the root seldom producing more than one bud.

Orchis ciliaris.

PLATE XLII.

ORCHIS CILIARIS.

Fringed Orchis.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix ſimplex. Perianthium nullum.

COROLLA. Petala quinque; tria exteriora; duo interiora ſurſum conniventia in galeam.

Nectarium monophyllum, a latere inferiore inter diviſuram petalorum receptaculo affixum. Labio ſuperiore erecto, breviſſimo. Labio inferiore magno, patente, lato. Tubo poſtice corniformi, nutante.

STAMINA. Filamenta duo, tenuiſſima, breviſſima, piſtillo inſidentia. Antheræ obovatæ, erectæ, tectæ duplicatura biloculari labii ſuperioris nectarii.

PISTILLUM. Germen oblongum, contortum, inferum. Stylus adnatus labio ſuperiori nectarii, breviſſimus. Stigma compreſſum, obtuſum.

PERICARPIUM. Capſula oblonga, unilocularis, tricarinata, trivalvis; ſub carinis trifariam dehiſcens, apice et baſi cohærens.

SEMINA numeroſa, minima.

EMPALEMENT. Sheaths ſcattered. Fruit-ſtalk ſimple. Cup none.

BLOSSOM. Petals five; three outer ones; two inner ones approaching upwards in form of a helmet.

Honey-cup one leaf, fixed by the lower ſide to the receptacle betwixt the diviſion of the petals. Upper lip upright, and very ſhort. Lower lip large, ſpreading, broad. Tube ſtanding behind, ſhaped like a horn, and hanging down.

CHIVES. Two threads, very ſlender, and very ſhort, fixed on the pointal. Tips inverſely egg-ſhaped, upright, covered by a folding of the upper lip of the honey-cup, forming two cells.

POINTAL. Seed-bud oblong, twiſted, and beneath. Shaft fixed to the upper lip of the honey-cup, very ſhort. Summit flattened, and blunt-ended.

SEED-VESSEL. Capſule oblong, of one cell, three keels, three valves; ſplitting in three places under the keels; faſtened at the point, and the baſe.

SEEDS numerous, very ſmall.

SPECIFIC CHARACTER.

Orchis radicibus ſubpalmatis, expanſis; nectarii labio lanceolato, ciliato, cornu torto, longiſſimo; floribus luteis.

Orchis with roots nearly hand-ſhaped, ſpreading; lip of the honey-cup lance-ſhaped, and fringed, horn twiſted, very long; flowers yellow.

REFERENCE TO THE PLATE.

1. The Honey-cup with its Horn.
2. The upper Petal.
3. A ſide Petal.
4. One of the inner Petals.
5. The Chives, and Pointal attached to the horn of the Honey-cup.
6. The Chives, and Pointal, magnified; with the Chives drawn from their cells.

THIS handſome Orchis is a native of North America, and is found in all the ſtates from Virginia as far north as Canada: it has been treated of by Ray, Moriſon, Gronovius, Royen, Linnæus, and others; but although ſo long known by name, it was not introduced to our gardens before the year 1796; having been ſent that year from Philadelphia by Mr. J. Lyons, from the gardens of J. Hamilton, Eſq. to Meſſrs. Lee and Kennedy, Hammerſmith; at whoſe nurſery it flowered this year, in the month of July, when the drawing was made. It is a hardy herbaceous plant, thriving beſt in a ſhady border, and ſhould be planted in a mixture of loam and peat earth. The propagation of this plant, like moſt of the genus, is difficult, the ſeeds being too ſmall to be collected, and the root ſeldom producing more than one bud.

Bignonia Laurifolia.

PLATE XLIII.

BIGNONIA LEUCOXYLON.

Oleander-flowered Trumpet Flower.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer [illegible] rounded.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, coelium, cuticiforme, quinquefidum.

COROLLA. monopetala, campanulata, tubus mediocris, longitudine calycis; faux longitudinalis, ventricosa; limbus quinque partitus; laciniis duabus superioribus reflexis; inferioribus patulis.

STAMINA. Filamenta quatuor, subulata, corolla [illegible], quorum duo reliquis longiora. Antheræ reflexæ, oblongæ, velut duplices.

PISTILLUM. Germen oblongum. Stylus filiformis, flex et figura staminum. Stigma [illegible].

PERICARPIUM. Siliqua bilocularis, bivalvis.

SEMINA. [illegible] numerosa, compressa, marginata, membranacea alata.

EXPLANATION. Cup-like leaf, upright, cup shaped, and cut into five divisions.

BLOSSOM. [illegible] shaped petals; tube small, the length of the cup; mouth very large, swelling in the bottom; border of five divisions; the two upper segments reflexed, the lower [illegible] spreading.

CHIVES. Threads four, awl-shaped, shorter than the blossom, two of which are longer than the others. Tips bent back, oblong, and appear doubled.

POINTAL. Seed-bud oblong. Short thread shaped, of the same situation and shape as the chives. Summit headed.

SEED-VESSEL. Pod of two cells, and two valves.

SEEDS numerous, laying one over the other, flat, and winged at each side.

SPECIFIC CHARACTER.

[illegible] vegetatio; foliolis integerrimis, [illegible] caule erecto, arboreo; [illegible] alato-lanceolatis.

Trumpet Flower with five-cleft leaves, the small leaves entire, egg-shaped, expanded, stem upright, growing to a tree; with flowers like the oleander, leaf [illegible].

REFERENCE TO THE PLATE.

[illegible] Supplement.

[illegible] open, shewing the proportionate length of the Chives to the Blossom, and their [illegible] of the Tips detached, and magnified.

[illegible] (natural size); the Summit detached, and magnified.

This [illegible] is well known in most collections of hothouse plants, and was first introduced [illegible] cultivated by Mr. P. Miller, the then gardener, in 1759, and may be found described in [illegible] but, notwithstanding its frequency, few have seen its blossoms. Owing to the naked [illegible] of its leaves, and its growing to so considerable a height before it flowers, [illegible] that but [illegible] is a plant but of little consideration; though perhaps, from the great beauty of [illegible] flowers, more attention. Being a native of the West Indies, it does not flourish without [illegible] but will live in any situation of the hothouse; thriving best in a moisture [illegible] and is readily propagated by cuttings. It was from a plant in the select and valuable [illegible] belonging to the Hon. Dowager Lady De Clifford (to whom the author, as well [illegible] and professors of the science, stand much indebted for the zeal and patronage [illegible] shewn, in her endeavours to promote it), that this figure was taken in July [illegible].

Bignonia Leucoxylon.

PLATE XLIII.

BIGNONIA LEUCOXYLON.

Oleander-flowered Trumpet Flower.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, erectum, cyathi-forme, quinquefidum.

COROLLA monopetala, campanulata; tubus minimus, longitudine calycis; faux longissima, subtus ventricosa; limbus quinque partitus; laciniis duabus superioribus reflexis; inferioribus patulis.

STAMINA. Filamenta quatuor, subulata, corolla breviora, quorum duo reliquis longiora. Antheræ reflexæ, oblongæ, velut duplicatæ.

PISTILLUM. Germen oblongum. Stylus filiformis, situ et figura staminum. Stigma capitatum.

PERICARPIUM. Siliqua bilocularis, bivalvis.

SEMINA plurima, imbricata, compressa, utrinque membranaceo alata.

EMPALEMENT. Cup one leaf, upright, cup-shaped, and cut into five divisions.

BLOSSOM of one bell-shaped petal; tube small, the length of the cup; mouth very long, swelled at the bottom; border of five divisions; the two upper segments reflexed, the lower ones spreading.

CHIVES. Threads four, awl-shaped, shorter than the blossom, two of which are longer than the others. Tips bent back, oblong, and appear doubled.

POINTAL. Seed-bud oblong. Shaft thread-shaped, of the same situation and shape as the chives. Summit headed.

SEED-VESSEL. Pod of two cells, and two valves.

SEEDS many, laying one over the other, flat, and winged at each side.

SPECIFIC CHARACTER.

Bignonia foliis digitatis; foliolis integerrimis, ovatis, acuminatis; caule erecto, arboreo; floribus nerii; alato semine.

Trumpet Flower with fingered leaves; the small leaves entire, egg-shaped, tapered; stem upright, growing to a tree; with flowers like the oleander; seed winged.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, shewing the proportionate length of the Chives to the Blossom, and their insertion; one of the Tips detached, and magnified.
3. The Pointal, (natural size); the Summit detached, and magnified.

THIS species of Bignonia is well known in most collections of hothouse plants, and was first introduced to the Chelsea gardens by Mr. P. Miller, the then gardener, in 1759, and may be found described in his Dictionary; but, notwithstanding its frequency, few have seen its blossoms. Owing to the naked appearance of the stem, and its growing to so considerable a height before it flowers, and that but rarely, has rendered it a plant but of little consideration; though perhaps, from the great beauty of its blossoms, it deserves more attention. Being a native of the West Indies, it does not flourish without the assistance of tan heat; but will live in any situation of the hothouse; thriving best in a mixture of loam and peat, and is readily propagated by cuttings. It was from a plant in the select and valuable collection at Paddington, belonging to the Hon. Dowager Lady De Clifford (to whom the author, as well as all the cultivators and professors of the science, stand much indebted for the zeal and patronage which her ladyship has shewn, in her endeavours to promote it), that this figure was taken in July this present year 1798.

Bignonia Leucoxylon.

PLATE XIII.

IXIA CINNAMOMEA.

Cinnamon-flower Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, æqualis. Stigmata tria, emarginata, petalis.

[illegible]

SPECIFIC CHARACTER.

Iris foliis falcatis, crispis; floribus alternis, nonnullis, cinnamomi odore.

[illegible]

REFERENCE TO THE FIGURE.

1. The Empalement.
2. A Flower cut open, with the Chives [illegible]
3. The Chives, attached to the tubular part of the [illegible]
4. The Shaft, Summit, and Seed-bud, [illegible]

Although this most extensive genus no species [illegible] and delicacy of its blossoms, which expand only by night [illegible] superiority over many of its companions. Thunberg [illegible] the name it here bears; but till the year 1792 we had no [illegible] duced by Messrs. Lee and Kennedy, Hammersmith, from the Cape of Good [illegible] it flowered the following year; where it continues to blow [illegible] It is rather a tender bulb, small, and easily injured; should therefore [illegible] the greenhouse, and kept dry when out of flower; it is rather difficult to [illegible] produces more than one offset, nor that always, and rarely [illegible]

Iris cinn

PLATE XLIV.

IXIA CINNAMOMEA.

Cinnamon-ſmelling Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, æqualis. Stigmata tria, erectiuſculo patula.	Blossom ſix petals, ſpreading, and equal. Summits three, nearly upright, ſpreading. See Ixia reflexa, Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis falcatis, criſpis; floribus alternis, noctiflorens, cinnamomi odore.	Ixia with ſcimitar-ſhaped leaves, waved at the edge; flowers alternate, blowing at night, and ſmelling of cinnamon.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives attached.
3. The Chives, attached to the tubular part of the Bloſſom, the border cut off, (magnified).
4. The Shaft, Summit, and Seed-bud, (magnified).

Amongst this moſt extenſive genus no ſpecies ſtands more diſtinct than this. The extreme ſweetneſs and delicacy of its bloſſoms, which expand only by night, and cloſe in the morning, give it a decided ſuperiority over many of its congeners. Thunberg, who ſaw it at the Cape, has deſcribed it under the name it here bears; but till the year 1792 we had no knowledge of it, when it was firſt introduced by Meſſrs. Lee and Kennedy, Hammerſmith, from the Cape of Good Hope; at whoſe nurſery it flowered the following year; where it continues to blow annually, and whence this figure was taken. It is rather a tender bulb, ſmall, and eaſily rotted; ſhould therefore be placed in the warmeſt part of the greenhouſe, and kept dry when out of flower; is rather difficult to increaſe, as each bulb ſeldom produces more than one offset, nor that always, and rarely ſeeds.

Iris longifolia.

PLATE XLV.

IRIS LONGIFOLIA.

Long-leaved Iris.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Spathæ bivalves, flores diſtinguentes, perſiſtentes.

COROLLA ſexpartita; petala oblonga, obtuſa, tria exteriora reflexa, tria interiora erecta, acutiora; omnia unguibus conata.

STAMINA. Filamenta tria, ſubulata, petalis reflexis incumbentia. Antheræ oblongæ, rectæ, depreſſæ.

PISTILLUM. Germen inferum, oblongum. Stylus ſimplex, breviſſimus. Stigma maximum, tripartitum, laciniis petala mentientibus, latis, reflexis, ſtamina et petala alterna deprimentibus, apicibus bifidis.

PERICARPIUM. Capſula oblonga, angulata, trilocularis, trivalvis.

SEMINA plurima, ovata, glabra.

EMPALEMENT. Sheaths of two valves, ſeparating the flowers, permanent.

BLOSSOM with ſix diviſions; petals oblong, blunt, the three outer ones reflexed, the three inner ones upright, and ſharper; all connected by the claws.

CHIVES. Threads three, awl-ſhaped, laying on the reflexed petals. Tips oblong, ſtraight, depreſſed.

POINTAL. Seed-bud beneath, oblong. Shaft ſimple, very ſhort. Summit very large, divided into three ſegments, reſembling petals, broad, bent back, and alternately preſſing down the chives and petals, cleft at the ends.

SEED-VESSEL. Capſule oblong, angular, of three cells, and three valves.

SEEDS many, egg-ſhaped, and ſmooth.

SPECIFIC CHARACTER.

Iris foliis linearibus, canaliculatis, longiſſimis, glaucis; ſcapus teres, multiflorus; radix bulboſus.

Iris with linear, channelled leaves, very long, and bluiſh; flower-ſtem cylindrical, with many flowers; the root bulbous.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. The Chives as attached to the Seed-bud.
3. The Pointal complete.

THIS Iris is a native of the Cape of Good Hope, and was introduced to us from the collection of Meſſrs. Voorhelm and Schnevoght, of Haarlem in Holland, about the year 1792. The leaves of this delicate Iris grow ſometimes to the length of three feet, giving it a very ſingular appearance: it ſhould be treated like the Cape Ixias, and protected from the weather, whilſt in bloom, as the flower is injured by the lighteſt wind, and the duration of each bloſſom is but a few hours; there is, however, a good ſucceſſion, which riſe diurnally from the ſame ſheath, ſeldom more than one at a time. This figure was taken in the month of June 1797, at the Hammerſmith nurſery. It has a ſingular mode of propagating itſelf; the old root dying, two young ones are formed above it, from whence the flower-ſtem ariſes: ſeldom ripe ſeeds are produced.

Massonia violacea.

PLATE XLVI.

MASSONIA VIOLACEA.

Purple-flowered Massonia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

Calyx, nullus.

Corolla sex-petala. Petala nectario impolita, lanceolata, patentia.

Nectarium inferum, cylindricum, membranaceum.

Stamina. Filamenta sex, nectarii dentibus imposita, filiformia declinata, petalis paulo longiora. Antheræ ovatæ.

Pistillum. Germen (respectu nectarii) superum. Stylus subulatus, declinatus, longitudine filamentorum. Stigma simplex, minutum.

Pericarpium. Capsula triquetra, glabra, trilocularis, trivalvis, angulis dehiscens.

Semina plurima, globosa, glabra, magnitudine seminum sinapios.

Embryo minus.

Flower six-petals. Petals placed on the honey-cups, are lance-shaped and spreading.

Honey-cup beneath, cylindrical and flattened.

Chives. Six filaments fixed into the teeth of the honey-cup, thread-shaped, bent downward, and a little longer than the petals. Tips egg-shaped.

Pointal. Seed-bud (with respect to the honey-cup) above. Shaft awl-shaped, and bent downward the length of the chives. Stigma simple and minute.

Seed-vessel. Capsule three-sided, and smooth, of three cells and three valves, splitting at the angles.

Seeds many, globular, smooth, the size of a mustard seed.

SPECIFIC CHARACTER.

Massonia foliis sparsulatis, glabris; scapus filiformis, erectus, bipollicaris; flores pedunculati, violacei, sparsi, pedunculi cuspidati.

Massonia with sparsely scattered and smooth leaves; flower-stalk thread-shaped, upright, two inches high; the flowers have foot-stalks, are of a violet colour, and grow scattered; the foot-stalks have each but one flower.

REFERENCE TO THE PLATE.

1. A Flower complete.
2. The same cut open, to shew the interior of the Corolla.
3. The Pointal.

This genus of plants perpetuates the name, as a botanist, (would it could likewise the rank, conflum-[illegible] and universally allowed amiableness of character) of Mr. Francis Masson, botanical collector to [illegible] now exploring the untrod regions of North America, [illegible] the [illegible] of this rare and magnificent Matter, which stand so much celebrated in the [illegible] for their present splendour. The Massonias are all rather tender, and require the [illegible] treatment in [illegible] that is, a dry stove; they are natives of the Cape of Good Hope, [illegible] the coast of Africa generally so called, but at some distance from the Cape [illegible] according to Thunberg) of the name of Bockland Bay. [illegible] when the leaves are decayed, if watered at that time. [illegible] out of the pot for two or three months, [illegible] are seldom perfected, and rarely [illegible] the beginning of which month this figure was taken, [illegible] Clapham Common. It appears to thrive best [illegible]

PLATE XLVI.

MASSONIA VIOLACEA.

Purple-flowered Maſſonia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA ſex-petala. Petala nectario impoſita, lanceolata, patentia.
Nectarium inferum, cylindricum, membranaceum.

STAMINA. Filamenta ſex, nectarii dentibus inſerta, filiformia declinata, petalis paulo longiora. Antheræ ovatæ.

PISTILLUM. Germen (reſpectu nectarii) ſuperum. Stylus ſubulatus, declinatus, longitudine, ſtaminum. Stigma ſimplex, acutum.

PERICARPIUM. Capſula triquetra, glabra, trilocularis, trivalvis, angulis dehiſcens.

SEMINA plurima, globoſa, glabra, magnitudine ſeminum ſinapios.

EMPALEMENT none.

BLOSSOM ſix-petals. Petals placed on the honey-cup, are lance-ſhaped and ſpreading.
Honey-cup beneath, cylindrical and ſkinny.

CHIVES. Six threads, fixed into the teeth of the honey-cup, thread-ſhaped, bent downward, and a little longer than the petals. Tips egg-ſhaped.

POINTAL. Seed-bud (with regard to the honey-cup) above. Shaft awl-ſhaped, and bent downward the length of the chives. Summit ſimple, and pointed.

SEED-VESSEL. Capſule three-ſided, and ſmooth, of three cells and three valves, ſplitting at the angles.

SEEDS many, globular, ſmooth, the ſize of a muſtard ſeed.

SPECIFIC CHARACTER.

Maſſonia, foliis ſpathulatis, glabris; ſcapus filiformis, erectus, bipollicaris; flores pedunculati, violacei, ſparſi, pedunculi uniflori.

Maſſonia with ſpatula-ſhaped, and ſmooth leaves; flower-ſtalk thread-ſhaped, upright, two inches high; the flowers have foot-ſtalks, are of a violet colour, and grow ſcattered; the foot-ſtalks have each but one flower.

REFERENCE TO THE PLATE.

1. A Flower complete.
2. The ſame cut open, to ſhew the inſertion of the Chives.
3. The Pointal.

THIS genus of plants perpetuates the name, as a botaniſt, (would it could likewiſe the mild, unaſſuming, and univerſally allowed amiableneſs of character) of Mr. Francis Maſſon, botanical collector to his Majeſty; now exploring the untrod regions of North America, to add to the extenſive collections of his royal and munificent Maſter, which ſtand ſo much indebted to his indefatigable induſtry for their preſent ſplendour. The Maſſonias are all rather tender, and require the ſame ſituation as Hæmanthus &c; that is, a dry ſtove; they are natives of the Cape of Good Hope, or, at leaſt, grow within that point of Africa generally ſo called, but at ſome diſtance from the Cape town, near a mountain (according to Thunberg) of the name of Bocklands Berg. The root of this ſpecies is very ſubject to rot when the leaves are decayed, if watered at that time; therefore, like the Ixias, ſhould be put aſide, or taken out of the pot for two or three months, after flowering. It is very difficult to propagate, as the ſeeds are ſeldom perfected, and rarely makes any offsets; flowering in September, about the beginning of which month this figure was taken, from a plant in the collection of G. Hibbert, Eſq. Clapham Common. It appears to thrive beſt in a mixture of peat and ſandy loam.

PLATE XLVII.

MUSA COCCINEA.

Scarlet-flowered Plantain-tree.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various dispositions. Upon one Plant.

GENERIC CHARACTER.

Hermaphroditi feminei flores.

CALYX. Spatha partialis ovato-oblonga, plano-concava, magna.

COROLLA inæqualis, ringens; petalo constituente labium superius, nectario vero labium inferius.

Petalum erectum, ligulatum, quinquedentatum, basi antice connivens.

Nectarium monophyllum, naviculare, petalo, brevius, intra sinum petali insertum.

STAMINA. Filamenta sex, subulata erecta, petalo dimidio breviora. Antheræ abortivæ.

PISTILLUM. Germen infra receptaculum floris, maximum, longissimum. Stylus erectus, longitudine petali. Stigma capitatum, subrotundum.

PERICARPIUM. Bacca carnosa, corio tecta, longissima, pulpa trifariam, absque dissepimentis.

SEMINA plurima, globosa.

Hermaphroditi masculi flores.

CALYX ut in feminæo.

COROLLA ut in feminæo.

STAMINA. Filamenta ut in feminæo, at longiora, tenuiora. Antheræ lineares, sulcatæ, erectæ, magnæ.

PISTILLUM. Germen ut in feminæo, ut minus. Stylus, et stigma ut in fæmineo, at minora.

PERICARPIUM abortit.

Hermaphrodite flowers, where the female parts are perfect.

EMPALEMENT. Partial sheath oblong, egg-shaped, smoothly-concave, and large.

BLOSSOM unequal and gaping; the petal forming the upper lip, the honey-cup the under.

Petal upright, ligulate, five-toothed, and meeting at the base in front.

Honey-cup one leaf, ship-shaped, shorter than the petal, and inclosed within it.

CHIVES. Threads six, awl-shaped, upright, shorter by half than the petal. Tips abortive.

POINTAL. Seed-bud below the receptacle of the flower, large and very long. Shaft upright the length of the petal. Summit headed, nearly round.

SEED-VESSEL. A fleshy berry, covered with a tough skin, very long, the pulp laying three ways, without partitions.

SEEDS many, round.

Hermaphrodite flowers, where the male parts are perfect.

EMPALEMENT as in the female flower.

BLOSSOM as in the female flower.

CHIVES. Threads as in the female flower, but longer, and thinner. Tips linear, channelled, upright, and large.

POINTAL. Seed-bud the same as in the female, but smaller. Shaft and summit like the female, but smaller.

SEED-VESSEL is abortive.

SPECIFIC CHARACTER.

Musa spadice erecto; floribus capitatis; spathis confertis, coccineis, maximis, apicibus luteis.

Plantain-tree with an upright fruit-stalk; flowers growing in heads; sheaths crowded together, scarlet, very large, points yellow.

REFERENCE TO THE PLATE.

1. The upper lip of the blossom, shewn in front, as cut off close to the seed-bud.
2. The same, shewing the hinder parts, with the three small claws on the border.
3. The honey-cup, which forms the lower lip of the blossom.
4. The seed-bud, chives, style, and summit, of a female hermaphrodite flower.
5. A seed-bud cut obliquely, to expose the situation character of the seeds.
6. The chives, seed-bud, shaft, and summit, of a male hermaphrodite flower.

THE honour of having introduced this supremely beautiful plant, pertains to, Thomas Evans Esq. of Stepney; a gentleman to whose zeal for the introduction of new plants our stoves are of late much beholden; he having received it, amongst many others, about the year 1792 from China, where, as well as in Cochin-China, Sumatra, Java, &c. it is very commonly found. Our figure was taken, in part, from a plant which flowered at James Vere's, Esq. Kensington Gore, last December, and partly, from one in blossom about the same time, at the Hon. Lady Archer's, Ham Common.. The Musa Coccinea grows to the height of about three, or four feet before it blows, and without question, has no rival but Strelitzea Regina in the hothouse. where its brilliancy, tends in some degree, to dispel the gloom of winter, for at least three months. It increases itself by suckers, which are thrown up in abundance from a vigorous plant; may be taken off at any time, and will arrive at a flowering size in twelve months; if planted in rich earth, and kept growing in pine heat, or on a strong hotbed.

PLATE XLVII.

MUSA COCCINEA.

Scarlet flowered Plantain-tree.

CLASS XXIII. ORDER I.

POLYGAMIA MONŒCIA. Various Hermaphrodites. Upon one Plant.

GENERIC CHARACTER.

Hermaphrodite flowers, where the female parts are perfect.

Calyx. Partial sheath oblong, egg-shaped, smoothly-concave, and large.

Corolla. Lip-shaped and gaping; the petal forming the upper lip, the honey-cup the under.

Stamens. Threads six, awl-shaped, upright, flender, and inclosed within it.

Pistil. Seed-bud below the receptacle of the flower, large and very long. Shaft upright the length of the petal. Summit headed, nearly round.

Seed-vessel. A fleshy berry, covered with a tough skin, very long, the pulp having three ways, without partitions.

Seeds many, round.

Hermaphrodite flowers, where the male parts are perfect.

Perianthium as in the female flower.

Nectarium as in the female flower.

Stamens. Threads as in the female flower, but longer, and slender. Tips linear, cleft-headed, upright, and large.

Pistil. Seed-bud the same as in the female, but smaller. Shaft and summit like the female, but smaller.

Seed-vessel is abortive.

SPECIFIC CHARACTER.

Musa fructu erecto; floribus capitatis; bractea coccinea, maxima, apicibus luteis.

Plantain-tree with an upright fruit-stalk; flowers growing in heads; sheaths crowded together, scarlet, very large, points yellow.

REFERENCE TO THE PLATE.

1. The upper lip of the blossom, shewn in front, as cut off close to the seed-bud.
2. The petal, showing the linear parts, with the three small claws on the border.
3. The honey-cup, which forms the lower lip of the blossom.
4. The seed-bud, chives, style, and summit, of a female hermaphrodite flower.
5. A seed-bud cut obliquely, to expose the situation character of the seeds.
6. The chives, seed-bud, shaft, and summit, of a male hermaphrodite flower.

The honour of having introduced this supremely beautiful plant, pertains to, Thomas Evans Esq. of Stepney; a gentleman to whose zeal for the introduction of new plants our stoves are of late much beholden; for having received it, amongst many others, about the year 1792 from China, where, as well as in Cochin-China, Sumatra, Java, &c. it is very commonly found. Our figure was taken, in part, from a plant which flowered at James Vere's, Esq. Kensington Gore, last December, and partly, from one in Sweden about the same time, at the Hon. Lady Archer's, Ham Common. The Musa Coccinea grows to the height of about three, or four feet before it blows, and without question, has no rival, but Strelitzia Regina in the hothouse, where its brilliancy, tends in some degree, to dispel the gloom of winter, for at least three months. It increases itself by suckers, which are thrown up in abundance from a vigorous plant; may be taken off at any time, and will arrive at a flowering size in twelve months, if planted in rich earth, and kept growing in pine heat, or on a strong hotbed.

PLATE XLVII.

MUSA COCCINEA.

Scarlet-flowered Plantain-tree.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various dispositions. Upon one Plant.

GENERIC CHARACTER.

Hermaphroditi feminei flores.

CALYX. Spatha partialis ovato-oblonga, plano-concava, magna.

COROLLA inæqualis, ringens; petalo constituente labium superius, nectario vero labium inferius.

Petalum erectum, ligulatum, quinquedentatum, basi antice connivens.

Nectarium monophyllum, naviculare, petalo brevius, intra sinum petali insertum.

STAMINA. Filamenta sex, subulata erecta, petalo dimidio breviora. Antheræ abortivæ.

PISTILLUM. Germen infra receptaculum floris, maximum, longissimum. Stylus erectus, longitudine petali. Stigma capitatum, subrotundum.

PERICARPIUM. Bacca carnosa, corio tecta, longissima, pulpa trifariam, absque dissepimentis.

SEMINA plurima, globosa.

Hermaphroditi masculi flores.

CALYX ut in feminæo.

COROLLA ut in feminæo.

STAMINA. Filamenta ut in feminæo, at longiora, tenuiora. Antheræ lineares, sulcatæ, erectæ, magnæ.

PISTILLUM. Germen ut in feminæo, ut minus. Stylus, et stigma ut in feminæo, at minora.

PERICARPIUM abortit.

Hermaphrodite flowers, where the female parts are perfect.

EMPALEMENT. Partial sheath oblong, egg-shaped, smoothly-concave, and large.

BLOSSOM unequal and gaping; the petal forming the upper lip, the honey-cup the under.

Petal upright, ligulate, five-toothed, and meeting at the base in front.

Honey-cup one leaf, skiff-shaped, shorter than the petal, and inclosed within it.

CHIVES. Threads six, awl-shaped, upright, shorter by half than the petal. Tips abortive.

POINTAL. Seed-bud below the receptacle of the flower, large and very long. Style upright the length of the petal. Summit headed, nearly round.

SEED-VESSEL. A fleshy berry, covered with a tough skin, very long, the pulp laying three ways, without partitions.

SEEDS many, round.

Hermaphrodite flowers, where the male parts are perfect.

EMPALEMENT as in the female flower.

BLOSSOM as in the female flower.

CHIVES. Threads as in the female flower, but longer, and thinner. Tips linear, channelled, upright, and large.

POINTAL. Seed-bud the same as in the female, but smaller. Shaft and summit like the female, but smaller.

SEED-VESSEL is abortive.

SPECIFIC CHARACTER.

Musa fœdice erecto; floribus capitatis; spathis confertis, coccineis, maximis, apicibus luteis.

Plantain-tree with an upright fruit-stalk; flowers growing in heads; sheaths crowded together, scarlet, very large, points yellow.

REFERENCE TO THE PLATE.

1. The upper lip of the blossom, shewn in front, as cut off close to the seed-bud.
2. The same, shewing the hinder parts, with the three small claws on the border.
3. The honey-cup, which forms the lower lip of the blossom.
4. The seed-bud, chives, style, and summit, of a female hermaphrodite flower.
5. A seed-bud cut obliquely, to expose the situation character of the seeds.
6. The chives, seed-bud, shaft, and summit, of a male hermaphrodite flower.

THE honour of having introduced this supremely beautiful plant, pertains to, Thomas Evans Esq. of Stepney; a gentleman to whose zeal for the introduction of new plants our stoves are of late many beholden; he having received it, amongst many others, about the year 1792 from China, where, as well as in Cochin-China, Sumatra, Java, &c. it is very commonly found. Our figure was taken, in part, from a plant which flowered at James Vere's, Esq. Kensington Gore, last December, and partly from one in bloom about the same time, at the Hon. Lady Archer's, Ham Common. The Musa Coccinea grows to the height of about three, or four feet before it blows, and without question, has no rival but Strelitzia Regina in the hothouse, where its brilliancy, tends in some degree, to dispel the gloom of winter, for at least three months. It increases itself by suckers, which are thrown up in abundance from a vigorous plant; may be taken off at any time, and will arrive at a flowering size in twelve months, if planted in rich earth, and kept growing in pine heat, or on a strong hotbed.

Musa coccinea.

Ixia bulbifera.
Var. flore luteo.

PLATE XLVIII.

IXIA BULBIFERA. *Var: flore luteo.*

Bulb-bearing Ixia. Var: yellow-flowered.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, æqualis. Stigmata tria, erectiusculo patula.	Blossom six petals, spreading, and equal. Summits three, nearly upright, and spreading. See Ixia reflexa, Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis falcatis, glabris, scapo brevioribus, axillis bulbiferis; floribus alternis, luteis.	Ixia with scimitar-shaped leaves, smooth, and shorter than the flower-stem, bearing bulbs at their insertion into the stalk; flowers alternate, and yellow.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives attached.
3. The Shaft, Summit, and Seed-bud, (magnified).

The singular sporting of Nature in the Ixia bulbifera is not uncommon; its viviparous character (if it may be so called) constitutes a specific difference in many genera; Lilium, Lysimachia, &c. partake of it. The bulbs produced from the stem blow the second year, whereas those from seeds do not till the third. The flowers of this variety are the first that open, amongst the numerous species yet introduced, of this extensive genus; they are of a brilliant yellow, and seldom expand more than one at a time. The usual treatment of other Cape Ixias is suitable for this. The drawing was made at Messrs. Lee and Kennedy's, in the month of March 1798, they having introduced it about the year 1784.

PLATE XLVIII.

IXIA BULBIFERA. *Var: flore luteo.*

Bulb-bearing Ixia. Var: yellow-flowered.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata tria, erectiuſculo patula.	BLOSSOM ſix petals, ſpreading, and equal. Summits three, nearly upright, and ſpreading. See IXIA REFLEXA, Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis falcatis, glabris, ſcapo brevioribus, axillis bulbiferis; floribus alternis, luteis.	Ixia with ſcimitar-ſhaped leaves, ſmooth, and ſhorter than the flower-ſtem, bearing bulbs at their inſertion into the ſtalk; flowers alternate, and yellow.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives attached.
3. The Shaft, Summit, and Seed-bud, (magnified).

THE ſingular ſporting of Nature in the Ixia bulbifera is not uncommon; its viviparous character (if it may be ſo called) conſtitutes a ſpecific difference in many genera; Lilium, Lyſimachia, &c. partake of it. The bulbs produced from the ſtem blow the ſecond year, whereas thoſe from ſeeds do not till the third. The flowers of this variety are the firſt that open, amongſt the numerous ſpecies yet introduced, of this extenſive genus; they are of a brilliant yellow, and ſeldom expand more than one at a time. The uſual treatment of other Cape Ixias is ſuitable for this. The drawing was made at Meſſrs. Lee and Kennedy's, in the month of March 1798, they having introduced it about the year 1784.

Malpighia crassifolia

PLATE XLIX.

MALPIGHIA CRASSIFOLIA

Thick-leaved Malpighia.

CLASS X. DECANDRIA.

ORDER I. TRIGYNIA.

GENERIC CHARACTER.

Perianthium pentaphyllum, erectum, persistens, connivens. Glandulæ [illegible] duæ, ovales gibbæ, Calicis [illegible] inferneque adnatæ.

Corolla. Petala quinque, reniformia, magna, [illegible] ciliata, patentia, concava; ungues [illegible] linearibus.

Stamina. Filamenta decem latiuscula, [illegible] cylindrum posita, parva. Anthera [illegible] dicta.

Pistillum. Germen subrotundum, [illegible] tres, filiformes. Stigmata obtusa.

Pericarpium. Bacca globosa, torulosa, magna, [illegible] unilocularis.

Semen. [illegible], ovata, oblonga, obtusa, [illegible].

SPECIFIC CHARACTER.

Malpighia foliis lanceolato-ovatis, [illegible] integerrimis; floribus [illegible] spicatis, pallide-luteis.

Inflorescence [illegible] large, downy [illegible] terminate the [illegible] pale yellow.

EXPLANATION OF THE PLATE.

1. The Empalement, [illegible]
2. The Empalement.
3. The Chives spread [illegible]
4. A Thread, and its [illegible]
5. The Pistil [illegible]

[illegible]

Introduced, we have given to this species of Malpighia, [illegible] introduced; yet, there is much doubt, whether it is not [illegible] may not both the same plant, natives of different [illegible] these hot-house plant, growing to the height of [illegible] feet, [illegible] Jamaica, and most of the adjacent islands, [illegible] the year 1792. From the extreme [illegible] strong growing pine heat during the winter months, [illegible] rather by cuttings, and seems to delight [illegible] transmitted by the Right Hon. Lord Viscount [illegible], in [illegible] Bitfle, near Exeter, it flowered, for the fifth time in England, in the month of [illegible]

Melampyrum amplexicaule

PLATE XLIX.

MALPIGHIA CRASSIFOLIA.

Thick-leaved Malpighia.

CLASS X. ORDER III.

DECANDRIA TRIGYNIA. Ten Chives. Three Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, erectum, minimum, perſiſtens, connivens. Glandulæ melliferæ duæ, ovales gibbæ, foliolis calycinis externe inferneque adnatæ.

COROLLA. Petala quinque, reniformia, magna, plicata, ciliata, patentia, concava; unguibus longis, linearibus.

STAMINA. Filamenta decem latiuſcula, erecta, in cylindrum poſita, parva. Antheræ cordatæ.

PISTILLUM. Germen ſubrotundum, minimum. Styli tres, filiformes. Stigmata obtuſa.

PERICARPIUM. Bacca globoſa, toruloſa, magna, unilocularis.

SEMINA tria, oſſea, oblonga, obtuſa, angulata.

EMPALEMENT. Cup five leaves, upright, very ſmall, remaining and cloſing at the points. Two honey-bearing glands, oval and gouty, are fixed to the outer and lower part of the leaves of the cup.

BLOSSOM. Petals five, kidney-ſhaped, large, plaited, laſhed, ſpreading, and concave; claws long, linear.

CHIVES. Threads ten, rather broad, upright, placed cylindrically, and ſmall. Tips heart-ſhaped.

POINTAL. Seed-bud nearly round, very ſmall. Shafts three, thread-ſhaped. Summits blunt.

PERICARPIUM. Berry globular, knobby, large, of one cell.

SEEDS three, bony, oblong, blunt, and angulated.

SPECIFIC CHARACTER.

Malpighia foliis lanceolato-ovatis, ſubtus tomentoſis, integerrimis; floribus terminalibus, ſpicatis, pallide-luteis.

Malpighia with oval ſpear-ſhaped leaves, downy beneath, and entire; flowers terminate the branches in ſpikes, and are pale yellow.

REFERENCE TO THE PLATE.

1. The Empalement, Chives, and Pointal, (natural ſize).
2. The Empalement, (magnified).
3. The Chives ſpread open, (natural ſize).
4. A Thread, and its Tip, (magnified).
5. The Pointal complete, (natural ſize).

ALTHOUGH, we have given to this ſpecies of Malpighia, the ſpecific name under which it has been introduced; yet, there is much doubt, whether it is not the Verbaſcifolium of Linnæus; or indeed if they are not both the ſame plant, named from different ſpecimens. Our ſpecies makes a very handſome hothouſe plant, growing to the height of five, or ſix feet, before it flowers. It is a native of Jamaica, and moſt of the adjacent iſlands, and was introduced by Meſſrs. Lee and Kennedy about the year 1792. From the extreme tenderneſs of the young leaves, and ſhoots, it muſt be kept in a ſtrong growing pine heat during the winter months; otherwiſe, they are ſubject to damp off. It is raiſed by cuttings, and ſeems to delight in a rich ſoil. The figure was made from a ſpecimen communicated by the Right Hon. Lord Viſcount Courtenay, in whoſe moſt ſuperb collection at Powderham Caſtle, near Exeter, it flowered, for the firſt time in England, in the month of September 1798.

Ixia capitata
Var. flore aurantio.

Published as the Act directs March
by M. Ambrose Mr. Slaughden

PLATE I.

IXIA CAPITATA. [illegible]

Branch flowering [illegible]

CLASS III. [illegible]

TRIANDRIA MONOGYNIA. [illegible]

[illegible]

REFERENCES [illegible]

1. The two [illegible]
2. A Flower [illegible]
3. The Shaft, [illegible]

[illegible] of Ixia capitata was introduced [illegible] Messrs. Lee and Kennedy, [illegible] It flowers the latter end of [illegible] in the root, which produces [illegible]

Ixia capitata.
Var. flore aurantio.

Pub.d as the act directs by H. Ker

PLATE L.

IXIA CAPITATA. *Var: flore aurantio.*

Bunch-flowering Ixia. Var: Blossom gold colour.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, patens, æqualis. Stigmata tria, erectiusculo-patula.	Blossom six petals, spreading, and equal. Summits three, nearly upright, and spreading. See Plate XIV. Ixia reflexa.

SPECIFIC CHARACTER.

Ixia foliis radicalibus, enfiformibus; floribus capitatis, confertis, aurantiis, petalis basi obscuris.	Ixia with leaves growing from the root, and sword-shaped; blossoms grow in a close bunch, gold coloured, and the petals dark at the base.

REFERENCE TO THE PLATE.

1. The two Sheaths of the Empalement.
2. A Flower cut open, with the Chives attached.
3. The Shaft, Summit, and Seed-bud, (magnified).

This variety of Ixia capitata was introduced at the same time as the Ixia bulbifera, flore luteo, viz. in 1784, by Messrs. Lee and Kennedy, Hammersmith, from the Cape of Good Hope, and requires the same treatment. It flowers the latter end of May, or beginning of June; propagating itself abundantly by the root, which produces annually numerous young bulbs.

Xeranthemum speciosissimum

PLATE LI.

XERANTHEMUM SPECIOSISSIMUM.

Largest-flowering Everlasting Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pi...

GENERIC CHARACTER.

Calyx. Communis imbricatus; squamis inæqualibus, quarum intimæ diffor longiores, membranaceæ, nitidæ, radium constituentes.

Corolla. Compositæ inæquales; corollulæ hermaphroditæ plurimæ, tubulosæ in disco. Feminæ pauciores, tubulatæ, in ambitu.

Propria hermaphroditis infundibuliformis, calyce longe brevior; limbus quinquefido, patulo.

Feminæ tubulosæ, longitudine hermaphroditæ, quinquefidæ, minus æqualis.

Stamina. Hermaphroditis filamenta quinque, brevissima. Antheræ cylindraceæ, tubulosæ, longitudine ferè corollulæ.

Pistillum. Hermaphroditis germen breve. Stylus filiformis, staminibus longior. Stigma bifidum.

Feminei germen ut in hermaphroditis. Stylus filiformis, longitudine hermaphroditorum. Stigmata duo, oblonga reflexa.

Pericarpium nullum. Calyx vix mutatus.

Semina oblonga, coronata.

Receptaculum nudum, planiusculum, punctatum.

Empalement. Common tiled; leaves spear-shaped, the inner ones longer than the disk, skinny, shining, and forming the ray of the flower.

Blossom. Compound, unequal; florets with chives and pointals numerous and tubular in the disk. Female florets fewer, and tubular in the circumference.

Individuals with chives and pointals funnel-shaped, much shorter than the empalement; border with five clefts, spreading.

Individuals with only pointals, tubular the length of the hermaphrodites, five cleft, and rather smaller.

Chives. The threads in the hermaphrodites are five, and very small. Tips forming a cylinder, tubular almost the length of the florets.

Pointal. Seed-bud of the hermaphrodites short. Shaft thread-shaped, longer than the chives. Summit cloven.

Seed-bud of the female florets the same as the hermaphrodites. Shaft thread-shaped the length of the hermaphrodites. Summits two, oblong and bent back.

Seed-vessel none. Empalement scarcely changing.

Seeds oblong, and crowned with a feather.

Receptacle naked, flatish, and dotted.

SPECIFIC CHARACTER.

Xeranthemum fruticosum, erectum; foliis amplexicaulibus, lanceolatis, trinerviis; ramis unifloris, subnudis.

Everlasting flower with an upright shrubby stem, leaves embracing the stem, lance-shaped, and three-nerved; branches with one flower, and nearly naked.

REFERENCE TO THE PLATE.

1. An Hermaphrodite floret, (natural size).
2. The Calyx, Pointal, and Seed-bud, (magnified).
3. The Pointal, and Seed-bud from a female floret, (magnified).

This handsome species of Xeranthemum was introduced, according to the Kew catalogue, by Mr. F. Masson from the Cape of Good Hope, in the year 1787; it is, nevertheless, a very scarce plant, being subject to decay from our winter damps; therefore requires a dry stove for its protection. The blossoms (or rather the flower-cups, for they are the portiliant parts) are easily preserved for many years, in all their brilliancy, by cutting them when they first expand; but our atmosphere seems uncongenial to the ripening of their seeds, and is with great difficulty increased by cuttings. The soil it most approves is sandy peat, with a small portion of loam. Our figure was taken in September last year, at the Hammersmith nursery.

Xeranthemum speciosissimum.

PLATE LI.

XERANTHEMUM SPECIOCISSIMUM.

Largeſt-flowering Everlaſting Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis imbricatus; ſquamis lanceolatis, quarum intimæ diſco longiores, membranaceæ, nitidæ, radium conſtituentes.

COROLLA. Compoſita inæqualis; corollulæ hermaphroditæ plurimæ, tubuloſæ in diſco. Femineæ pauciores, tubulatæ, in ambitu.

Propria hermaphroditis infundibuliformis, calyce longe brevior; limbo quinquefido, patulo.

Femineis tubuloſa, longitudine hermaphroditi, quinquefida, minus æqualis.

STAMINA. Hermaphroditis filamenta quinque, breviſſima. Antheræ cylindracea, tubuloſa, longitudine fere corollulæ.

PISTILLUM. Hermaphroditis germen breve. Stylus filiformis, ſtaminibus longior. Stigma bifidum.

Femineis germen ut in hermaphroditis. Stylus filiformis, longitudine hermaphroditorum. Stigmata duo, oblonga reflexa.

PERICARPIUM nullum. Calyx vix mutatus.

SEMINA oblonga, coronata.

RECEPTACULUM nudum, planiuſculum, punctatum.

EMPALEMENT. Common tiled; ſcales ſpear-ſhaped, the inner ones longer than the diſk, ſkinny, ſhining, and forming the ray of the flower.

BLOSSOM. Compound, unequal; florets with chives and pointals numerous and tubular in the diſk. Female florets fewer, and tubular in the circumference.

Individuals with chives and pointals funnel-ſhaped, much ſhorter than the empalement; border with five clefts, ſpreading.

Individuals with only pointals, tubular the length of the hermaphrodites, five cleft, and rather ſmaller.

CHIVES. The threads in the hermaphrodites are five, and very ſmall. Tips forming a cylinder, tubular almoſt the length of the florets.

POINTAL. Seed-bud of the hermaphrodites ſhort. Shaft thread-ſhaped, longer than the chives. Summit cloven.

Seed-bud of the female florets the ſame as the hermaphrodites. Shaft thread-ſhaped the length of the hermaphrodites. Summits two, oblong and bent back.

SEED-VESSEL none. Empalement ſcarcely changing.

SEEDS oblong, and crowned with a feather.

RECEPTACLE naked, flatiſh, and dotted.

SPECIFIC CHARACTER.

Xeranthemum fruticoſum, erectum; foliis amplexicaulibus, lanceolatis, trinerviis; ramis unifloris, ſubundis.

Everlaſting flower with an upright ſhrubby ſtem; leaves embracing the ſtem, lance-ſhaped, and three-nerved; branches with one flower, and nearly naked.

REFERENCE TO THE PLATE.

1. An Hermaphrodite floret, (natural ſize).
2. The Chives, Pointal, and Seed-bud, (magnified).
3. The Pointal, and Seed-bud from a female floret, (magnified).

THIS handſome ſpecies of Xeranthemum was introduced, according to the Kew catalogue, by Mr. F. Maſſon from the Cape of Good Hope, in the year 1787; it is, nevertheleſs, a very ſcarce plant, being ſubject to decay from our winter damps; therefore requires a dry ſtove for its protection. The bloſſoms (or rather the flower-cups, for they are the perſiſtent parts) are eaſily preſerved for many years, in all their brilliancy, by cutting them, when they firſt expand; but our atmoſphere ſeems uncongenial to the ripening of their ſeeds, and is with great difficulty increaſed by cuttings. The ſoil it moſt approves is ſandy peat, with a ſmall portion of loam. Our figure was taken in September laſt year, at the Hammerſmith nurſery.

Gnidia pinifolia.

PLATE LII.

GNIDIA PINIFOLIA.

Pine-leaved Gnidia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, infundibuliforme, coloratum; tubo filiformi, longissimo; limbo quadripartito, plano.

COROLLA. Petala quatuor, sessilia, plana, calyce breviora, eique inserta.

STAMINA. Filamenta octo, setacea, erecta, longitudine fermè floris. Antheræ simplices.

PISTILLUM. Germen ovatum. Stylus filiformis, germinis lateri insertus, longitudine staminum. Stigma capitatum, hispidum.

PERICARPIUM nullum. Fructus in fundo calycis.

SEMEN unicum, ovatum.

EMPALEMENT. Cup one leaf, funnel-shaped and coloured; tube thread-shaped, very long; border of four segments, which are flat.

BLOSSOM. Petals four, sitting close to the cup, flat, shorter than the cup, and fixed within it.

CHIVES. Threads eight, awn-like, upright, scarcely the length of the flower. Tips simple.

POINTAL. Seed-bud egg-shaped. Shaft thread-shaped, fixed into the side of the seed-bud, and of the length of the chives. Summit headed, and hairy.

SEED-VESSEL none. Fruit in the lower part of the cup.

SEED one, egg-shaped.

SPECIFIC CHARACTER.

Gnidia, foliis sparsis, lineari-subulatis; ramis verticillatis; floribus aggregatis, terminalibus.

Gnidia with scattered, linearly awl-shaped leaves; branches grow in whorls; the flowers terminating the branches in clusters.

REFERENCE TO THE PLATE.

1. A Flower with its seed, (natural size).
2. The same cut open, to shew the situation and insertion of the Chives into the tube of the Empalement.
3. The Pointal, (magnified).

THE essential distinguishing character, in Passerina, Gnidia, Struthiola, and Lachnæa, must certainly be considered as amongst the slightest generic divisions made by Linnæus. It is no small difficulty to distinguish the blossom in Gnidia, and Lachnæa, from the empalement in Passerina, and Strathiola; the same exact natural structure being alike in them all; and to us, appear noticeable in their small variations, rather as forming specific, than generic distinctions. As our plan is not to alter, upon any terms, what has been determinately settled by that great master in the arcana of nature, let our opinions be what they will; we are determined to prevent confusion (which has been but little attended to of late), to give it only as such, without presuming upon alteration. But as in the present instance, when a plant long named, but otherwise unknown to cultivators, has unfortunately been missed from its rank by another, no ways answering to the characters of the describer; we shall consider it as our particular province to rectify the mistake, however generally the error may have obtained.—The Gnidia pinifolia is a native of the Cape of Good Hope, the seeds having been received from thence in 1795, by Messrs. Lee and Kennedy, Hammersmith, at whose nursery it has flowered, for the first time in England, in the month of February this year, and where the drawing was taken. It is a hardy greenhouse plant, but is propagated with difficulty by cuttings; growing to the height of eighteen inches, being most exquisitely scented by night, continuing in flower at least three months, and thriving best in a light peat soil.

A figure of the plant generally known by the name of G. pinifolia, will be given with the next number; to the end our assertions may be properly investigated.

Gnidia pinifolia.

PLATE LII.

GNIDIA PINIFOLIA.

Pine-leaved Gnidia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, infundibuliforme, coloratum; tubo filiformi, longiſſimo; limbo quadripartito, plano.

COROLLA. Petala quatuor, ſeſſilia, plana, calyce breviora, eique inſerta.

STAMINA. Filamenta octo, ſetacea, erecta, longitudine ſermè floris. Antheræ ſimplices.

PISTILLUM. Germen ovatum. Stylus filiformis, germinis lateri inſertus, longitudine ſtaminum. Stigma capitatum, hiſpidum.

PERICARPIUM nullum. Fructus in fundo calycis.

SEMEN unicum, ovatum.

EMPALEMENT. Cup one leaf, funnel-ſhaped and coloured; tube thread-ſhaped, very long; border of four ſegments, which are flat.

BLOSSOM. Petals four, fitting cloſe to the cup, flat, ſhorter than the cup, and fixed within it.

CHIVES. Threads eight, awn-like, upright, ſcarcely the length of the flower. Tips ſimple.

POINTAL. Seed-bud egg-ſhaped. Shaft thread-ſhaped, fixed into the ſide of the ſeed-bud, and of the length of the chives. Summit headed, and hairy.

SEED-VESSEL none. Fruit in the lower part of the cup.

SEED one, egg-ſhaped.

SPECIFIC CHARACTER.

Gnidia, foliis ſparſis, lineari-ſubulatis; ramis verticillatis; floribus aggregatis, terminalibus.

Gnidia with ſcattered, linearly awl-ſhaped leaves; branches grow in whorls; the flowers terminating the branches in cluſters.

REFERENCE TO THE PLATE.

1. A Flower with its ſeed, (natural ſize).
2. The ſame cut open, to ſhew the ſituation and inſertion of the Chives into the tube of the Empalement.
3. The Pointal, (magnified).

THE eſſential diſtinguiſhing character, in Paſſerina, Gnidia, Struthiola, and Lachnæa, muſt certainly be conſidered as amongſt the ſlighteſt generic diviſions made by Linnæus. It is no ſmall difficulty to diſtinguiſh the bloſſom in Gnidia, and Lachnæa, from the empalement in Paſſerina, and Struthiola; the ſame exact natural ſtructure being alike in them all; and to us, appear noticeable in their ſmall variations, rather as forming ſpecific, than generic diſtinctions. As our plan is not to alter, upon any terms, what has been determinately ſettled by that great maſter in the arcana of nature, let our opinions be what they will; we are determined to prevent confuſion (which has been but little attended to of late), to give it only as ſuch, without preſuming upon alteration. But as in the preſent inſtance, when a plant long named, but otherwiſe unknown to cultivators, has unfortunately been foiſted from its rank by another, no ways anſwering to the characters of the deſcriber; we ſhall conſider it as our particular province to rectify the miſtake, however generally the error may have obtained.—The Gnidia pinifolia is a native of the Cape of Good Hope, the ſeeds having been received from thence in 1795, by Meſſrs. Lee and Kennedy, Hammerſmith, at whoſe nurſery it has flowered, for the firſt time in England, in the month of February this year, and where the drawing was taken. It is a hardy greenhouſe plant, but is propagated with difficulty by cuttings; growing to the height of eighteen inches, being moſt exquiſitely ſcented by night, continuing in flower at leaſt three months, and thriving beſt in a light peat ſoil.

A figure of the plant generally known by the name of G. pinifolia, will be given with the next number; to the end our aſſertions may be properly inveſtigated.

Mimosa stricta.

Pub.d as the Act directs April 1.st 1799 by J. Sowerby
N.o 3. Bloomsbury.

PLATE LIII.

MIMOSA STRICTA.

Harsh-leaved upright Mimosa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various dispositions. Upon one Plant.

GENERIC CHARACTER.

PERIANTHIUM monophyllum, quinquedentatum, minimum.

COROLLA. Petalum unicum, infundibuliforme, semiquinquefidum, parvum.

STAMINA. Filamenta capillaria, longissima. Antherae incumbentes.

PISTILLUM. Germen oblongum. Stylus filiformis, staminibus brevior. Stigma truncatum.

PERICARPIUM. Legumen longum, dilaplidatum transversis, pluribus.

SEMINA plurima, figura varia.

EMPALEMENT. One leaf, five-toothed, and very small.

BLOSSOM. One petal, funnel-shaped, cut half way down into five divisions, and small.

CHIVES. Threads like fine hairs, and very long. Tips laying on the threads.

PISTIL. Seed-bud oblong. Shaft thread-shaped, shorter than the chives. Summit somewhat cut off.

SEED-VESSEL. A long pod, the partitions run across the pod, and are numerous.

SEEDS many, of different shapes.

SPECIFIC CHARACTER.

Mimosa foliis simplicibus, utrinque venosis, linearibus, obtusis; ramis strictissimis, capitulis geminatis, oppositis, ex alis foliorum.

Mimosa with simple leaves, veiny on both sides, narrow, and blunt; [illegible] branches very straight and [illegible] heads [illegible] opposite, and in the bosoms of the leaf [illegible] two [illegible].

REFERENCE TO THE PLATE.

1. A Floret, (natural size).
2. The Empalement, (magnified).
3. The Blossom, (magnified).
4. One Thread and its Tip, (magnified).
5. The Pointal, (magnified).

THIS species of New Holland Mimosa, has as yet, escaped every the best [illegible] and [illegible] Smith; it is from Port Jackson, whence the seeds were transmitted by Colonel [illegible] in the year 1793. Being easily raised, it is found in most collections; the seeds [illegible] many years, and striking readily by cuttings. It has the peculiar character [illegible] of that country, viz. winged seed-leaves, which are lost after the first year's growth. [illegible] so small, and grows to the height of three or four feet before it shews [illegible] pod, from which circumstance we have taken its trivial name.

Mimosa stricta.

Pub.d by the Ant. Soc. April 1.st 1794 by R. Ackermann
N.o 3 Strand Bridge

PLATE LIII.

MIMOSA STRICTA.

Harſh-leaved upright Mimoſa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various diſpoſitions. Upon one Plant.

GENERIC CHARACTER.

PERIANTHIUM monophyllum, quinquedentatum, minimum.

COROLLA. Petalum unicum, infundibuliforme, ſemiquinquefidum, parvum.

STAMINA. Filamenta capillaria, longiſſima. Antheræ incumbentes.

PISTILLUM. Germen oblongum. Stylus filiformis, ſtaminibus brevior. Stigma truncatum.

PERICARPIUM. Legumen longum, diſſepimentis tranſverſis, pluribus.

SEMINA plurima; figura varia.

EMPALEMENT. One leaf, five-toothed, and very ſmall.

BLOSSOM. One petal, funnel-ſhaped, cut half way down into five diviſions, and ſmall.

CHIVES. Threads like fine hairs, and very long. Tips laying on the threads.

POINTAL. Seed-bud oblong. Shaft thread-ſhaped, ſhorter than the chives. Summit appearing cut off.

SEED-VESSEL. A long pod, the partitions run acroſs the pod, and are numerous.

SEEDS many; of different ſhapes.

SPECIFIC CHARACTER.

Mimoſa foliis ſimplicibus, utrinque venoſis, linearibus, obtuſis; ramis ſtrictiſſimis; capituli geminati, oppoſiti, ex alis foliorum.

Mimoſa with ſimple leaves, veiny on both ſides, linear, and blunt ended; branches growing cloſe and upright; flower heads grow by pairs, oppoſite, and at the inſertion of the leaf into the ſtem.

REFERENCE TO THE PLATE.

1. A Floret, (natural ſize).
2. The Empalement, (magnified).
3. The Bloſſom, (magnified).
4. One Thread and its Tip, (magnified).
5. The Pointal, (magnified).

THIS ſpecies of New Holland Mimoſa, has as yet, eſcaped even the indefatigable, and accurate Dr. Smith; it is from Port Jackſon, whence the ſeeds were tranſmitted by Colonel Paterſon in the year 1793. Being eaſily raiſed, it is found in moſt collections; the ſeeds preſerving their vegetative quality many years, and ſtriking readily by cuttings. It has the peculiar character attached to the Mimoſas of that country, viz. winged ſeed-leaves, which are loſt after the firſt year's growth. This ſpecies has no ſmell, and grows to the height of three or four feet before it flowers; perfectly ſtraight and compact, from which circumſtance we have taken its trivial name.

N 3 Haughton sc

Aloëris sarmentosa

PLATE LIV.

ALETRIS SARMENTOSA.

Creeping-rooted Ballard Aloe.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA, monopetala, oblonga; limbi laciniis lanceolatis, acuminatis, erectis; persistens.

STAMINA. Filamenta sex, subulata, longitudine corollæ, inserta basi laciniarum corollæ. Antheræ oblongæ, erectæ.

PISTILLUM. Germen ovatum. Stylus subulatus, longitudine staminum. Stigma tridentatum.

PERICARPIUM. Capsula ovata, triquetra, acuminata, trilocularis.

SEMINA plurima.

NECTARIUM, none.

BLOSSOM, one leaf, oblong; the segments of the border are lance-shaped, tapering, and upright; remaining.

CHIVES. Threads six, awl-shaped, the length of the blossom, and inserted into the divisions of it, at the base. Tips oblong, upright.

POINTAL. Seed-bud egg-shaped. Shaft awl-shaped, the length of the chives. Summit three-cleft.

SEED-VESSEL. Capsule egg-shaped, three-sided, tapering, and of three cells.

SEEDS many.

SPECIFIC CHARACTER.

ALETRIS, caulescens; foliis conformibus, laxis; floribus spicatis, suave rubentibus; radicibus sarmentosis.

Ballard Aloe, without a stem; having sword-shaped, weak leaves; flowers grow in spikes of a soft red colour; roots producing suckers from the joints.

REFERENCE TO THE PLATE.

1. A Flower.
2. The Chives, and Pointal.
3. The Pointal.

THIS species of Aletris was introduced to us, from the Cape of Good Hope, about the year 1789; it is a hardy plant, requiring the same management as Aletris Capensis, that is, to be kept in a dry part of the greenhouse; although the plant should be frequently watered when in bloom, as should mostly all bulbous notwithstanding (as in the present instance is the rule) their flowering in the winter and spring. This caution we have thought necessary, as it is a general rule with gardeners during that season, to put as little moisture as possible to their plants, whether in flower or not, to avoid damps. The very easy in propagating this handsome species of Aletris, will render it less common; the roots grow nearly horizontally, and from their joints numberless young plants are produced; which circumstance we were desirous of expressing in the figure, as from whence we have taken our trivial name; but from the size of the work, it was found impracticable. The drawing was made in December 1792, from a plant then in flower, at the Hammersmith nursery: we are necessarily informed, that when strongly planted in a light, rich soil, it may be made to grow to the height of three feet; with a [illegible] flowers, one fourth the length of the flower-stem.

Aletris sarmentosa.

PLATE LIV.

ALETRIS SARMENTOSA.

Creeping-rooted Baſtard Aloe.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA, monopetala, oblonga; limbi laciniis lanceolatis, acuminatis, erectis; perſiſtens.

STAMINA. Filamenta ſex, ſubulata, longitudine corollæ, inſerta baſi laciniarum corollæ. Antheræ oblongæ, erectæ.

PISTILLUM. Germen ovatum. Stylus ſubulatus, longitudine ſtaminium. Stigma trifidum.

PERICARPIUM. Capſula ovata, triquetra, acuminata, trilocularis.

SEMINA plurima.

EMPALEMENT, none.

BLOSSOM, one leaf, oblong; the ſegments of the border are lance-ſhaped, tapering, and upright; remaining.

CHIVES. Threads ſix, awl-ſhaped, the length of the bloſſom, and inſerted into the diviſions of it, at the baſe. Tips oblong, upright.

POINTAL. Seed-bud egg-ſhaped. Shaft awl-ſhaped, the length of the chives. Summit three-cleft.

SEED-VESSEL. Capſule egg-ſhaped, three-ſided, tapered, and of three cells.

SEEDS many.

SPECIFIC CHARACTER.

Aletris, acaulis; foliis enſiformibus, laxis; floribus ſpicatis, ſuave rubentibus; radicibus ſarmentoſis.

Baſtard Aloe, without a ſtem; having ſword-ſhaped, weak leaves; flowers grow in ſpikes of a ſoft red colour; roots producing ſuckers from the joints.

REFERENCE TO THE PLATE.

1. A Flower.
2. The Chives, and Pointal.
3. The Pointal.

THIS ſpecies of Aletris was introduced to us, from the Cape of Good Hope, about the year 1789; it is a hardy plant, requiring the ſame management as Aletris Capenſis, that is, to be kept in a dry part of the greenhouſe; although the plant ſhould be frequently watered when in bloom, as ſhould moſtly all plants, notwithſtanding (as in the preſent inſtance is the caſe) their flowering in the winter months. This caution we have thought neceſſary, as it is a general rule with gardeners during that ſeaſon, to put as little moiſture as poſſible to their plants, whether in flower or not, to avoid damps. The little difficulty in propagating this handſome ſpecies of Aletris, will render it ſoon common; the roots grow nearly horizontally, and from their joints numberleſs young plants are produced; which character we were deſirous of expreſſing in the figure, as from thence we have taken our trivial name; but from the ſize of the work, it was found impracticable. The drawing was made in December 1798, from a plant then in flower, at the Hammerſmith nurſery: we are nevertheleſs informed, that from being planted in a light, rich ſoil, it may be made to grow to the height of three feet; with a ſpike of flowers, one fourth the length of the flower-ſtem.

Zinnia violacea.

PLATE LV.

ZINNIA VIOLACEA.

Purple Zinnia.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis ovato-cylindricus, lævis, imbricatus; ſquamis plurimis, obtuſis, erectis, perſiſtentibus.

COROLLA. Compoſita radiata; corollulæ hermaphroditæ plures in diſco elevato. Femineæ plurimæ in radio.

Propria hermaphroditi infundibuliformis, quinquefida intus villoſa.

Feminea ligulata, ſubrotunda, retuſa, perſiſtens.

STAMINA. Hermaphroditis; filamenta quinque, breviſſima. Anthera cylindracea, tubuloſa.

PISTILLUM. Hermaphroditis; germen oblongum, triquetrum. Stylus filiformis, ſemibifidus. Stigmata duo, obtuſa.

Femineis; germen oblongum, triquetrum. Stylus capillaris, ſemibifidus. Stigmata duo, recurvata.

PERICARPIUM. Calyx immutatus.

SEMINA. Hermaphroditis ſolitaria, oblonga, tetragono-ancipitia. Pappus muconibus duobus.

Femineis ſolitaria, mutica, coronata petalo perſiſtente.

RECEPTACULUM paleaceum; paleis lingulatis, canaliculatis, longitudine calycis, deciduis.

EMPALEMENT. Common cylindrically egg-ſhaped, ſmooth, and tiled; ſcales many, blunt, upright, and remaining.

BLOSSOM. Compound radiate; florets with chives and pointals, are numerous in the center, which is elevated; florets with only pointals, many in the circumference.

Individuals with chives and pointals funnel-ſhaped, five-cleft, and hairy within.

Individuals with pointals only, ligulate, roundiſh, dented at the end, and remaining.

CHIVES. Hermaphrodites; five ſhort threads. Tips forming a hollow cylinder.

POINTAL. Hermaphrodites; ſeed-bud oblong, three-ſided. Shaft thread-ſhaped, ſplit nearly half way down. Summits two, blunt.

Females; ſeed-bud oblong, three-ſided. Shaft hair-like, ſplit half way down. Summits two, bent backward.

SEED-VESSEL. Cup not changing.

SEEDS. Hermaphrodites, ſolitary, oblong, three-ſided, but ſharp at two edges. Feather of two ſharp points.

Females, ſolitary, without points, being crowned with the perſiſtent petal.

RECEPTACLE chaffy; chaff tongue-ſhaped, channelled, the length of the cup, and falling off.

SPECIFIC CHARACTER.

Zinnia foliis oppoſitis, amplexicaulibus, lato-lanceolatis, ſcabris; floribus pedunculatis, purpureis, ſolitariis.

Zinnia with oppoſite leaves, embracing the ſtem, broadly lance-ſhaped, and rough; flowers have foot-ſtalks, are purple, and grow ſolitary.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Floret of the ray with the ſeed attached, (natural ſize).
3. A Floret of the diſk with the ſeed attached, (magnified).
4. The Chives and Pointal of an hermaphrodite floret
5. The chaffy ſubſtance dividing the florets.

THIS elegant new ſpecies of Zinnia, is deſcribed and figured by J. A. Cavaniller, in his firſt volume of Spaniſh plants; where he ſays, it is a native of Mexico, South America, and was tranſmitted from thence to the royal gardens, where it perfected its ſeeds. In the year 1796, the Marchioneſs of Bute received it amongſt many other curious ſeeds, from Madrid, through the medium of Profeſſor Ortega. Being rather a tender annual, it ſhould be ſown in March, on a gentle hotbed; and tranſplanted into the open borders the beginning of May. The plant grows to the height of three feet or more, and makes in the months of Auguſt and September, a very conſiderable addition to the ſplendor of the flower garden. The ſeeds ripen freely, though the flower ſhould be plucked before it appears decayed.

Zinnia violacea.

PLATE LV.

ZINNIA VIOLACEA.

Purple Zinnia.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis ovato-cylindricus, lævis, imbricatus; ſquamis plurimis, obtuſis, erectis, perſiſtentibus.

COROLLA. Compoſita radiata; corollulæ hermaphroditæ plures in diſco elevato. Femineæ plurimæ in radio.

Propria hermaphroditi infundibuliformis, quinquefida intus villoſa.

Feminea ligulata, ſubrotunda, retuſa, perſiſtens.

STAMINA. Hermaphroditis; filamenta quinque, breviſſima. Anthera cylindracea, tubuloſa.

PISTILLUM. Hermaphroditis; germen oblongum, triquetrum. Stylus filiformis, ſemibifidus. Stigmata duo, obtuſa.

Femineis; germen oblongum, triquetrum. Stylus capillaris, ſemibifidus. Stigmata duo, recurvata.

PERICARPIUM. Calyx immutatus.

SEMINA. Hermaphroditis ſolitaria, oblonga, tetragono-ancipitia. Pappus muconibus duobus.

Femineis ſolitaria, mutica, coronata petalo perſiſtente.

RECEPTACULUM paleaceum; paleis lingulatis, canaliculatis, longitudine calycis, deciduis.

EMPALEMENT. Common cylindrically egg-ſhaped, ſmooth, and tiled; ſcales many, blunt, upright, and remaining.

BLOSSOM. Compound radiate; florets with chives and pointals, are numerous in the center, which is elevated; florets with only pointals, many in the circumference.

Individuals with chives and pointals funnel-ſhaped, five-cleft, and hairy within.

Individuals with pointals only, ligulate, roundiſh, dented at the end, and remaining.

CHIVES. Hermaphrodites; five ſhort threads. Tips forming a hollow cylinder.

POINTAL. Hermaphrodites; ſeed-bud oblong, three-ſided. Shaft thread-ſhaped, ſplit nearly half way down. Summits two, blunt.

Females; ſeed-bud oblong, three-ſided. Shaft hair-like, ſplit half way down. Summits two, bent backward.

SEED-VESSEL. Cup not changing.

SEEDS. Hermaphrodites; ſolitary, oblong, three-ſided, but ſharp at two edges. Feather of two ſharp points.

Females, ſolitary, without points, being crowned with the perſiſtent petal.

RECEPTACLE chaffy; chaff tongue-ſhaped, channelled, the length of the cup, and falling off.

SPECIFIC CHARACTER.

Zinnia foliis oppoſitis, amplexicaulibus, lato-lanceolatis, ſcabris; floribus pedunculatis, purpureis, ſolitariis.

Zinnia with oppoſite leaves, embracing the ſtem, broadly lance-ſhaped, and rough; flowers have foot-ſtalks, are purple, and grow ſolitary.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Floret of the ray with the ſeed attached, (natural ſize).
3. A Floret of the diſk with the ſeed attached, (magnified).
4. The Chives and Pointal of an hermaphrodite floret
5. The chaffy ſubſtance dividing the florets.

THIS elegant new ſpecies of Zinnia, is deſcribed and figured by J. A. Cavanilles, in his firſt volume of Spaniſh plants; where he ſays, it is a native of Mexico, South America, and was tranſmitted from thence to the royal gardens, where it perfected its ſeeds. In the year 1796, the Marchioneſs of Bute received it amongſt many other curious ſeeds, from Madrid, through the medium of Profeſſor Ortega. Being rather a tender annual, it ſhould be ſown in March, on a gentle hotbed; and tranſplanted into the open borders the beginning of May. The plant grows to the height of three feet or more, and makes in the months of Auguſt and September, a very conſiderable addition to the ſplendor of the flower garden. The ſeeds ripen freely, though the flower ſhould be plucked before it appears decayed.

Antholyza spicata.

Pub.d as the Act directs May 1.st 1799
by R. Pulteney & Aug.s Hill Temple

PLATE LVI.

ANTHOLYZA SPICATA.

Spike-flowered Antholyza.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA tubulosa, irregularis, recurvata. Capsula infera.	BLOSSOM tubular, irregular, and bent backward. Capsule beneath. See Plate XXXII. ANTHOLYZA RINGENS.

SPECIFIC CHARACTER.

Antholyza, floribus infundibuliformibus, spicatis, incarnato-pallidis; foliis falcatis, breviffimis.	Antholyza with funnel-fhaped, fpiked flowers, of a pale flefh colour; leaves fcimitar-fhaped, and very fhort.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloffom cut open, to fhew the infertion of the Chives.
3. The Pointal, (natural fize).

THERE are few fpecies of this genus but furnifh beautiful flowers; this is certainly among the moft handfome, from the foftnefs of its colour, and the regularity of the fpike: what adds confiderably to its merit, is, that the bloffoms remain a confiderable time before they fall, which unfortunately, is feldom the cafe with the flowers of this genus. It was received from the Cape of Good Hope in bulbs, fent by J. Pringle, Efq. of Madeira, in 1794, to Meffrs. Lee and Kennedy of Hammerfmith; the drawing was made in the month of June 1797 at their nurfery. Not being eafily injured by damp, there is no neceffity for removing it from its pot, as is neceffary for moft bulbs, but to increafe it; one, or two young bulbs being annually produced, in addition from the old one. The beft foil is a fandy peat, with a fmall proportion of loam.

Antholyza spicata.

Pub. as the Act directs May 1. 1797
by J. Sowerby Mary Anne Street

PLATE LVI.

ANTHOLYZA SPICATA.

Spike-flowered Antholyza.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla tubulosa, irregularis, recurvata. Capsula infera.	Blossom tubular, irregular, and bent backward. Capsule beneath. See Plate XXXII. Antholyza ringens.

SPECIFIC CHARACTER.

Antholyza, floribus infundibuliformibus, spicatis, incarnato-pallidis; foliis falcatis, brevissimis.	Antholyza with funnel-shaped, spiked flowers, of a pale flesh colour; leaves scimitar-shaped, and very short.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to shew the insertion of the Chives.
3. The Pointal, (natural size).

There are few species of this genus but furnish beautiful flowers; this is certainly among the most handsome, from the softness of its colour, and the regularity of the spike: what adds considerably to its merit, is, that the blossoms remain a considerable time before they fall, which unfortunately, is seldom the case with the flowers of this genus. It was received from the Cape of Good Hope in bulbs, sent by J. Pringle, Esq. of Madeira, in 1794, to Messrs. Lee and Kennedy of Hammersmith; the drawing was made in the month of June 1797 at their nursery. Not being easily injured by damp, there is no necessity for removing it from its pot, as is necessary for most bulbs, but to increase it; one, or two young bulbs being annually produced, in addition from the old one. The best soil is a sandy peat, with a small proportion of loam.

Mesembryanthemum glabrum.

PLATE LVII.

MESEMBRYANTHEMUM GLABRUM.

Smooth-leaved annual Fig Marygold.

CLASS XII. ORDER IV.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, femiquinquefidum, fuperum, patens, perfidens.

COROLLA. Monopetala; petala lanceolato-linearia, numerofiffima, ferie multiplici nata, calyce longiora, ungulibus leviter connatis in unum.

STAMINA. Filamenta numerofa capillaria, longitudine calycis. Antheræ incumbentes.

PISTILLUM. Germen inferum, angulis quinque, obtufis. Styli quinque fetacei, fubulati, erecto reflexi. Stigmata fimplicia.

PERICARPIUM. Capfula carnofa, fubrotunda, loculamentis numero ftylorum refpondentibus.

SEMINA plurima, fubrotunda.

ESPALEMENT. Cup one leaf, cut nearly half way down into five divifions, above, fpreading, and remaining.

BLOSSOM. One petal; petals linearly lance-fhaped, very numerous, rifing in a number of rows, longer than the cup, flightly joined together by their claws.

CHIVES. Threads numerous, hair-like, the length of the cup. Tips laying on the threads.

POINTAL. Seed-bud beneath, with five obtufe angles. Shafts moftly five, awl-fhaped, upright, and a little bent outwards. Stigmats fimple.

SEED-VESSEL. A fleftiy capfule, nearly round, the cells anfwering to the number of the chives.

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Mesembryanthemum foliis amplexicaulibus, glabrifculis, fpathulatis; pedunculis longitudine foliorum; calycibus hemifphericis; corollis luteis.

Fig Marygold with leaves embracing the ftem, very fmooth, and fpatula-fhaped; the footftalks the length of the leaves; cups hemifpherical; blofloms yellow.

REFERENCE TO THE PLATE.

1. A Seed-bud; the Blofom, Cup and Chives, cut off, the Pointals remaining.
2. The fame, with the Cup and Chives.

As the extreme brilliancy of this plant cannot be done juftice to in painting, we muft reft fatisfied with having done our beft; every perfon in the leaft acquainted with the art, muft know, that in [illegible] fo dazzling colour exifting in nature cannot be retained in a drawing. This fpecies is annual, and, according to the Kew Catalogue, was introduced to the royal gardens by Mr. F. Masson in the [illegible]. The feeds fhould be fown on a hotbed in the month of February, and by the end of [illegible] the plants will flower, and continue to blow till the end of October; never failing to perfect [illegible].

Mesembryanthemum glabrum.

PLATE LVII.

MESEMBRYANTHEMUM GLABRUM.

Smooth-leaved annual Fig Marygold.

CLASS XII. ORDER IV.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ſemiquinquefidum, ſuperum, patens, perſiſtens.

COROLLA. Monopetala; petala lanceolato-linearia, numeroſiſſima, ſerie multiplici nata, calyce longiora, unguibus læviter connatis in unum.

STAMINA. Filamenta numeroſa, capillaria, longitudine calycis. Antheræ incumbentes.

PISTILLUM. Germen inferum, angulis quinque, obtuſis. Styli quinque ſæpius, ſubulati, erecto-reflexi. Stigmata ſimplicia.

PERICARPIUM. Capſula carnoſa, ſubrotunda, loculamentis numero ſtylorum reſpondentibus.

SEMINA plurima, ſubrotunda.

EMPALEMENT. Cup one leaf, cut nearly half way down into five diviſions, above, ſpreading, and remaining.

BLOSSOM. One petal; petals linearly lance-ſhaped, very numerous, riſing in a number of rows, longer than the cup, ſlightly joined together by their claws.

CHIVES. Threads numerous, hair-like, the length of the cup. Tips laying on the threads.

POINTAL. Seed-bud beneath, with five obtuſe angles. Shafts moſtly five, awl-ſhaped, upright, and a little bent outwards. Summits ſimple.

SEED-VESSEL. A fleſhy capſule, nearly round, the cells anſwering to the number of the chives.

SEEDS many, nearly round.

SPECIFIC CHARACTER.

Meſembryanthemum foliis amplexicaulibus, glaberrimis, ſpathulatis; pedunculis longitudine foliorum; calycibus hemiſphæricis; corollis luteis.

Fig Marygold with leaves embracing the ſtem, very ſmooth, and ſpatula-ſhaped; the footſtalks the length of the leaves; cups hemiſpherical; bloſſoms yellow.

REFERENCE TO THE PLATE.

1. A Seed-bud; the Bloſſom, Cup and Chives, cut off, the Pointals remaining.
2. The ſame, with the Cup and Chives.

As the extreme brilliancy of this plant cannot be done juſtice to in painting, we muſt reſt ſatisfied with having done our beſt; every perſon in the leaſt acquainted with the art, muſt know, that in yellow the ſhining colour exiſting in nature cannot be retained in a drawing. This ſpecies is annual, and according to the Kew Catalogue, was introduced to the royal gardens by Mr. F. Maſſon in the year 1787. The ſeeds ſhould be ſown on a hotbed in the month of February, and by the end of Auguſt the plants will flower, and continue to bloſſom till the end of October; never failing to perfect their ſeeds.

Boronia pinnata

Pub.d as the Act directs 1st
by H. Bradwell & Norfolk

PLATE 14TH

BORONIA PINNATA

Hawthorn-leaved Boronia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Linn. Syst. Veg. Mant.

GENERIC CHARACTER.

CALYX. Perianthium quadripartitum; laciniis acutis, persistentibus.

COROLLA. Petala quatuor, ovata, obtusa.

Nectarium coronæ floralis, excavatum, glandulosum.

STAMINA. Filamenta octo, plana, ciliata, insertata, receptaculo inserta. Anthræ infra apicem filamentorum pedicellatæ, incumbentes.

PISTILLUM. Germen superum, ovatum, quadrisulcatum. Stylus brevissimus, simplex. Stigma capitatum, glabrum, sulcatum.

PERICARPIUM. Capsulæ quatuor, ovato-acuminatæ, compressæ, margine introrsum coalitæ, apicibus distantibus, intra superiori dehiscentes, bivalves.

SEMINA solitaria sæpius, nitida, reniformia, arillata.

SPECIFIC CHARACTER.

Boronia foliis impari-pinnatis, integerrimis; pedunculis axillaribus, dichotomis, flexuosis; apice obtusis, glandulosis.

REFERENCES.

1. The Sarpalemon, [illegible]
2. The Chives, [illegible]
3. One Class, [illegible]
4. The Pelvis, [illegible]

THIS is the only species yet in our gardens of [illegible] South Wales, first named, described, [illegible] *Natural History by Dr. J. E. Smith, F. R. S.* [illegible] and faithful servant, who by his assiduity in [illegible] usual considerations, richer, on learning, [illegible] his heart, than what his distinguished [illegible] seat in this kingdom. In the [illegible] he had resigned him to Dr. [illegible] Greece; where, at Athens, [illegible] long survive him.

The Boronia pinnata has [illegible] flowers, which appear about February, and [illegible] it grows to a shrub of the height of [illegible] has not hitherto perfected its seeds in the [illegible] flourishes most in light sandy peat. The specimen was taken from a plant which flowered last year, in the nursery of Messrs. Lee and Kennedy, Hammersmith, where it was raised from seeds [illegible]

Boronia pinnata

Pub.d as the Act directs 1st
by H. Robinson Penzance

PLATE LVIII.

BORONIA PINNATA.

Hawthorn-ſcented Boronia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quadripartitum; laciniis acutis, perſiſtentibus.

COROLLA. Petala quatuor, ovata, ſeſſilia.

Nectarium coronæ forma, excavatum, glanduloſum.

STAMINA. Filamenta octo, plana, ciliata, incurvata, receptaculo inſerta. Antheræ infra apicem filamentorum pedicillatæ, incumbentes.

PISTILLUM. Germen ſuperum, conicum, quadriſulcatum. Stylus breviſſimus, ſimplex. Stigma capitatum, glabrum, ſulcatum.

PERICARPIUM. Capſulæ quatuor, ovato-acuminatæ, compreſſæ, margine introrſum coalitæ, apicibus diſtantibus, ſutra ſuperiori dehiſcentes, bivalves.

SEMINA ſolitaria ſæpius, nitida, reniformia, arillata.

EMPALEMENT. Cup with four diviſions; ſegments ſharp pointed, and remaining.

BLOSSOM. Petals four, egg-ſhaped, fitting cloſe to the cup.

Honey-cup of the ſhape of a crown, hollowed, and glandular.

CHIVES. Eight threads, flat, fringed, turned inwards, and fixed into the receptacle. Tips fixed below the ends on the inſide of the threads, on ſhort foot-ſtalks, and lying on them.

POINTAL. Seed-bud above, conical, and four-furrowed. Shaft very ſhort, and ſimple. Summit headed, ſmooth, and furrowed.

SEED-VESSEL. Capſules four, of a pointed egg-ſhape, flattened, joined by the interior edge, the points ſtanding ſeparate, ſplitting from the upper ſuture, two-valved.

SEEDS moſtly ſolitary, ſhining, kidney-ſhaped, and covered with an elaſtic coat.

SPECIFIC CHARACTER.

Boronia foliis impari-primatis, integerrimis; pedunculis axillaribus, dichotomis; filamentis apice obtuſis, glanduloſis.

Boronia with leaves abruptly winged, entire; flower-ſtalks growing from the baſe of the leaves, forked; end of the threads blunt, and glandular.

REFERENCE TO THE PLATE.

1. The Empalement, (natural ſize).
2. The Chives, and Pointal.
3. One Chive, (magnified).
4. The Pointal, and Honey-cup, (natural ſize).

THIS is the only ſpecies yet in our gardens, of a moſt beautiful new genus of plants, natives of New South Wales; firſt named, deſcribed, and with three other ſpecies, figured in the *Tracts relating to Natural Hiſtory by Dr. J. E. Smith, F. R. S. P. L. S. &c.* Thus eternizing the name of an eſteemed and faithful ſervant, who by his ardour in botanical purſuits, had merited the honour; rejecting the uſual conſiderations, riches, or learning, does the Dr. no leſs credit as a man, for the kindneſs of his heart, than what his diſtinguiſhed talents have gained him, by placing him in the firſt botanical ſeat in this kingdom. In the ſhort hiſtory of the unfortunate end of Borone, the Dr. informs us, he had reſigned him to Dr. Sibthorpe, as a moſt fit perſon to attend him in his laſt journey through Greece; where, at Athens, he met his death, by an accidental fall from a balcony: the Dr. did not long ſurvive him.

The Boronia pinnata has much of the aromatic flavour of Dioſma in its leaves and ſtem; the flowers, which appear about February, and continue till May, have the ſcent of the Hawthorn flower; it grows to a ſhrub of the height of eighteen inches, is propagated with difficulty by cuttings, and has not hitherto perfected its ſeeds in this country; requiring a dry ſituation in the greenhouſe, and flouriſhes moſt in light ſandy peat. The figure was taken from a plant which flowered laſt year, in the nurſery of Meſſrs. Lee and Kennedy, Hammerſmith, where it was raiſed from ſeeds in 1794.

Ixia fistulosa

PLATE LIX.

IXIA FISTULOSA.

Hollow-leaved Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens æqualis. Stigmata tria, erectiuſculo-patula.	BLOSSOM ſix petals, ſpreading, equal. Summits three, nearly upright, and ſpreading. See IXIA REFLEXA. Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis linearibus, fiſtuloſis; floribus ſecundis, noctu fragrantes; bulbus campanulatus, margine acuto-fibroſo.	Ixia with linear, hollow leaves, flowers pointing one way, and fragrant by night; bulb bell-ſhaped, the margin edged with ſharp fibres.

REFERENCE TO THE PLATE.

1. The outer ſpath of the Empalement.
2. The inner ſpath of the Empalement.
3. A Flower cut open.
4. The Pointal, and Chives.
5. The Pointal.

THIS Ixia is of a very delicate nature, the root being ſubject to rot ſoon after the flower decays, if not then removed from its pot, and dried; the flowers expand about four o'clock in the afternoon, and are ſo extremely fragrant that they are ſmelt at a conſiderable diſtance. For this plant, our gardens are indebted to the Dowager Lady De Clifford, who received the bulbs from the Cape of Good Hope in the year 1794. The drawing was made from a plant, which flowered laſt year at Meſſrs. Lee and Kennedy's, Hammerſmith, who had ſome of them in a preſent from her ladyſhip. Like other Ixias, it ſhould be planted in light peat, and watered but ſeldom; its propagation is but ſlow, as ſeldom more than one new bulb is produced, upon the decay of the old one.

Ixia fistulosa

PLATE LIX.

IXIA FISTULOSA.

Hollow-leaved Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens æqualis. Stigmata tria, erectiuſculo-patula.	BLOSSOM ſix petals, ſpreading, equal. Summits three, nearly upright, and ſpreading. See IXIA REFLEXA. Plate XIV.

SPECIFIC CHARACTER.

Ixia foliis linearibus, fiſtuloſis; floribus ſecundis, noctu fragrantes; bulbus campanulatus, margine acuto-fibroſo.	Ixia with linear, hollow leaves; flowers pointing one way, and fragrant by night; bulb bell-ſhaped, the margin edged with ſharp fibres.

REFERENCE TO THE PLATE.

1. The outer ſpath of the Empalement.
2. The inner ſpath of the Empalement.
3. A Flower cut open.
4. The Pointal, and Chives.
5. The Pointal.

THIS Ixia is of a very delicate nature, the root being ſubject to rot ſoon after the flower decays, if not then removed from its pot, and dried; the flowers expand about four o'clock in the afternoon, and are ſo extremely fragrant that they are ſmelt at a conſiderable diſtance. For this plant, our gardens are indebted to the Dowager Lady De Clifford, who received the bulbs from the Cape of Good Hope in the year 1794. The drawing was made from a plant, which flowered laſt year at Meſſrs. Lee and Kennedy's, Hammerſmith, who had ſome of them in a preſent from her ladyſhip. Like other Ixias, it ſhould be planted in light peat, and watered but ſeldom; its propagation is but ſlow, as ſeldom more than one new bulb is produced, upon the decay of the old one.

Geranium punctatum

GERANI[illegible] PUNCTATUM.

Dotted-[illegible] Geranium.

CLASS XVI. ORDER [illegible] *Syſtem. Veget.* 1781.

MONODELPHIA DECANDR[illegible] [illegible] Ten Chives.

ESSENTIAL GENER[illegible]

MONOGYNA. Stigmata 5. Fructus roſtratus, 5-coccus.

C[illegible] Fruit furniſhed [illegible] berries.

S[illegible] Plate XII.

SPECIFIC CHARAC[illegible]

Geranium foliis radicalibus; floribus umbellatis, diandris; petalis duobus ſuperioribus punctatis; ſtigmata quatuor.

Geranium [illegible] from the root, flowe[illegible] two fertile chives, the tw[illegible] ſtamens ſtanding doubled, fum mits fou[illegible]

REFERENCE TO THE PLATE.

1. The Empalement cut open, with the Chives and Pointal left on [illegible]
2. The Threads cut open, to ſhew their number, and the ſituatio[illegible] (magnified).
3. The Pointal, (magnified).

PERHAPS amongſt plants, there is no genus exhibits ſuch varied and numerous [illegible] one, in which the ſpecies are ſo allied in natural character, or ſo unfavourable [illegible] ſome deviation from general rules was not allowed: the founder thought [illegible] and we implicitly follow him. Thus far we have thought proper to extenuate [illegible] for ſhould we follow Monſ. L'Heritier, (as moſt of the modern correctors of Linnæus [illegible] new genus muſt inevitably be formed for this plant. Upon a cloſe examination of the [illegible] a dozen different plants, invariably, only ſeven threads were found; two only with the [illegible] placed immediately behind the ſhaft, whoſe ſummits were but four. This Geranium is [illegible] and requires a dry-ſtove heat to make it flower, which it will readily do with ſuch aſſiſtance [illegible] about the beginning of which month, this year, a drawing was made from a plant in the [illegible] Meſſrs. Lee and Kennedy. The roots or bulbs of this plant were firſt received in England by [illegible] Johnſon, Eſq. in the year 1794, in whoſe magnificent conſervatory at Havod they flowered the [illegible] year.

PLATE LX.

GERANIUM PUNCTATUM.

Dotted-flowered Geranium.

CLASS XVI. ORDER IV. *Suppl. Syſtem. Veget.* 1781.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus roſtratus, 5-coccus.	ONE POINTAL. Five ſummits. Fruit furniſhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium foliis radicalibus; floribus umbellatis, diandris; petalis duobus ſuperioribus punctatis; ſtigmata quatuor.	Geranium with leaves growing from the root; flowers grow in umbels, two fertile chives; the two upper petals being dotted; ſummits four.

REFERENCE TO THE PLATE.

1. The Empalement cut open, with the Chives and Pointal left on, (natural ſize).
2. The Threads cut open, to ſhew their number, and the ſituation of the two fertile ones, (magnified).
3. The Pointal, (magnified).

PERHAPS amongſt plants, there is no genus exhibits ſuch varied and numerous ſpecies as Geranium; no one, in which the ſpecies are ſo allied in natural character, or ſo unfavourable to the ſexual ſyſtem, if ſome deviation from general rules was not allowed: the founder thought ſuch licence neceſſary, and we implicitly follow him. Thus far we have thought proper to extenuate in the preſent inſtance; for ſhould we follow Monſ. L'Heritier, (as moſt of the modern correctors of Linnæus have done,) a new genus muſt inevitably be formed for this plant. Upon a cloſe examination of the flowers, from a dozen different plants, invariably, only ſeven threads were found; two only with tips, and thoſe placed immediately behind the ſhaft, whoſe ſummits were but four. This Geranium is rather tender, and requires a dry-ſtove heat to make it flower, which it will readily do with ſuch aſſiſtance, in April; about the beginning of which month, this year, a drawing was made from a plant in the collection of Meſſrs. Lee and Kennedy. The roots or bulbs of this plant were firſt received in England by Thomas Johnes, Eſq. in the year 1794, in whoſe magnificent conſervatory at Havod they flowered the next year.

Aster dentatus

PLATE LXI.

ASTER DENTATUS.

Toothed-leaved Starwort.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. *Communis* squamoso-imbricatus; squamis interioribus apice proximulis.

COROLLA. Compositæ radiatæ; corollulæ hermaphroditæ numerosæ in disco; femineæ ligulatæ, decem plures in radio.

Propria hermaphroditi infundibuliformis; limbo quinquefido, patulo.

Feminæ ligulata, lanceolata, tridentata.

STAMINA. Filamenta quinque, capillaria, brevissima. Anthera cylindracea, tubulosa.

PISTILLUM. Hermaphroditis; germen oblongum. Stylus filiformis, longitudine staminum. Stigma bifidum, patens.

Femineis; germen oblongum. Stylus filiformis, longitudine hermaphroditi. Stigmata duo, oblonga, revoluta.

PERICARPIUM nullum. Calyx vix mutatus.

SEMINA. Hermaphroditis solitaria, oblonga, ovata. Pappus pilosus.

Femineis foliis hermaphroditis.

RECEPTACULUM nudum, planiusculum.

EMPALEMENT. *Common*, scales tiled; the inner scales standing a little out at the points.

BLOSSOM. Compound, radiate; florets with chives and pointals, many in the center; florets with only pointals, ligulate, ten or more in the circumference.

Individuals with chives and pointals, funnel-shaped; border with five-clefts, spreading.

Individuals with only pointals, ligulate, spear-shaped, with three teeth.

CHIVES. Five hair-like threads, very short. Tips forming a hollow cylinder.

POINTAL. To those with chives and pointals, seed-bud oblong. Shaft thread-shaped, the length of the chives. Summit two-cleft, expanding.

Seed-bud to those with pointals only, oblong. Shaft thread-shaped, the length of the hermaphrodites. Summits two, oblong, bent back.

SEED-VESSEL none. Cup scarcely changing.

SEEDS to the hermaphrodites solitary, oblong, egg-shaped. Feather hairy.

Females the same as hermaphrodites.

RECEPTACLE naked, almost flat.

SPECIFIC CHARACTER.

Aster caulis fruticosus; foliis dentatis, subtus ferrugineis; floribus terminalibus; pedunculis unifloris, bracteatis.

Starwort with a shrubby stem; leaves toothed, iron colour beneath; flowers terminate the branches; fruit-stalks having but one flower, with floral leaves.

REFERENCE TO THE PLATE.

1. A Floret of the circumference.
2. The Pointal of the preceding.
3. A Floret of the center, (magnified).
4. The Chives and Pointal of the preceding, (magnified).
5. The Shaft and Summits of the same, (magnified).

This plant cannot undoubtedly be considered as amongst the most beautiful of the vegetable productions of New Holland; but nevertheless, from the continuance of its flowering, is very valuable as a greenhouse plant, as it begins to expand its blossoms about December, and from that time till August is seldom seen without flowers. It is a low-growing shrub, seldom exceeding a foot in height, and very branching. Like most plants from Botany Bay, it delights in a light sandy soil, easily propagated by cuttings, and seeds. The drawing was made from a plant in the nursery of Messrs. Lee and Kennedy, who raised it first from seeds in the year 1788.

Aster dentatus

PLATE LXI.

ASTER DENTATUS.

Toothed-leaved Starwort.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. *Communis* ſquamoſo-imbricatus; ſquamis interioribus apice prominulis.

COROLLA. Compoſita radiata; corollulæ hermaphroditæ numeroſæ in diſco; femineæ ligulatæ, decem plures in radio.

Propria hermaphroditi infundibuliformis; limbo quinquefido, patulo.
Femineæ ligulata, lanceolata, tridentata.

STAMINA. Filamenta quinque, capillaria, breviſſima. Anthera cylindracea, tubuloſa.

PISTILLUM. Hermaphroditis; germen oblongum. Stylus filiformis, longitudine ſtaminum. Stigma bifidum, patens.

Femineis; germen oblongum. Stylus filiformis, longitudine hermaphroditi. Stigmata duo, oblonga, revoluta.

PERICARPIUM nullum. Calyx vix mutatus.

SEMINA. Hermaphroditis ſolitaria, oblonga, ovata. Pappus piloſus.
Femineis ſimilia hermaphroditis.

RECEPTACULUM nudum, planiuſculum.

EMPALEMENT. *Common,* ſcales tiled; the inner ſcales ſtanding a little out at the points.

BLOSSOM. Compound, radiate; florets with chives and pointals, many in the center; florets with only pointals, ligulate, ten or more in the circumference.
Individuals with chives and pointals, funnel-ſhaped; border with five-clefts, ſpreading.
Individuals with only pointals, ligulate, ſpear-ſhaped, with three teeth.

CHIVES. Five hair-like threads, very ſhort. Tips forming a hollow cylinder.

POINTAL. To thoſe with chives and pointals, ſeed-bud oblong. Shaft thread-ſhaped, the length of the chives. Summit two-cleft, expanding.
Seed-bud to thoſe with pointals only, oblong. Shaft thread-ſhaped, the length of the hermaphrodites. Summits two, oblong, bent back.

SEED-VESSEL none. Cup ſcarcely changing.

SEEDS to the hermaphrodites ſolitary, oblong, egg-ſhaped. Feather hairy.
Females the ſame as hermaphrodites.

RECEPTACLE naked, almoſt flat.

SPECIFIC CHARACTER.

Aſter caulis fruticoſus; foliis dentatis, ſubtus ferrugineis; floribus terminalibus; pedunculis unifloris, bracteatis.

Starwort with a ſhrubby ſtem; leaves toothed, iron colour beneath; flowers terminate the branches; fruit-ſtalks having but one flower, with floral leaves.

REFERENCE TO THE PLATE.

1. A Floret of the circumference.
2. The Pointal of the preceding.
3. A Floret of the center, (magnified).
4. The Chives and Pointal of the preceding, (magnified).
5. The Shaft and Summit of the ſame, (magnified).

THIS plant cannot undoubtedly be conſidered as amongſt the moſt beautiful of the vegetable productions of New Holland; but nevertheleſs, from the continuance of its flowering, is very deſirable as a greenhouſe plant, as it begins to expand its bloſſoms about December, and from that time till Auguſt is ſeldom ſeen without flowers. It is a low-growing ſhrub, ſeldom exceeding a foot in height, and very branching. Like moſt plants from Botany Bay, it delights in a light ſandy peat ſoil, is eaſily propagated by cuttings, and ſeeds. The drawing was made from a plant in the nurſery of Meſſrs. Lee and Kennedy, who raiſed it firſt from ſeeds in the year 1793.

Gladiolus graminaus.

PLATE LXII.

GLADIOLUS GRAMINEUS.

Grass-like Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens.	BLOSSOM with six divisions, gaping.
STAMINA adscendentia.	CHIVES ascending.
	See GLADIOLUS LONGIFLORUS. Plate V.

SPECIFIC CHARACTER.

Gladiolus polystachyus, scapo laxo, spicis capillaribus, flexuosis; foliis ensiformibus; corollae sexpartitae, absque tubo.	Gladiolus with many spikes, upon a flexible flower stem, spikes hair-like, growing zig-zag; leaves sword-shape; blossom of six divisions without a tube.

REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. The Seed-bud, Chives, and Pointal (magnified).
3. The Pointal, (magnified).

This species of Gladiolus has been described by Thunberg, and from him by Linnaeus, in his Suppl. Plant. p. 98, under the specific name it here bears. It is a little straining on the genus to introduce this species into it; as it is deficient in most of the essential characters; having a blossom without a tube, and the petals equal. From the Kew Catalogue we learn it was introduced in the year 1787, by Mr. F. Masson, to the royal gardens; is there said to flower most part of the year: a plant of such character is most desirable, but unfortunately we have never seen it in blossom but at the usual season for the flowers of this tribe; that is, from April till June. The capsules of this plant bear a strong resemblance to those of the Euonymus: generally perfecting their seeds. It is a very hardy bulb, blows early, and may be kept in a pit protected from the frost.

PLATE LXII.

GLADIOLUS GRAMINEUS.

Grafs-like Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpartita, ringens. STAMINA adfcendentia.	BLOSSOM with fix divifions, gaping. CHIVES afcending. See GLADIOLUS LONGIFLORUS. Plate V.

SPECIFIC CHARACTER.

Gladiolus polyftachyus, fcapo laxo, fpicis capillaribus, flexuofis; foliis enfiformibus; corollæ fexpartitæ, abfque tubo.	Gladiolus with many fpikes, upon a flexible flower ftem, fpikes hair-like, growing zigzag; leaves fword-fhape; bloffom of fix divifions, without a tube.

REFERENCE TO THE PLATE.

1. The two fheaths of the Empalement.
2. The Seed-bud, Chives, and Pointal (magnified).
3. The Pointal, (magnified).

THIS fpecies of Gladiolus has been defcribed by Thunberg, and from him by Linnæus, in his Suppl. Plant. p. 95, under the fpecific name it here bears. It is a little ftraining on the genus to introduce this fpecies into it; as it is deficient in moft of the effential characters; having a bloffom without a tube, and the petals equal. From the Kew Catalogue we learn it was introduced in the year 1787, by Mr. F. Maffon, to the royal gardens; is there faid to flower moft part of the year: a plant of fuch character is moft defirable, but unfortunately we have never feen it in bloffom but at the ufual feafon for the flowers of this tribe; that is, from April till June. The capfules of this plant bear a ftrong refemblance to thofe of the Euonymus: generally perfecting their feeds. It is a very hardy bulb, blows early, and may be kept in a pit protected from the froft.

Usteria scandens.

Published as the Act directs July 1st 1799
by H. Andrews N° 5 Chapel Bridge

PLATE LXIII.

USTERIA SCANDENS.

Climbing Usteria.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum, persistens; laciniis erectis, subulatis.

COROLLA. Monopetala, ringens, tubus ventricosus, basi arcta; limbus bilabiatus, labium *superius* bifidum, rotundatum, reflexum; labium *inferius* trifidum, laciniis rotundatis, intermedia minore.

STAMINA. Filamenta quatuor, sub labio superiori recondita, quorum duo lateralia longiora, fundo corollæ inserta, basi incrassata, lanata, apice incurvata. Antheræ erectæ, versatiles, approximatæ.

PISTILLUM. Germen sub-rotundum. Stylus filiformis, persistens; longitudine staminum. Stigma obtusum.

PERICARPIUM. Capsula sub-rotunda, bilocularis, calyce longior, obtusa.

SEMINA plurima, sub-rotunda, scabrida.

EMPALEMENT. Cup one leaf, five divisions, permanent; segments upright, and awl-shaped.

BLOSSOM. One leaf, gaping, tube swelled out in the middle, and pinched in at the base; border with two lips, the *upper* divided into two lobes, which are rounded, and bent back; the *lower* has three divisions, the segments rounded, the middle one the smallest.

CHIVES. Threads four, hid under the upper lip, of which the two side ones are the longest, fixed into the bottom of the blossom, thickened at the base, woolly, and turned inward at the point. Tips upright, slightly fixed by the middle, and approaching.

POINTAL. Seed-bud nearly round. Shaft thread-shaped, remaining the length of the chives. Summit blunt.

SEED-VESSEL. Capsule nearly round, of two cells, longer than the cup, blunt ended.

SEEDS many, almost round, and very rough.

SPECIFIC CHARACTER.

Usteria caulis volubilis; foliis hastatis, floribus solitariis, purpureis; pedunculis tortis, longissimis.

Usteria with a climbing stem; leaves halbert-shaped; flowers solitary, and purple; fruit-stalks twisted, very long.

REFERENCE TO THE PLATE.

1. A Blossom cut open, to expose the situation of the Chives.
2. One Chive, (magnified).
3. The Pointal, (natural size).
4. The Empalement, and Seed-vessel nearly ripe, of its natural size.

This is one of those plants raised in the year 1797 by the Marchioness of Bute at her charming [illegible] from Seeds, sent to her Ladyship from Spain by Dr. Ortega. It is a native of Mexico, North America, and will live through our winters with the protection of a greenhouse, to which it forms a beautiful ornament as a creeper, flowering from May till September. It does not appear to be a hardy plant; it easily propagated by cuttings, or from seeds, which are ripened by November, in a moderate growing bed in July and August.

Usteria scandens.

Pub. for the Bot. Reg. by Henry July 1, 1829
by H. Mackenzie N. Hagelstein

PLATE LXIII.

USTERIA SCANDENS.

Climbing Usteria.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquepartitum, persistens; laciniis erectis, subulatis.

COROLLA. Monopetala, ringens, tubus ventricosus, basi arcta; limbus bilabiatus, labium *superius* bifidum, rotundatum, reflexum; labium *inferius* trifidum, laciniis rotundatis, intermedia minore.

STAMINA. Filamenta quatuor, sub labio superiori recondita, quorum duo lateralia longiora, fundo corollæ inserta, basi incrassata, lanata, apice incurvata. Antheræ erectæ, versatiles, approximatæ.

PISTILLUM. Germen sub-rotundum. Stylus filiformis, persistens; longitudine staminum. Stigma obtusum.

PERICARPIUM. Capsula sub-rotunda, bilocularis, calyce longior, obtusa.

SEMINA plurima, sub-rotunda, scabrida.

EMPALEMENT. Cup one leaf, five divisions, permanent; segments upright, and awl-shaped.

BLOSSOM. One leaf, gaping, tube swelled out in the middle, and pinched in at the base; border with two lips, the *upper* divided into two lobes, which are rounded, and bent back; the *lower* has three divisions, the segments rounded, the middle one the smallest.

CHIVES. Threads four, hid under the upper lip, of which the two side ones are the longest, fixed into the bottom of the blossom, thickened at the base, woolly, and turned inward at the point. Tips upright, slightly fixed by the middle, and approaching.

POINTAL. Seed-bud nearly round. Shaft thread-shaped, remaining, the length of the chives. Summit blunt.

SEED-VESSEL. Capsule nearly round, of two cells, longer than the cup, blunt ended.

SEEDS many, almost round, and very rough.

SPECIFIC CHARACTER.

Usteria caulis volubilis; foliis hastatis; floribus solitariis, purpureis; pedunculis tortis, longissimis.

Usteria with a climbing stem; leaves halbert-shaped; flowers solitary, and purple; fruit-stalks twisted, very long.

REFERENCE TO THE PLATE.

1. A Blossom cut open, to expose the situation of the Chives.
2. One Chive, (magnified).
3. The Pointal, (natural size).
4. The Empalement, and Seed-vessel nearly ripe, of its natural size.

THIS is another of those plants raised in the year 1797 by the Marchioness of Bute, at her charming little villa, Brompton, from seeds, sent to her ladyship from Spain by Dr. Ortega. It is a native of Mexico, North America, and will live through our winters with the protection of a greenhouse, to which it forms a beautiful ornament as a creeper; flowering from May till September, but does not appear to be a long-lived plant; is easily propagated by cuttings, or from seeds, which are ripened by November, or earlier; thriving best in light rich earth.


Paeonia albiflora.
1
2
3
4

PLATE LXIV.

PÆONIA ALBIFLORA.

White Pæony.

CLASS XIII. ORDER II.

POLYANDRIA DIGYNIA. Many Chives. Two Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, parvum, persistens; foliolis subrotundis, concavis, reflexis, inæqualibus magnitudine et situ.

COROLLA. Petala quinque, subrotunda, concava, basi angustiora, patentia, maxima.

STAMINA. Filamenta numerosa, capillaria. Antheræ oblongæ, quadrangulæ, erectæ, quadriloculares, magnæ.

PISTILLUM. Germina duo, ovata, erecta, tomentosa. Styli nulli. Stigmata compressa, obtusa, colorata.

PERICARPIUM. Capsulæ oblongæ, acuminatæ, reflexo-patentes, tomentosæ, uniloculares, univalves, longitudinaliter introrsum dehiscentes.

SEMINA plura, ovalia, nitida, colorata, suturæ dehiscenti affixa.

ENVALEMENT. Cup five-leaved, small, and remaining; leaves roundish, concave, bent back, and unequal both in size and situation.

BLOSSOM. Petals five, roundish, concave, smaller at the base, spreading, and very large.

CHIVES. Threads numerous, and hair-like. Tips oblong, four-sided, upright, with four cells, and large.

POINTAL. Seed-buds two, egg-shaped, upright, and downy. Shafts none. Summits flattened, oblong, blunt, and coloured.

SEED-VESSEL. Capsules oblong, tapered, bent back, and spreading, downy, of one cell, and one valve, splitting lengthways from the inner part.

SEEDS many, oval, shining, coloured, and fixed to the suture where it splits.

SPECIFIC CHARACTER.

Pæonia foliis lobatis, nitentibus; corollis albidis; germinibus ternis, vel quaternis.

Pæony with leaves divided into lobes, and shining; blossoms white; seed-buds three, or four.

REFERENCE TO THE PLATE.

1. The Envalement, Chives, and Pointals.
2. A Thread and its Tip (magnified).
3. The Seed-vessels.
4. A Seed.

THIS new species of Pæony is a native of Mongol Tartary, and the parts adjacent; of course, is sufficiently hardy to endure our severest winters. It has been described by Gmelin, in his Flora Sibirica; and figured by Dr. Pallas, in his Flora Rossica, under the specific title it here bears. J. Bell, Esq. of Isleworth, procured some plants of it from St. Petersburg, about the year 1791; where it had been introduced by Dr. Pallas some time before, when on his travels through Tartary. It forms a handsome, upright growing, herbaceous plant; the flowers standing much above the foliage, are much handsomer before they are expanded, than when fully so; as the under part of the petals are tinged with red, which contrasted with the purity of the white of the other parts, renders them at that period extremely beautiful. The figure was taken at the nursery of Messrs. Lee and Kennedy, this year, in the month of June, during which month it is in perfection. Like the rest of the Pæonies, it is easily propagated by the root; requiring little attention in its cultivation, as it will live in almost any soil or situation.

PLATE LXIV.

PÆONIA ALBIFLORA.

White Pæony.

CLASS XIII. ORDER II.

POLYANDRIA DIGYNIA. Many Chives. Two Pointals.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, parvum, perſiſtens; foliolis ſubrotundis, concavis, reflexis, inequalibus magnitudine et ſitu.

COROLLA. Petala quinque, ſubrotunda, concava, baſi anguſtiora, patentia, maxima.

STAMINA. Filamenta numeroſa, capillaria. Antheræ oblongæ, quadrangulæ, erectæ, quadriloculares, magnæ.

PISTILLUM. Germina duo, ovata, erecta, tomentoſa. Styli nulli. Stigmata compreſſa, obtuſa, colorata.

PERICARPIUM. Capſulæ oblongæ, acuminatæ, reflexo-patentes, tomentoſæ, uniloculares, univalves, longitudinaliter introrſum dehiſcentes.

SEMINA plura, ovalia, nitida, colorata, ſaturæ dehiſcenti affixa.

EMPALEMENT. Cup five-leaved, ſmall, and remaining; leaves roundiſh, concave, bent back, and unequal both in ſize and ſituation.

BLOSSOM. Petals five, roundiſh, concave, ſmaller at the baſe, ſpreading, and very large.

CHIVES. Threads numerous, and hair-like. Tips oblong, four-ſided, upright, with four cells, and large.

POINTAL. Seed-buds two, egg-ſhaped, upright, and downy. Shaft none. Summits flattened, oblong, blunt, and coloured.

SEED-VESSEL. Capſules oblong, tapered, bent back, and ſpreading, downy, of one cell, and one valve, ſplitting lengthways from the inner part.

SEEDS many, oval, ſhining, coloured, and fixed to the ſuture where it ſplits.

SPECIFIC CHARACTER.

Pæonia foliis lobatis, nitentibus; corollis albidis; germinibus ternis, vel quaternis.

Pæony with leaves divided into lobes, and ſhining; bloſſoms white; ſeed-buds three, or four.

REFERENCE TO THE PLATE.

1. The Empalement, Chives, and Pointals.
2. A Thread and its Tip (magnified).
3. The Seed-veſſels.
4. A Seed.

THIS new ſpecies of Pæony is a native of Mongol Tartary, and the parts adjacent; of courſe, is ſufficiently hardy to endure our ſevereſt winters. It has been deſcribed by Gmelin, in his Flora Sibirica; and figured by Dr. Pallas, in his Flora Roſſica, under the ſpecific title it here bears. J. Bell, Eſq. of Iſleworth, procured ſome plants of it from St. Peterſburg, about the year 1791; where it had been introduced by Dr. Pallas ſome time before, when on his travels through Tartary. It forms a handſome, upright growing, herbaceous plant; the flowers ſtanding much above the foliage, are much handſomer before they are expanded, than when fully ſo; as the under part of the petals are tinged with red, which contraſted with the purity of the white of the other parts, renders them at that period extremely beautiful. The figure was taken at the nurſery of Meſſrs. Lee and Kennedy, this year, in the month of June, during which month it is in perfection. Like the reſt of the Pæonies, it is eaſily propagated by the root; requiring little attention in its cultivation, as it will live in almoſt any ſoil or ſituation.

Ophrys bifolia.

PLATE LXV.

OPHRYS LILIFOLIA.

Lily-leaved Ophrys.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathae duae. Spatha simplex. Perianthium nullum.

COROLLA. Petala quinque oblonga, fornicata conniventia, aequalia, duo eorum exteriora.

Nectarium petalis longius, dependens, apice tantum carinatum.

STAMINA. Filamenta duo, brevissima, petalis insidentia. Antherae crassae, totae dorso interiore nectarii.

PISTILLUM. Germen oblongum, compressum, inferum. Stylus marginali interiori adnatus. Stigma obtusum.

PERICARPIUM. Capsula foliosa, unilocularis, ventris, striata, trivalvis, multisperma, angulis carinatis dehiscens.

SEMINA numerosa, fusiformia.

RECEPTACULUM lineare, ramosum longitudine valvae pericarpii.

SPECIFIC CHARACTER.

Ophrys bulbis subrotundis; scapo nudo; foliis ovato-oblongis, radicalibus; nectarii labio integro; petalis dorsalibus linearibus.

Bulbus subrotundus, fibris radicalibus.

Scapus nudus, 1 pedalis.

Folia radicalia, ovata, oblonga, obtusa, nervosa, sessilia, 3 vel 4 in numero, erecta, longitudine scapi, ad basin vaginantia.

Spatha simplex, lanceolata, acuta, longitudine pedunculi.

Flos unus, ad apicem scapi, albus, odoratissimus.

Perianthium nullum.

Corolla: Petala sex, oblonga, approximata, aequalia, duo eorum exteriora, fornicata, conniventia, reflexa.

Nectarium petalis longius, dependens, apice tantum carinatum.

Stamina: Filamenta duo, brevissima, petalis insidentia. Antherae crassae, totae dorso interiore nectarii.

Pistillum: Germen oblongum, compressum, inferum. Stylus marginali interiori adnatus. Stigma obtusum.

Pericarpium: Capsula foliosa, unilocularis, trivalvis, striata, multisperma, angulis carinatis dehiscens.

Semina numerosa, fusiformia.

Receptaculum lineare, ramosum, longitudine valvae pericarpii.

Radix: Bulbus subrotundus, fibris radicalibus.

Folia radicalia, ovata, oblonga, obtusa, nervosa, sessilia, 3 vel 4 in numero, erecta, longitudine scapi, ad basin vaginantia.

Scapus nudus, 1 pedalis.

Flos unus, ad apicem scapi, albus, odoratissimus.

Perianthium nullum.

Corolla: Petala sex, oblonga, approximata, aequalia, duo eorum exteriora, fornicata, conniventia, reflexa.

Nectarium petalis longius, dependens, apice tantum carinatum.

Stamina: Filamenta duo, brevissima, petalis insidentia. Antherae crassae, totae dorso interiore nectarii.

Pistillum: Germen oblongum, compressum, inferum. Stylus marginali interiori adnatus. Stigma obtusum.

Pericarpium: Capsula foliosa, unilocularis, trivalvis, striata, multisperma, angulis carinatis dehiscens.

Semina numerosa, fusiformia.

Receptaculum lineare, ramosum, longitudine valvae pericarpii.

SPECIFIC CHARACTER.

Ophrys bulbis subrotundis; scapo nudo; foliis ovato-oblongis, radicalibus; nectarii labio integro; petalis dorsalibus linearibus.

Ophrys with roundish roots; stem naked; leaves oblong, egg-shaped, proceeding from the root; the two back petals linear.

EXPLANATION OF THE PLATE.

1. The Honey-cup cut off the Nectary.
2. The Seed-bed and Seeds (natural size) flying away.
3. The farina (magnified) shewn in place with the cap lifted up, to expose the parts of fructification.

GRONOVIUS, in his arrangement of the plants discovered by Mr. J. Clayton in Virginia, P. 1, page 135, has described this plant; and LINNAEUS after him, in his second edition of the Species Plantarum, page 1341, has it likewise, but though it only a large variety of a species found in marshy grounds in Sweden; however that may be, it is perfectly new to Britain, as a plant in our gardens. This species of Ophrys seems much more only to preserve than most of its congeners, as since its introduction, the bulbs have to acquire additional size, and the spikes of flowers to grow larger each year. Our drawing was taken from a plant in the extensive collection of the Right Hon. the Marquis of Blandford, Blenheim, Oxfordshire, in the year 1797, about the beginning of the month of July, having been sent the preceding year from Philadelphia, by J. Lyons, gardener to William Hamilton, Esq. of that State. It is a hardy plant, and will thrive in a sheltered border, if planted in light earth, and kept moist, is propagated not slowly by the root, which seems the only method; as the seeds are too small of all this natural order to raise them by that means.

Ophrys lilifolia

PLATE LXV.

OPHRYS LILIFOLIA.

Lily-leaved Ophrys.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spathæ vagæ. Spadix ſimplex. Perianthium nullum.

COROLLA. Petala quinque, oblonga, ſurſum conniventia, æqualia; duo horum exteriora.

Nectarium petalis longius, dependens; poſtice tantum carinatum.

STAMINA. Filamenta duo, breviſſima, piſtillo inſidentia. Antheræ erectæ, tectæ margine interiore nectarii.

PISTILLUM. Germen oblongum, contortum, inferum. Stylus margini interiori nectarii adnatus. Stigma obſoletum.

PERICARPIUM. Capſula ſubovata, trigona, obtuſa, ſtriata, trivalvis, unilocularis, angulis carinatis dehiſcens.

SEMINA numeroſa, ſcobiformia.

RECEPTACULUM lineare, adnatum ſingulæ valvulæ pericarpii.

EMPALEMENT. Sheaths ſcattered. Fruit-ſtalks ſimple. Cup none.

BLOSSOM. Five petals, oblong, approaching upwards, equal; two of them placed outwards.

Honey-cup longer than the petals, hanging down; only keeled on the back part.

CHIVES. Two threads, very ſhort, fixed to the pointal. Tips upright, covered by the inner edge of the honey-cup.

POINTAL. Seed-bud beneath, oblong, twiſted beneath. Shaft fixed to the inner edge of the honey-cup. Summit imperfect.

SEED-VESSEL. Capſule nearly egg-ſhaped, three-ſided, blunt, channelled, three-valved, and one cell, opening at the keel-ſhaped angles.

SEEDS numerous, like ſaw-duſt.

RECEPTACLE linear, growing to each valve of the ſeed-veſſel.

SPECIFIC CHARACTER.

Ophrys bulbo ſubrotundo; ſcapo nudo; foliis ovato-oblongis, radicalibus; nectarii labio integro; petalis dorſalibus linearibus.

Ophrys with roundiſh roots; ſtem naked; leaves oblong, egg-ſhaped, growing from the root; the two back petals linear.

REFERENCE TO THE PLATE.

1. The Honey-cup cut off the bloſſom.
2. The Seed-bud and Pointal (natural ſize) ſhewn ſideways.
3. The ſame (magnified) ſhewn in front, with the cap lifted up, to expoſe the parts of fructification.

GRONOVIUS, in his arrangement of the plants diſcovered by Mr. J. Clayton in Virginia, P. i, page 185, has deſcribed this plant; and Linnæus after him, in his ſecond edition of the Species Plantarum, page 1341, has it likewiſe, but thought it only a large variety of a ſpecies found in marſhy grounds in Sweden; however that may be, it is perfectly new to Britain, as a plant in our gardens. This ſpecies of Ophrys ſeems much more eaſy to preſerve than moſt of its congeners, as, ſince its introduction, the bulbs ſeem to acquire additional ſize, and the ſpikes of flowers to grow larger each year. Our drawing was taken from a plant in the extenſive collection of the Right Hon. the Marquis of Blandford, Bill-hill, Berkſhire, in the year 1797, about the beginning of the month of July; having been ſent the preceding year from Philadelphia, by J. Lyons, gardener to William Hamilton, Eſq. of that State. It is a hardy plant, and will thrive in a ſheltered border, if planted in light earth, and kept moiſt; is propagated but ſlowly by the root, which ſeems the only method; as the ſeeds are too ſmall of all this natural order to raiſe them by that means.

Gladiolus polystachious

Pubd as the Act directs Aug. 1 1797
by H. Hamond & Knight Sculpt

PLATE LXVI.

GLADIOLUS [illegible]

Branched Gladiolus.

CLASS III. [illegible]

TRIANDRIA MONOGYNIA. [illegible]

ESSENTIAL [illegible]

COROLLA 6-partita, ringens.
STAMINA adscendentia.

CHARACTER [illegible]

Gladiolus foliis falcatis; caule potrachio [illegible] rollis sub-regularibus, carneis.

REFERENCES [illegible]

1. The Empolement.
2. A Floflom cut open, [illegible]
3. The Pointil and Scopiled, [illegible]

This species of Gladiolus has been long known [illegible] mountain, at the Cape of Good Hope; Jacquin [illegible] tribe of Ixia, with the specific name of Scillaris. [illegible] hesitation in placing it under its true genus [illegible] inferoon into the tube of the floflom, [illegible] the situation of the summits behind the clives, [illegible] be. Although plentiful at the Cape, it has not been [illegible] for the first time in the year 1797, at Baldrode, [illegible] contributes much to the value of this plant is, that it [illegible] the beginning of June till the end of July; propagates [illegible] subject to rot, though not removed from the pots in which they [illegible]

PLATE LXVI.

GLADIOLUS POLYSTACHIUS.

Branching Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, ringens.	BLOSSOM of ſix diviſions, and gaping.
STAMINA adſcendentia.	CHIVES aſcending.
	See Plate XI. GLADIOLUS ROSEUS.

SPECIFIC CHARACTER.

Gladiolus foliis falcatis; caule polyſtachio; corollis ſub-regularibus, carneis.	Gladiolus with cymitar-ſhaped leaves; ſtem many branches; bloſſoms nearly regular, and fleſh colour.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom cut open, with the Chives attached.
3. The Pointal and Seed-bud, one ſummit magnified.

THIS ſpecies of Gladiolus has been long known in herbariums, as it is very common about Table mountain, at the Cape of Good Hope; Jacquin, Thunberg, Gmelin, Welldenow, &c. have it under the tribe of Ixia, with the ſpecific names of Scillaris, Fabricii, &c. but notwithſtanding, we have no heſitation in placing it under its true genus Gladiolus. The upright character of the chives, their inſertion into the tube of the bloſſom, and not at the mouth, the difference in the ſhape of the petals, the ſituation of the ſummits behind the chives, &c. leave no room for doubt where its ſtation ſhould be. Although plentiful at the Cape, it has not been long an inhabitant of this clime; having flowered for the firſt time in the year 1797, at Bulſtrode, the ſeat of his Grace the Duke of Portland. What contributes much to the value of this plant is, that it continues in flower at leaſt two months, from the beginning of June till the end of July; propagates itſelf abundantly by the roots, which are not ſubject to rot, though not removed from the pots in which they have flowered. Thrives in peat earth.

Geranium incisum.

Pub.d as the Act directs Sept.r 1st 1798
by H. Andrews Hoxton Lane

PLATE LXVII.

GERANIUM INCISUM.

Jagged-leaved Geranium.

CLASS XVI. ORDER IV.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNIA. Stigmata quinque. Fructus rostratus, 5-coccus.	ONE FOEMAL. Five summits. Fruit furnished with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium foliis multifidis, crassis, confertis; floribus umbellatis, pedunculis longissimis; caule erecto, fruticoso.	Geranium with leaves of many clefts, thick, and crowded together; flowers grow in bunches, on very long foot-stalks; stem upright, and shrubby.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal, (natural size).
3. The Chives cut open.
4. The Pointal, (magnified).

THIS pretty species of Geranium, from the Cape of Good Hope, is one of those having seven fertile tips; therefore a Pelargonium of Mons. L'Heritier. It is a low growing plant, seldom exceeding eight or nine inches in height, keeping very compact; but is subject to damp in the leaves, if kept moist in winter, though otherwise pretty hardy. Mr. C. Lodiges, of Hackney, first raised it from seeds which he received from Vienna, about the year 1793. It is readily propagated by cuttings, or seeds, and continues to flower all the summer months, requiring light rich earth to make it flourish.

Geranium incisum.

Pub.d as the Act directs Sept.r 1st 1799
by H. Andrews at Hoxton Lodge

PLATE LXVII.

GERANIUM INCISUM.

Jagged-leaved Geranium.

CLASS XVI. ORDER IV.

MONODELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, 5-coccus.	ONE POINTAL. Five ſummits. Fruit furniſhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Plate XII.

SPECIFIC CHARACTER.

Geranium foliis multifidis, craſſis, confertis; floribus umbellatis, pedunculis longiſſimis; caule erecto, fruticoſo.	Geranium with leaves of many clefts, thick, and crowded together; flowers grow in bunches, on very long foot-ſtalks; ſtem upright, and ſhrubby.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives and Pointal, (natural ſize).
3. The Chives cut open.
4. The Pointal, (magnified).

THIS pretty ſpecies of Geranium, from the Cape of Good Hope, is one of thoſe having ſeven fertile tips; therefore a Pelargonium of Monſ. L'Heritier. It is a low growing plant, ſeldom exceeding eight or nine inches in height, keeping very compact; but is ſubject to damp in the leaves, if kept moiſt in winter, though otherwiſe pretty hardy. Mr. C. Lodiges, of Hackney, firſt raiſed it from ſeeds which he received from Vienna, about the year 1793. It is readily propagated by cuttings, or ſeeds, and continues to flower all the ſummer months; requiring light rich earth to make it flouriſh.

Goodenia ovata.

PLATE LXVIII.

GOODENIA OVATA.

Oval-leaved Goodenia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA supra longitudinaliter fissa, genitalia exserens, quinquefida. Stigma urceolatum, ciliatum.	BLOSSOM longitudinally cloven on the upper side, exposing the organs of generation, and five-cleft. Summit cup-shaped, and fringed. See GOODENIA CALENDULACEA. Plate XXII.

SPECIFIC CHARACTER.

Goodenia foliis ovatis, serratis; corollis luteis, laciniis duobus exterioribus erectis.	Goodenia with egg-shaped leaves, sawed at the edges: blossoms yellow, the two outer segments grow upright.

REFERENCE TO THE PLATE.

1. The Empalement and Seed-bud.
2. A Blossom, with the parts of fructification attached.
3. The Chives, and Pointal (magnified).

In the second volume of the Linnean Transactions, Dr. Smith enumerates ten species of the genus Goodenia; this species makes an addition to the number. The oval-leaved Goodenia is a half woody plant, making long willow-like branches, which mostly decay in the winter, though a great part of the plant remains; it is a hardy greenhouse plant, requiring little trouble either to keep or propagate; the latter of which is done by cuttings. About the year 1793, a parcel of seeds was received by Messrs. Lee and Kennedy, sent to them by Colonel Paterson from Port Jackson, New Holland; amongst them, the seeds of this plant; it nevertheless did not flower till the year 1798, about the month of June. It is certainly a desirable plant, never failing to flower from June till September, if kept growing in stove, which it will surely do if planted in light peat earth.

3

Goodenia ovata.

PLATE LXVIII.

GOODENIA OVATA.

Oval-leaved Goodenia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA ſupra longitudinaliter fiſſa, genitalia exſerens, quinquefida. Stigma urceolatum, ciliatum.	BLOSSOM longitudinally cloven on the upper ſide, expoſing the organs of generation, and five-cleft. Summit cup-ſhaped, and fringed. See GOODENIA CALENDULACEA. Plate XXII.

SPECIFIC CHARACTER.

Goodenia foliis ovatis, ſerratis; corollis luteis, laciniis duobus exterioribus erectis.	Goodenia with egg-ſhaped leaves, ſawed at the edges; bloſſoms yellow, the two outer ſegments grow upright.

REFERENCE TO THE PLATE.

1. The Empalement and Seed-bud.
2. A Bloſſom, with the parts of fructification attached.
3. The Chives, and Pointal (magnified).

IN the ſecond volume of the Linnæan Tranſactions, Dr. Smith enumerates ten ſpecies of the genus Goodenia; this ſpecies makes an addition to the number. The oval-leaved Goodenia is a half woody plant, making long willow-like branches, which moſtly decay in the winter, though a great part of the plant remains; it is a hardy greenhouſe plant, requiring little trouble either to keep or propagate; the latter of which is done by cuttings. About the year 1793, a parcel of ſeeds was received by Meſſrs. Lee and Kennedy, ſent to them by Colonel Paterſon from Port Jackſon, New Holland; amongſt them, the ſeeds of this plant; it nevertheleſs did not flower till the year 1798, about the month of June. It is certainly a deſirable plant, never failing to flower from June till September, if kept growing in vigour, which it will ſurely do if planted in light peat earth.

Lambertia formosa
Var. longifolia

PLATE DIX.

LAMBERTIA FORMOSA. *Var. longifolia.*

Red-flowered Lambertia. Long-leaved variety.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium commune, imbricatum, squamis interioribus longioribus.

COROLLA. *Universalis* uniformis, septem-flora.

Propria monopetala, tubulosa, limbus quadrifidus, laciniis revolutis, flamentiferis.

STAMINA. Filamenta quatuor, subulata, brevissima, inserta limbo corollæ, intus singulam laciniam singula. Antheræ lineares, erectæ.

PISTILLUM. Germen superum, apice villosum. Stylus filiformis, erectus. Stigma subulatum, falcatum.

PERICARPIUM. Capsula trigona, unilocularis, disperma.

SEMINA bina, alata, ovata, nigra.

SPATHELLUM. Common cup tiled, the inner scales the longest.

BLOSSOM. *General* regular composed of seven flowers.

Individual of one petal, tubular, border four-cleft, the segments rolled back, and supporting the chives.

CHIVES. Threads four awl-shaped, very short, fixed into the border of the blossom, one within each segment. Tips linear, and upright.

POINTAL. Seed-bud nearly round, the upper part hairy. Shaft awn-like, upright. Summit awl-shaped, and furrowed.

SEED-VESSEL. Capsule three-horned, of one cell, and two seeds.

SEEDS two, winged, rough, and black.

SPECIFIC CHARACTER.

Lambertia foliis ternis, apice mucronato-pungentibus; corollis striatis, extus flavo rubentibus; antheris exsertis.

Lambertia with leaves growing by threes, the ends terminating in sharp points; blossoms striped, of a light red without; tips blue.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, with the Pointal as it stands in the blossom.
3. One segment of a Flower, with the Chive attached.
4. The Pointal (magnified).
5. A Capsule.
6. A Seed.

On all the plants yet introduced from New Holland, that have hitherto flowered with us, this unquestionably takes the lead for beauty, considering the plant altogether. It is a hardy greenhouse plant, growing to the height of five or eight feet before it flowers; when the blossoms break from the ends of almost every branch. The seeds of this plant were among the first which arrived from Botany Bay, in the year 1789, when two varieties of it were raised by Messrs. Lee and Kennedy, at their nursery, who were fortunate enough to procure all the seeds which came home that season. This fine genus has received its title (under the sanction of Dr Smith, *see the Linn. Transf. page* 214, *vol.* 3.) from Aylmer Bourke Lambert, Esq. fellow of the Royal and Linnean Societies; a gentleman whose zeal for the advancement of the Science is unbounded, and whose labours to that end, as well as his endeavours to render botany of universal benefit, by combining the useful with the pleasing, (witness his work on the Cinchona or Jesuits' Bark) do him the greatest credit. Our drawing was made from a plant which flowered for the first time in this kingdom, in the collection of J. Robertson, Esq. of Stockwell, Surry, in July 1796. It is without difficulty raised by cuttings, and thrives in peat earth.

Lambertia formosa
Var. longiflora

PLATE LXIX.

LAMBERTIA FORMOSA. *Var. longifolia.*

Red-flowered Lambertia. Long-leaved variety.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium commune, imbricatum, ſquamis interioribus, longioribus.

COROLLA. *Univerſalis* uniformis, ſeptem-florus.

Propria monopetala, tubuloſa, limbus quadrifidus, laciniis revolutis, ſtameniferis.

STAMINA. Filamenta quatuor, ſubulata, breviſſima, inſerta limbo corollæ, intra ſingulam laciniam ſingula. Antheræ lineares, erectæ.

PISTILLUM. Germen ſubrotundum, apice piloſum. Stylus ſetaceus, erectus. Stigma ſubulatum, ſulcatum.

PERICARPIUM. Capſula tricornuta, unilocularis, diſperma.

SEMINA bina, alata, ſcabra, nigra.

EMPALEMENT. Common cup tiled, the inner ſcales the longeſt.

BLOSSOM. *General* regular compoſed of ſeven flowers.

Individuals of one petal, tubular, border four-cleft, the ſegments rolled back, and ſupporting the chives.

CHIVES. Threads four awl-ſhaped, very ſhort, fixed into the border of the bloſſom, one within each ſegment. Tips linear, and upright.

POINTAL. Seed-bud nearly round, the upper part hairy. Shaft awn-like, upright. Summit awl-ſhaped, and furrowed.

SEED-VESSEL. Capſule three-horned, of one cell, and two ſeeds.

SEEDS two, winged, rough, and black.

SPECIFIC CHARACTER.

Lambertia foliis ternis, apice mucronato-pungentibus; corollis ſtriatis, extus ſuave rubentibus; antheris cæruleis.

Lambertia with leaves growing by threes, the ends terminating in ſharp points; bloſſoms ſtriped, of a light red without; tips blue.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom cut open, with the Pointal as it ſtands in the bloſſom.
3. One ſegment of a Flower, with the Chive attached.
4. The Pointal (magnified).
5. A Capſule.
6. A Seed.

OF all the plants yet introduced from New Holland, that have hitherto flowered with us, this unqueſtionably takes the lead for beauty, conſidering the plant altogether. It is a hardy greenhouſe plant, growing to the height of ſix or eight feet before it flowers; when the bloſſoms break from the ends of almoſt every branch. The ſeeds of this plant were among the firſt which arrived from Botany Bay, in the year 1788; when two varieties of it were raiſed by Meſſrs. Lee and Kennedy, at their nurſery, who were fortunate enough to procure all the ſeeds which came home that ſeaſon. This fine genus has received its title, (under the ſanction of Dr. Smith, *ſee the Linn. Tranſ. page* 214, *vol.* 3.) from Aylmer Bourke Lambert, Eſq. fellow of the Royal and Linnæan Societies; a gentleman whoſe zeal for the advancement of the ſcience is unbounded, and whoſe labours to that end, as well as his endeavours to render botany of univerſal benefit, by combining the uſeful with the pleaſing; (witneſs his work on the Cinchonas, or Jeſuits' Barks) do him the greateſt credit. Our drawing was made from a plant which flowered for the firſt time in this kingdom, in the collection of J. Robertſon, Eſq. of Stockwell, Surry, in July 1798. It is without difficulty raiſed by cuttings, and thrives in peat earth.

Gnidia simplex.

PLATE LXX.

GNIDIA SIMPLEX.

Heath-leaved Gnidia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX infundibuliformis, quadrifidus. Petala quatuor, calyci inserta. Semen unicum, subbaccatum.

EMPALEMENT funnel-shaped, and four-cleft. Petals four, inserted into the empalement. One seed, something like a berry.
See GNIDIA PINIFOLIA, Plate LII.

SPECIFIC CHARACTER.

Gnidia, foliis linearibus, acutis, lævibus; floribus terminalibus, sessilibus, luteis.

Gnidia, with linear, pointed, smooth leaves; flowers terminating the branches, sitting close upon them, and yellow.

REFERENCE TO THE PLATE.

1. A Flower, (natural size).
2. The same cut open, and magnified.
3. The Pointal, (natural size).
4. The same magnified.

The flowers of this species of Gnidia, like most plants of this natural order, are fragrant, which increases much towards night. It is one of those delicate Cape plants requiring a dry stove, or an airy warm situation in the greenhouse; where it continues to flower through the months of April and May, and frequently will blossom a second time in September and October. It is easily propagated by cuttings; delighting most in peat earth, and seldom grows more than a foot high. Our drawing was made, (by his kind permission) at the beautiful and unique conservatory of R. James, Esq. Gloucester-place, from a plant in his valuable and select collection, in May this year.

Unfortunately the G. Simplex having been introduced to our gardens before the G. Pinifolia, (see our figure, Pl. LII.) it was found in most collections under that title, but we have no hesitation in placing this plant under the specific name given it by Linnæus, in his Mantissa, Plantarum of 1767, page 67; where, to the usual specific character, he has superadded an accurate description of it.

Gracilaria simplex

PLATE LXX.

GNIDIA SIMPLEX.

Heath-leaved Gnidia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX infundibuliformis, quadrifidus. Petala quatuor, calyci inſerta. Semen unicum, ſubbaccatum.

EMPALEMENT funnel-ſhaped, and four-cleft. Petals four, inſerted into the empalement. One ſeed, ſomething like a berry.

See GNIDIA PINIFOLIA, Plate LII.

SPECIFIC CHARACTER.

Gnidia, foliis linearibus, acutis, lævibus; floribus terminalibus, ſeſſilibus, luteis.

Gnidia, with linear, pointed, ſmooth leaves; flowers terminating the branches, ſitting cloſe upon them, and yellow.

REFERENCE TO THE PLATE.

1. A Flower, (natural ſize).
2. The ſame cut open, and magnified.
3. The Pointal, (natural ſize).
4. The ſame magnified.

THE flowers of this ſpecies of Gnidia, like moſt plants of this natural order, are fragrant, which increaſes much towards night. It is one of thoſe delicate Cape plants requiring a dry ſtove, or an airy warm ſituation in the greenhouſe; where it continues to flower through the months of April and May, and frequently will bloſſom a ſecond time in September and October. It is eaſily propagated by cuttings; delighting moſt in peat earth, and ſeldom grows more than a foot high. Our drawing was made, (by his kind permiſſion) at the beautiful and unique conſervatory of R. James, Eſq. Groſvenor-place, from a plant in his valuable and ſelect collection, in May this year.

Unfortunately the G. Simplex having been introduced to our gardens before the G. Pinifolia, (ſee our figure, Pl. LII.) it was found in moſt collections under that title; but we have no heſitation in placing this plant under the ſpecific name given it by Linnæus, in his Mantiſſa Plantarum of 1767, page 67; where, to the uſual ſpecific character, he has ſuperadded an accurate deſcription of it.

Clematis viorna.

PLATE LXXI.

CLEMATIS VIORNA.

Blue thick-petal'd Virgin's Bower.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

PERIANTHIUM. Calyx nullus.

COROLLA. Petala quatuor, oblonga, laxa.

STAMINA. Filamenta plurima, subulata, corolla longiora. Antheræ lateri filamentorum adnatæ.

PISTILLUM. Germina plurima, subrotunda, compressa, definentia in stylos subulatos, staminibus longiores. Stigmata simplicia.

PERICARPIUM nullum. Receptaculum capitatum, parvum.

SEMINA plurima, subrotunda, compressa, stylo (figura varia) instructa.

CHIVALENEXT. Cup none.

BUSSOM. Petals four, oblong, flexible.

CHIVES. Threads many, awl-shaped, shorter than the bussom. Tips fixed to the sides of the threads.

POINTAL. Seed-buds many, nearly round, flattened, ending in awl-shaped shafts, longer than the chives. Stigmata simple.

SEED-VESSEL none. Receptacle forming a round head, and small.

SEEDS many, roundish, flattened, retaining the shaft, which is variously shaped.

SPECIFIC CHARACTER.

Clematis foliis compositis decompositisque; foliolis quibusdam trifidis; floribus violaceis, corymbis.

Virgin's Bower, with compound and doubly compound leaves; some of the little leaves split into three; flowers blue, and rough.

REFERENCE TO THE PLATE.

1. The Chives, and Pointals, the petals being removed.
2. The Pointals.
3. A Chive, (magnified).
4. A Pointal, (magnified).
5. A Seed nearly ripe, (natural size).

DOUBTS have been entertained, among some botanists, whether this plant is the Clematis viorna of Linnæus, as given by him, with various synonims, in his Sp. Plan. By collating the different specific characters from the synonims adopted by him, we have no hesitation in our decision. Being a native of Virginia and Carolina, it is not so hardy as some others from the northern parts of Europe or America; but, nevertheless, is not killed by our winters, as it is herbaceous, and not making its shoots till late. In a warm situation against a wall or trellis, it will begin to blossom in July, and continue to flower till destroyed by the frost. As yet it is rather scarce in our gardens, being but of a late introduction, though long known by description. Our figure was taken at the Hammersmith nursery, where it is in high perfection, being planted in a mixture of loam and peat earth. It is most readily increased, by parting the roots in spring; as the seeds seldom come to maturity in this climate.

Clematis viorna.

PLATE LXXI.

CLEMATIS VIORNA.

Blue thick-petal'd Virgin's Bower.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

PERIANTHIUM. Calyx nullus.

COROLLA. Petala quatuor, oblonga, laxa.

STAMINA. Filamenta plurima, ſubulata, corolla breviora. Antheræ lateri filamentorum adnatæ.

PISTILLUM. Germina plurima, ſubrotunda, compreſſa, definentia in ſtylos ſubulatos, ſtaminibus longiores. Stigmata ſimplicia.

PERICARPIUM nullum. Receptaculum capitatum, parvum.

SEMINA plurima, ſubrotunda, compreſſa, ſtylo (figura varia) inſtructa.

EMPALEMENT. Cup none.

BLOSSOM. Petals four, oblong, flexible.

CHIVES. Threads many, awl-ſhaped, ſhorter than the bloſſom. Tips fixed to the ſides of the threads.

POINTAL. Seed-buds many, nearly round, flattened, ending in awl-ſhaped ſhafts, longer than the chives. Summits ſimple.

SEED-VESSEL none. Receptacle forming a round head, and ſmall.

SEEDS many, roundiſh, flattened, retaining the ſhaft, which is variouſly ſhaped.

SPECIFIC CHARACTER.

Clematis foliis compoſitis decompoſitiſque; foliolis quibuſdam trifidis; floribus violaceis, coriaceis.

Virgin's Bower, with compound and doubly compound leaves; ſome of the little leaves ſplit into three; flowers blue, and tough.

REFERENCE TO THE PLATE.

1. The Chives, and Pointals; the petals being removed.
2. The Pointals.
3. A Chive, (magnified).
4. A Pointal, (magnified).
5. A Seed nearly ripe, (natural ſize).

DOUBTS have been entertained, among ſome botaniſts, whether this plant is the Clematis viorna of Linnæus, as given by him, with various ſynonims, in his Sp. Plan. By collating the different ſpecific characters from the ſynonims adopted by him, we have no heſitation in our deciſion. Being a native of Virginia and Carolina, it is not ſo hardy as ſome others from the northern parts of Europe or America; but, nevertheleſs, is not killed by our winters, as it is herbaceous, and not making its ſhoots till late. In a warm ſituation againſt a wall or trellis, it will begin to bloſſom in July, and continue to flower till deſtroyed by the froſt. As yet it is rather ſcarce in our gardens, being but of a late introduction, though long known by deſcription. Our figure was taken at the Hammerſmith nurſery, where it is in high perfection, being planted in a mixture of loam and peat earth: it is moſt readily increaſed, by parting the roots in ſpring; as the ſeeds ſeldom come to maturity in this climate.

Styphelia triflora

PLATE LXXII.

STYPHELIA TRIFLORA.

Three-flowered Styphelia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

PERIANTHIUM. Calyx imbricatus, persistens; foliolis interioribus longioribus, acutis, erectis.

COROLLA tubulosa, quinquefida; laciniis revolutis, hirsutis.

Nectarium membranaceum, laceratum, germen cingens.

STAMINA. Filamenta quinque, tubo inserta. Antheræ apice bifidæ, versatiles.

PISTILLUM. Germen globosum, sulcatum, nectario cinctum. Stylus capillaris. Stigma capitatum, quinquepartitum.

PERICARPIUM. Drupa quinquelocularis, subrotunda, glabra.

SEMINA, bina.

EXPALEMENT. Cup tiled, and scaly; the inner leaves the longest, sharp-pointed, and upright.

BLOSSOM tubular, five-cleft; the segments rolled back, and hairy.

Honey-cup skinny, torn, and surrounding the seed-bud.

CHIVES. Five threads, fixed into the tube of the blossom. Tips split at the top, and loosely fixed by the middle to the threads.

POINTAL. Seed-bud globular, furrowed, encircled by the honey-cup. Shaft hair-like. Summit headed, and of five divisions.

SEED-VESSEL. A pulpy fruit with five cells, roundish, and smooth.

SEEDS, two, gether.

SPECIFIC CHARACTER.

Styphelia, foliis imbricatis, sparsis, glaucis, ovato-mucronatis; floribus axillaribus, terminis.

Styphelia, with leaves tiled, scattered, bluish, egg-shaped, and sharp-pointed; flowers growing from the lower part of the leaves by twos.

REFERENCE TO THE PLATE.

1. The Expalement.
2. A Flower cut open, with the Chives remaining attached, to show the insertion into the tube of the Blossom.
3. The Pointal, (natural size,) the Summit detached, and magnified.
4. The Honey-cup, (magnified).

THE Styphelias constitute a very extended tribe of plants, indigenous only to New Holland; we are indebted to the pupil of Linnæus, the celebrated Dr. Solander, for this generic title, which, (as Dr. Smith has fairly observed) is expressive of the habit of this whole genus, having its origin in στυφελος, harsh, or hard, a character which seems invariable in every species that has come under our notice. The S. tubiflora, although set off by Dr. Smith, in his fourth number of *New Holland Botany*, with so much grace, merit, (and we have no doubt of his concurrence) give place to S. tridora, which undoubtedly claims the palm from all its congeners hitherto discovered. The only specimen also, our dead, and from which our figure was taken, of this plant, which has come to our knowledge, is to be found in the extensive collection of G. Hibbert, Esq. Clapham-common; from whose exotics the exotic collections of this kingdom, are likely to acquire such considerable additions.

The S. tridora was raised from seed at Clapham in 1796, but did not flower till this year, in the month of June, continuing in blossom through July, and part of August. It grows to the height of near three feet, branching but little, the whole stem being hid by the leaves. Mr. Allen the gardener, to whose kind communications we are much indebted, informs us he has kept it in peat earth, and that he thinks it is to be raised by cuttings.

Styphelia triflora

PLATE LXXII.

STYPHELIA TRIFLORA.

Three-flowered Styphelia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

PERIANTHIUM. Calyx imbricatus, perſiſtens; foliolis interioribus longioribus, acutis, erectis.

COROLLA tubuloſa, quinquefida; laciniis revolutis, hirſutis.

Nectarium membranaceum, lacerum, germen cingens.

STAMINA. Filamenta quinque, tubo inſerta. Antheræ apice bifidæ, verſatiles.

PISTILLUM. Germen globoſum, ſulcatum, nectario cinctum. Stylus capillaris. Stigma capitatum, quinquepartitum.

PERICARPIUM. Drupa quinquelocularis, ſubrotunda, glabra.

SEMINA, bina.

EMPALEMENT. Cup tiled, and remaining; the inner leaves the longeſt, ſharp-pointed, and upright.

BLOSSOM tubular, five-cleft; the ſegments rolled back, and hairy.

Honey-cup ſkinny, torn, and ſurrounding the ſeed-bud.

CHIVES. Five threads, fixed into the tube of the bloſſom. Tips ſplit at the top, and looſely fixed by the middle to the threads.

POINTAL. Seed-bud globular, furrowed, encircled by the honey-cup. Shaft hair-like. Summit headed, and of five diviſions.

SEED-VESSEL. A pulpy fruit with five cells, roundiſh, and ſmooth.

SEEDS, two together.

SPECIFIC CHARACTER.

Styphelia, foliis imbricatis, ſparſis, glaucis, ovato-mucronatis; floribus axillaribus, ternis.

Styphelia, with leaves tiled, ſcattered, bluiſh, egg-ſhaped, and ſharp-pointed; flowers growing from the lower part of the leaves by threes.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives remaining attached, to ſhew their inſertion into the tube of the Bloſſom.
3. The Pointal, (natural ſize,) the Summit detached, and magnified.
4. The Honey-cup, (magnified).

THE Styphelias conſtitute a very extended tribe of plants, indigenous only to New Holland; we are indebted to the pupil of Linnæus, the celebrated Dr. Solander, for this generic title, which, (as Dr. Smith has fairly obſerved) is expreſſive of the habit of this whole genus, having its origin in στυφελὸς, harſh, or hard; a character which ſeems invariable in every ſpecies that has come under our notice. The S. tubiflora, although ſet off by Dr. Smith, in his fourth number of New Holland Botany, with ſo much grace, muſt, (and we have no doubt of his concurrence) give place to S. triflora, which undoubtedly claims the palm from all its congeners hitherto diſcovered. The only ſpecimen alive or dead, and from which our figure was taken, of this plant, which has come to our knowledge, is to be found in the extenſive collection of G. Hibbert, Eſq. Clapham-common; from whoſe exertions the exotic collections of this kingdom, are likely to acquire ſuch conſiderable additions.

The S. triflora was raiſed from ſeed at Clapham in 1796, but did not flower till this year, in the month of June, continuing in bloſſom through July, and part of Auguſt. It grows to the height of near three feet, branching but little; the whole ſtem being hid by the leaves. Mr. Allen the gardener, to whoſe kind communications we are much indebted, informs us he has kept it in peat earth, and that he thinks it is to be raiſed by cuttings.

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TO THE PLANTS CONTAINED IN VOL. I.

Plate 1	Cortusa Matthioli.	Alpine Sanicle.	Har.	Herb.	May, June.
2	Sprengelia incarnata.	Star-flowered Sprengelia.	G. H.	Shrub.	All Summer.
3	Neottia speciosa.	Flesh-coloured Neottia.	H. H.	Herb.	March, April.
4	Rhododendron Dauricum.	Dauric Rhododendron.	Har.	Shrub.	April, May.
5	Gladiolus longiflorus.	Long-flowered Gladiolus.	G. H.	Herb.	June, July.
6	Hemerocallis cærulea.	Blue Day Lily.	H. H.	Herb.	Septem. or Feb.
7	Primula Cortusoides.	Siberian Primrose.	Har.	Herb.	June, July.
8	Gladiolus alatus.	Wing-flowered Gladiolus.	G. H.	Herb.	May, June.
9	Atragene Capensis.	Cape Atragene.	G. H.	Shrub.	March, April.
10	Aristea cyanea.	Blue-flowered Aristea.	G. H.	Herb.	July, August.
11	Gladiolus roseus.	Rose-coloured Gladiolus.	G. H.	Herb.	May, June.
12	Geranium grandiflorum.	Largest-flowered Geranium.	G. H.	Shrub.	July, August.
13	Epidendrum cochleatum.	Purple-flowered Epidendrum.	H. H.	Herb.	July.
14	Ixia reflexa.	Reflex-flowered Ixia.	G. H.	Herb.	May, June.
15	Anthyllis erinacea.	Blue Broom of Spain.	G. H.	Shrub.	April, May.
16	Azalea Pontica.	Yellow Pontic Azalea.	Har.	Shrub.	May, June.
17	Protea formosa.	Coronet Protea.	G. H.	Shrub.	August.
18	Corræa alba.	White Correa.	G. H.	Shrub.	April, May.
19	Gladiolus versicolor.	Changeable Gladiolus.	G. H.	Herb.	June.
20	Echium grandiflorum.	Large-flowered Viper's Bugloss.	G. H.	Shrub.	April, May.
21	Vereia crenata.	Scolloped-leaf Vereia.	H. H.	Shrub.	July.
22	Goodenia calendulacea.	Cape Marygold-leaved Goodenia.	G. H.	Shrub.	August.
23	Ixia capitata. Var. ovata.	Bunch-flowering Ixia. Var. egg-shaped.	G. H.	Herb.	April.
24	Cineraria aurita.	Two-coloured-leaved Cineraria.	G. H.	Herb.	All Summer.
25	Camellia Japonica. Var. flo. albo pleno.	Double white Camellia.	G. H.	Shrub.	Octob. Novem.
26	Crassula odoratissima.	Sweet-scented Crassula.	G. H.	Shrub.	April, May.
27	Gladiolus ringens. Var. cinereo odorato.	Gaping Ash-coloured sweet Gladiolus.	G. H.	Herb.	June.
28	Geranium elegans.	Round-leaved Geranium.	G. H.	Shrub.	May.
29	Ixia spicata. Var. viridi nigra.	Sea-green spiked Ixia.	G. H.	Herb.	May, June.
30	Vaccinium Arctostaphyllus.	Madeira Whortle-berry.	Har.	Shrub.	July, August.
31	Borbonia cordata.	Heart-shape-leaved Borbonia.	G. H.	Shrub.	July.
32	Antholyza ringens.	Gaping Antholyza.	G. H.	Herb.	June.
33	Diosma latifolia.	Broad-leaved Diosma.	G. H.	Shrub.	August.
34	Chelone Ruellioides.	Scarlet Chelone.	Har.	Herb.	August.
35	Ixia crispifolia. Var. flo. cæruleo.	Crisped-leaved Ixia, blue variety.	G. H.	Herb.	July.
36	Rhododendron punctatum.	Dotted-leaved Rhododendron.	Har.	Shrub.	July.
37	Geranium fragile.	Brittle-stalked Geranium.	G. H.	Shrub.	August.
38	Gladiolus præcox. Var. flore rubro.	Red early-flowering Gladiolus.	G. H.	Herb.	April.
39	Echium ferocissimum.	Prickly Viper's Bugloss.	G. H.	Shrub.	July.
40	Chelone campanuloides.	Bell-flowered Chelone.	Har.	Herb.	August, Septem.
41	Lachenalia pendula.	Drooping-flowered Lachenalia.	G. H.	Herb.	September.
42	Orchis ciliaris.	Fringed Orchis.	Har.	Herb.	July.
43	Bignonia Leucoxylon.	Oleander-flowered Trumpet Flower.	H. H.	Shrub.	July.
44	Ixia cinnamomea.	Cinnamon-smelling Ixia.	G. H.	Herb.	June.
45	Iris longifolia.	Long-leaved Iris.	G. H.	Herb.	June.
46	Massonia violacea.	Purple-flowered Massonia.	G. H.	Herb.	September.
47	Musa coccinea.	Scarlet-flowered Plantain-tree.	H. H.	Shrub.	Decem. Jan.
48	Ixia bulbifera. Var. flo. luteo.	Bulb-bearing Ixia. Var. yellow-flowered.	G. H.	Herb.	May.
49	Malpighia crassifolia.	Thick-leaved Malpighia.	H. H.	Shrub.	September.
50	Ixia capitata. Var. flore aurantio.	Bunch-flowering Ixia. Var. gold colour.	G. H.	Herb.	May.
51	Xeranthemum speciosissimum.	Largest-flowering Everlasting Flower.	G. H.	Shrub.	September.
52	Gnidia pinifolia.	Pine-leaved Gnidia.	G. H.	Shrub.	Feb. March.
53	Mimosa stricta.	Harsh-leaved upright Mimosa.	G. H.	Shrub.	March, April.
54	Aletris sarmentosa.	Creeping-rooted Bastard Aloe.	G. H.	Herb.	Decem. Jan.
55	Zinnia violacea.	Purple Zinnia.	Har.	Ann.	August, Sept.
56	Antholyza spicata.	Spike-flowered Antholyza.	G. H.	Herb.	June.
57	Mesembryanthemum glabrum.	Smooth-leaved annual Fig Marygold.	G. H.	Ann.	July.
58	Boronia pinnata.	Hawthorn-scented Boronia.	G. H.	Shrub.	All Summer.
59	Ixia fistulosa.	Hollow-leaved Ixia.	G. H.	Herb.	June.
60	Geranium punctatum.	Dotted-flowered Geranium.	G. H.	Herb.	April.
61	Aster dentatus.	Toothed-leaved Starwort.	G. H.	Shrub.	All Summer.
62	Gladiolus gramineus.	Grass-like Gladiolus.	G. H.	Herb.	May, June.
63	Ufteria scandens.	Climbing Ufteria.	G. H.	Bien.	All Summer.
64	Pæonia albiflora.	White Pæony.	Har.	Herb.	June.
65	Ophrys lilifolia.	Lily-leaved Ophrys.	Har.	Herb.	July.
66	Gladiolus polystachius.	Branching Gladiolus.	G. H.	Herb.	July.
67	Geranium incisum.	Jagged-leaved Geranium.	G. H.	Shrub.	All Summer.
68	Goodenia ovata.	Oval-leaved Goodenia.	G. H.	Shrub.	August, Sept.
69	Lambertia formosa. Var. longifolia.	Red-flowered Lambertia. Long-leaved var.	G. H.	Shrub.	July.
70	Gnidia simplex.	Heath-leaved Gnidia.	G. H.	Shrub.	April, Sept.
71	Clematis viorna.	Blue thick-petal'd Virgin's Bower.	Har.	Herb.	All Summer.
72	Styphelia triflora.	Three-flowered Styphelia.	G. H.	Shrub.	June.