



Leather Binding and
7/5/67

227-228

Bot

Vol. III.

IV

of the
Botanists Repository
 Comprising
 Colour'd Engravings
 of
 New and Rare Plants
 ONLY

With Botanical Descriptions &c.

in

Latin and English,

after the

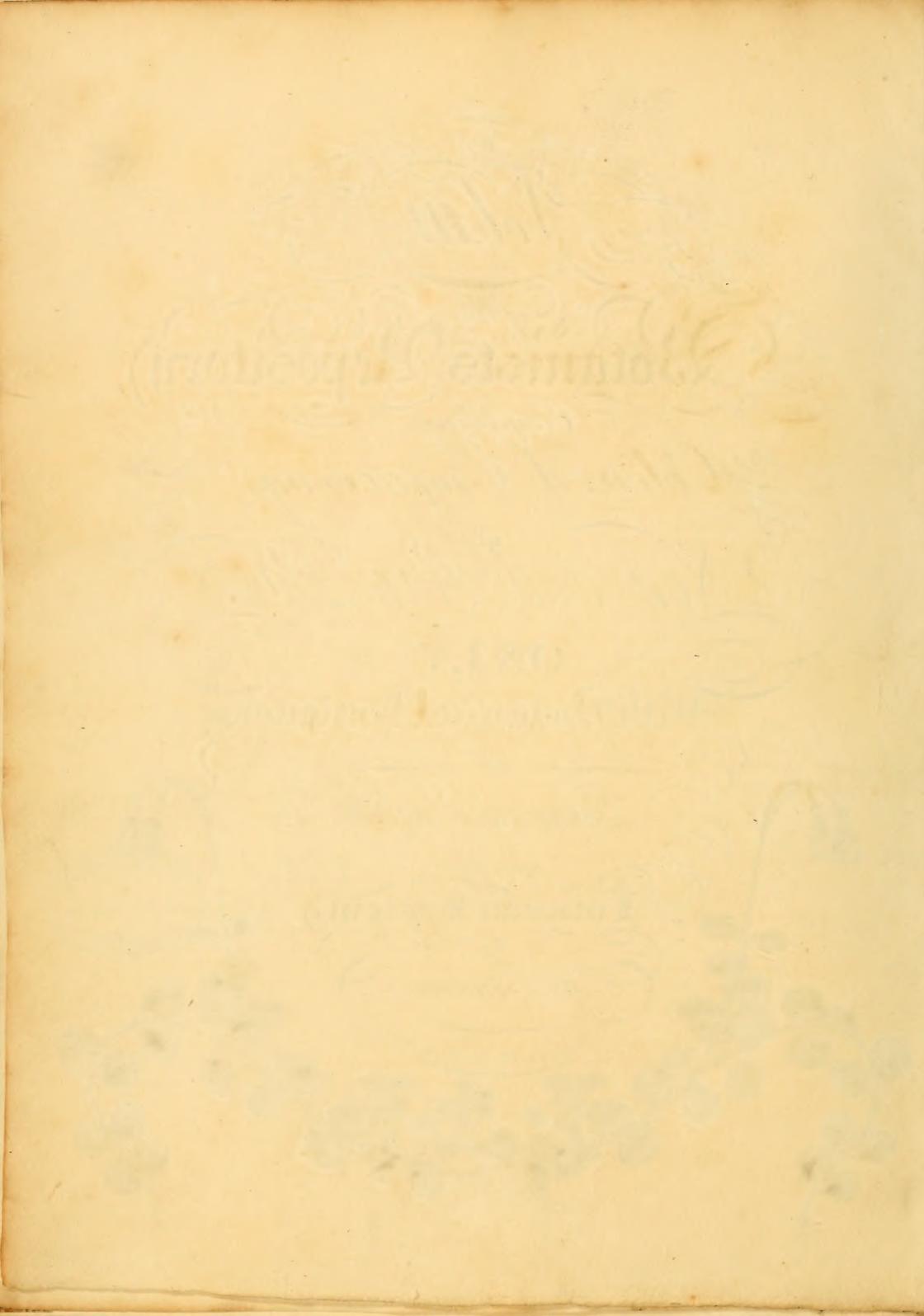
Linnæan System,

by

H. Andrews

Botanical Printer & Engraver





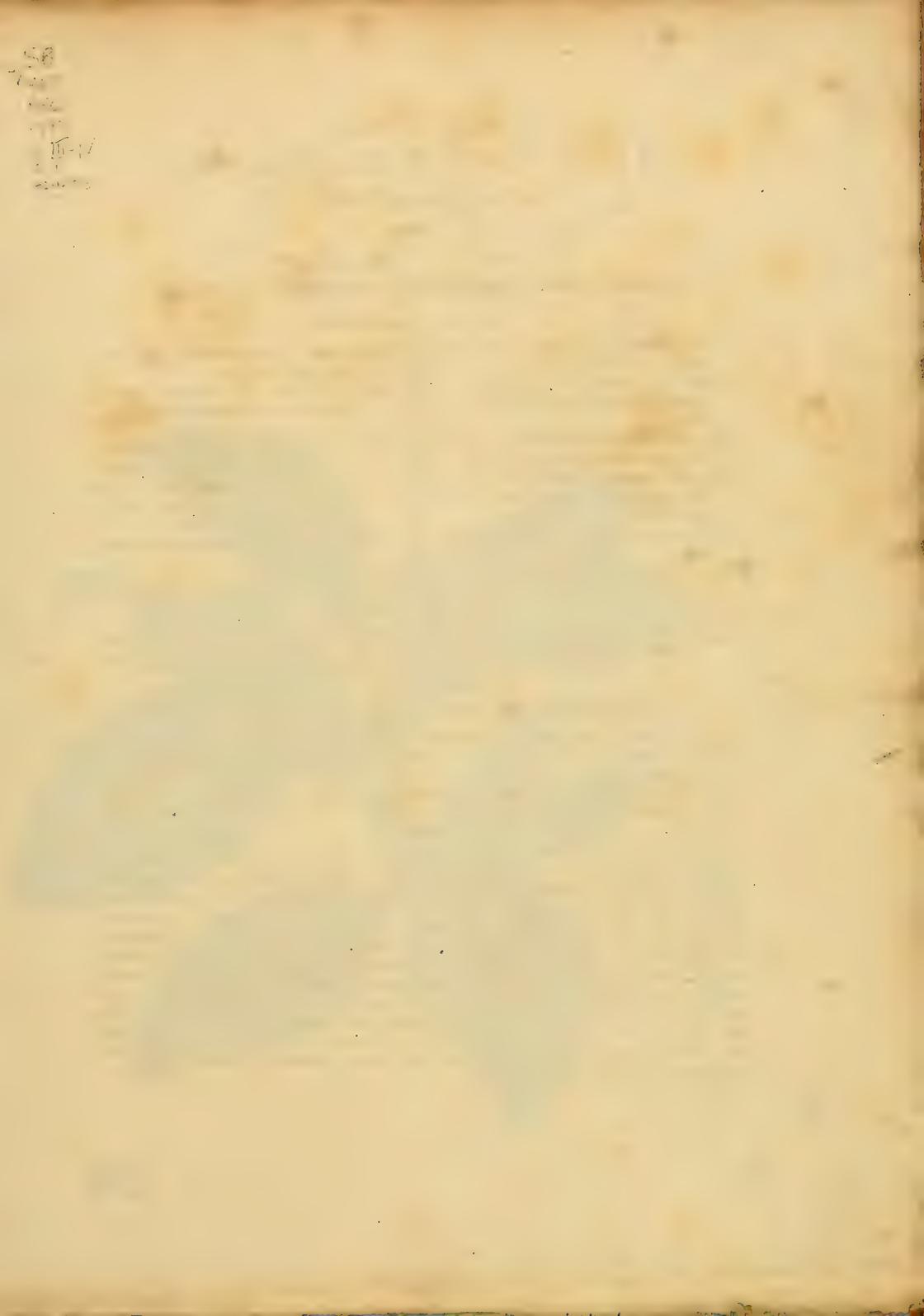


PLATE CXLV.
HILLIA LONGIFLORA.
Long-flowered Hillia.

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

GENERIC CHARACTER.

CALYX. Perianthium hexaphyllum; foliis oblongis, acutis, erectis.
COROLLA monopetala; tubus cylindricus, longissimus; limbus sexfidus; laciniis oblongis, planis.
STAMINA. Filamenta sex, brevissima. Antheræ oblongæ, erectæ, intra faucem corollæ.
PISTILLUM. Germen inferum, oblongum, obfoleto hexagonum. Stylus filiformis, longitudine tubi. Stigma capitatum.
PERICARPIUM oblongum, compressum, biloculare.
SEMINA numerosa, minima.

EMPALEMENT. Cup six-leaved; leaflets oblong, sharp pointed and upright.
BLOSSOM one petal, tube cylindrical, very long; border six-cleft; segments oblong, flat.
CHIVES. Threads six very short. Tips oblong, upright, within the mouth of the blossom.
POINTAL. Seed-bud beneath oblong, slightly six-fided. Shaft thread-shaped, the length of the tube. Summit headed.
SEED-VESSEL oblong, flattened and two celled.
SEEDS many, very small.

SPECIFIC CHARACTER.

Hillia corollis sexfidis, laciniis lanceolatis, supra convexis; foliis ovatis, acutis, glabris.

Hillia with blossoms six cleft, segments lance-shaped, convex above; leaves egg-shaped, pointed and smooth.

REFERENCE TO THE PLATE.

1. A flower cut open, to expose the number and situation of the Chives.
2. The Shaft and its summit, natural size, placed by the flower, to shew its proportional length to the tube.
3. The Seed-bud, with the leaflets of the Empalement attached, cut transversely, to shew the division of the cells in the center.

THIS species of Hillia was first introduced to our gardens in the year 1789, from the Island of Barbadoes, sent in plants, by Mr. J. Elcock, to Messrs. Lee and Kennedy, Hammermith. Originally this shrub was specifically termed, *parasitica* by professor Jacquin, when he first formed, and titled the Genus, after Dr. J. Hill, of voluminous memory; from a supposition that it was to be found growing, only, upon some other plant; a circumstance, which being denied by Swartz, he has altered it to *longiflora*. We have followed the latter name that ours may go in unison with the author of the last Species plantarum now publishing by Willdenow, as well as professor Martyn, who in his edition of Miller's Dictionary has followed Swartz; they appearing to be the most accurate, as well as the most read and followed of any modern Botanical authorities. It is a tender hot-house plant, strikes easily from cuttings, thrives in rich mould and flowers about the end of February. To the Right Hon. Lord Viscount Valentia we are indebted, for the specimen from which our figure was taken, sent from his Lordship's famed collection at Arley near Bewdley, Staffordshire; where, we believe, it has flowered for the first time in England.

DS1



Walteria longiflora





PLATE CXLVI.
PSORALEA ACULEATA.
Prickly Psoralea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two sets. Ten Chives.

GENERIC CHARACTER.

<p>CALYX. Perianthium monophyllum, tuberculis punctatum, quinquefidum; laciniis acutis, æqualibus, persistitibus; infima duplo longiore.</p> <p>COROLLA papilionacea, pentapetala. <i>Vexillum</i> subrotundum, emarginatum, affurgens. <i>Alæ</i> lunulatæ, obtusæ, parvæ. <i>Carinâ</i> dipetala, lunulata, obtusa.</p> <p>STAMINA. Filamenta diadelpa (simplex setaceum et novem coalita), adscendentia. Antheræ subrotundæ.</p> <p>PISTILLUM. Germen lineare. Stylus subulatus, adscendens, longitudine staminum. Stigma obtusum.</p> <p>PERICARPIUM. Legumen longitudine calycis, compressum, adscendens, acuminatum.</p> <p>SEMEN unicum, reniforme.</p>	<p>EMPALEMENT. Cup one leaf, dotted over with small tubercles, and five-cleft; the segments equal and remaining, the lower one twice the length of the others.</p> <p>BLOSSOM butterfly-shaped, five-petalled. <i>Standard</i> nearly round, notched at the end, turned upwards. <i>Wings</i> half-moon-shaped, obtuse, small. <i>Keel</i> two-petalled, half-moon-shaped, obtuse.</p> <p>CHIVES. Threads in two sets (a single one like a bristle, and nine united), ascending. Tips nearly round.</p> <p>POINTAL. Seed-bud linear. Shaft awl-shaped, ascending, the length of the chives. Summit blunt.</p> <p>SEED-VESSEL. A pod the length of the cup, flattened, ascending, and tapered to the point.</p> <p>SEED, one, kidney-shaped.</p>
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SPECIFIC CHARACTER.

<p><i>Psoralea</i> foliis ternatis, minimis, confertissimis, recurvatis, in spinulam definentibus.</p>	<p><i>Psoralea</i> with three-leafletted leaves, very small, very crowded, bent back, and ending in a small spine.</p>
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REFERENCE TO THE PLATE.

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

THE Prickly *Psoralea* is not a new plant in our collections; for, it was first introduced by Mr. F. Maifon to the Royal Gardens at Kew, as we learn from the Catalogue, in the year 1774. But although so long a sojourner with us, it is not found in many collections, owing to the difficulty in its increase, as it seldom ripens its seeds; and cuttings, the only remaining method, but seldom succeed; although by taking them from a vigorous growing plant and giving them the assistance of the bark-bed of the hothouse, early in March, a few plants have been procured occasionally. Our drawing was made from a most beautiful plant in the Clapham Collection, last year, in the month of August.



Boralea aculeata



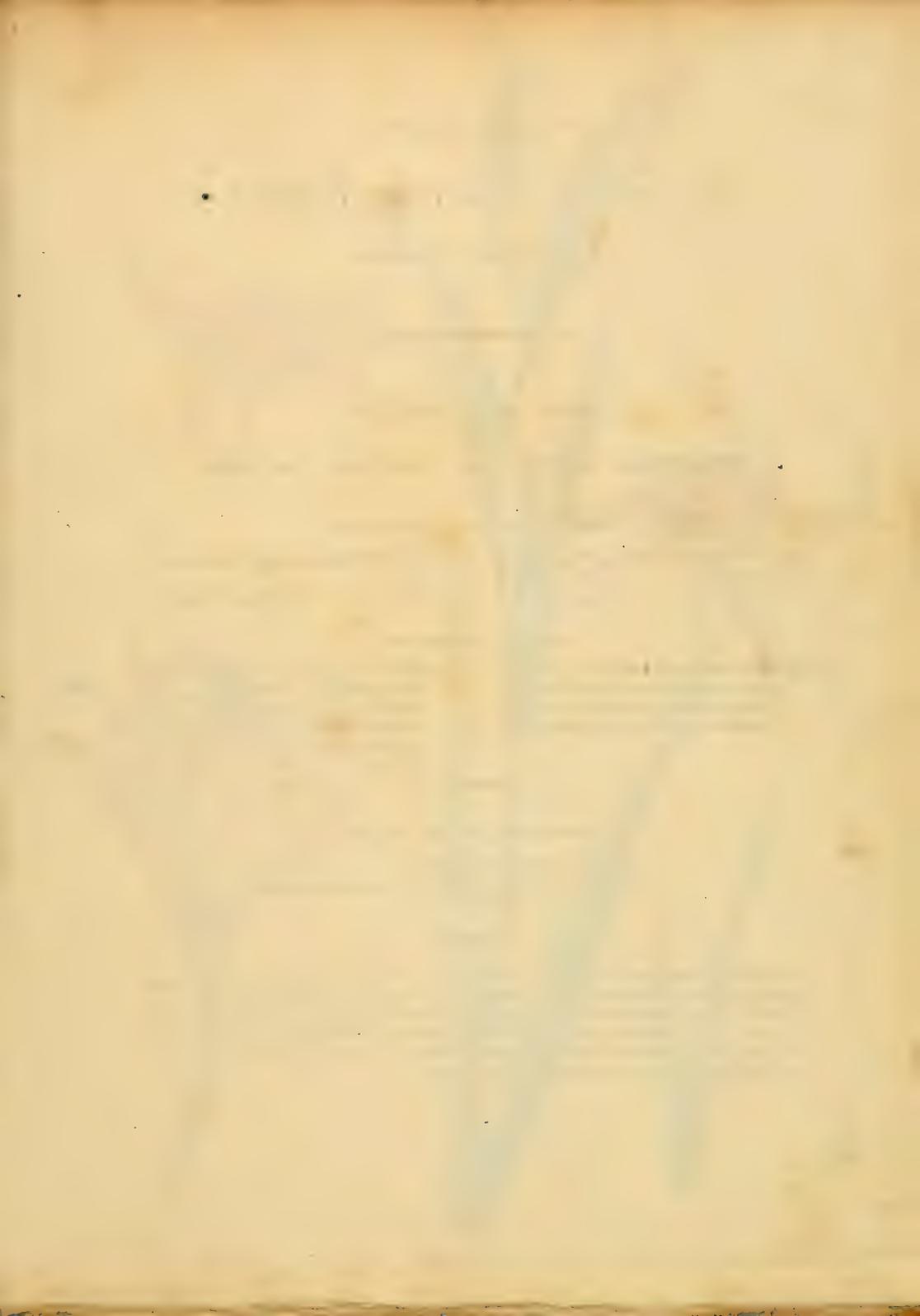


PLATE CXLVII.

GLADIOLUS CUSPIDATUS. •

Spear-spotted Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens. Stamina adscendentia.

BLOSSOM six divisions, gaping. Chives ascending.

See GLADIOLUS ROSEUS. Plate XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis lineari-ensiformibus, glabris; corolla ringente; laciniis longissimis, acuminatis, undulatis, subæqualibus, tribus inferioribus in medio macula oblonga notatis.

Gladiolus with leaves that are linearly sword-shaped and smooth; blossom gaping; segments very long, tapered to the point, waved and nearly equal, the three lower in the middle have an oblong spot.

REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. A blossom cut open, with the Chives remaining attached.
3. The Seed-bud, Shaft, and Summit.

THE *Gladiolus* here figured, represents a variety of one of the most errant species of the Genus, known commonly by the name of Spade *Gladiolus*, and of which we have drawings of eight, quite distinct; yet all, unquestionably, originating in one common parent. It was introduced in 1796, from the Cape of Good Hope, by Mr. R. Williams, nurseryman of Turnham-green, near Brentford; is a very hardy greenhouse bulb, increases from the root in abundance, if planted in very sandy peat earth, and flowers about the Month of April, or May.



2

1

3

Splendens cuspidata



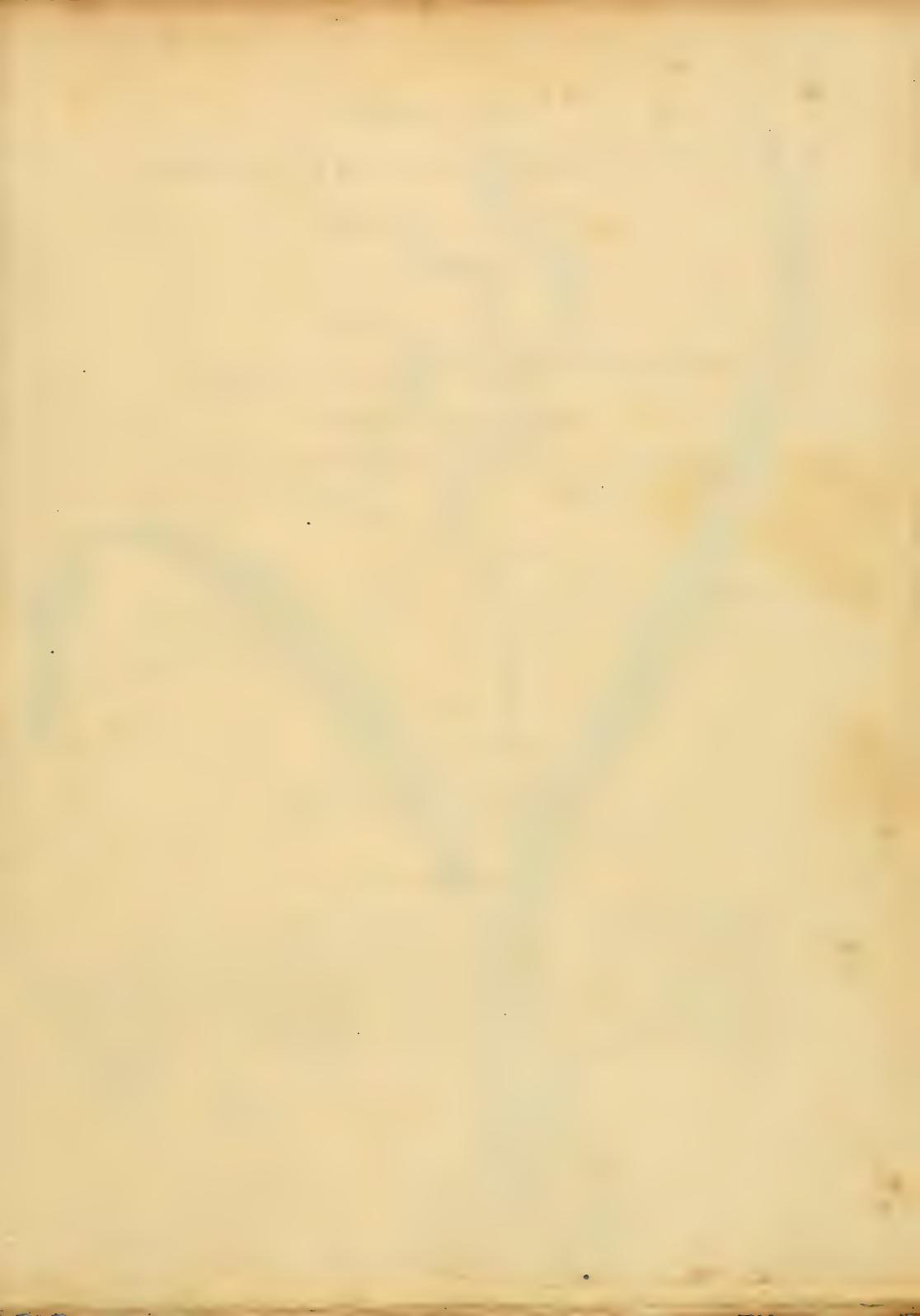


PLATE CXLVIII.

LACHENALIA QUADRICOLOR.

Four-coloured Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COR. 6-petala, infera; petalis 3 interioribus longioribus. Stamina erecta. Capfula subovata, trialata. Semina globosa.

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

SPECIFIC CHARACTER.

Lachenalia foliis geminis, lineari-lanceolatis; scapo erecto; corollis propendulis, cylindricis, quadricoloratis, cum limbo petalorum interiorum patulo.

Lachenalia with leaves in pairs, linearly lance-shaped; flower-stem erect; blossoms hanging down, cylindrical, and four-coloured, with the border of inner petals spreading out.

REFERENCE TO THE PLATE.

1. A Flower cut open, with the Chives remaining.
2. An inner Petal, with its Chive, shewn from the inside.
3. An outer Petal, shewn from the outside.
4. The Pointal complete.

ABOUT the year 1789, this very handsome species of Lachenalia was first received by Messrs. Lee and Kennedy, Hammermith, from the Cape of Good Hope, sent in bulbs to them by J. Pringle, Esq. It is as hardy as the L. tricolor, to which it much inclines, well known to collectors, and is equally easily propagated; an excellent figure of which is to be found, in the 82d Plate of the Botanical Magazine of Mr. Curtis. The L. quadricolor is given as a synonym by Willdenow to L. pendula, a plant we have already figured, and from which this stands quite distinct in the conformation of every part; they are both to be found in the 2d Vol. of Icon. of Jacquin, from whom we copy our specific title, the pendula, t. 400, the quadricolor, t. 396. — *L. lanceolata* 220. 1798



Lachenalia quadricolor



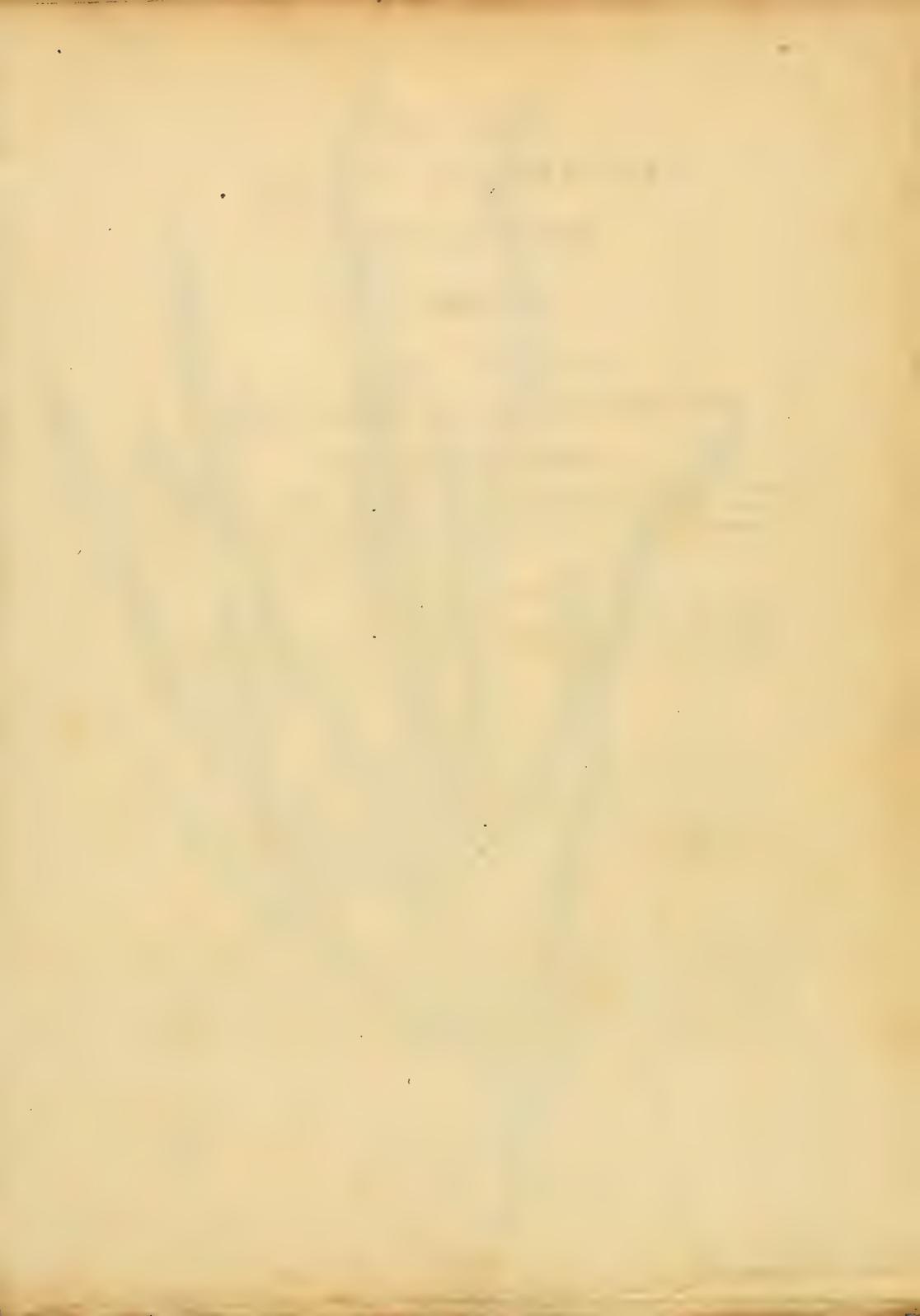


PLATE CXLIX.

STRUTHIOLA CILIATA.

Fringed-leaved Struthiola.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PERIANTHIUM diphyllum. Corolla tubulosa, 4-fida; Nectarium, glandulæ octo fauci circumpositæ. Semen unum, subbaccatum.

CUP two-leaved. Blossom tubular, 4-cleft; Honey-cup, 8 glands placed round the mouth of the blossom. One seed like a berry.

See STRUTHIOLA IMBRICATA, Pl. CXIII. Vol. II.

SPECIFIC CHARACTER.

Struthiola foliis ovato-lanceolatis, mucronatis, ciliatis, concavis, quadrifariam imbricatis, apice incurvis; corolla subalbida.

Struthiola with leaves between egg and lance-shaped, pointed, fringed, concave, tiled in four rows, turned inwards at the point; blossom whitish.

REFERENCE TO THE PLATE.

1. A leaf shewn side-ways that the incurvature of the upper part may be seen.
2. A flower complete.
3. The two leaves of the Empalement, magnified.
4. A blossom-cut open, to expose the situation of the chives, at the mouth of the tube, magnified.
5. The Pointal, a little magnified.

THIS is the variety of *Struthiola ciliata* promised in the last number. It varies from the other in the largeness and incurvature of the leaves, and colour of the flower, as well as, in the growth of the plant; in this, the stem rises to three feet; in that, it seldom exceeds one. With rather less difficulty it is increased and preserved than the red variety, and makes a very handsome figured plant, flowering in the month of August, at which season, last year, our drawing was taken from a plant in the Hibbertian Collection. This Var. has the advantage of the other, in having the blossoms extremely fragrant, in the evening.

1899



Phacelia ciliolata



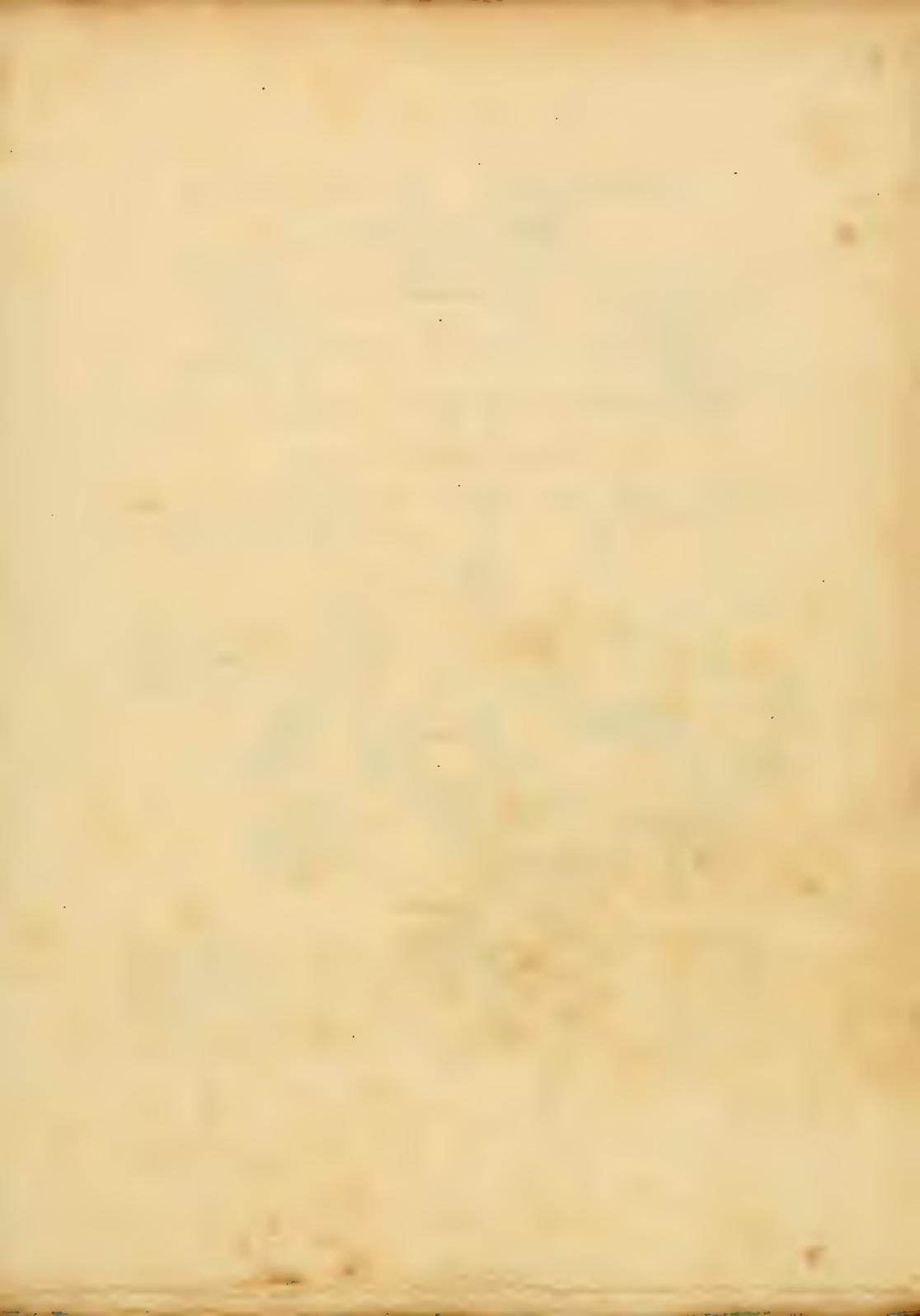


PLATE CL.

GERANIUM PRÆMORSUM.

Bitten-leaved Geranium.

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

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

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

Geranium foliis inciso-lobatis, reniformibus; lobis cuneiformibus, præmorsis; floribus subfoliariis, heptandris; caule flexuoso, subcarnoso.		Geranium with leaves deeply cut into lobes and kidney-shaped; lobes wedge-shaped, and bitten at the ends; flowers generally foliary, with seven fertile tips; stem grows zig-zag, rather fleshy.
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REFERENCE TO THE PLATE.

1. The Empalement cut open, to shew its tubular fructure.
2. The Chives and Pointal.
3. The Chives spread open.
4. The Pointal and Seed-bud.

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



Geranium praevenum



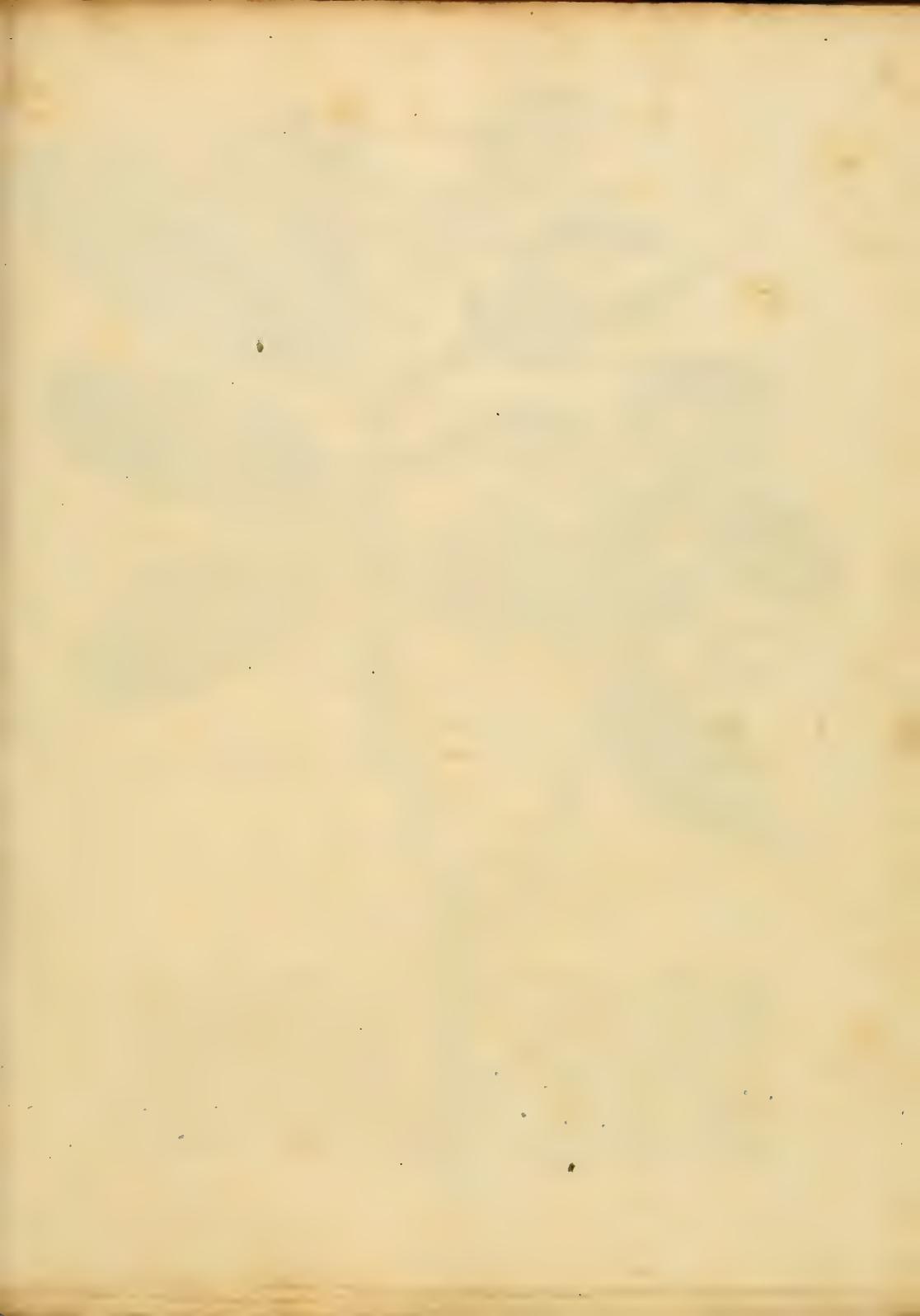


PLATE CLI.

PITTIOSPORUM CORIACEUM.

Thick-leaved Pittosporum.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, inferum, deciduum.
COROLLA. Petala quinque; unguis concavi, in tubum urceolatum conniventes; laminae ovato-oblongæ, patentes.
STAMINA. Filamenta quinque, fubulata, receptaculo inferta. Antheræ sagittatæ, erectæ, filamentis dorso affixæ.
PISTILLUM. Germen ovatum, superum, compressum. Stylus brevissimus, cylindricus. Stigma capitatum, planum.
PERICARPIMUM. Bacca subglobosa, 2-5 locularis, 2-5 valvis; loculamentis pulpa refinosa fœtibus; dissepimenta valvulis contraria.
SEMINA tria seu quatuor, angulata, oblonga, obtusa, offea.

EMPALEMENT. Cup five-leaved, beneath, and falling off.
BLOSSOM. Five petals; claws concave, closing into a tube pitcher-shaped; the borders oblong egg shaped, spreading.
CHIVES. Threads five, awl-shaped, inserted into the receptacle. Tips arrow shaped, upright, fixed by the back to the threads.
POINTAL. Seed-bud egg-shaped, above, flattened. Shaft very short, cylindrical. Summit headed, flat.
SEED VESSEL. A roundish berry 2-5 cells, 2-5 valves; the cells filled with a refinous pulp; partitions contrary to the valves.
SEEDS, three or four, angulated, oblong, obtuse, and bony.

SPECIFIC CHARACTER.

Pittosporum foliis ovalibus, obtusis, glaberrimis, coriaceis, integerrimis.

Pittosporum with oval leaves, blunt ended, very smooth, leathery, and quite entire.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Petal of the Blossom.
3. The Chives and Pointal.
4. The Pointal separated from the Chives.
5. A Berry of the size when ripe.

ABOUT the year 1763, this plant was first raised in Britain, from seeds which had been received from the Island of Madeira, by Messrs. Lee and Kennedy, Hammer-smith. It forms one of the most decorative and conspicuous plants, either in the Conservatory, or Green-house; and if encouraged in its growth, by being planted in the border of the one; or kept in rich earth, in a large pot in the other, will attain the height of from 6 to 8 feet. The finest specimen we believe, in England, of this plant is to be found in the elegant Conservatory of the Right Honourable Lord R. Spencer, Woolbeding, Suffex. The flowers, which grow in clusters from the ends of the branches in May, have the flavour of Jasmine; but are rather transitory. It is propagated but slowly and with difficulty, as it does not perfect its seeds with us, and it is not to be increased by laying: the only method is cuttings, which should be taken whilst very young and tender from the plant, about April, and put from 6 to 8 in a pot, fixed very tight, in stiffish loam; they must remain under a hand-glass on a shady border till Autumn, when they may be removed into the hot-house and plunged into the bark bed, where they will begin to grow the ensuing spring.



Alseporum crinitum



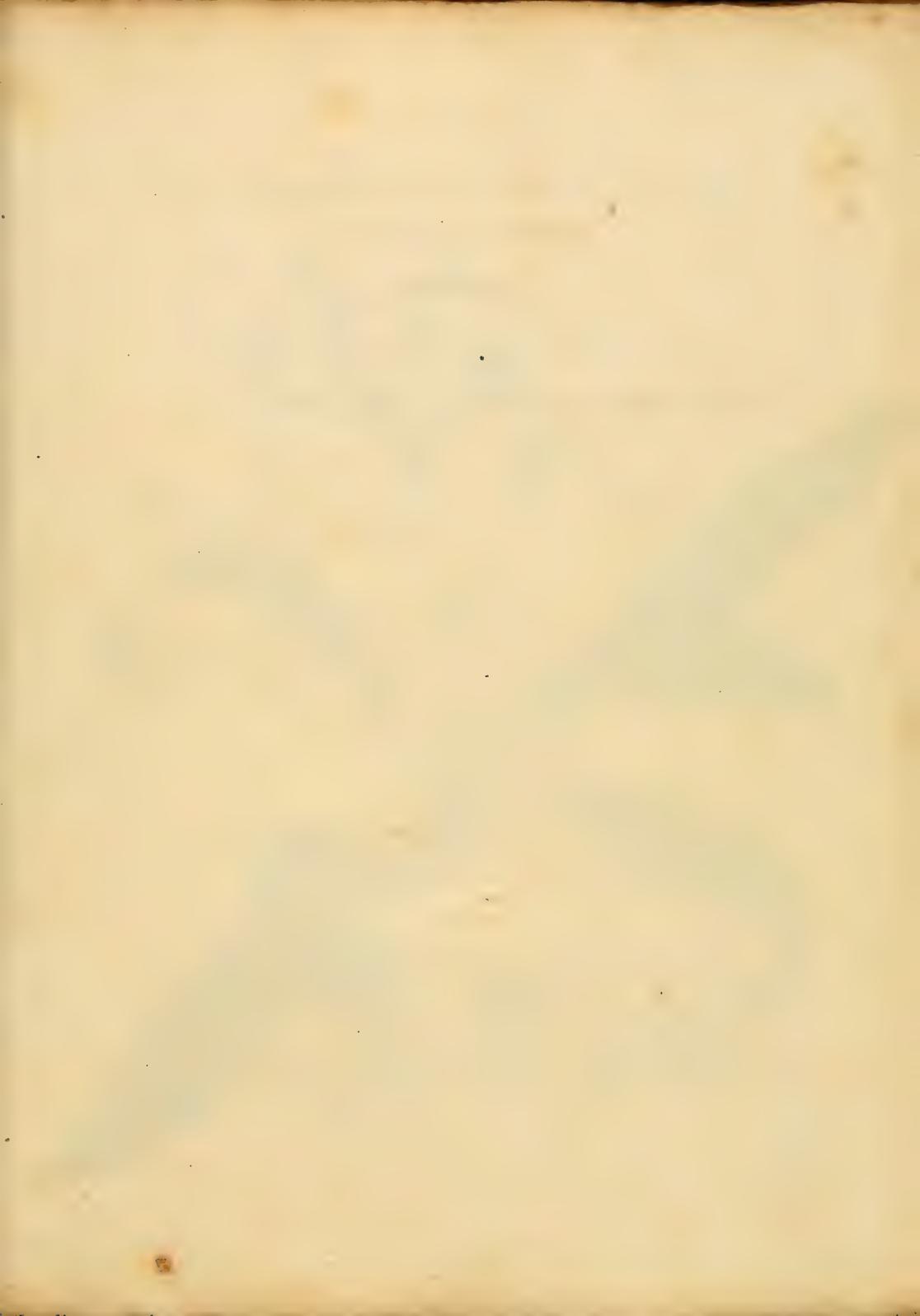


PLATE CLII.

GERANIUM SPATHULATUM.

Spatula-leaved Geranium.

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

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

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

SPECIFIC CHARACTER.

GERANIUM foliis integerrimis, spatulatis, glabris, obtusis, radicalibus; calycibus monophyllis; staminibus quinque fertilibus; radice tuberosa. || GERANIUM with quite entire leaves, spatula-shaped, smooth, blunt, and growing from the root; cups one-leaved; five fertile chives; root tuberosous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to shew its hollow structure.
2. The Chives and Pointal natural size.
3. The Chives spread open, to shew the number and situation of the fertile ones, which are alternate.
4. The Pointal magnified.

THE greater number of Geraniums which have been introduced of late, are of the tuberous herba- ceous kind; drawings of 14 we have, independent of those already figured; constituting a distin- guished, and distinct natural branch of this extensive family. For the most part, they have only five fertile chives with tubular empalements, some only two, and others seven, with the footstalk of the flower solid up to the bottom of the cup. This species is as yet, we believe, only in the Hibbertian Collection, Clapham, where our drawing was taken in April this year. The roots had been received in the autumn of 1800 from the Cape. It appears to require the same management as *G. punctatum*, and like it, may be increased by the root.



Geranium spathulatum



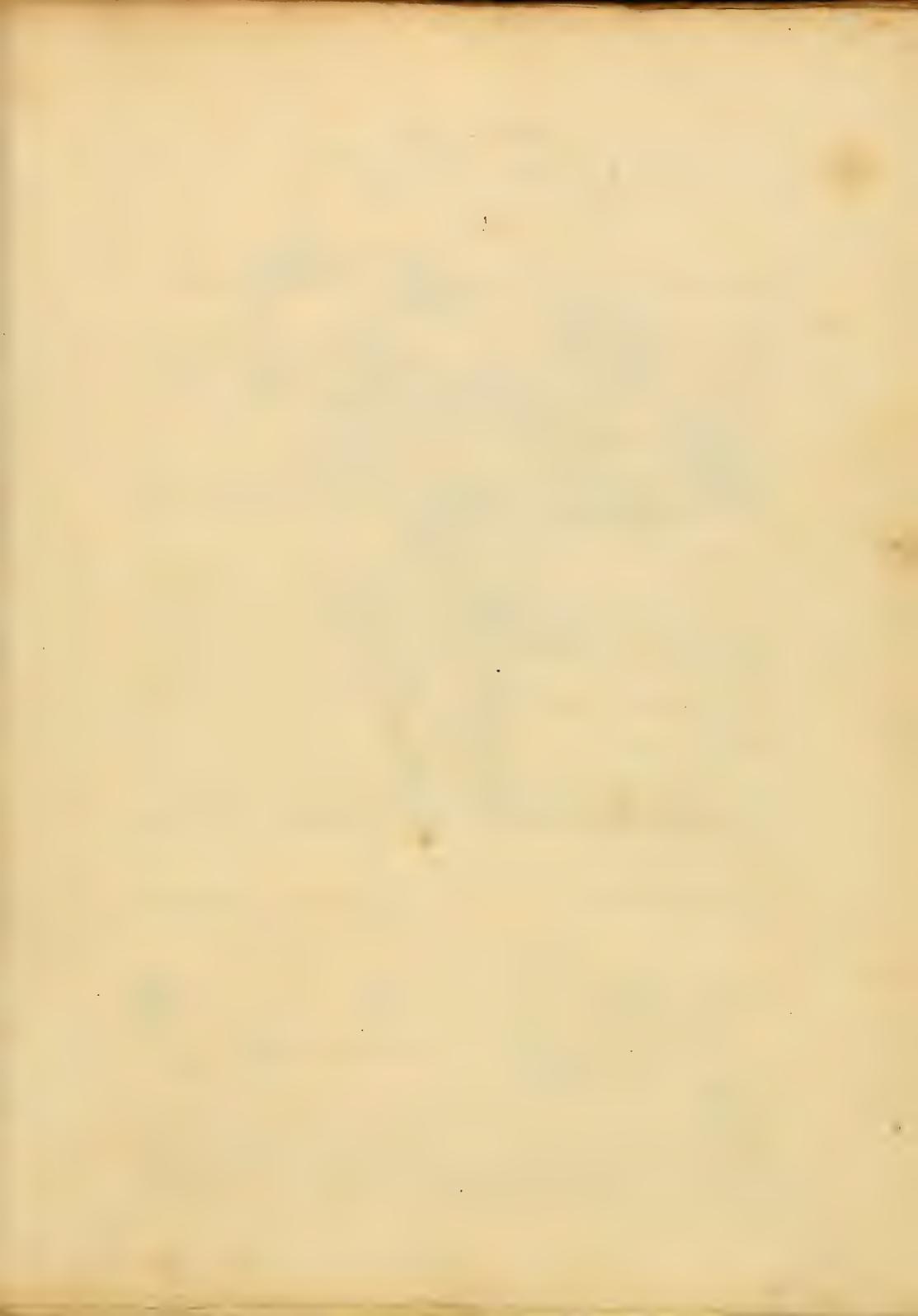


PLATE CLIII.
 VIOLA PEDATA.

Bird's-foot-leaved Violet.

CLASS XIX. ORDER VI.

SYNGENESIA POLYGAMIA MONOGAMIA. Tips united. Flowers simple.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum, breve, perfittens; foliolis ovato-oblongis, erectis, apice acutioribus, basi obtusis, supra basin affixis, aequalibus, sed dispositione variis; quorum duo fulciunt petalum α .; singula singulum petalum β . γ .; unicum duo petala δ . ϵ . firmul.

COROLLA pentapetala, irregularis, petalis inæqualibus; quorum

Petalum α . supremum rectum, deorsum spectans, latius, obtusius, emarginatum, deficiens basi in nectarium corniculatum, obtusum, inter calycis foliola prominens.

β . γ . *Lateralia* paria, obtusa, opposita, recta.

δ . ϵ . *Infima* paria, majora, sursum reflexa.

STAMINA. Filamenta quinque, minima, quorum duo petalo α . proxima appendicibus annexis intrant nectarium. Antheræ sæpius connexæ, obtusæ, membranæ ad apicem auctæ.

PISTILLUM. Germen subrotundum. Stylus filiformis, extra antheras prominens. Stigma obliquum.

PERICARPIMUM. Capsula ovata, trigona, obtusa, unilocularis, trivalvis.

SEMINA plura, ovata, appendiculata, valvis affixa. Receptaculum lineare, per singulam valvulam lineæ instar excurrens.

Obs. *Stigma vel in hamum simplicem reflectitur, vel capitulum est concavum apice perforato.*

CUP five-leaved, short, permanent; leaflets oblong-egg-shaped, erect, sharpest at the point, blunt at the bottom, joined together above the base, equal, but variously disposed; of which, two support petal α . one each petal β . γ . and one the two petals δ . ϵ . together.

BLOSSOM five petals, irregular, unequal petals, of which

The upper petal α . is upright, bent back, broader, and blunter than the rest, notched at the end, terminating at the base in a blunt horn-shaped honey-cup, protruding between the leaflets of the cup.

The lateral petals β . γ . grow in pairs, obtuse, opposite, upright.

The lower petals δ . ϵ . grow in pairs, larger, and reflexed upwards.

CHIVES. Five threads, very small; of which the two nearest to the petal α . have small appendages which enter the honey-cup. Tips generally united, blunt, enlarged by skinny substances at the end.

POINTAL. Seed-bud roundish. Shaft thread-shaped, projecting beyond the tips. Summit oblique.

SEED-VESSEL. Capsule egg-shaped, three-sided, blunt, one cell and three valves.

SEEDS many, egg-shaped, having appendages, fixed to the valves. Receptacle linear, running like a line along each valve.

Obs. *The summit is either reflexed into a simple hook, or a concave small head perforated at the end.*

SPECIFIC CHARACTER.

VIOLA acaulis; foliis pedatis, septempartitis; laciniis dentatis.

VIOLET without a stem, leaves formed like a bird's foot, with seven divisions; segments toothed.

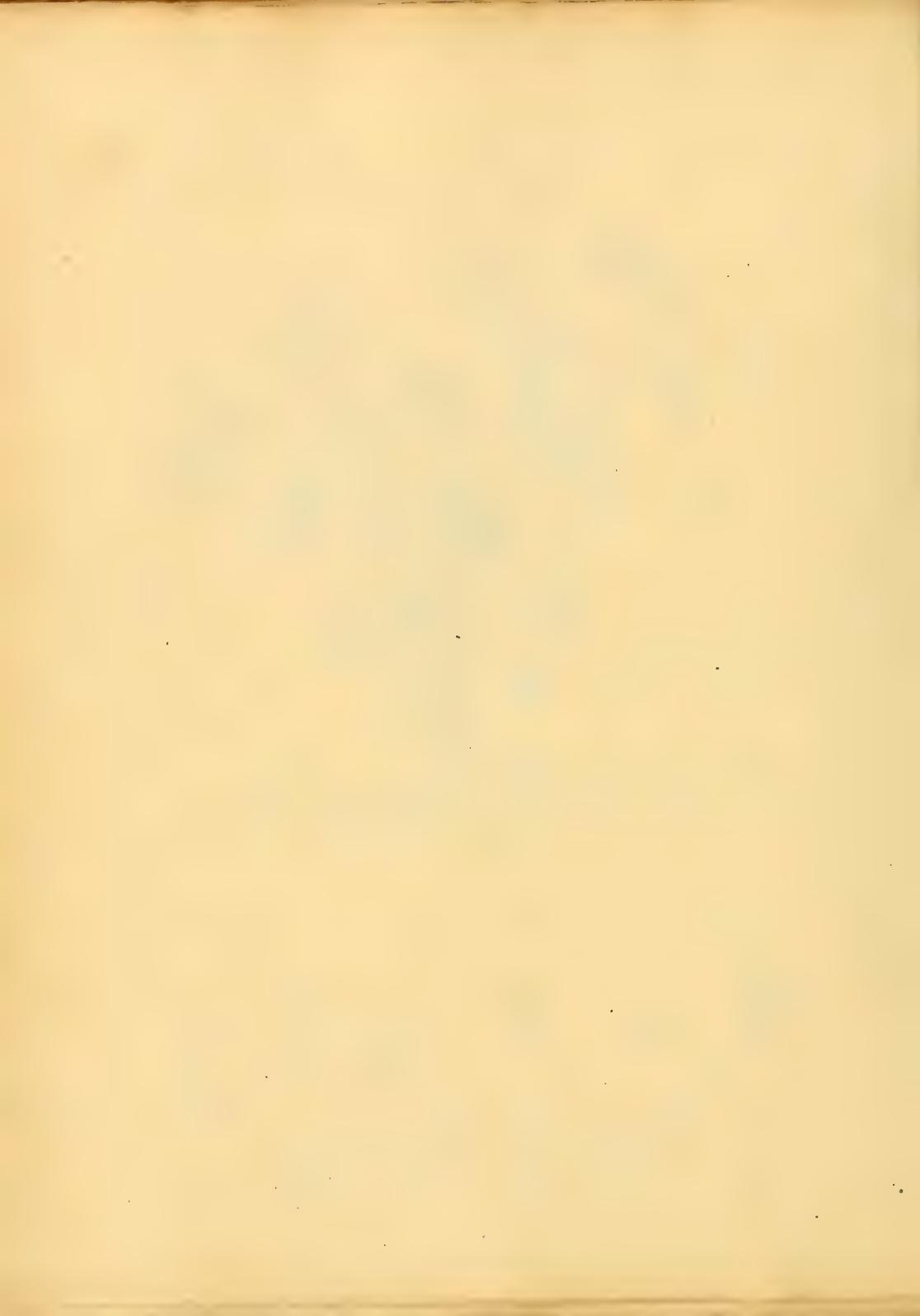
REFERENCE TO THE PLATE.

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

THE Bird's-foot-leaved Violet is a native of North America near Philadelphia; and (according to the Kew Catalogue) was cultivated by Mr. P. Miller, in 1759, at the Physic Gardens, Chelsea. It is a hardy herbaceous plant, but is sometimes destroyed by the wetness of our autumnal months: the flowers, if kept in the open air, expand about May, or the beginning of June; but if kept in pots they, with a slight protection from the Spring frosts, will be produced in April. Peat earth is the soil it approves most, and it should not be exposed to too much wet, whether planted in the borders or in pots. The roots may be parted in March.



Viola parviflora



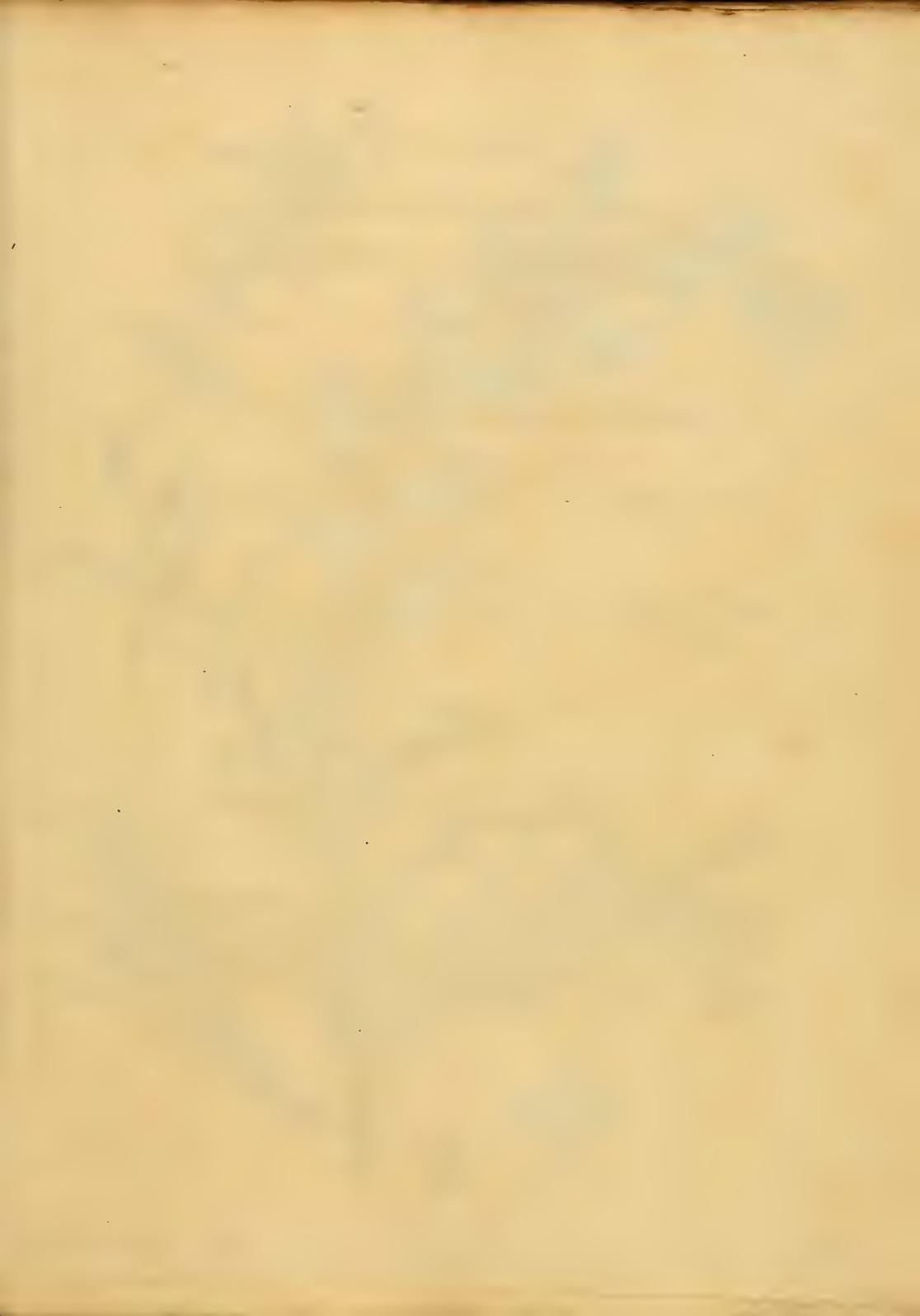


PLATE CLIV.

ECHIUM ARGENTUM.

Silvery-leaved Viper's-Buglofs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA irregularis, fauce nudà.

BLOSSOM irregular, mouth naked.

See ECHIUM GRANDIFLORUM, Pl. XX. Vol. I.

SPECIFIC CHARACTER.

Echium foliis lanceolatis, acutis, fericeo-villofis; spicis terminalibus; corolla violacea, subæqualia.

Viper's-buglofs with lance-shaped leaves, sharp-pointed and filkily-hairy; spikes terminate the branches; blossom violet colour, nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives remaining attached.
3. The Seed-buds, Shaft, and Summit.

THIS fine species of Echium, was raised from seeds received from the Cape of Good Hope in the year 1789, at the nursery, Hammermith; where our drawing was made, last year, from a plant which had been planted in the open ground, for the summer months; and where it had grown to the height of four feet. It is a hardy green-house plant, and grows best in light earth, either peat, or leaf mould; and flowers about July. It is as difficult to propagate as either, the E. grandiflorum, or E. ferocissimum; but only to be increased, like them, by cuttings.



Cytisium argenteum



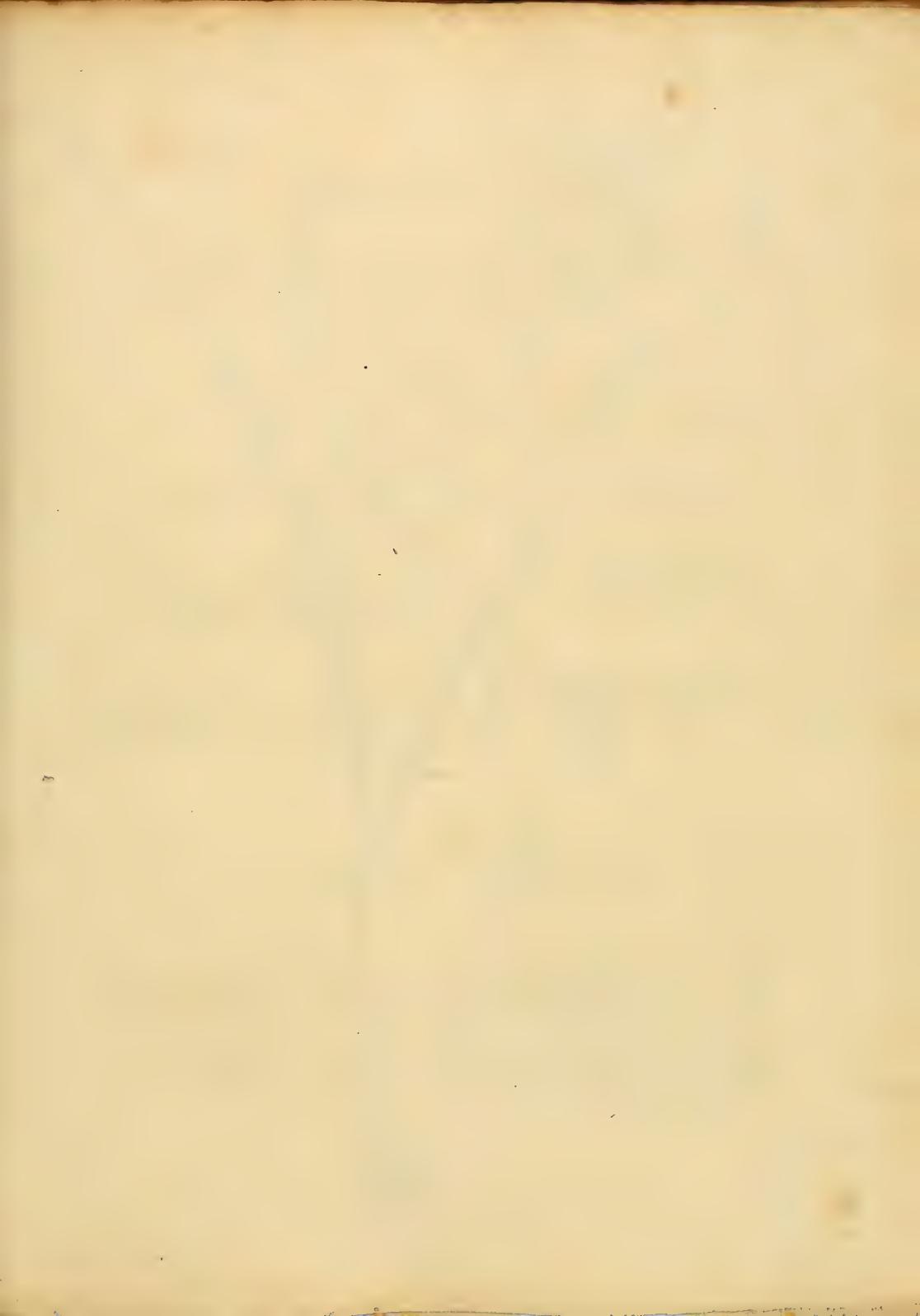


PLATE CLV.

IXIA POLYSTACHIA.

Many-spiked Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, patens, equalis. Stigmata 3, erectiusculo-patula.		BLOSSOM 6-divisions, spreading, equal. Summits three, nearly upright and spreading. See IXIA REFLEXA, Vol. I. Plate XIV.
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SPECIFIC CHARACTER.

Ixia foliis linearibus; scapo spicis pluribus; floribus oppositis, spicatis; corollis albidis.		Ixia with linear leaves; flower-stem with many spikes; flowers grow opposite and spiked; blossoms white.
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REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. A flower cut open to shew the situation of the Chives.
3. The Pointal natural size.

This is the plant which is figured by Miller, in the coloured plates which correspond with the dictionary, 104, t. 155. fig. 2. under the specific title it here bears; and, says the Kew Catalogue, was cultivated by him 1757. Since this is the first which bore the title of Polystachia, and being of the colour we think is mostly primitive in flowers, we have given it the preference; and shall consider all the other 18, (of which we have drawings and decidedly of this species) as varieties from this. The flowers of this species are more lasting than most of the others; and are in general, especially this sort, very hardy. It propagates freely by the root and by seed. Our drawing was made at the nursery, Hammermith, last year, in the month of May.



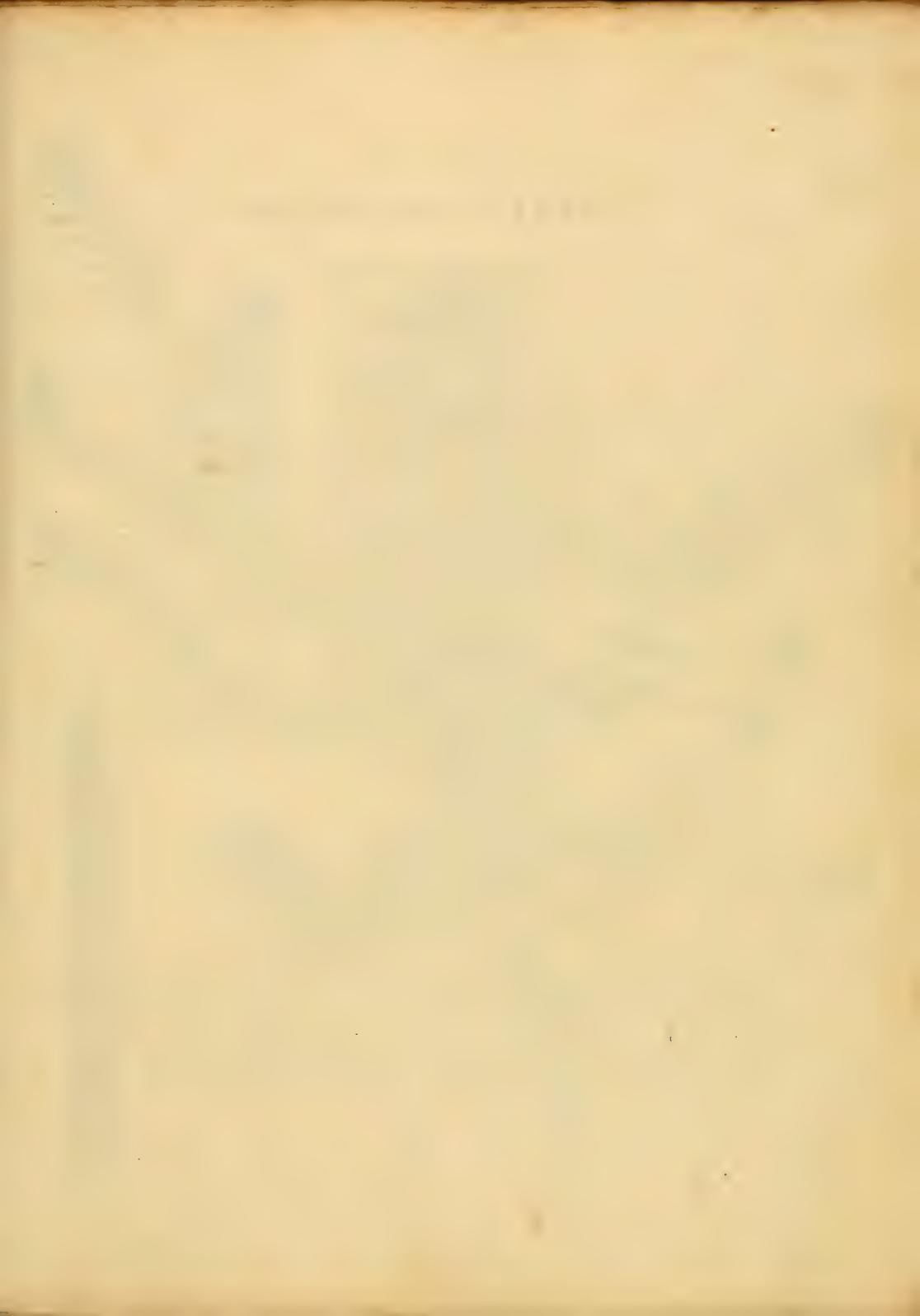


PLATE CLVI.

BANKSIA ERICÆFOLIA.

Heath-leaved Banksia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Receptaculum commune elongatum, squamosum.
Corolla tetra-petala. Stamina limbo inferta.
Capsula bivalvis, disperma, interjecto femi-
nibus dissepimento mobili. Semina alata.

Common receptacle elongated, scaly. Blossom
of four petals. Chives inserted into the
limb of the blossom. Capsule with two
valves, two seeds, and a moveable partition
between them. Seeds winged.

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

SPECIFIC CHARACTER.

Banksia foliis linearibus, margine revolutis,
truncato-emarginatis, supra glabris.

Banksia with linear leaves, rolled back at the
edge, appearing cut off at the ends, which
are notched and smooth on the upper side.

REFERENCE TO THE PLATE.

1. A Blossom complete.
2. The same spread open.
3. The Petals of a flower, with their chives magnified.
4. The Pointal natural size, with the Summit detached, magnified.
5. The rudiments of a cone, cleared from the flowers.

THE seeds of this species of *Banksia* were amongst the first which arrived from New Holland, and plants were raised at the nursery, Hammermith, in the same year as the *B. serrata*. To the directions in the management and increase of which plant, we refer our readers for the treatment of this, as it requires no other. It grows to the height of five, or six feet, very bushy from the bottom, and the leaves, which are harsh and numerous, are not very subject to decay. Although it has flowered in many collections, where we have seen it, we have had no opportunity of making an accurate drawing until last month, March 1801, from a fine plant in the collection of G. Hibbert Esq. Clapham.





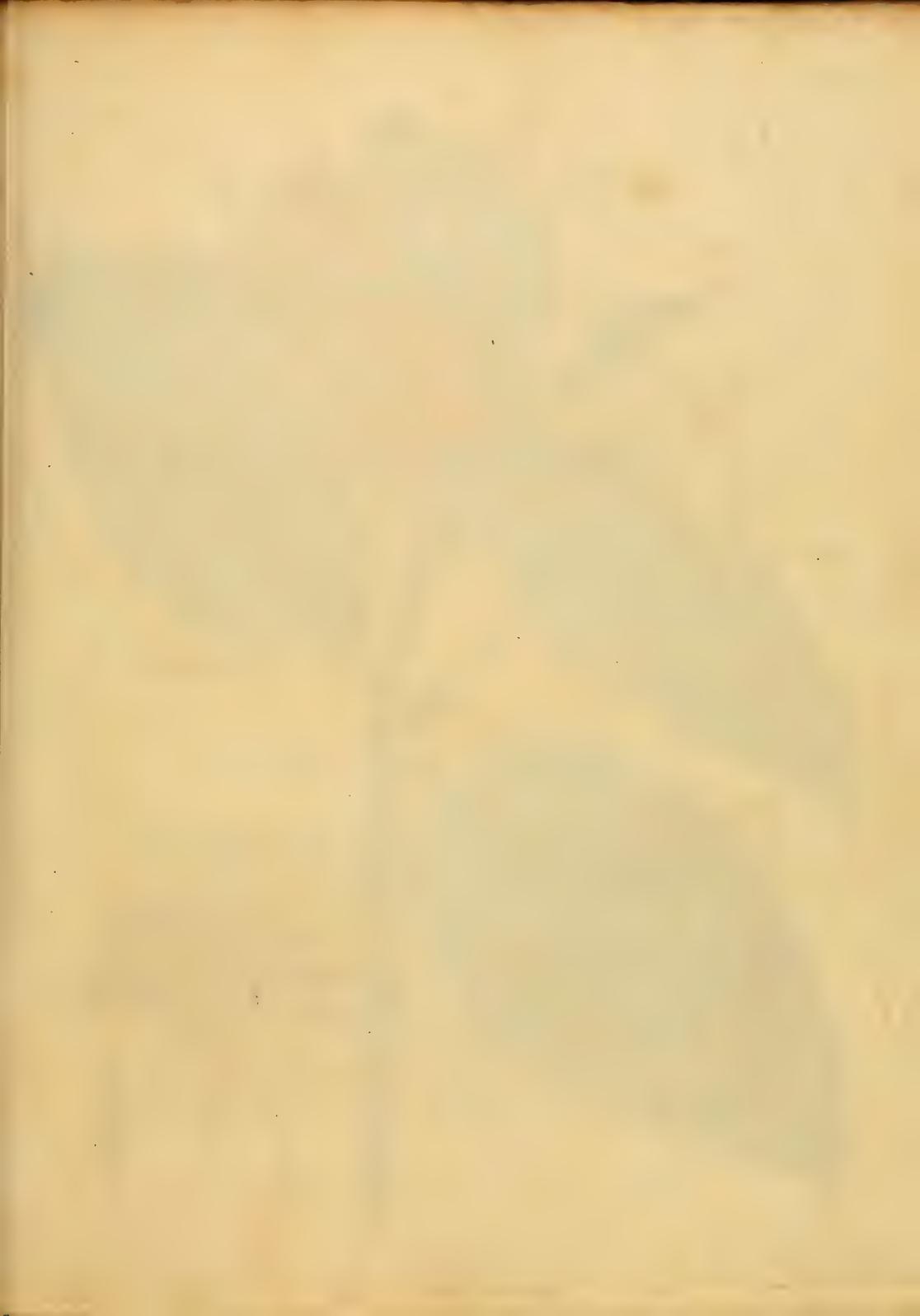


PLATE CLVII.
C O R D I A S E B E S T E N A .
Rough-leaved Cordia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, apice dentatum, perfoliatum.
COROLLA monopetala, infundibuliformis; tubus patulus, longitudine calycis; limbus erecto-patens, scissus in quinque (quatuor vel sex), lacinias obtusas.
STAMINA. Filamenta quinque, subulata. Antheræ oblongæ, longitudine tubi.
PISTILLUM. Germen subrotundum, acuminatum. Stylus simplex, longitudine staminum, superne bifidus, lacinias bifidis. Stigmata obtusa.
PERICARPIMUM. Drupa globosa, acuminata, calyce accreta.
SEMEN. Nux falcata, quadrilocularis.

EMPALEMENT. Cup one leaf, tubular, toothed at the upper part, remaining.
BLOSSOM one petal, funnel-shaped; tube widening, the length of the cup; border upright and spreading, cut into five (four or six) obtuse segments.
CHIVES. Five threads, awl-shaped. Tips oblong, the length of the tube.
POINTAL. Seed-bud roundish, tapered. Shaft simple, the length of the chives, two-cleft at the upper part, segments two-cleft. Summits blunt.
SEED-VESSEL, pulpy, globular, tapered, growing to the cup.
SEED. A furrowed, four-celled nut.

SPECIFIC CHARACTER.

Cordia foliis oblongo-ovatis, scabris; floribus miniatis, crispis, hexandris.

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

REFERENCE TO THE PLATE.

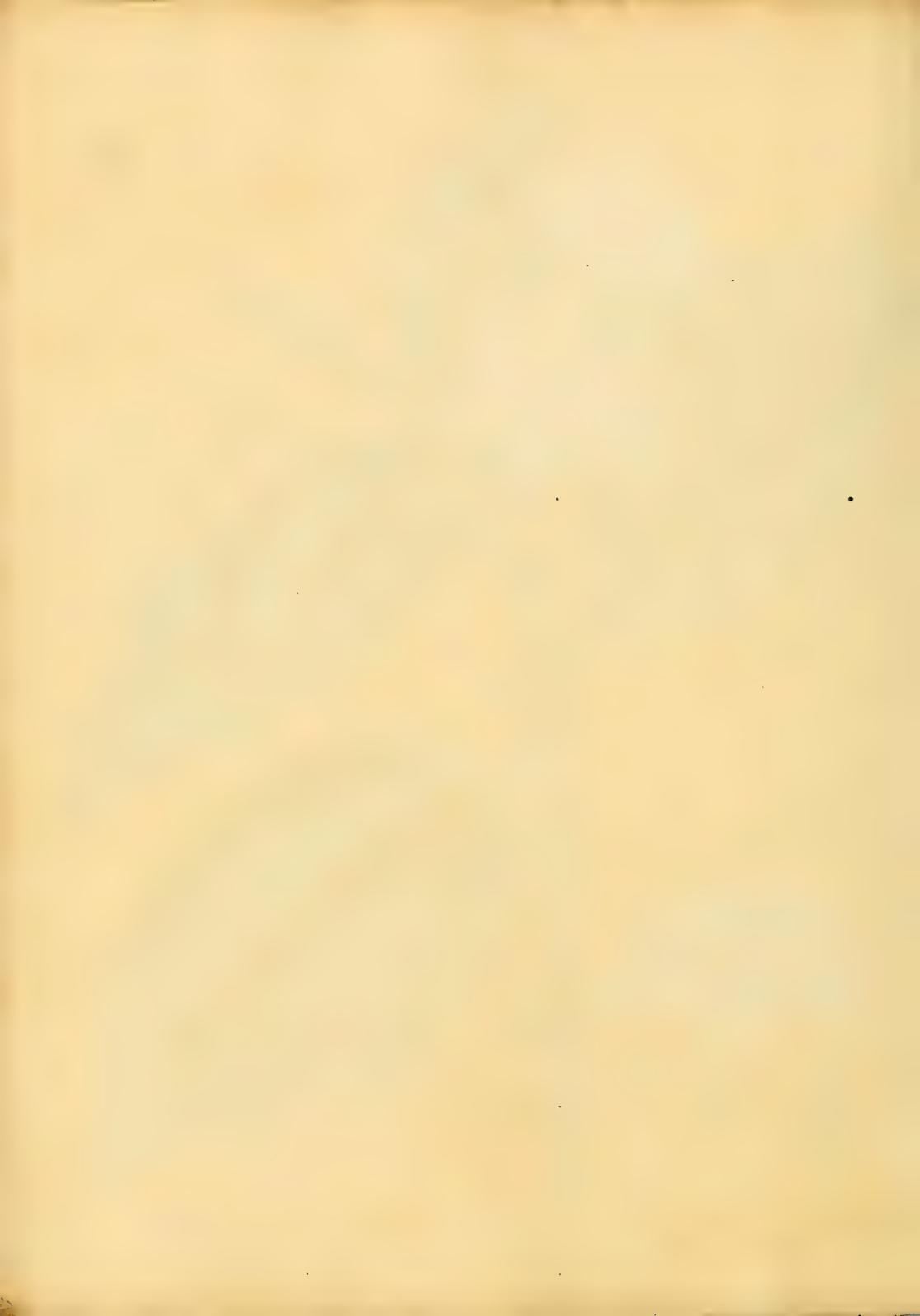
1. The Empalement.
2. A Blossom spread open, with the Chives in their place.
6. The Pointal and Seed-bud.

As it should seem a determined principle in the inscrutable arrangement of nature's productions, to the greater humiliation of our very limited understandings; that no effort as emanating solely from thence, shall be perfect; so must we be content to pursue our Botanical travel, under the guidance of a system decidedly defective; yet certainly, the best we have to boast. Scarce a genus, comprehending a number of species, but must be strained in its class or order, for the introduction of one, or more species, evidently of the same family. So convinced was our great master of the science, of the impossibility of forming such certain data, that to prevent the confusion and difficulty, which must have arisen, from such an accumulation of Genera, if every sexual character was attended to, that, where certain other characters (called by him essential, and adopted as a substitute for such occasional hiatus) are formed, the plant is retained under the Genus so characterized. This disposition is the natural result of our examination of the present plant, which, although the chives are six, is placed in the fifth class!

The Rough-leaved *Cordia* is a native of the West India Islands, and was cultivated, says Martyn's Dictionary, from Dillenius, in the year 1728, by Dr. Sherard. It is a tender hot-house plant, may be increased by cuttings made about the month of April, if kept from too much moisture, in a pot of sandy loam, under a small striking glass in the bark-bed. At present it is rather a scarce plant in our collections, and as it is rather difficult to propagate, is likely to continue so, at least for some years. From an imported plant, received by Messrs. Lee and Kennedy, Hammermith, from the island of Barbadoes, our figure was taken in the year 1789, about the month of July. It is grown to the greatest perfection by keeping it in a mixture of rotten dung and loam.



Cordia alliodora



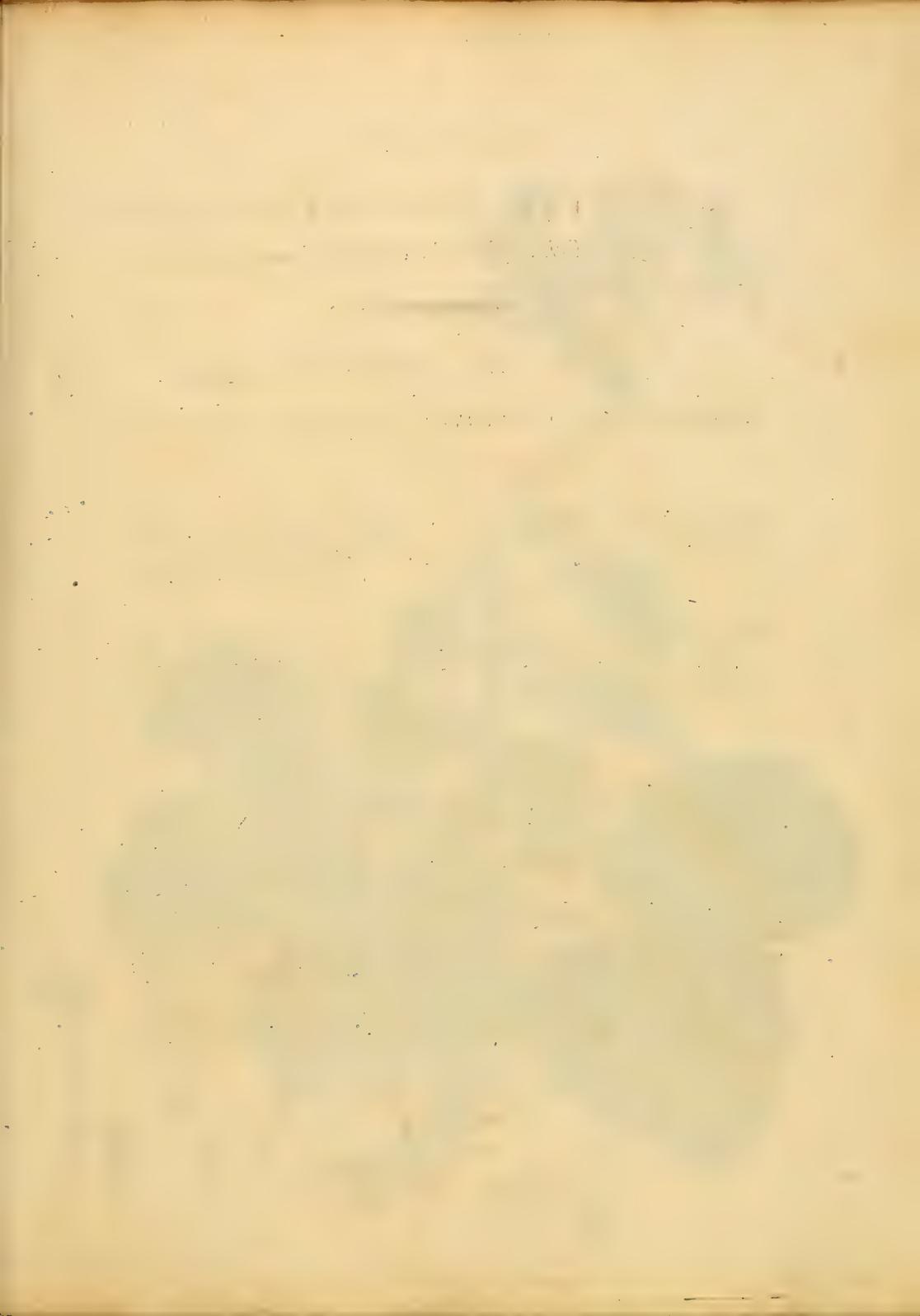


PLATE CLVIII.

GERANIUM ECHINATUM. *Var. flore rubro-purpureo.*

Prickly-stalked Geranium. Red-purple flowered Var.

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

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus rostratus, penta-coccus.

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

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

SPECIFIC CHARACTER.

Geranium foliis fericeis, cordatis, inequaliter dentatis; caule spinoso, subcaroso, spinis retrofractis; floribus hexandris, rubro-purpureis; calycibus pilosis.

Geranium with silky heart-shaped leaves, unequally toothed; stem spiny, rather fleshy, spines turned downwards; flowers with six fertile tips and red-purple; cups hairy.

REFERENCE TO THE PLATE.

1. The Empalement.
2. An upper Petal of the Blossom.
3. An under Petal of the Blossom.
4. The Chives and Pointal.
5. The Chives spread open.
6. The Pointal, magnified.

THIS fine variety of the Prickly-stalked Geranium, was introduced, at the same time with the white variety, by Mr. Francis Maffon, to the Royal Gardens, Kew, in the year 1795. It is a tender plant, and requires the heat of the hot-house, through the winter months to preserve it, being a native of that part of Africa near the Namaqua land, which is in most parts a barren, arid sand, extremely hot and parched, experiencing little change through the whole year. The propagation is either produced by cuttings, or from the roots, which are tuberous, in most instances, if the plant is kept in light sandy peat earth. The drawing was made, in March this year, at the Nursery of Mr. J. Colville, King's Road, Chelsea.



Gesnerium echinatum
Swartz, Prodr. Fl. Ind. Occid. 1791, p. 107, t. 1, f. 10.



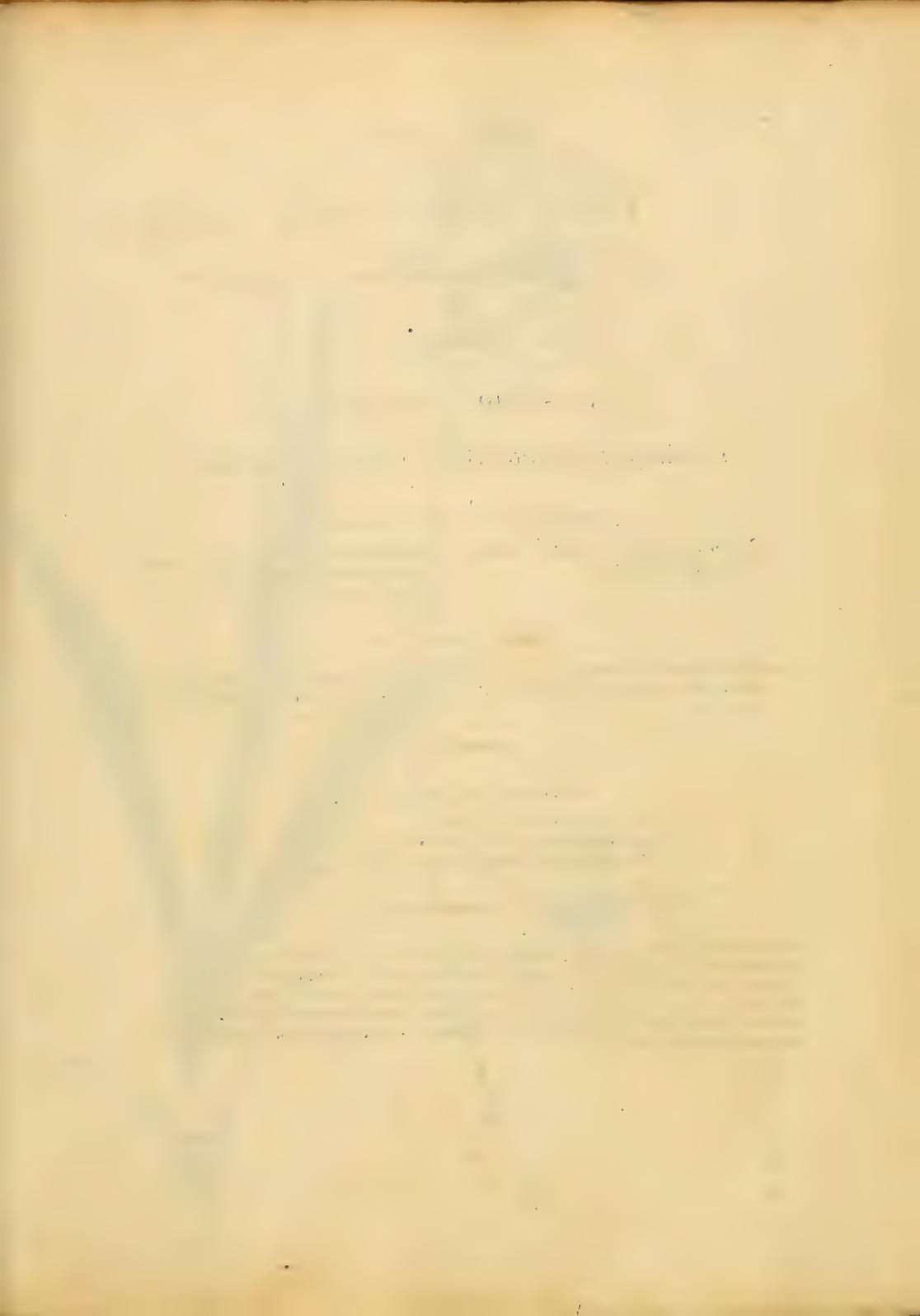


PLATE CLIX.

IXIA CAPITATA. *Var. flore albo, fundo nigro.*

Bunch flowering Ixia. *Var. white flowered, black bottom.*

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, spreading. See IXIA REFLEXA, Vol. I. Plate XIV.
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SPECIFIC CHARACTER.

<i>Ixia</i> , foliis ensiformibus; floribus capitatis, confertis, albidis, petalis basi nigerrime notatis.		<i>Ixia</i> , with sword-shaped leaves; flowers grow in close bunches, whitish, the petals very dark, marked at the base.
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REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. A Blossom spread open, with the Chives remaining.
3. The Seed-bud and Pointal, one Summit detached, magnified.

As no difference, either in culture or increase, is necessary for this plant, more than is required for the other varieties of this species of *Ixia*; we shall refer our readers to the directions for the treatment of them, for the management of this. Our figure is from a drawing taken at the Hammermith nursery in the year 1799, about the month of May. It is one of those introduced to the Royal Gardens at Kew by Mr. F. Masson about the year 1774, although lost to us for some years, but since received from the collections in Holland.



Isia capitata
Isia alba, fide "arce"



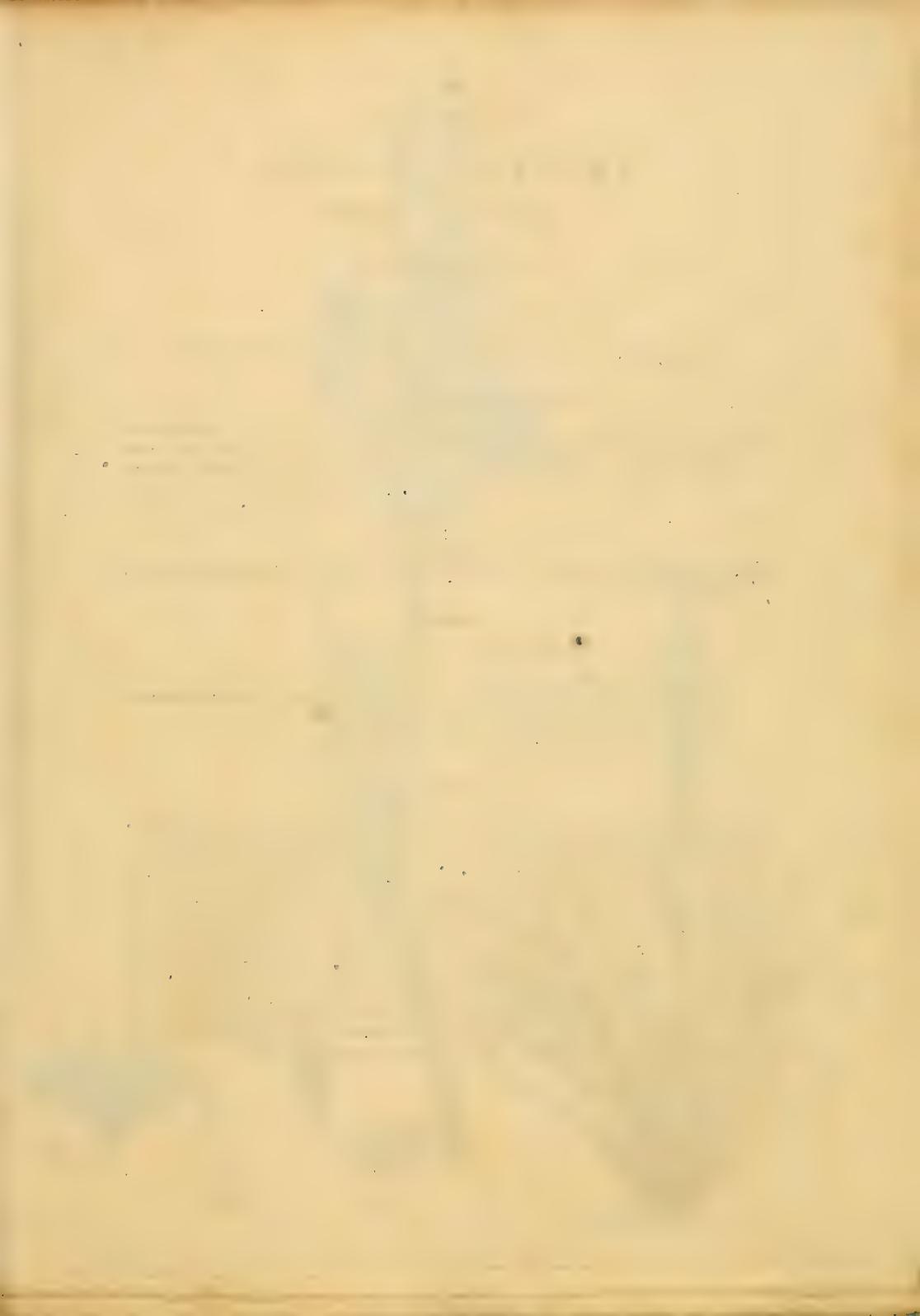


PLATE CLX.

ARISTEA MAJOR.

Spike-flowered Aristea.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PETALA 6. Stigma concavum. Capfula triloba, trilocularis, loculis compressis. Semina in singulo loculo bina, compressa truncata.

PETALS 6. Summit concave. Capful three-lobed, three celled; cells flattened. Seeds two in each cell, flattened and appearing cut off at the end.

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

SPECIFIC CHARACTER.

Aristea foliis ensiformibus longissimis; floribus spicatis, caeruleis.

Aristea with very long leaves; flowers grow in spikes, and blue.

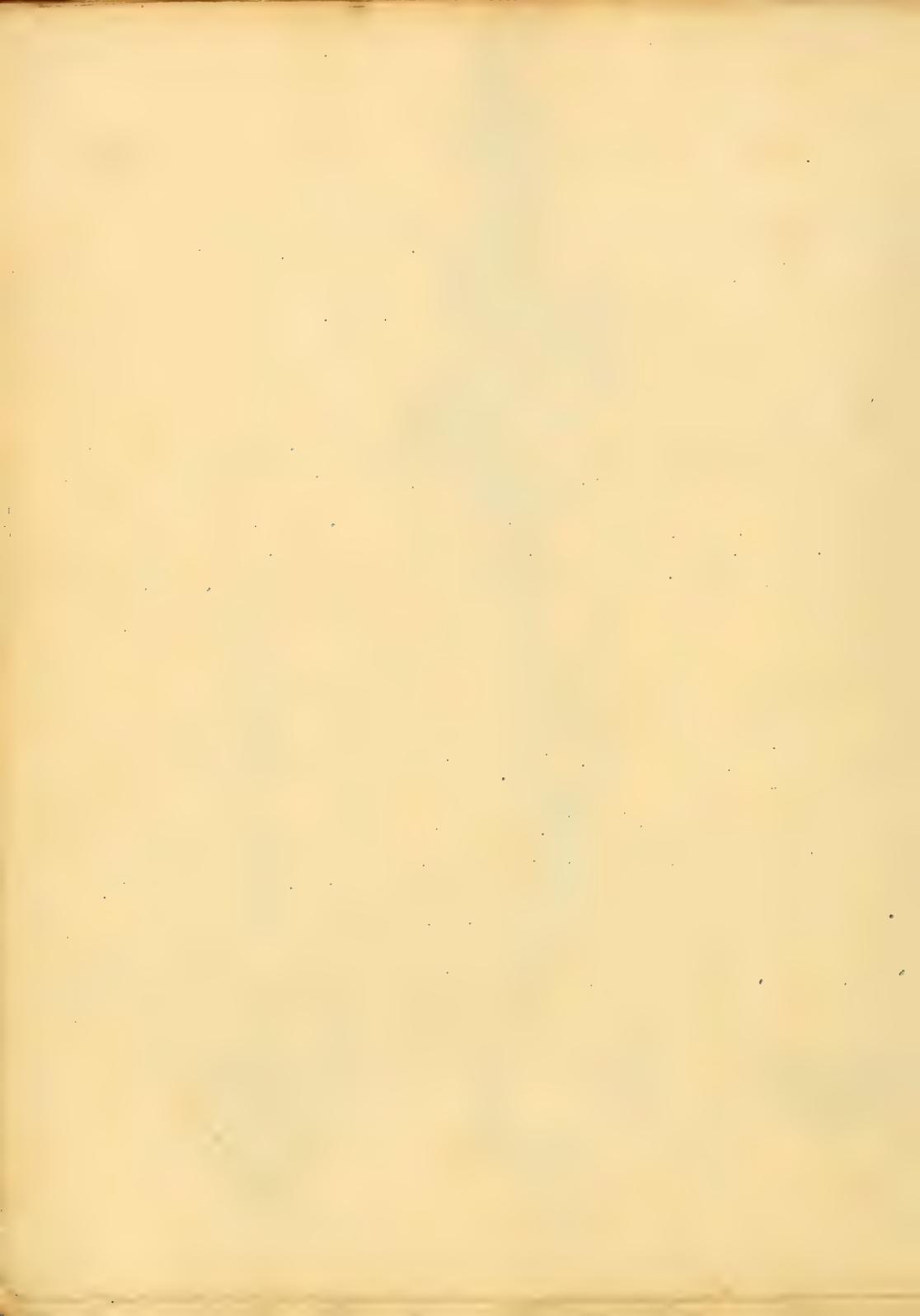
REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. A Blossom with the Seed-bud, both cut open and remaining attached, the Shaft removed.
3. The Pointal natural size, with the summit detached magnified.
4. A ripe seed-vessel, natural size.
5. The same with the cells laid open to shew the situation of the seeds.

The Genus *Aristea*, having certainly been formed from a dried specimen of the plant, the alterations we have made in our Generic and Essential characters, will, upon inspecting the dissections, appear absolutely necessary; as the shaft is not bent, in either species we have examined, whilst the flower is perfect; but assumes that appearance on its decay, as it becomes involved with the petals, which twist up in the manner of *Moræa*, *Iris*, &c. The Summit likewise, is not funnel-shaped, but merely a little concave, with a border: other small variations have been made, in the character of the seed-vessel and seed. In the year 1794, this fine plant was raised by Messrs. Lee and Kennedy, from seeds received by them from the Cape of Good Hope, where it is native. It is one of the very hardiest inhabitants of the greenhouse, and is propagated, either from the seed, which ripens with us: or by the offsets made from the root. The plant is persistent, but does not acquire a stem; the leaves growing to the length of from two, to three feet, the flower-stem sometimes to the height of four feet; which was nearly that of the plant in the Collection of G. Hibbert, Esq. Clapham, from which our drawing was taken in the month of July 1800. It should be planted in sandy peat.



Aristea major



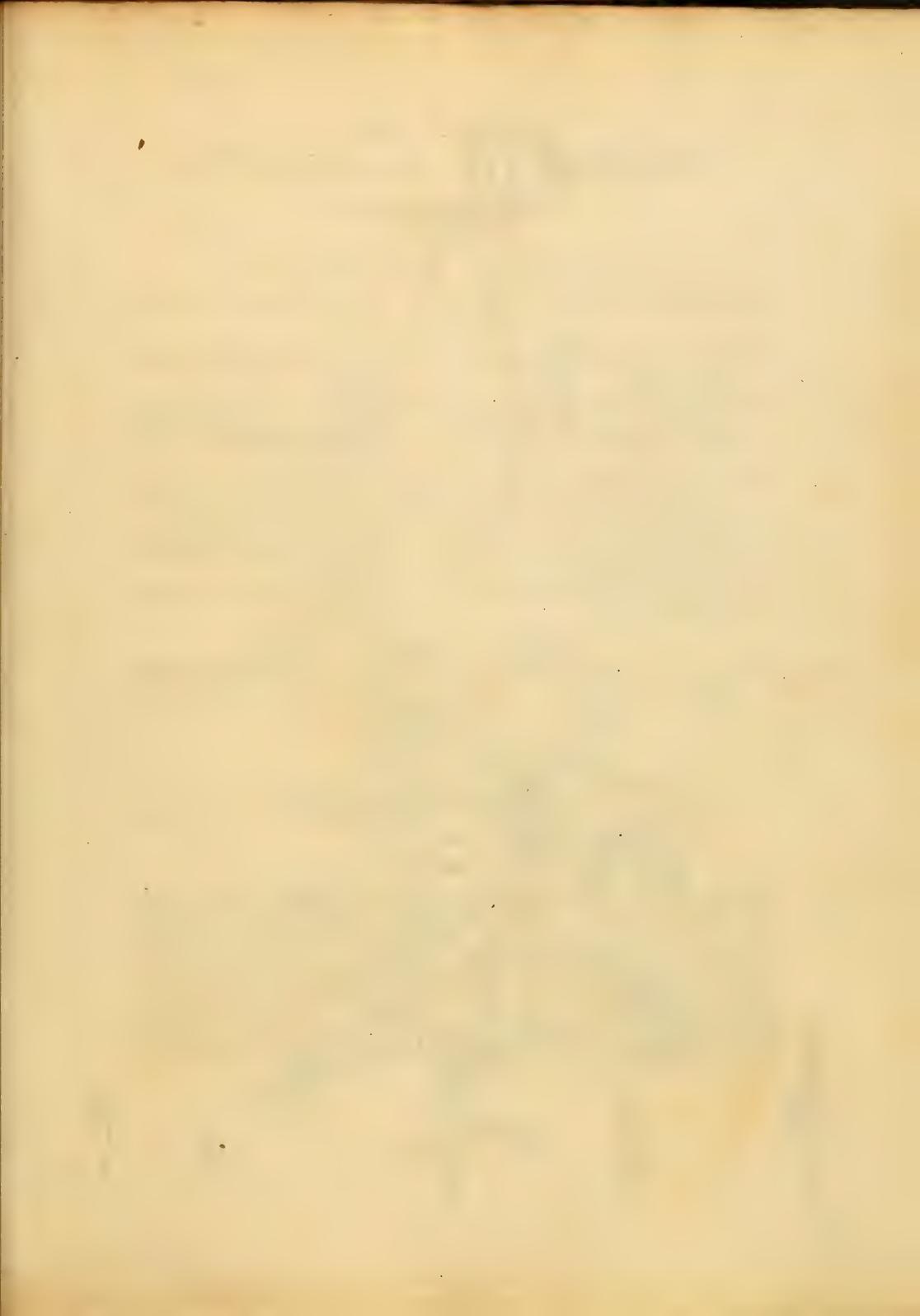


PLATE CLXI.
HERMANNIA PULVERATA.

Powdered Hermannia.

CLASS XVI. ORDER II.

MONADELPHIA PENTANDRIA. Threads united. Five Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, subrotundum, inflatum; lacinulis inflexis; persistentis.

COROLLA pentapetala, spiralis; ungues longitudine calycis, utrinque aucti membranula connivente in tubum cucullatum nectariferum; limbus patens, latiusculus, obtusus.

STAMINA. Filamenta quinque, latiuscula, inferne levissime in unum corpus coalita. Antheræ erectæ, acuminatæ, conniventes.

PISTILLUM. Germen subrotundum, pentagonum, quinquangulare. Styli quinque, filiformes, approximati, subulati, staminibus longiores. Stigmata simplicia.

PERICARPIMUM. Capsula subrotunda, pentagona, quinque-ocularis, apice dehiscentis.

SEMINA plurima, parva.

EMPALEMENT. Cup one leaf, five-cleft, roundish and swelled out; segments turned inwards; remaining.

BLOSSOM, five petals, spiral; claws the length of the cup, widened on both sides by a small skinny substance forming a honey-bearing, cowl-shaped tube; border spreading, broadish, blunt.

CHIVES. Five threads, broadish, slightly joined at the base into one body. Tips upright, tapered, and approaching each other.

POINTAL. Seed-bud roundish, five-sided, five-angled. Shafts five, thread-shaped, close together, awl shaped, longer than the Chives. Summits simple.

SEED-VESSEL. Capsula roundish, five-sided, five-celled, splitting at top.

SEEDS, many, small.

SPECIFIC CHARACTER.

Hermannia foliis bipinnatifidis, scabriusculis, albicantibus; pedunculis bifloris, longifinis; corollis fœdidè luteis.

Hermannia with doubly wing-cleft leaves, rather rough and whitish; flower-stems two-flowered, very long; blossoms of a dirty yellow.

REFERENCE TO THE PLATE.

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

THIS plant appears to stand an intermediate character, between *Mahernia* and *Hermannia*: the general habit affines most to the former, and indeed, the shape of the threads, on which the essential general distinction rests, approaches very near to those in *Mahernia*; for, although they have not absolutely foot stalks, they are much larger, above the middle, than is usual in *Hermannia*, as may be seen on the plate; where these parts are shewn, magnified. It has likewise that singularly curious character, seen in *Mahernia*, of the two blossoms which terminate the flower-stems, each taking a contrary direction, in its spiral twist, to the other. As a greenhouse plant, it is rather tender in regard to damp, though not to cold; therefore, should be kept in the most airy part of the house. It is a native of the Cape, from whence it was introduced in the year 1796, to the Royal Gardens, Kew. By cuttings made in the month of April, it may be preserved, and increased, as it is not a long-lived plant. Loam, with a small portion of old rotten dung, it thrives in most. Our drawing was taken, at the Nurseries, Hammer-smith, in June 1800.



Hermannia pulverata



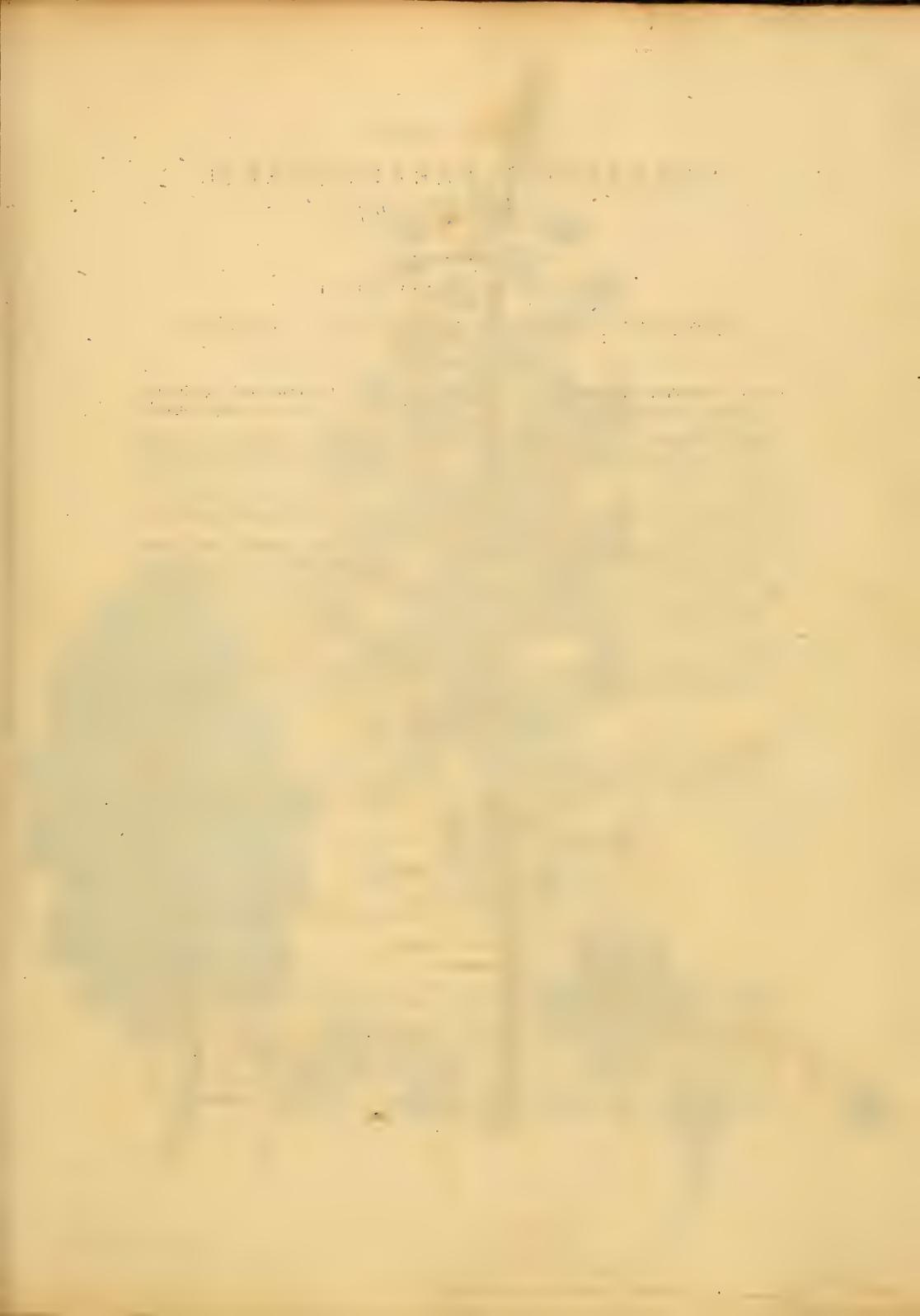


PLATE CLXII.

VERBASCUM FERRUGINEUM.

Rusty-flowered Mullein.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinque-partitum, parvum, persistens; laciniis erectis, acutis.

COROLLA monopetala, rotata, sub-inæqualis; tubus cylindraceus, brevissimus; limbus patens, quinque-partitus; laciniis ovatis, obtusis.

STAMINA. Filamenta quinque, subulata, corolla breviora. Anthera subrotunda, compressa, erecta.

FISTILLUM. Germen subrotundum. Stylus filiformis, longitudine staminum, inclinatus. Stigma crassiusculum, obtusum.

PERICARPIUM. Capsula subrotunda, bilocularis, bivalvis, superne dehiscens. Receptacula dimidiato-ovata, dissepimento affixa.

SEMINA numerosa, angulata.

Obs. In plerisque stamina inclinata sunt, villisque coloratis inferne vestita.

EMPALEMENT. Cup of one leaf, with five divisions, small, remaining; segments upright, sharp pointed.

BLOSSOM one petal, wheel-shaped, rather unequal; tube cylindrical, very short; border spreading, five divisions; segments egg-shaped, blunt.

CHIVES. Threads five, awl-shaped, shorter than the blossom. Tips roundish, flattened, upright.

POINTAL. Seed-bud roundish. Shaft thread-shaped, the length of the chives, bent downward. Summit rather thick and blunt.

SEED-VESSEL. Capsule roundish, with two cells, two valves, splitting at the top. Receptacles the form of half an egg, fixed to the partition.

SEEDS numerous, angular.

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

SPECIFIC CHARACTER.

Verbascum foliis subvillosis, rugosis; caulinis subfiliilibus, æqualiter crenatis; radicalibus oblongis, cordatis, duplicato-crenatis.

Mullein with leaves a little hairy and rough; stem leaves almost without foot stalks, equally scolloped; leaves from the root oblong, heart-shaped, and doubly scolloped.

REFERENCE TO THE PLATE.

1. A Leaf of the plant, from the lower part.
2. The Empalement.
3. A Blossom, shewn from the front.
4. The same cut open from the side, to shew the insertion of the chives.
5. One Chive magnified.
6. The Pointal and Seed-bud, magnified.

The rusty-flowered Mullein of the Kew Catalogue, collated from Sutherland's Hortus Medicus Edinburgensis, is undoubtedly our plant; but, though it stands a name in the book, we much question its having graced the garden, at the time of its publication. It certainly has been lost to us above a century. and but recently introduced to the Oxford Botanic Garden by the late Dr. Sibthorpe. Being a hardy biennial, it will perfect its seeds about July, which may be sown in August the same year. It will grow in any soil, but a sandy compost of light peat and loam suits it most. The flowers on the spikes, which grow sometimes to the length of four feet, continue to expand, upwards, for above two months; that is to say, from April, till June. Our figure was taken from a specimen sent by the Hon. W. H. Irby, from his garden at the Parsonage, Farnham Royal, Bucks.



Verbascum thapsus





PLATE CLXIII.

AMARYLLIS FOTHERGILLIA.

Fothergillian Lily Daffodil.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, campanulata. Stigma trifidum.

BLOSSOM 6-petalled, bell-shaped. Summit three-cleft.

See AMARYLLIS RADIATA, Pl. XCV. Vol. II.

SPECIFIC CHARACTER.

Amaryllis spatha multiflora; petalis lanceolatis, apice revolutis; genitalibus erectis; foliis linearibus, sub-canaliculatis, obtusis, glaucis.

Lily Daffodil with many flowers in the sheath; petals lance-shaped, rolled back at the point; parts of fructification upright; leaves linear, rather channelled, obtuse, and of a sea-green colour.

REFERENCE TO THE PLATE.

1. A Petal, with its Chive attached.
2. The Seed bud, and Pointal.
3. A ripe Seed-vessel, with the Seeds.

EVEN amidst this splendid family, *Amaryllis Fothergillia* stands conspicuously preeminent; the flowers have the same vivid character of refulgence, when exposed to the sun's rays, which is perceived in *A. Sarniensis*, or the *Guernsey Lily*, to which it is nigh allied. The late Dr. Fothergill (to whom the botanical world is so much indebted, for the zeal and extraordinary liberality he constantly manifested, in advancing the science) received this plant from China at the same time with *A. aurea*, *A. radiata*, &c. about the year 1777. It is rather a scarce and tender bulb, as it is subject to rot by overmuch wet. It has hitherto been kept, as are most plants on their first arrival from China, in the hot-house; but, from every appearance, we should be led to suppose, it would not perish if kept in the Green-house, as we question much, whether it is not equally hardy with the *Guernsey Lily*, and a native, originally, as well as the latter, of Japan.

It should be planted in sandy-loam, with a small quantity of rough peat, above the tiles in the pot, to make it flower. The propagation is from offsets, which are produced but rarely from the old bulbs. Our figure was taken from a plant in the HammerSmith nursery this year, 1801, in the month of May.



Amaryllis Fothergillii





PLATE CLXIV.

GALAXIA GRANDIFLORA.

Large-flowered Galaxia.

CLASS XVI. ORDER I.

MONADELPHIA TRIANDRIA. Threads united. Three Chives.

ESSENTIAL GENERIC CHARACTER.

SPATHA univalvis. Corolla monopetala, 6 fida,
tubus filiformis. Stigma multipartita.

SHEATH of one valve. Blossom one petal, 6-cleft,
tube thread-shaped. Summit many divi-
sions.

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

SPECIFIC CHARACTER.

Galaxia foliis canaliculatis, acuminatis, arcuatis;
corolla magna, lutea, folia æquantia.

Galaxia with channelled leaves, tapered to the
point, and arched; blossom large, yellow,
and the length of the leaves.

REFERENCE TO THE PLATE.

1. The sheath of the blossom.
2. A Blossom spread open, with the Chives attached.
3. The Seed-bud, Shaft, and Summit, the summit detached, magnified.

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



Cypripedium grandiflorum



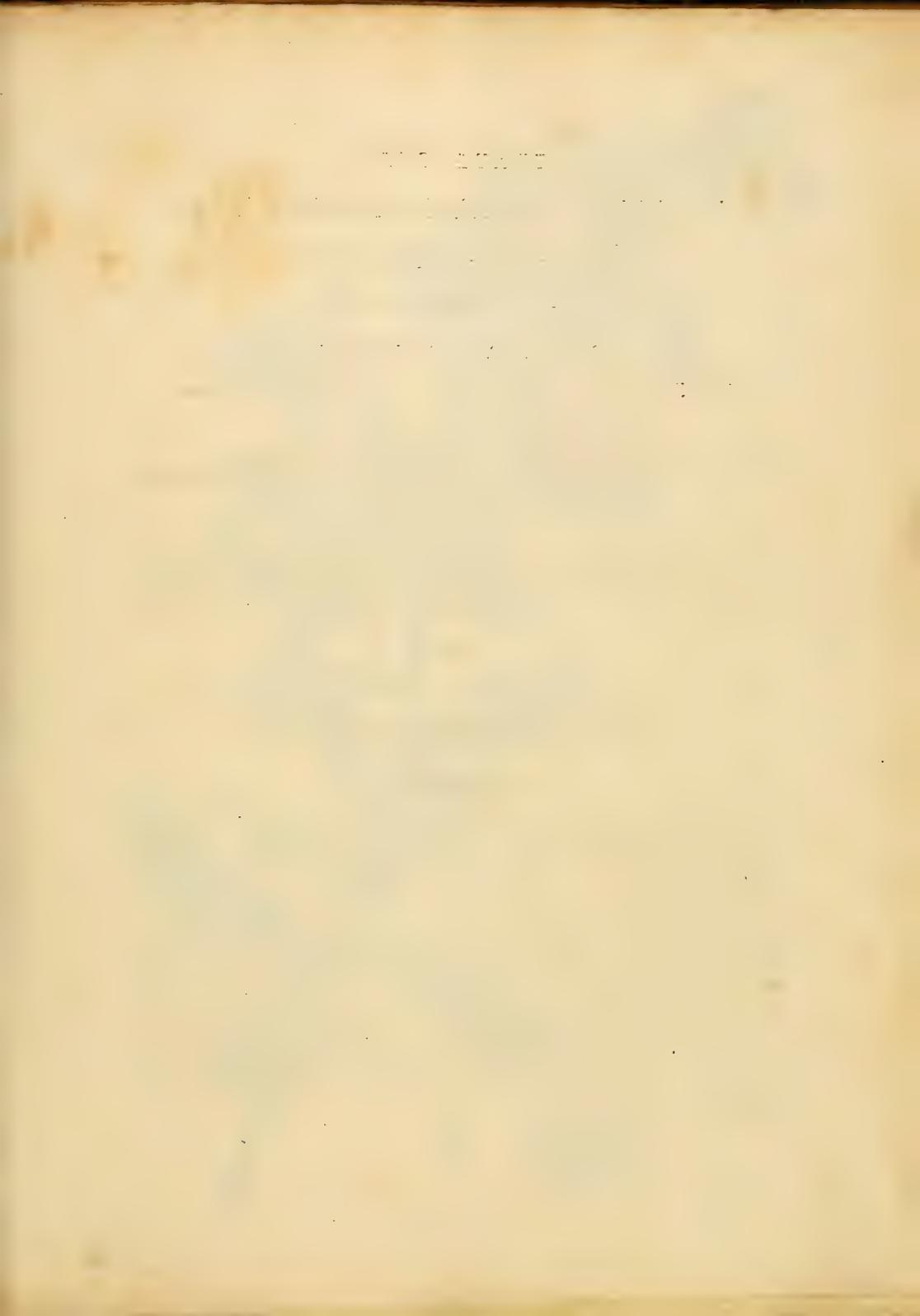


PLATE CLXV.

ECHIUM GLAUCOPHYLLUM.

Sea-green-leaved Viper's-Buglofs.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA irregularis, fauce nuda.

|| Blossom irregular, mouth naked.
|| See ECHIUM GRANDIFLORUM, Pl. XX. Vol. I.

SPECIFIC CHARACTER.

Echium caule fruticoso; ramis calycibusque glabris; foliis ovato-lanceolatis, glaucis, glabris, margine ferrulatis; corollis fubæqualibus.

|| Viper's-Buglofs with a shrubby stem; branches very smooth; leaves between egg and lance-shaped, of a sea-green colour, smooth, and slightly sawed at the margin; blossoms nearly equal.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, to shew the insertion of the chives.
3. The Seed-bud, Shaft, and Summit, magnified.

THIS shrubby species of Echium was introduced, to the Royal Gardens at Kew, by Mr. F. Masson, in the year 1792, from the Cape of Good Hope. It grows to the height of three feet, or more, rather bushy at the top, flowers about the month of May, and perfects its seeds with us; by which only method, it is to be propagated. It thrives best in a light loamy soil, with a small proportion of sandy peat, about one fourth.

Professor Martyn, in his Miller's Dic. has collated two descriptions of Echiums under the titles of lævigatum, and glabrum; the first, No. 9, from Lin. Sp. Plant. 199; the second, No. 19, from Vahl. Symb. 3. 22. Thunberg has likewise, in his Prodrumus, 33. two names of plants. as E. lævigatum, and E. glabrum; from whom Willdenow, in his new Edition of Sp. Plant. p. 785, has copied them under the same titles; adding, the various synonyms, from Linnæus's Sp. Plant. to the one; and to the latter, Prof. Jacquin's specific of glaucophyllum, taken from his Ic. rar. 2. t. 312, and his Collect. 2. p. 325. Now, we have little hesitation in declaring our opinion, and we think, those who choose to compare our figure with the different descriptions here mentioned, will coincide with us, that this is the plant from which they must all have originated, except the E. glabrum of Vahl, which we take to be a different plant; as, the cup is described hairy, the length of the tube of the blossom; the chives longer, and the flower smaller. Wherefore, we have taken, for our plant, the specific title of Jacquin, as being, in our idea, the most appropriate.



Echinum glaucophyllum





PLATE CLXVI.

GLADIOLUS ABREVIATUS.

Shortened-petalled Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

SPECIFIC CHARACTER.

Gladiolus foliis linearibus, cruciatis, scapo longioribus; corolla tubulosa, striata, ima angustata, lacinia summa magna, recta, ovata, reliquæ vero parvæ, abbreviatæ. Gladiolus with linear leaves, cross shaped, longer than the flower-stem; blossom tubular, streaked, and narrowed at the lower part, the upper petal is large, grows straight out, and egg-shaped, the others are small, and appear as if shortened.

REFERENCE TO THE PLATE.

1. The outer sheath of the Empalement.
2. The inner sheath of the Empalement.
3. A Blossom spread open, with the Chives attached.
4. The Seed-bud, Shaft, and Summits.

THIS most singular Gladiolus was received, amongst a variety of others, in the year 1799, from the Cape of Good Hope, by Messrs. Lee and Kennedy, Hammermith; at whose nursery it flowered in March, this year 1801, for the first time. It is a hardy bulb, and propagates freely from the root; grows about two feet high, and, before flowering, has much the appearance of *G. trifidis*.



Gradiolus speciosus





PLATE CLXVII.
BRUNSFELSIA UNDULATA.

Waved-flowered Brunfelsia.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum, quinquecostatum, obtusum, minimum, persistens.

COROLLA monopetala, infundibuliformis; tubus longissimus, subincurvus; limbus planus, quinquefidus, obtusus.

STAMINA. Filamenta quatuor, brevissima. Antheræ oblongæ, erectæ, filamentis dorso affixæ.

PISTILLUM. Germen subrotundum, parvum. Stylus filiformis, longitudine tubi. Stigma crassiusculum.

PERICARPIUM. Capsula extus baccata, globosa, unilocularis, bivalvis.

SEMINA plurima, compressa, hinc convexa, inde angulata, punctato-scabra.

RECEPTACULUM fundo capsulæ adnatum, paleaceum; paleis coadunatis, apice subulatis, femina distinguentibus.

EMPALEMENT. Cup one leaf, bell-shaped, five-toothed, blunt, very small, remaining.

BLOSSOM. One petal, funnel-shaped; tube very long, rather curved; border flat, five-cleft, obtuse.

CHIVES. Four threads, very short. Tips oblong, upright, fixed by the back to the threads.

POINTAL. Seed-bud roundish, small. Shaft thread-shaped, the length of the tube. Summit rather fleshy.

SEED-VESSEL. Capsule on the outside a berry, globular, one cell, two valves.

SEEDS many, flat, convex on one side, angular on the other, roughly punctured.

RECEPTACLE fixed to the bottom of the capsule, chaffy; chaffs joining at the base, awl shaped at the point, separating the seeds.

SPECIFIC CHARACTER.

Brunfelsia foliis lanceolato-obovatis, utrinque acuminatis, petiolis brevifimis; tubus parum incurvatus, laciniis limbi undulatis.

Brunfelsia with leaves between lance and inversely egg-shaped, tapered to both ends, footstalks very short; tube a little incurved, the segments of the border waved.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The tube of the blossom cut open, to shew the insertion and character of the Chives.
3. The Pointal and Seed-bud.

THE Genus *Brunfelsia* (by Plumier so named, in honour of Otho Brunfels a monk, the first who edited in 1590 a Botanical work with good figures, it contained 238 plates) has undergone a very necessary revision since the days of Linnæus; indeed, it appears singular that Father Plumier, from whom Linnæus quotes his Generic character, should have committed so great an oversight, as to describe it with five chives; a feature scarcely to be expected, from a sport of nature, in plants of this Class. So however it is on record, and the fifth Class of the Gen. and Spe. Plant. and of the Syst. Nat. tom. ii. each includes this Genus; from which, we should be induced to think he had designed some other plant; if the figure, and the rest of the description, did not confirm it. Schreber, in his Gen. Plant. has likewise an observation, that the fruit should be named a capsule, rather than a berry; as given by Linnæus, Miller, and Swartz; his reason, that it splits determinately, by a suture, from the top to the base.

Our species, is the third now in Britain; they are all natives of the West India Islands. The 1st *B. americana* has been long an inhabitant of our hothouses; the 2d *B. maculata* is but little known to most, though long cultivated here; as it has been treated as a variety of the first species, notwithstanding the strong specific difference, in the shape of the leaves and blossoms; which in the *B. maculata*, are beautifully marked at the base, and as large as the undulata; the leaves inversely egg-shaped and more downy. The present plant seldom grows more than four feet high, flowers freely about March, is very sweet scented, and is easily propagated by cuttings. It was first sent to England in the year 1784, by Mr. Elcock from the Island of Barbadoes, to Messrs. Lee and Kennedy, Hammermith. Our drawing was made from a plant in the Clapham Collection, in March 1800. It should be planted in rich earth.



Stemodia grandiflora



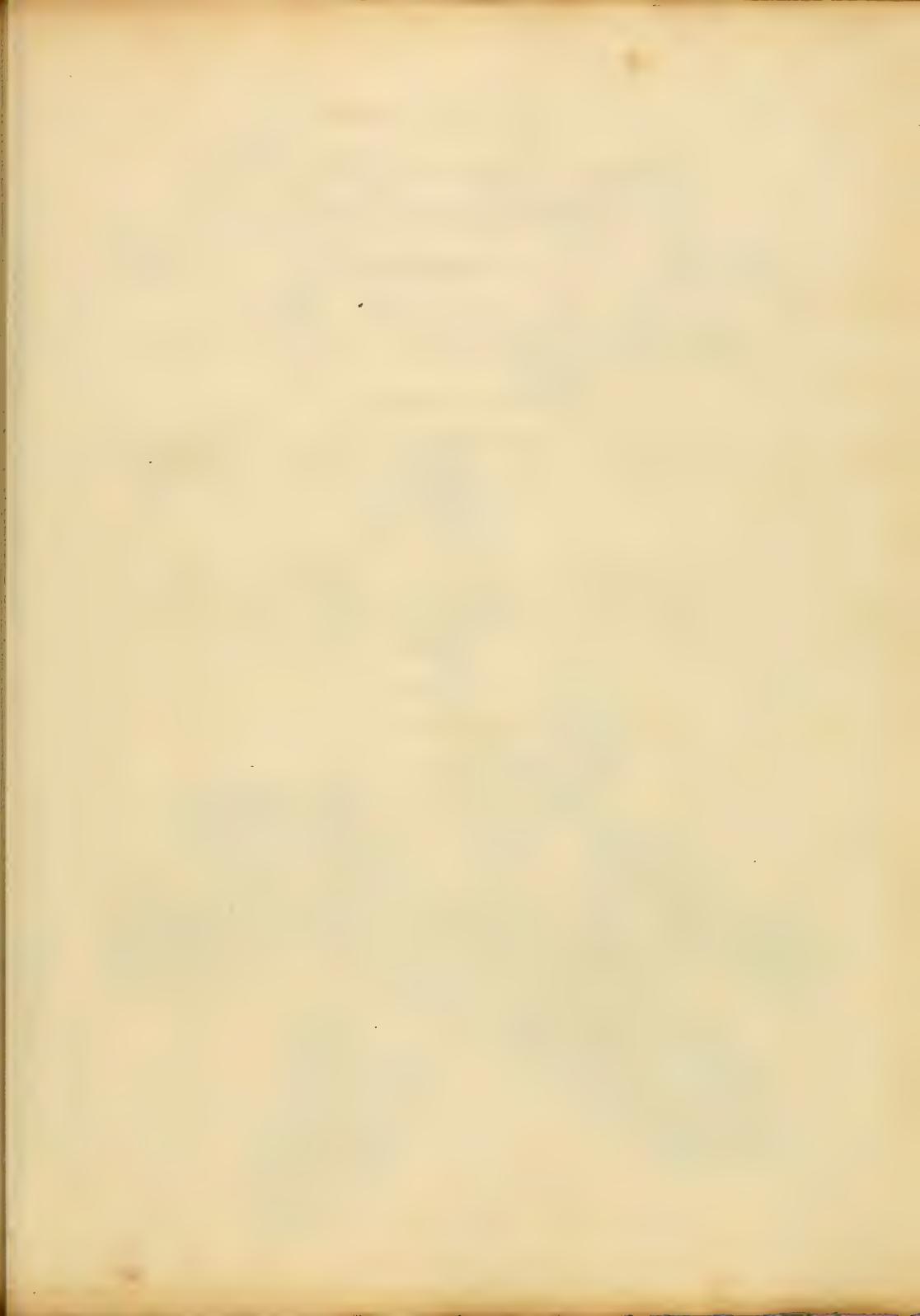


PLATE CLXVIII.

GERANIUM PICTUM.

Painted-flowered Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata 5. Fructus rostratus,
penta-coccus.

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

SPECIFIC CHARACTER.

Geranium foliis cordato-oblongis, obtusis, in-
equaliter incisfis, tomentosif, humi adpres-
fis; corolla alba, petalis superioribus pro-
fundè fupra medium rubro maculatis; fla-
minibus feptem fertilibus; radice tuberofa.

Geranium with oblong heart-shaped leaves,
blunt, unequally gashed, downy, and ly-
ing clofe to the ground; bloffom white;
the upper petals deeply marked with red
about the middle; feven fertile chives;
root tuberous.

REFERENCE TO THE PLATE.

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

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



Ranunculus repens



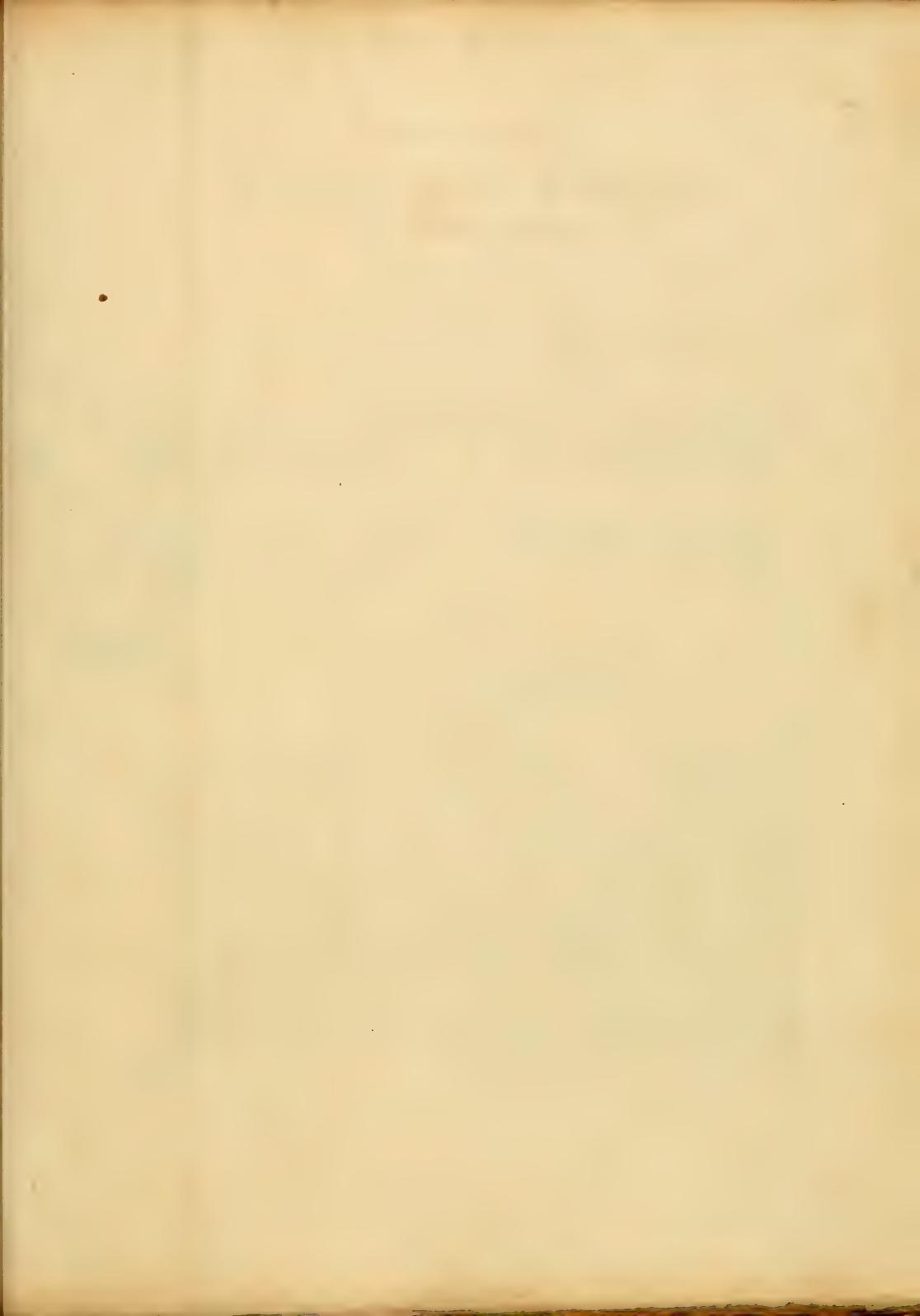


PLATE CLXIX.

CRINUM GIGANTEUM.

Gigantic Asphodel-Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA supra, infundibuliformis, sexpartita, æqualis; filamenta tubi faucis inserta; femina ad basin corollarum, vivipara.

BLOSSOM above, funnel-shaped, six-parted, equal; threads inserted into the mouth of the tube; feeds at the base of the blossoms, viviparous. See CRINUM SPIRALE, Pl. XCII. Vol. II.

SPECIFIC CHARACTER.

Crinum foliis flaccidis, undulatis; floribus sessilibus, umbellatis; petalis concavis, sub-
abidis.

Asphodel-Lily with flaccid, waved leaves; flowers fitting close to the flower stem in umbels; petals concave, nearly white.

REFERENCE TO THE PLATE.

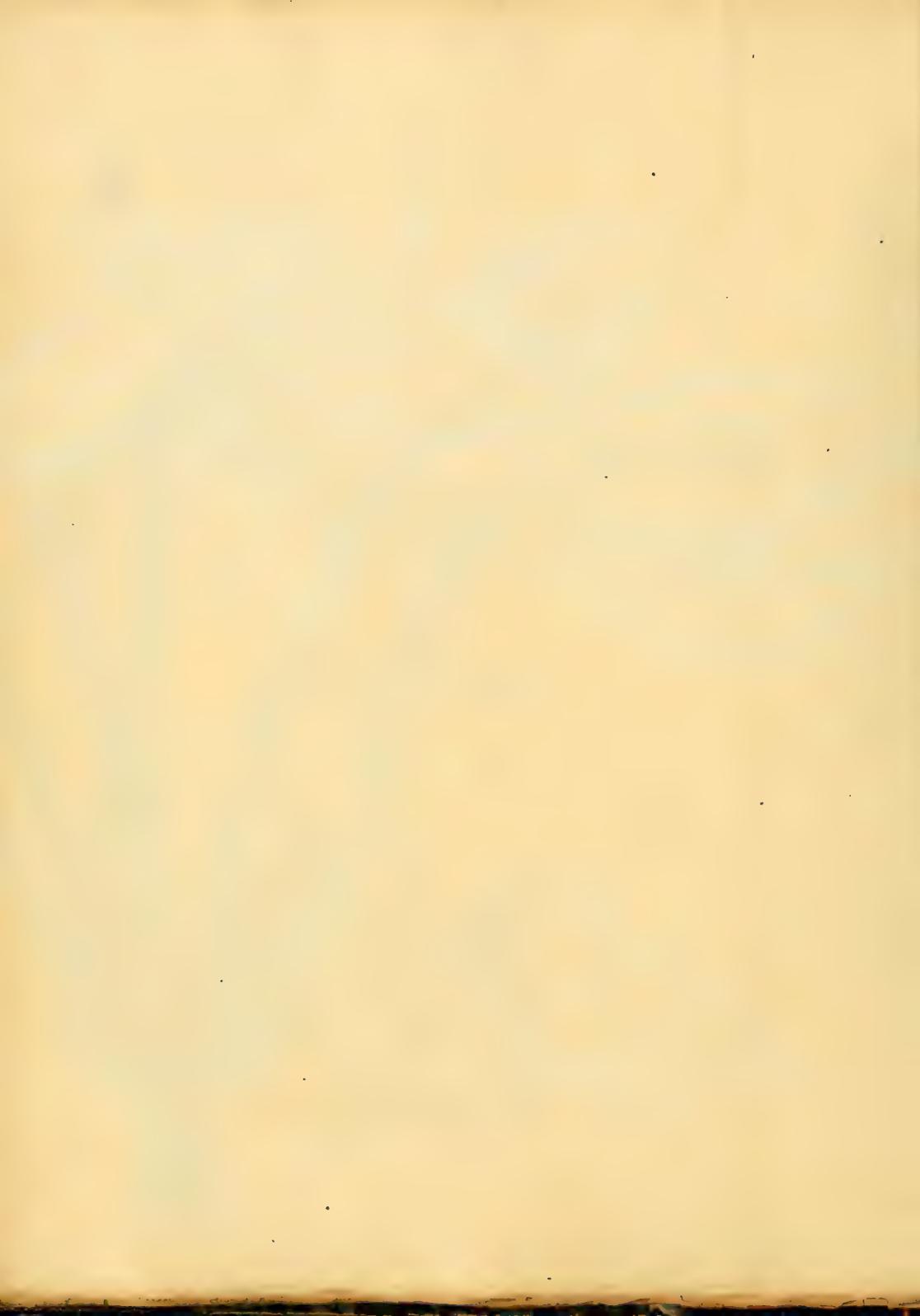
1. A miniature representation of the whole plant.
2. A Petal with its chive.
3. The Seed-bud, Shaft, and Summit.

THE coast of Africa bordering on our settlement at Sierra Leone, has furnished us with a number of beautiful plants; but none more so, than those of the natural order of Lily; witness our present figure, which was taken from a plant in the HammerSmith collection, in the month of August 1800. The bulbs of this grand species of Crinum, were received by her Ladyship, the Right Honourable the Marchioness of Rockingham, about the year 1792, from Sierra Leone; they may be considered as hardy hothouse plants, and may be kept in any part of it: will flower, freely, about the month of August, the flower-stems rising, sometimes, to the height of three feet. A mixture, of leaf mould, or sandy peat one half, and light loam the other, is the best compost to make them flourish. It is propagated from the seed, or offsets.—Having made a small alteration, in the Essential Character of the Genus; and as it is likely we may figure some other species of Crinums shortly; we think it necessary to add a few words, to that point. The most ostensible difference, we have been able to trace, in comparing above 40 species of Crinums and Amaryllis's, and on which to rest, with certainty, for general distinction; can, unquestionably, be taken only, from the feeds; as these in most species of Pancratium, Hæmanthus, and all of this Genus, are viviparous or formed like fleshy bulbs, producing plants, like offsets taken from the original bulbs. From Pancratium it is distinct, in being destitute of the Honey-cup; and equally so from Hæmanthus, which has its sheath of many leaves, the flowers and chives upright, and the chives, twice the length of the blossoms.





Crinum giganteum



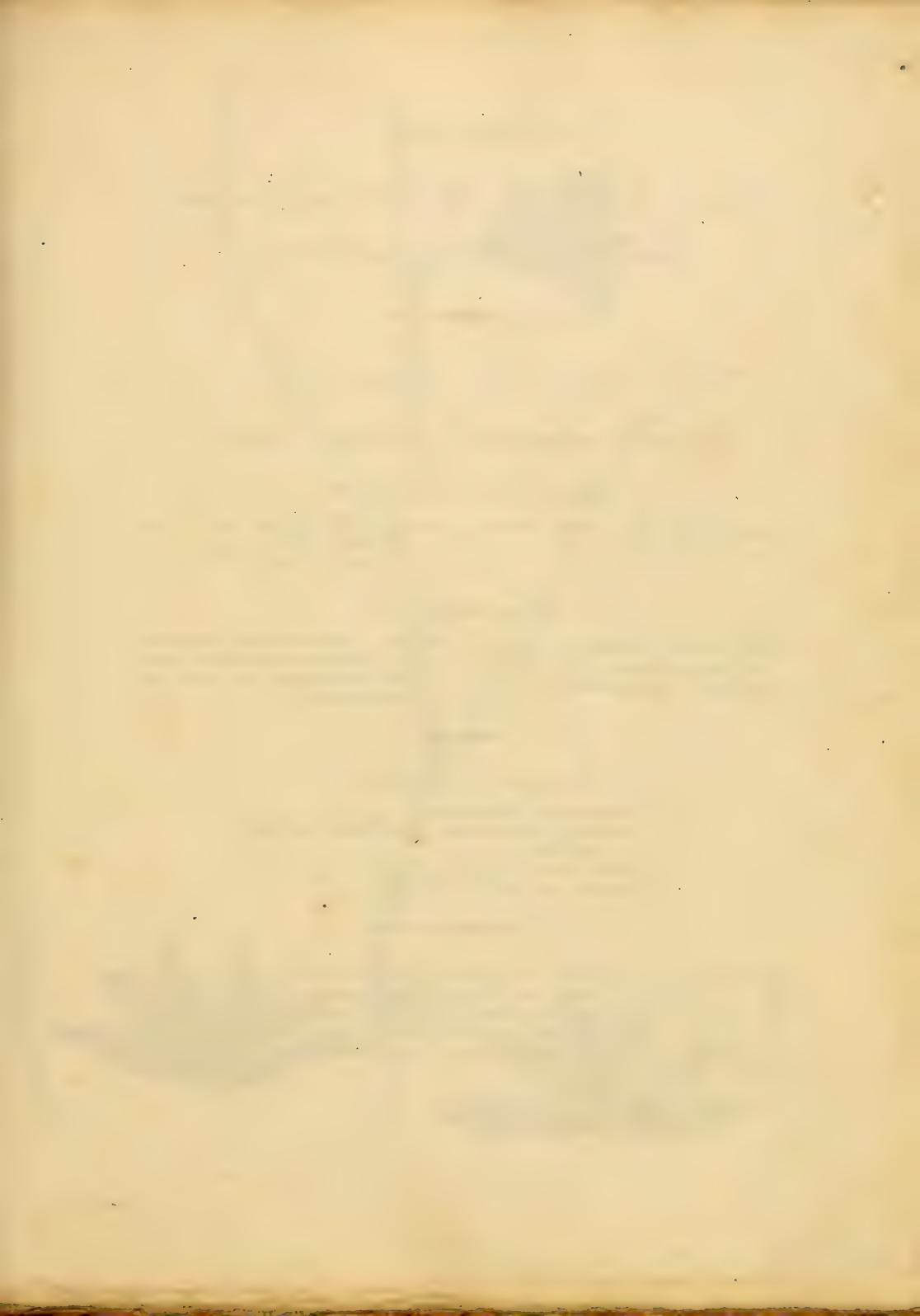


PLATE CLXX.

IXIA BULBOCODIUM. *Var. flore speciosissimo.*

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

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stamina tria, erectiusculo-patula.		BLOSSOM 6-petals, spreading, equal. Chives three, upright, spreading. See IXIA REFLEXA, Pl. XIV. Vol. I.
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SPECIFIC CHARACTER.

<i>Ixia</i> scapo unifloro; foliis linearibus, canaliculatis, scapo æquantibus; corolla declinata, tubo brevi; stigmatibus sextuplicibus.		<i>Ixia</i> with one flower on the stem; leaves linear, and channelled, the length of the flower-stem; blossom declined, with a short tube; summits sextuple.
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REFERENCE TO THE PLATE.

1. The two sheaths of the Empalement.
2. A Blossom cut and spread open, with the Chives, shewn from the inside.
3. The same, shewn from the back or outside.
4. The Pointal, with the Summits, magnified.

THIS extremely delicate, and beautiful little *Ixia*, flowered, for the first time, in March this year, 1801, in the collection of G. Hibbert, Esq. Clapham Common; the bulbs having been received the preceding autumn from the Cape of Good Hope. It appears to be one of those plants, which seldom survive the second season, in this climate; and we much fear, without a fresh supply, it will be soon lost to this country; as it does not ripen its seeds, and the roots do not seem as if inclined to increase by offsets.



Iris Bulbocodium
in flore sparsifera



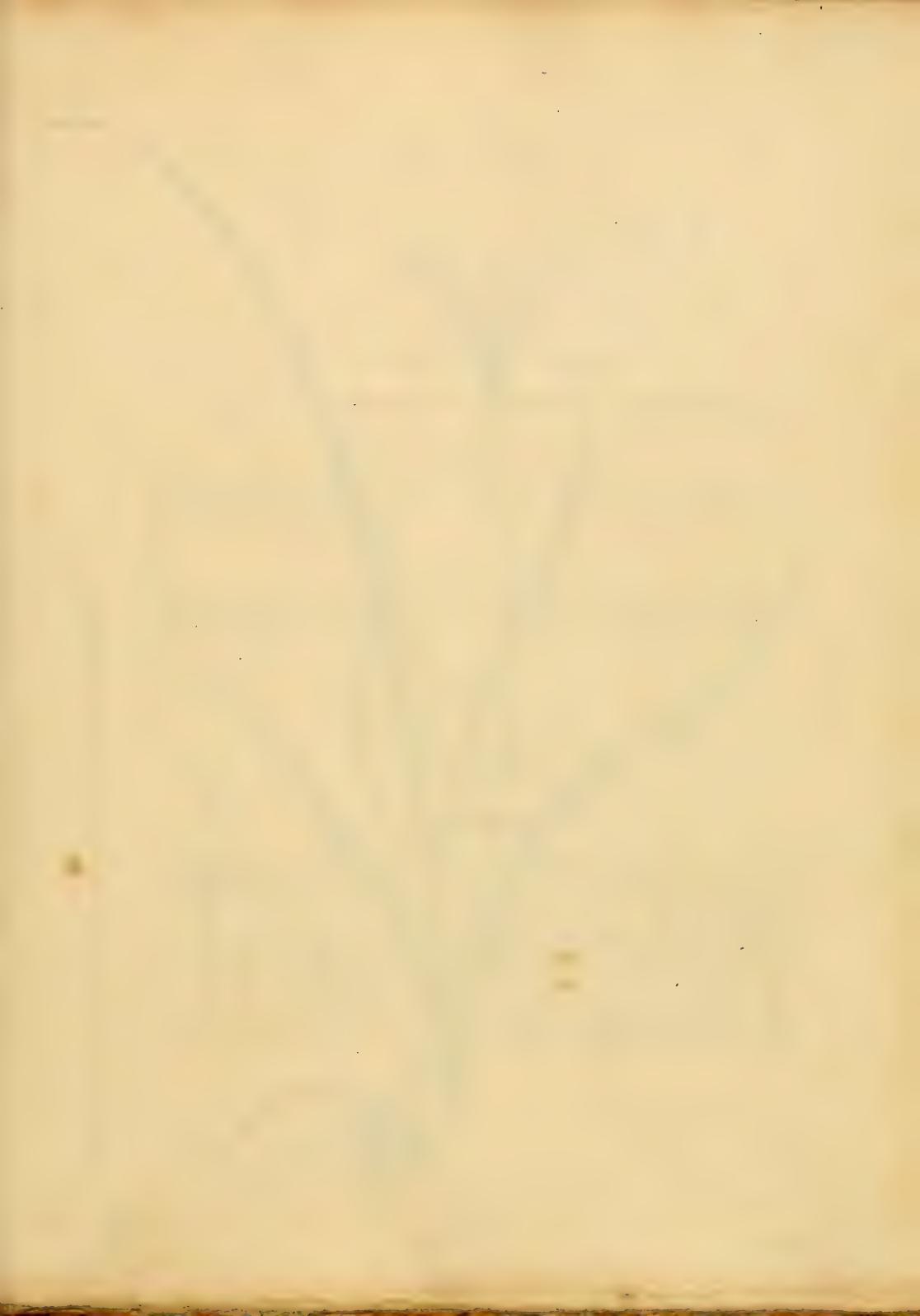


PLATE CLXXI.

HYPOXIS LINEARIS.

Linear-leaved Hypoxis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, persistens, supera. Capsula basi angustior. Spatha 2-valvis.		BLOSSOM 6-parted, remaining, above. Capsule narrower at the base. Sheath 2-valved. See HYPOXIS STELLATA, Pl. CI. Vol. II.
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SPECIFIC CHARACTER.

Hypoxis foliis linearibus, glabris, canaliculatis, longiore scapo unifloro; corolla intus au- rea, extus viridis.		Hypoxis with linear leaves, smooth, channelled, and longer than the flower-stem, which has but one flower; blossom orange within, green without.
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REFERENCE TO THE PLATE.

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

At first, we had some doubts whether this plant should not be considered as a variety of *Hypoxis stellata*, to which it undoubtedly affines; but, upon due examination, find it a distinct and new species; as well, from the shape and length of the leaves, as the shape, character, and colour of the blossom, and figure of the root.

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



Hypoxis linearis



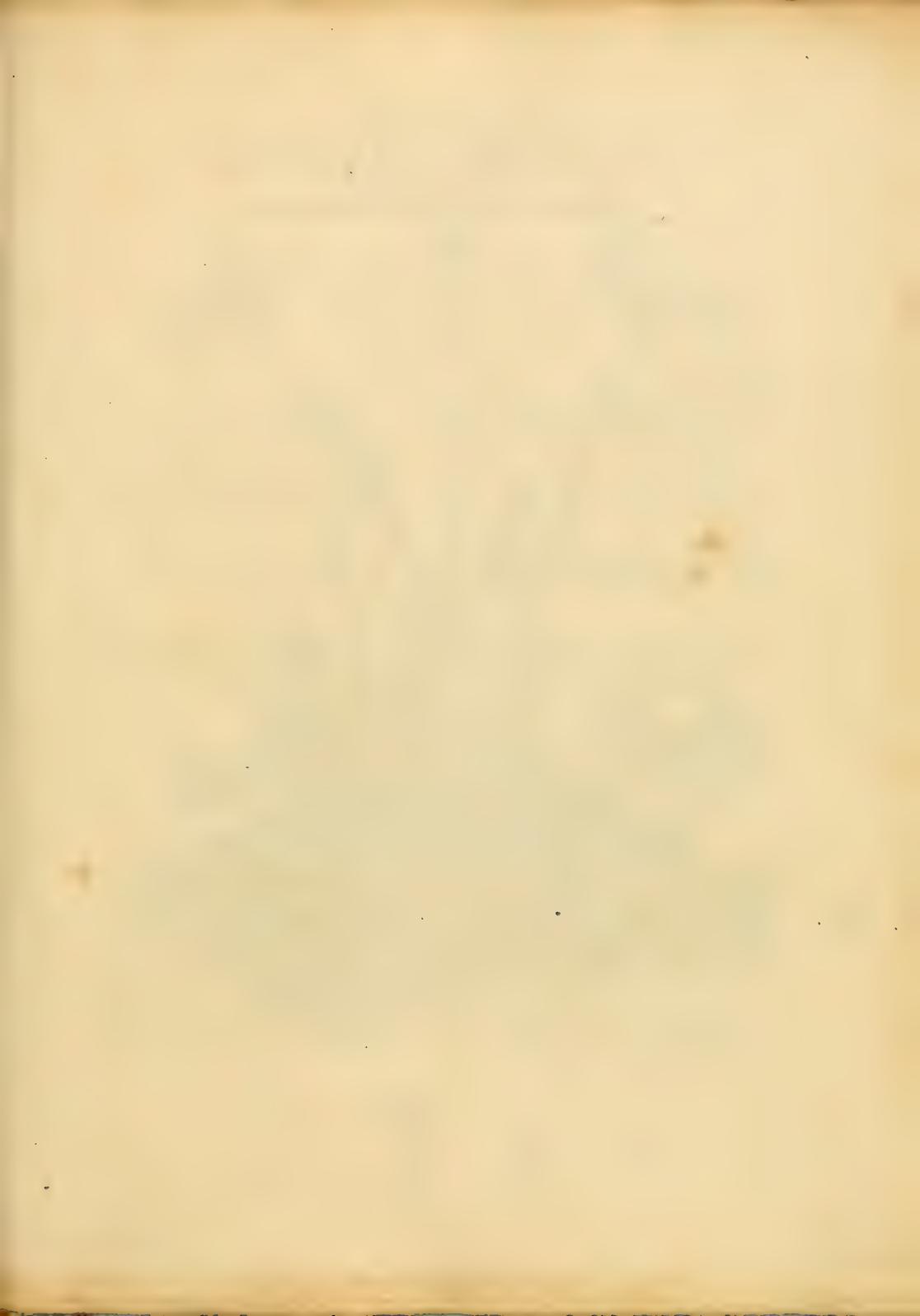


PLATE CLXXII.
ANEMONE PALMATA.

Cyclamen-leaved Portugal Anemone.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

<p>CALYX nullus.</p> <p>COROLLA. Petala duorum triumve ordinum, in singula ferie tria, oblongiufcula.</p> <p>STAMINA. Filamenta numerosa, capillaria, corolla dimidio breviora. Antheræ didymæ, erectæ.</p> <p>PISTILLA. Germina numerosa, in capitulum collecta. Styli acuminati. Stigmata obtusa.</p> <p>PERICARPIMUM nullum. Receptaculum globosum, five oblongum, excavato-punctatum.</p> <p>SEMINA plurima, acuminata, stylum retinentia.</p>	<p>EMPALEMENT none.</p> <p>BLOSSOM. Petals in two or three rows, three in a row, rather oblong.</p> <p>CHIVES. Threads numerous, hair-like, half the length of the blossom. Tips doubled, erect.</p> <p>POINTALS. Seed-buds numerous, collected into a small head. Shafts tapered. Summits blunt.</p> <p>SEED-VESSEL none. Receptacle globular or oblong, hollowed and dotted.</p> <p>SEEDS many, tapered, retaining the shaft.</p>
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SPECIFIC CHARACTER.

<p>Anemone foliis reniformibus, sub-lobatis, crenatis; involucre multifido; petalis exterius villosis, majoribus.</p>	<p>Anemone with kidney-shaped leaves, a little lobed, fcolloped; fence many-cleft; the outer petals hairy and larger.</p>
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REFERENCE TO THE PLATE.

1. An outer Petal of the Blossom, shewn from the inside.
2. The Chives, as they stand on the receptacle.
3. The small Head, as formed by the pointals.
4. A Seed-bud and its appendages, a little magnified.

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



Anemone palmata.



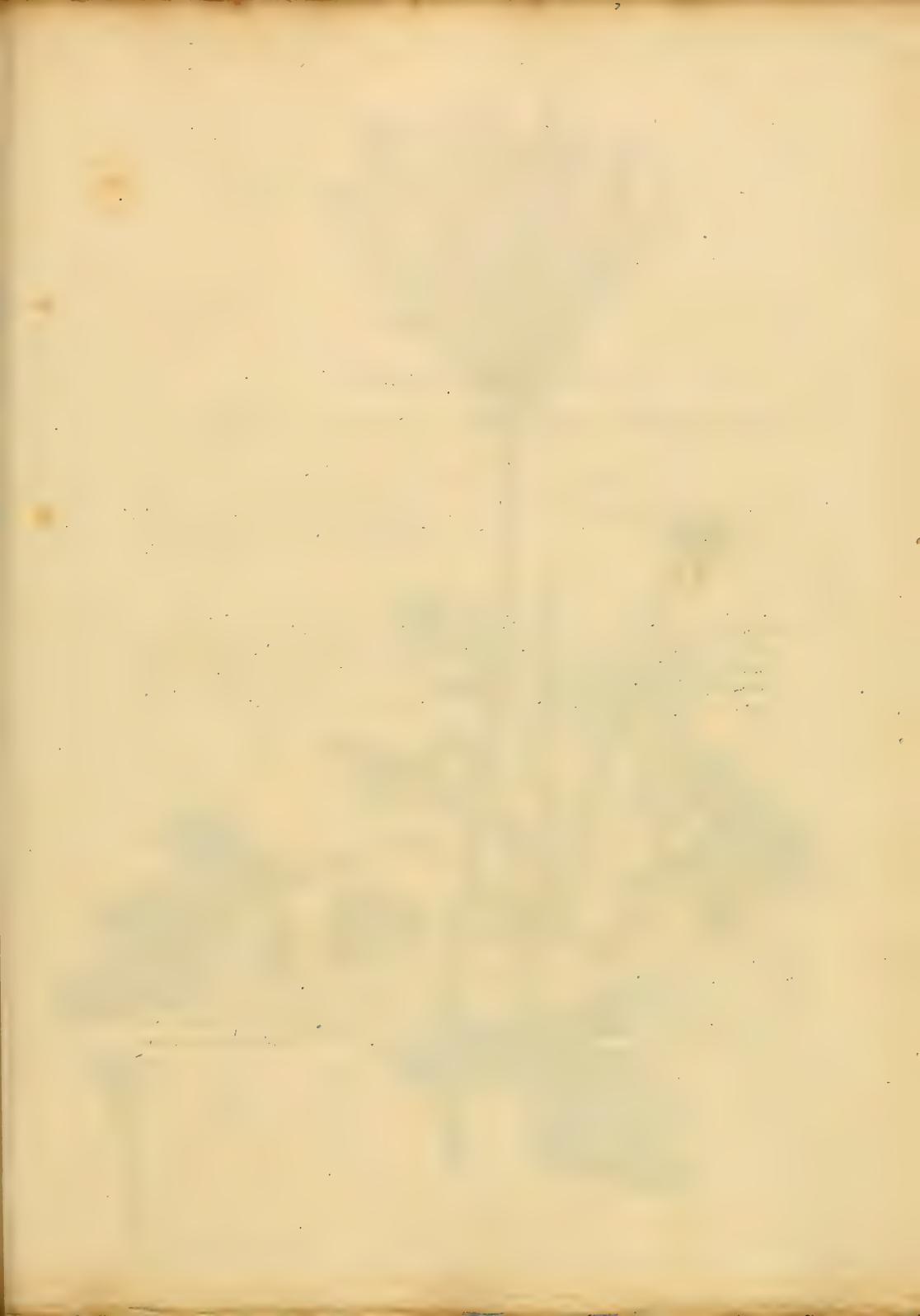


PLATE CLXXIII.

GERANIUM ROSEUM.

Rosy Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

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

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

SPECIFIC CHARACTER.

Geranium foliis inciso-lobatis, tomentosis, lobis crenatis, obtusis; pedunculis multifloris; floribus erectis, confertis, roseis, pentandris; calycibus monophyllis; radice tuberosa.

Geranium with deeply-gashed, lobed, downy leaves, the lobes scalloped and blunt; flower-stems many flowered; the flowers erect, crowded, rose-coloured and with five tips; cups one-leaved; root tuberous.

REFERENCE TO THE PLATE.

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

ABOUT the year 1794, this species of *Geranium* was first introduced to the Royal Gardens, **Kew**, by Mr. Francis Mañon, from the Cape of Good Hope. Of all the tuberous kind, this is, certainly, the most specious yet in England; it flowers generally about March, in which month, our drawing was made, from a specimen in the nursery of Mr. J. Colville, King's Road, Chelsea. Mr. Colville informs us, that the propagation is very difficult, and only to be performed by the root; as the plant does not produce any branches, and that the seeds do not ripen; he keeps it in a mixture of rotten leaves, and sandy peat, in which, it has every appearance of luxuriant health.



Ranunculus roseum



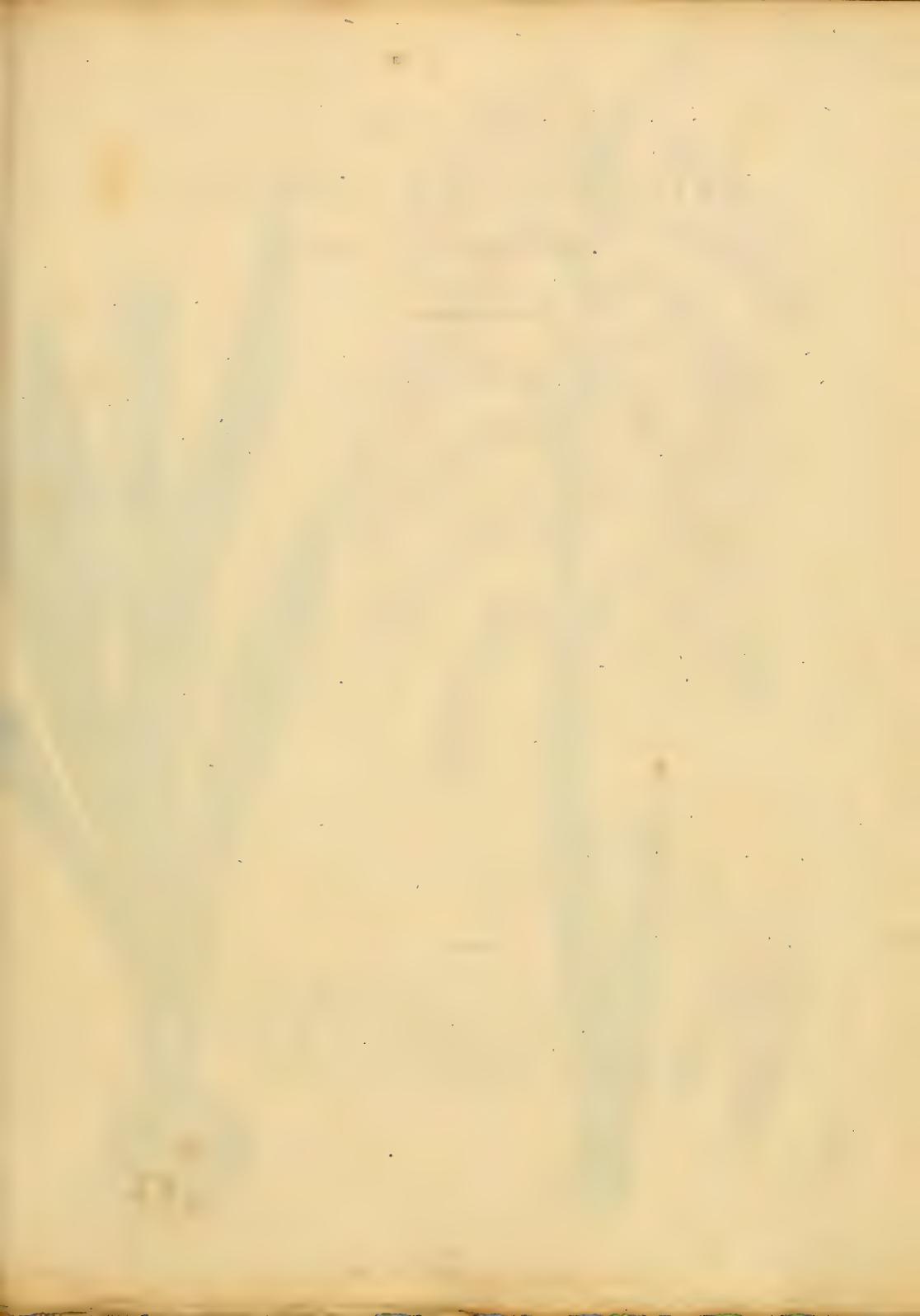


PLATE CLXXIV.

ANTHOLYZA TUBULOSA. *Var. flore variegato.*

Tubular Antholyza. Striped flowered Var.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA tubulosa, irregularis, recurvata. Cap-
fula infera.

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

SPECIFIC CHARACTER.

Antholyza floribus tubulosis, subcylindraceis;
scapo disticho, foliis lanceolato-eniformi-
bus, brevioribus.

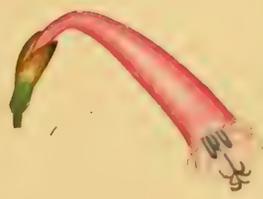
Antholyza with tubular, nearly cylindrical flow-
ers; flower-stem with the blossoms pointing
two opposite ways, leaves between lance
and sword-shaped, shorter.

REFERENCE TO THE PLATE.

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

THIS fine species of Antholyza was received by Messrs. Grimwood and Wykes, Kenfington, from the Cape of Good Hope, in the year 1796; they possess three varieties, and we should have been happy to have given a blossom of the third, but, it was out of flower before our drawing was taken, which was, in the end of June, this year. It is a hardy bulb, and increases freely, either by the seed, or from the root, and should be planted in sandy peat, with a small mixture of loam.

(Pl. 17)



Anthelyza tubulosa
 Pers. fl. rossicæ



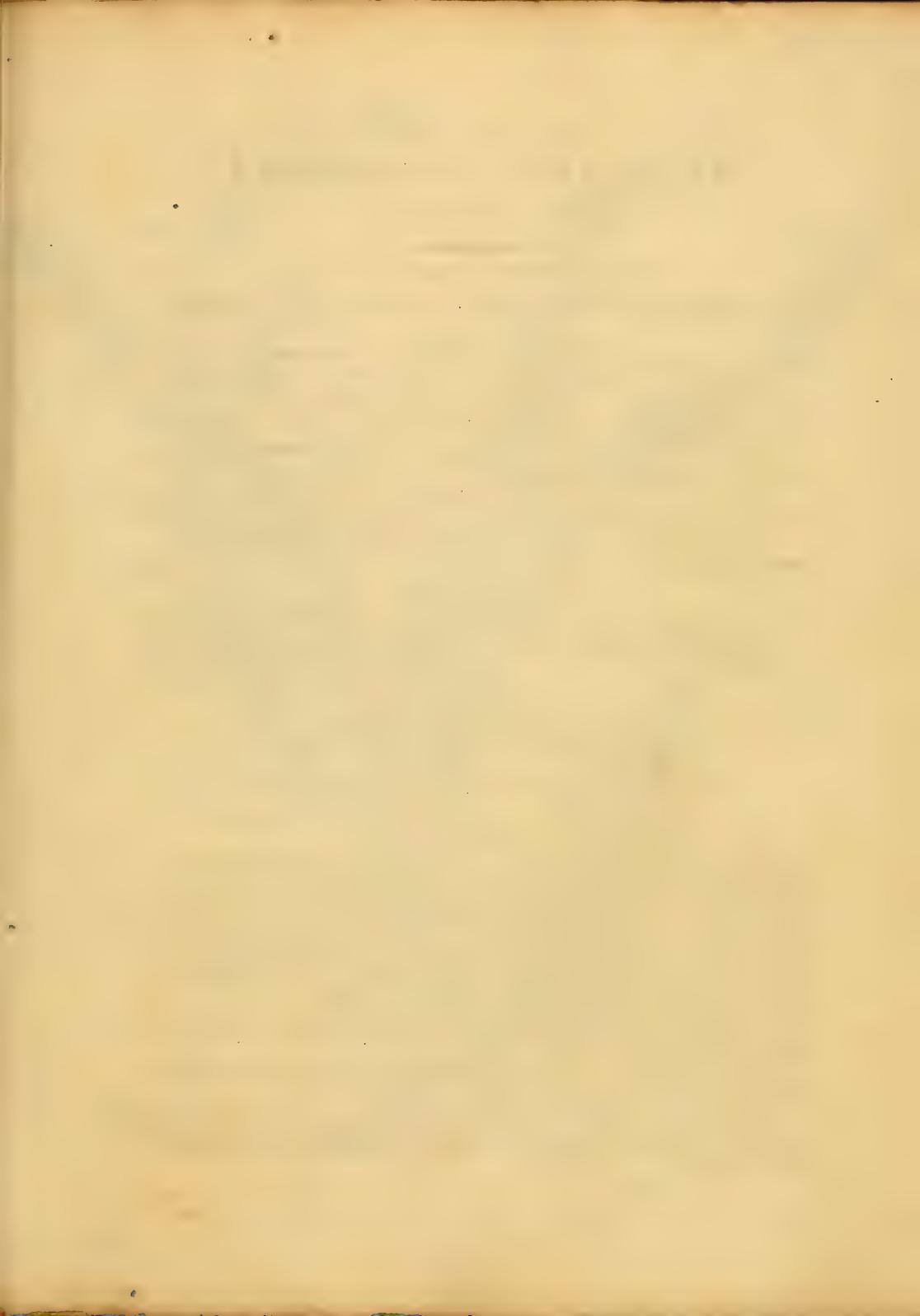


PLATE CLXXV.
MELALEUCA ERICÆFOLIA.

Heath-leaved Melaleuca.

CLASS XVIII. ORDER IV.

POLYADELPHIA POLYANDRIA. Threads in many fets. Many Chives.

GENERIC CHARACTER.

CALYX. Perianthium turbinatum, germi adnatum, quinquefidum seu quinque-dentatum.
COROLLA. Petala quinque, rotundata, calycis margini interiori inserta.
STAMINA. Filamenta numerosa, filiformia, in fasciculos quinque connata. Antheræ incumbentes.
PISTILLUM. Germen turbinatum, fundo calycis adnatum. Stylus filiformis, erectus. Stigma simplex.
PERICARPIMUM. Capsula subglobosa, calycis ventre corticata, summitate nuda, trilobularis, dissepimentis contrariis.
SEMINA plurima, oblonga, seu rotundato-angulata, seu alata.

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

SPECIFIC CHARACTER.

Melaleuca foliis sparsis oppositifve, linearibus, nerviis, subrecurvis, muticis; floribus sessilibus, apicem versus ramulorum confertis, spicatis.

Melaleuca with scattered or opposite leaves, linear, without nerves, a little turned back and beardless; flowers grow close to the stem, crowded together near the end of the smaller branches in spikes.

REFERENCE TO THE PLATE.

1. A Prop, one which is to be found at the base of each flower.
2. A Blossom, natural size.
3. The same magnified.
4. One of the five bundles of Chives, with its Petal, to which it is attached at the base, magnified.
5. The Cup, Seed-bud, Shaft and Summit, natural size, the summit detached and magnified.

THE plants from New Holland, of the natural order of Myrti; comprized under the different Genera of *Metrofideros*, *Eucalyptus*, *Leptospermum*, *Myrtus*, and this present one of *Melaleuca*; seem, from what we yet know, to constitute a very distinguished part, of the woody vegetable productions of that country: wherefore, we can have little hopes of seeing many of them flower with us, at least, for many years to come. The *M. ericæfolia* was amongst the first plants raised in 1788, by Messrs. Lee and Kennedy, Hammermith, from seeds; but, till this year, we believe it has not been seen to flower, in any collection in Great Britain; nor perhaps would it, as yet, had not a large and old plant, been planted out in the novel and elegant conservatory of the Right Hon. the Marquis of Blandford at White Knights, near Reading, Berks, from a branch of which, obligingly communicated by his Lordship, our drawing was taken, the beginning of July, this year.

The Plant grows to the height of six or seven feet, upright, very branching, the branches weeping, and the flowers, which grow in spikes or branches of about six inches in length, project, straight out, from about the middle of the stem.

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

This species of *Melaleuca* and the *Metrofideros Nodosa* of Gaertner, 1st Vol. de fruct. p. 172, t. 34, f. 6, we must consider as the same, though made by Dr. Smith, see Linn. Transf. Vol. III. p. 276, distinct species; perhaps from specimens gathered at different times, differently dried, or from different parts of the country.



Melaleuca scopulina



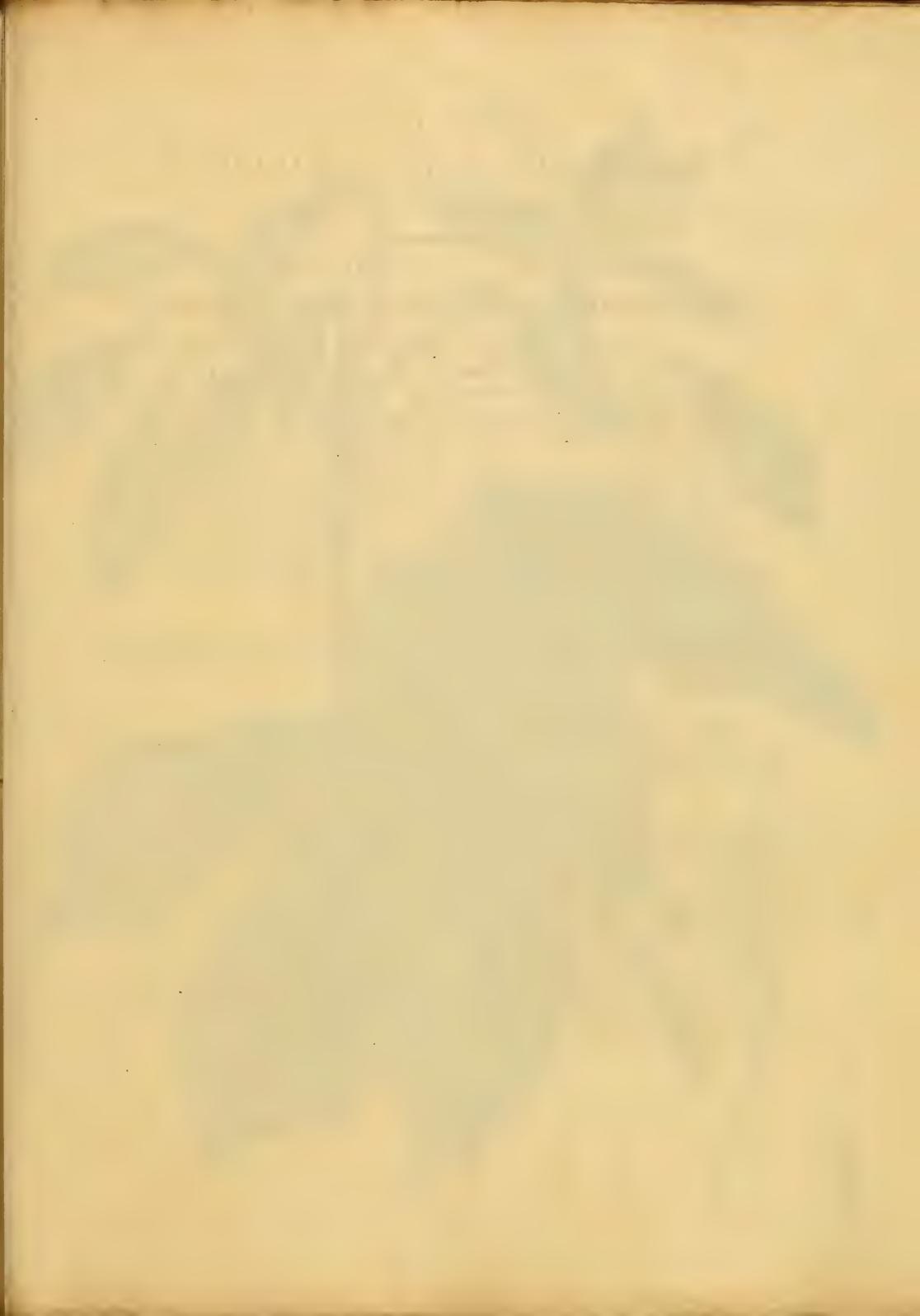


PLATE CLXXVI.
CRATÆVA CAPPAROIDES.
Caper-like Cratæva.

CLASS XI. ORDER I.

DODECANDRIA MONOGYNIA. Twelve Chives. One Pointal.

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

<p>CALYX. Perianthium monophyllum, quadrifidum, deciduum, basi planum; laciniis patentibus, ovatis, inæqualibus.</p> <p>COROLLA. Petala quatuor, oblonga, unguibus tenuibus, longitudine calycis, divisuris inferta.</p> <p>STAMINA. Filamenta sedecim vel plura, setacea, corolla breviora. Antheræ erectæ, oblongæ.</p> <p>PISTILLUM. Germen, pedicello filiformi, longissimo, ovatum. Stylus nullus. Stigma fecundabile, capitatum.</p> <p>PERICARPIUM. Bacca? carnosâ, globosa, maxima, pedicellata, unilocularis, bivalvis.</p> <p>SEMINA plura, subrotunda, emarginata, nidulantia.</p>	<p>EMPALEMENT. Cup one leaf, four-cleft, falling off, flat at the base; segments spreading, egg-shaped, unequal.</p> <p>BLOSSOM. Four petals, oblong, claws slender, the length of the cup and inserted into the divisions.</p> <p>CHIVES. Threads sixteen or more, like bristles, shorter than the blossom. Tips erect, oblong.</p> <p>POINTAL. Seed-bud on a thread-shaped and very long foot-stalk, egg-shaped. Shaft none. Summit fitting on the seed-bud, beaded.</p> <p>SEED-VESSEL. A Berry? fleshy, globular, large, with a foot-stalk, one-celled, two-valved.</p> <p>SEEDS many, roundish, notched at the end, dispersed in pulp.</p>
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SPECIFIC CHARACTER.

<p><i>Cratæva</i> foliolis ellipticis, glabris; floribus umbellatis, terminalibus, luteo-viridibus, petalis longissimis, apicibus crispis.</p>	<p><i>Cratæva</i> with elliptical, smooth leaflets; flowers grow in umbels, terminal and yellow green; petals very long, crisped at the ends.</p>
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REFERENCE TO THE PLATE.

1. Shews the Pointal, part of the Chives, and three Petals of the blossom; a few of the Chives, one of the Petals, and the leaves of the Empalement, being removed, the better to exhibit the structure of the blossom.
2. The Pointal, complete.

To Mr. Eldred Elfælius, a native of Sweden, we are indebted for this species of *Cratæva*; by whom it was brought to Great Britain, on his return from Sierra Leone, in the year 1795. As a native of that burning clime, it will not endure our winters, without the protection of the hothouse; to which, as a climber, it is a considerable ornament, both in foliage, and flower; the flowers coming, in succession, from June, till August; perhaps, much later, as we believe, this is the first time its blossoms have been produced in England. The propagation is extremely easy, by cuttings; but, to give the plant sufficient vigour for flowering, it must be planted in a border, prepared of old rotten dung, sandy peat, and loam, of each, equal parts; separated from the tan-bed by a partition of boards, sufficiently strong to support the earth, upon the removal of the tan. This method of treating many of the tropical climbers, and even the common Caper, though a native of the south of Europe, has been found necessary to their production of flowers in this country. Our figure was taken from a plant, treated in the above manner, in the Stepney collection; from whence, through the kind indulgence of the truly urbanic, and indefatigable proprietor, T. Evans, Esq. we are in hopes of gratifying our botanical friends, with the figures of a number of plants, new to this country; and of which he is, at present, the sole possessor.



Sp. pl. Linn.



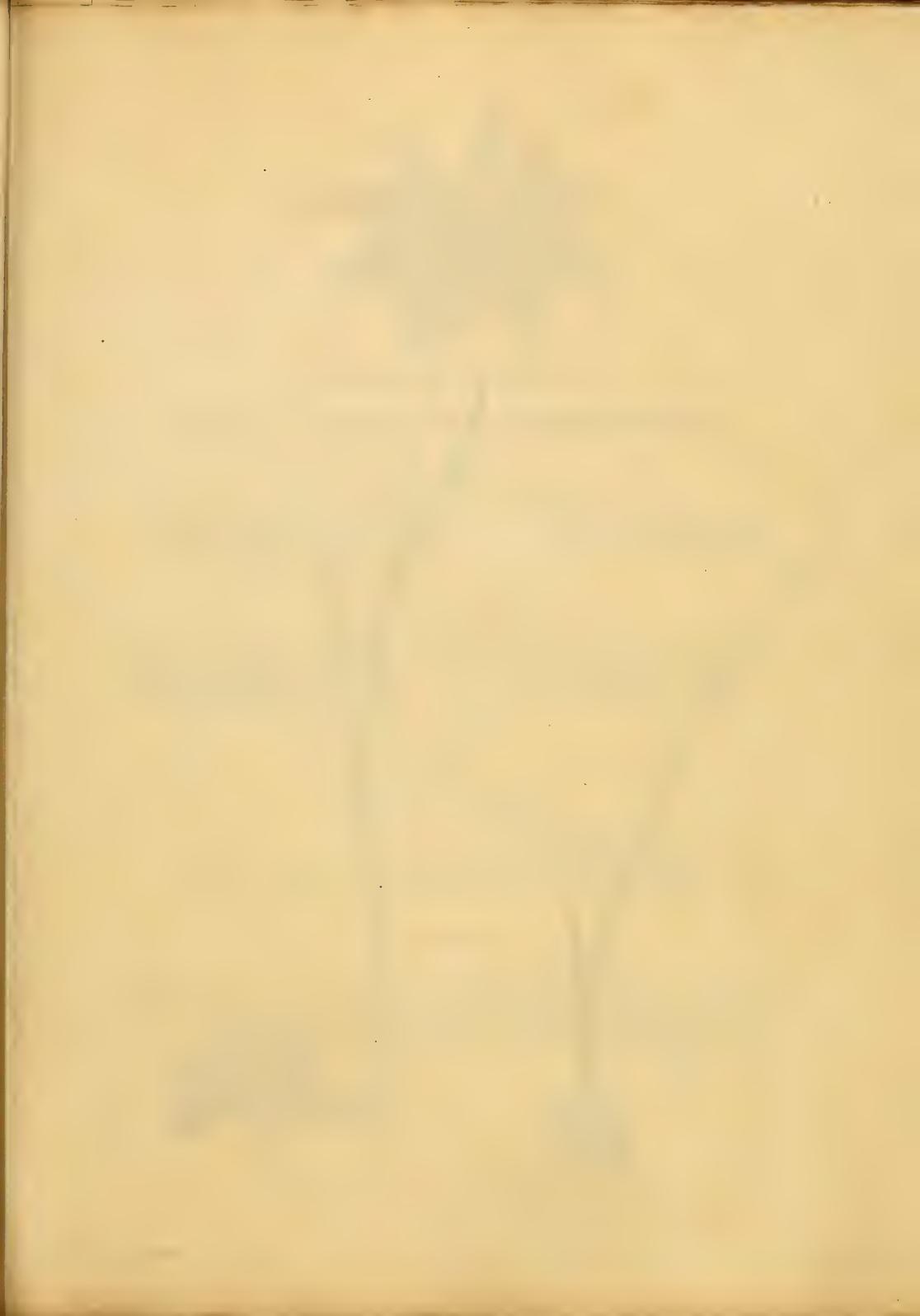


PLATE CLXXVII.

IXIA PUNCTATA.

Dotted flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, patens, æqualis.
STIGMATA 3, erectiusculo-patula.

BLOSSOM 6 divisions, spreading, equal.
SUMMITS three, nearly upright, spreading.
See *Ixia reflexa*, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis linearibus, scapo vaginantibus; scapus geniculatus, subtriflorus; laciniis corollæ obovatis, lineato-punctatis, purpureis.

Ixia with linear leaves sheathing the stem; flower-stem jointed, mostly three flowered; segments of the blossom inversely egg-shaped, dotted in lines, and purple.

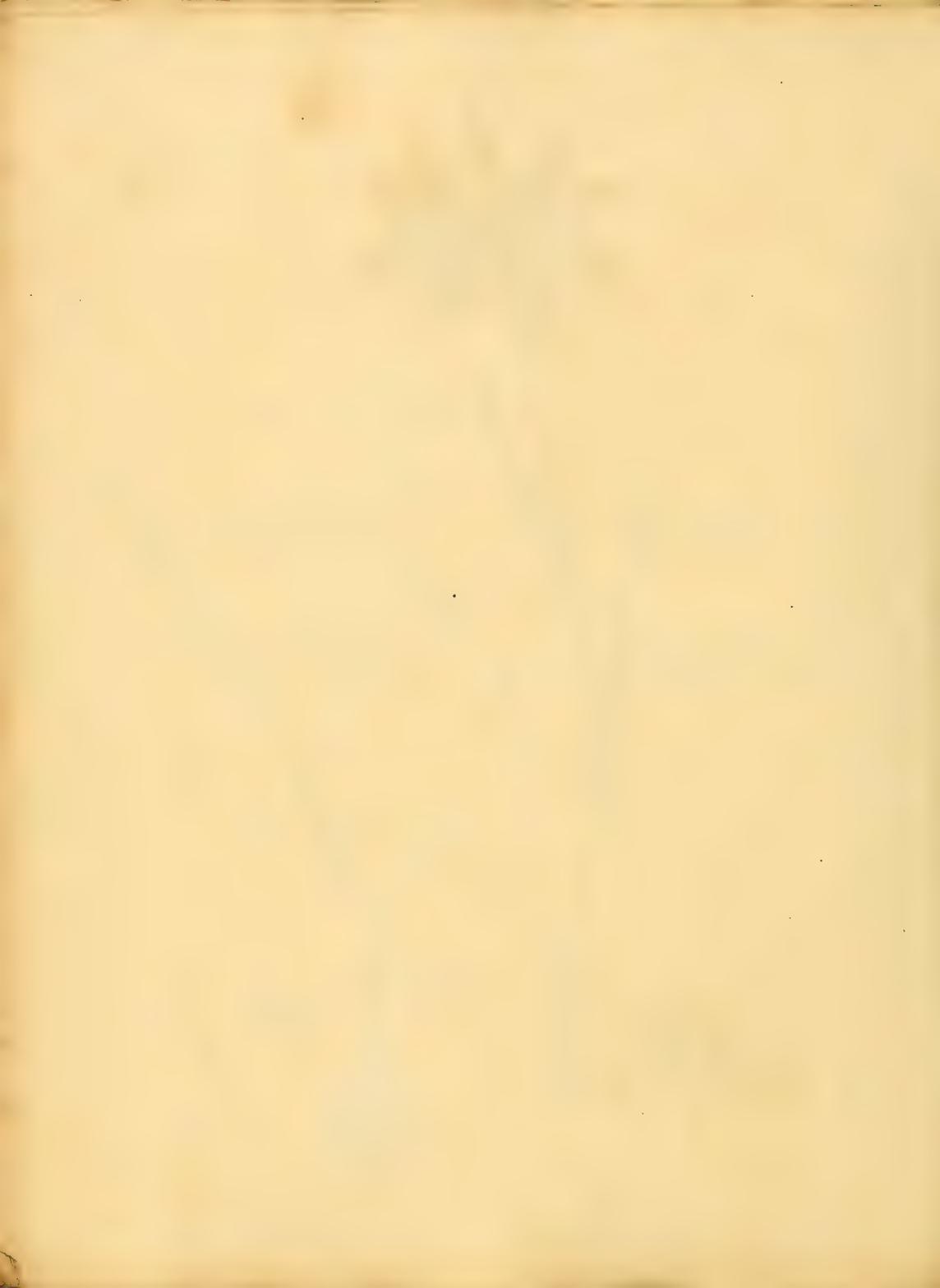
REFERENCE TO THE PLATE.

1. The two valves of the sheath.
2. A Blossom cut open, with the Chives attached.
3. The Seed-bud, Shaft, and Summits; a division of one of the summits magnified.

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



Liza punctata



THE HISTORY OF THE
CITY OF BOSTON

From its first settlement in 1630 to the present time.

By SAMUEL JOHNSON, Esq.

Vol. I.

BOSTON: Printed and Sold by S. KNEELAND, at the Sign of the Anchor, in the City.

1786.

PLATE CLXXVIII.
FERRARIA PAVONIA.
Mexican Ferraria.

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

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

<p>CALYX. Spathæ binæ, alternæ, carinatæ, involutæ, unifloræ.</p> <p>COROLLA monopetala, supera, fexpartita; laciniis oblongis, erecto-patentibus, undulato-crippatis, maculatis; tribus alternis exterius latoribus.</p> <p>STAMINA. Filamenta tria, in tubum cylindraceum, corolla breviorum, connata, superne distincta. Antheræ subovata, didymæ.</p> <p>PISTILLUM. Germen oblongum, triquetrum, obtusum, inferum. Stylus filiformis, longitudine tubi.</p> <p>STIGMATA tria, profundè bifida.</p> <p>PERICARPIUM. Capsula oblonga, triquetra, trilocularis, trivalvis; dissepimentis contrariis.</p> <p>SEMINA numerosa, subrotunda, pulpa involuta.</p>	<p>EMPALEMENT. Sheaths two, alternate, keeled, involute, one-flowered.</p> <p>BLOSSOM one petal, above, six divided; segments oblong, upright spreading, crisp-waved and spotted; the three alternate outer ones the broadest.</p> <p>CHIVES. Threads three, in a cylindrical tube shorter than the blossom, joined together, separate at the top. Tips nearly egg-shaped, double.</p> <p>POINTAL. Seed-bud oblong, three-sided, blunt, beneath. Shaft thread-shaped, the length of the tube.</p> <p>SUMMITS three, deeply two cleft.</p> <p>SEED VESSEL. Capsule oblong, three-sided, three-celled, three-valved; partitions contrary.</p> <p>SEEDS many, roundish, covered with a pulp.</p>
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SPECIFIC CHARACTER.

<p>Ferraria corollis sub campanulatis, speciosissimis; laciniis planis, tribus interioribus hastatis, nectariferis; foliis plicatis, basi spathaceis.</p>	<p>Ferraria with blossoms nearly bell-shaped and very showy; segments plain, the three inner ones are half-egg-shaped, and have honey-cups, leaves plaited, sheathing at the base.</p>
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REFERENCE TO THE PLATE.

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

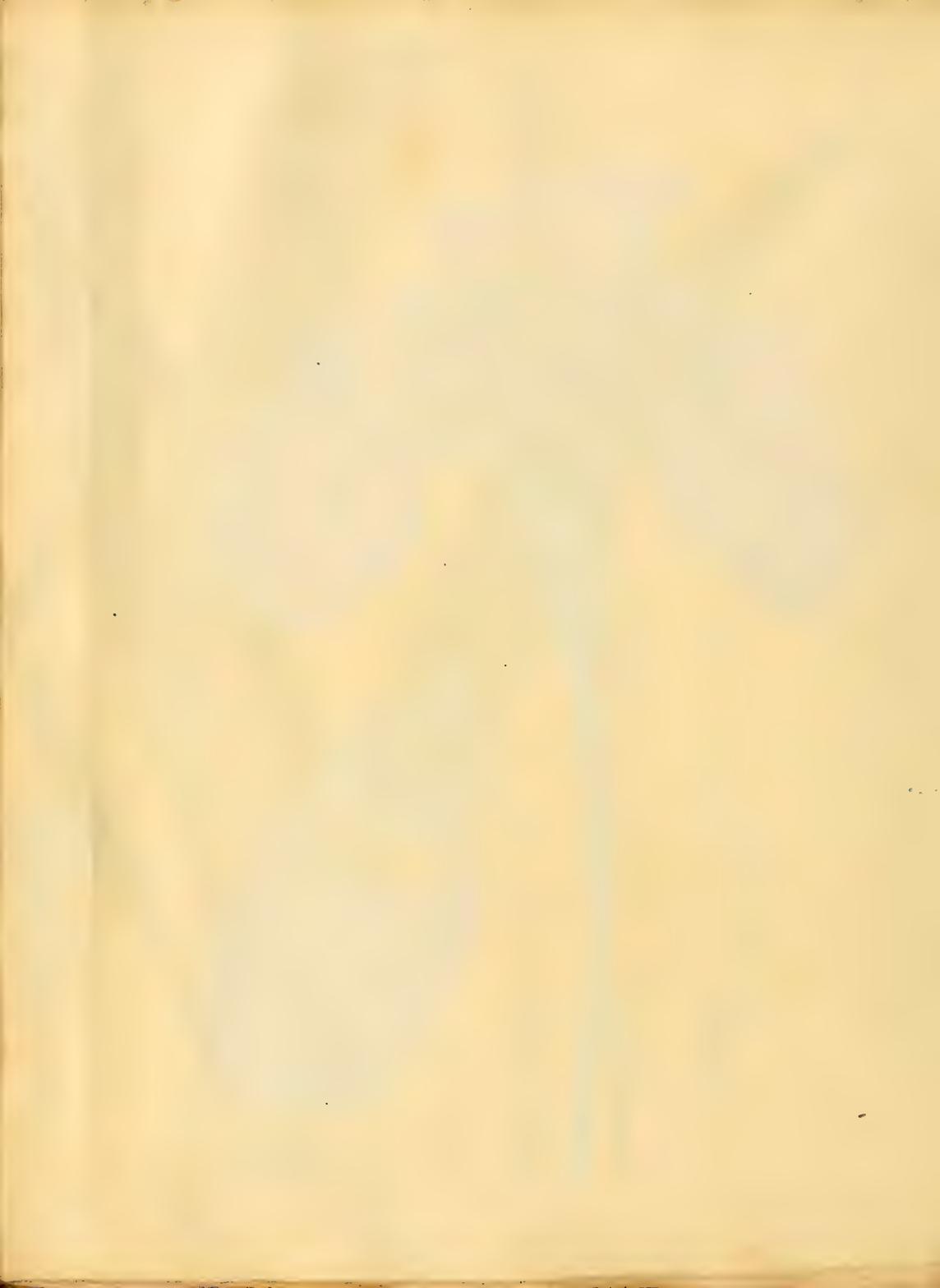
THIS is, without doubt, the Mexican plant given in the 2nd. Vol. t. 31. f. 2. of Swertius's Florilegium, published in 1612; by F. Hernandez, in his Nov. Plant. &c. Mex. Hist. p. 276, in 1648; and of Mutis, under the title it here bears, in his Flo. Amer. 1. t. 15; from whom it has been copied into the Suppl. Plant. of the younger Linnæus, p. 407. and continued by Professor Martyn in his Mill. Dic. Art. Ferraria 2. This Genus, which was originally formed on the Ferraria undulata of the Cape, and placed to the class Gynandria by Linnæus, has been so continued by Martyn, &c. but upon what grounds, we are unable to determine; unless the mistake arose from the impracticability of dividing the tube of the chives, from the shaft, in a dried specimen; which, in such transitory flowers as those of Ferraria, Sisyrrinchium, Galaxia, &c. all of this class, seem, in that state, to form a perfect unison. Schreber has referred these Genera, in his Ed. of Linn. Gen. Plant. to where they certainly must stand, to Monadelphica. But, although we have continued the plant under the title by which it is generally known, from an adherence to our original principle; yet do we think, it equally necessary to state our opinion, why we consider its generic reference to have been as ill taken up, as the Genus had been ill classified. This plant, as may be seen from our dissections, is much nigher affined to Sisyrrinchium, as it wants every essential character of Ferraria, such as a sheath of one leaf, undulated crisped petals, hooded and fringed summits, &c. for we do not consider the length of the tube of the blossom of any moment, as it is not constant. Now, every distinguishing feature of Sisyrrinchium are here extant, viz. a sheath of two leaves, flat or plain petals, summits neither hooded or fringed; but our figure will better explain, than words, these strong marked differences. If indeed we were to give an opinion, it certainly would not be in coincidence with Thunberg, by placing the whole Genus to Moræa; but to create a new one from this plant; whose whole structure, but especially from the Nectaria or honey-cups upon the margin of the inner petals, stands eminently distinguished from all others.

This most distinguished plant, was first introduced to this country by Mrs. Hudson of Manchester, about the year 1797; but is now found in most collections round the Metropolis. It is increased by the seed, which ripens in this climate, and from the root, which makes abundance of offsets. The flowers expand in rotation, three or four upon each stem at the interval of a few days; the stem growing to the height of about two feet. So very rapid is the progress of the blossom in its decay, from the time of its opening, which is generally about seven o'clock in the morning; that before twelve, the lustre is gone, and it is quite decayed by three, or four. Our drawing was made at the HammerSmith Nursery in July; and still there were a number of flower stems, which had not, as yet, made an appearance of flowering. It is best grown in peat earth.

W. G.



Iris pavonia



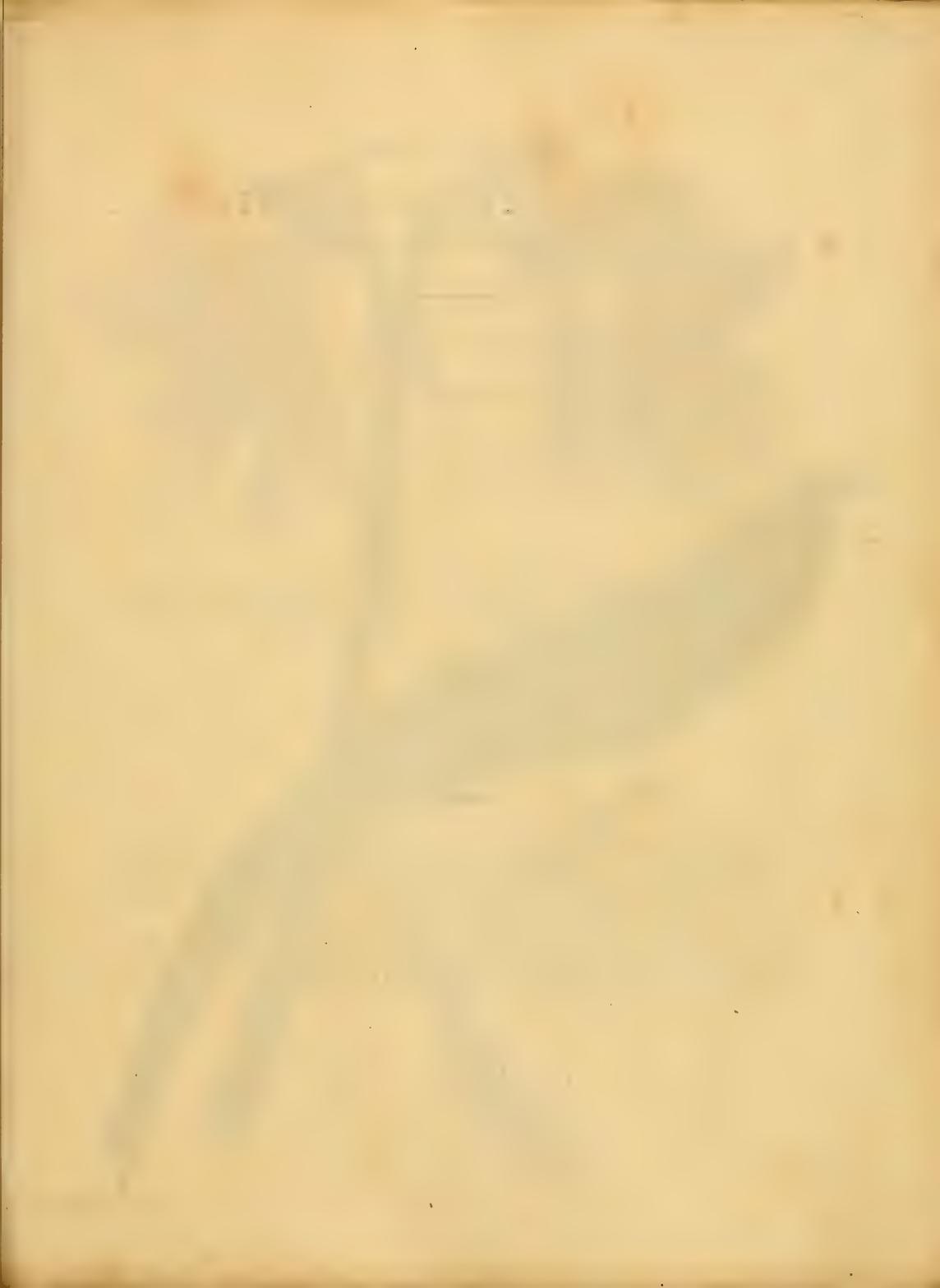


PLATE CLXXIX.

AMARYLLIS RETICULATA.

Netted-flowered Lily-Daffodil.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

Amaryllis spatha multiflora; corollis reticulatis, purpureis; foliis oblongis, reticulatis, basi attenuatis.		Lily Daffodil, sheath many flowered; blossoms netted and purple; leaves oblong, netted, and tapered at the base.
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REFERENCE TO THE PLATE.

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

THE *Amaryllis reticulata*, a native of Brazil, South America, was first cultivated in the year 1772, at the Hammer-smith nursery; the bulbs had been received from Portugal by Edward Whittaker Gray, M. D. of the British Museum; and were by him communicated to Messrs. Lee and Kennedy. Our drawing was made this spring, in May, from a plant in the invaluable, and extensive collection of hothouse plants, at Stepney, belonging to T. Evans, Esq. where it flowers annually.

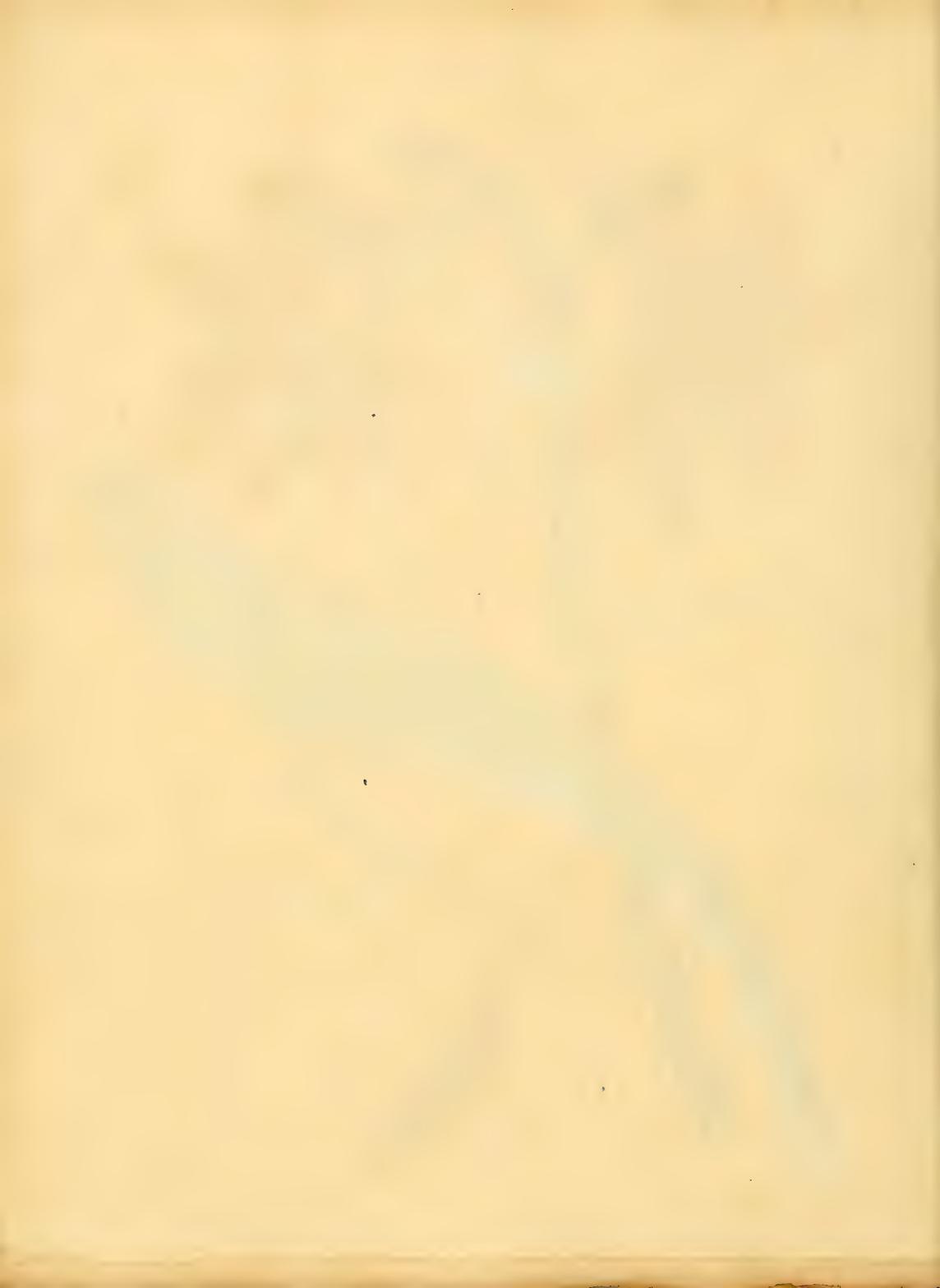
To ensure the flowering of this plant, it is necessary to plunge the pot in the heat of the bark-bed of the hothouse; and, during the winter months, to keep the earth rather dry, as the bulbs are very subject to rot, without that precaution. It should be planted in a composition of old rotten dung, or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



1

2

Amaryllis reticulata



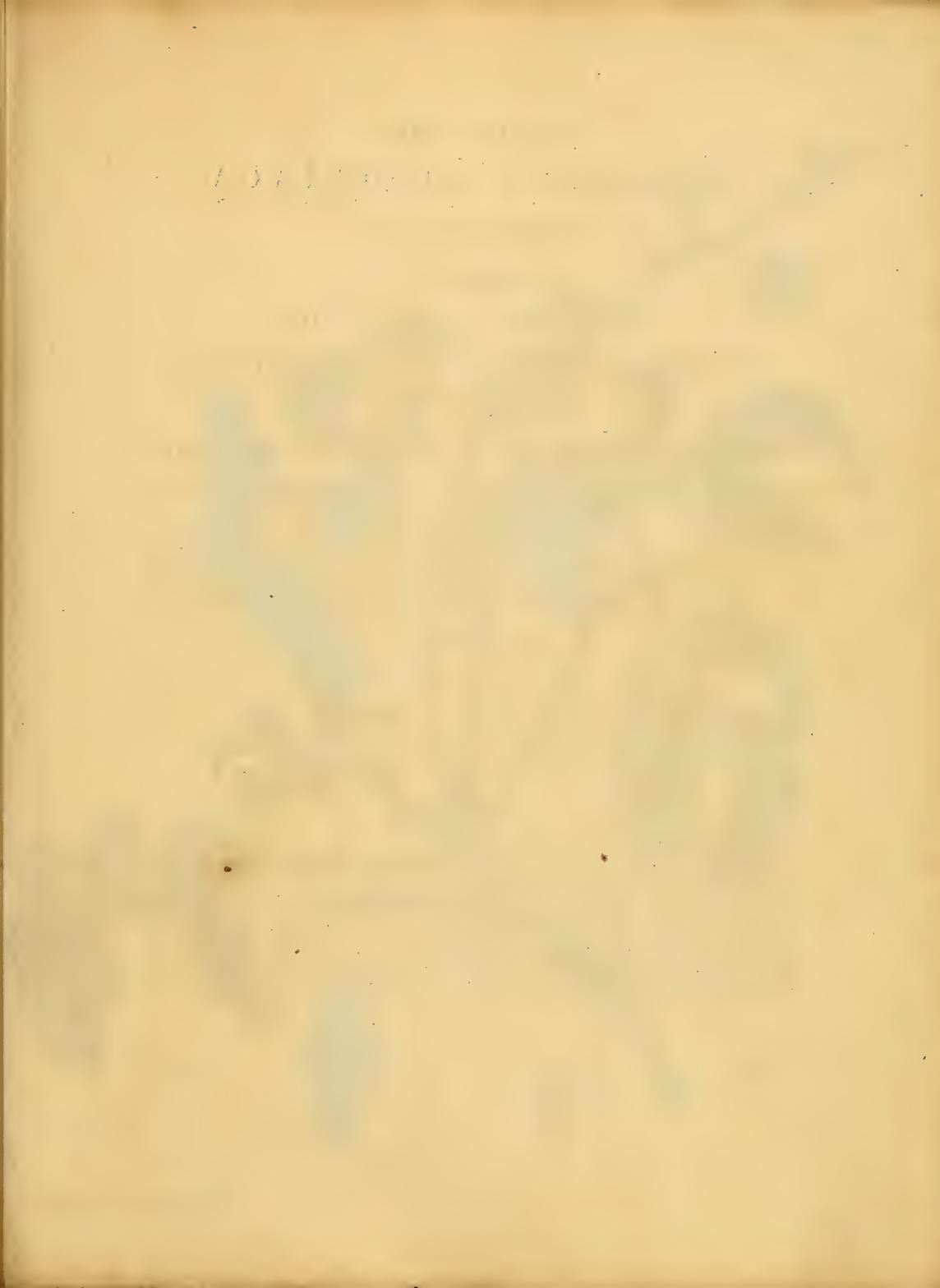


PLATE CLXXX.
ATRAGENE AUSTRIACA.

Austrian Atragene.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 4-phyllus. Petala. 12. Semina caudata.		EMPALEMENT 4 leaves. Petals 12. Seeds with tails.
		See ATRAGENE CAFENSIS, Pl. IX. Vol. I.

SPECIFIC CHARACTER.

Atragene foliis oppositis, trternatis; foliolis rugosis, ferratis; floribus folitariis, tomentosis, cernuis; calyce magno, caeruleo, marginato.		Atragene with opposite, twice-three-divided leaves; leaflets rough and sawed; flowers solitary, downy, nodding; empalement large, blue, and bordered.
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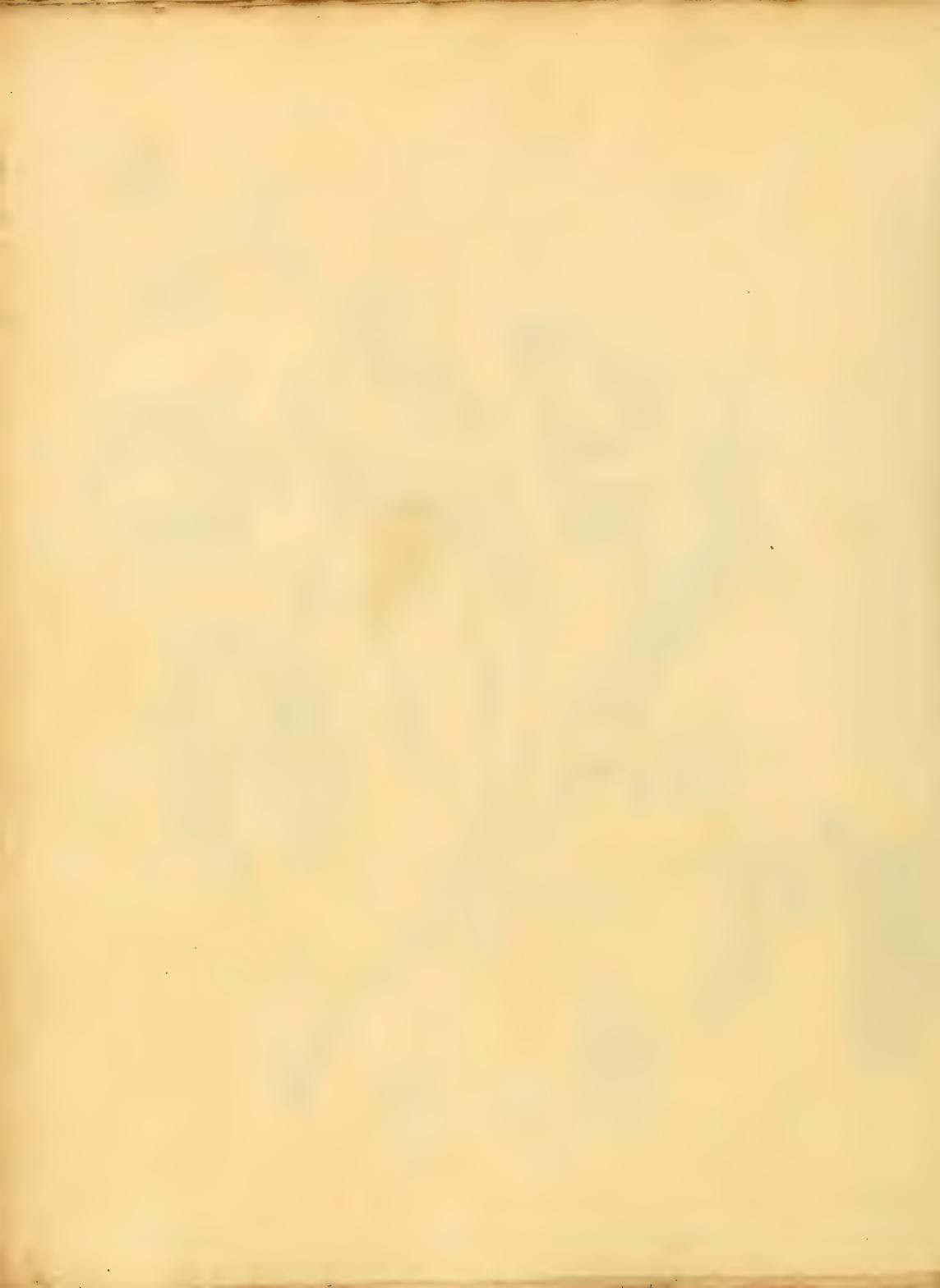
REFERENCE TO THE PLATE.

1. A Leaf of the empalement.
2. A Petal of the flower.
3. A Chive complete.
4. The Pointals as they stand in the flower.
5. A ripe seed, with its feathered tail.

THIS is, unquestionably, the Austrian Atragene of Jacquin's Vind. 249; and, we think, no one who has had an opportunity of comparing the *A. alpina* with this plant, but will determine it a distinct species. It is a hardy, climbing shrub; growing frequently, eight or ten feet in a season, and covers itself pretty abundantly with foliage; the foot-stalks of the old leaves becoming cirrhi or tendrils, and the wood growing to a considerable thickness. The flowers begin to appear about May; and continue in succession, till July. It may be propagated by layers; but, the surest mode is by seed, which may be sown as soon as ripe, and which will be perfected from the first flowers, by August. It grows the most flourishing in light rich earth; but will live in the most common. Our figure was made from a plant in the Hammermith collection, to which it was first introduced in the year 1792.



Atragene austriaca.



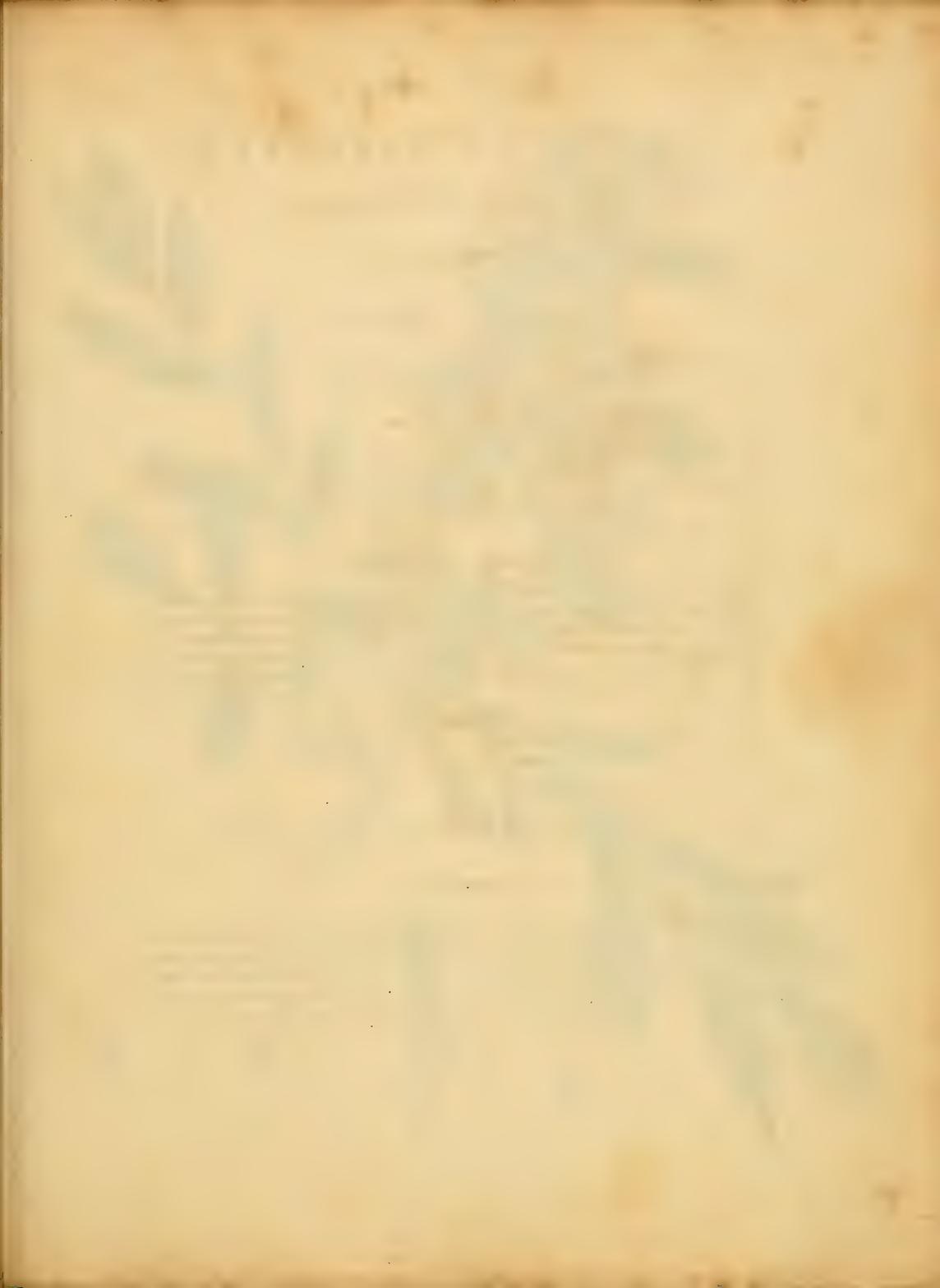


PLATE CLXXXI.

VACCINIUM VIRGATUM.

Green-twigg'd Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX superus. Corolla monopetala. Filamenta receptaculo inferta. Bacca quadrilocularis, polyſperma. || CUP ſuperior. Bloſſom one petal. Threads fixed into the receptacle. A berry with four cells and many ſeeds.

See VACCINIUM ARCTOSTAPHYLOS. Pl. XXX. Vol. I.

SPECIFIC CHARACTER.

Vaccinium foliis oblongo-ovatis, ferrulatis, deciduis, ramulis viridibus; floribus, ſub-umbellatis, axillaribus; corollis, ſub-cylindraceis; calycibus apice reflexis. Stamini- bus decem. || Whortle-berry with oblong egg-shaped leaves, ſlightly ſawed, deciduous, the ſmall branches green; flowers grow rather umbelled from where the leaves are fixed to the ſtem; bloſſoms nearly cylindrical; cups reflexed at the upper part. Ten chives.

REFERENCE TO THE PLATE.

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

THIS ſpecies of Whortle-berry was, according to the Kew Catalogue, introduced by Mr. Young in the year 1770. It is a hardy plant; and, as a native of North America, where it is an under ſhrub of the woods, ſhould be planted in a ſhady ſituation, in peat earth. It is rarely killed by our froſts; grows about two feet high, and loſes its leaves in winter. Our drawing was made in June, this year, at the Nurſery, Hammerſmith, where it is propagated by layers.



Vaccinium vitifolium



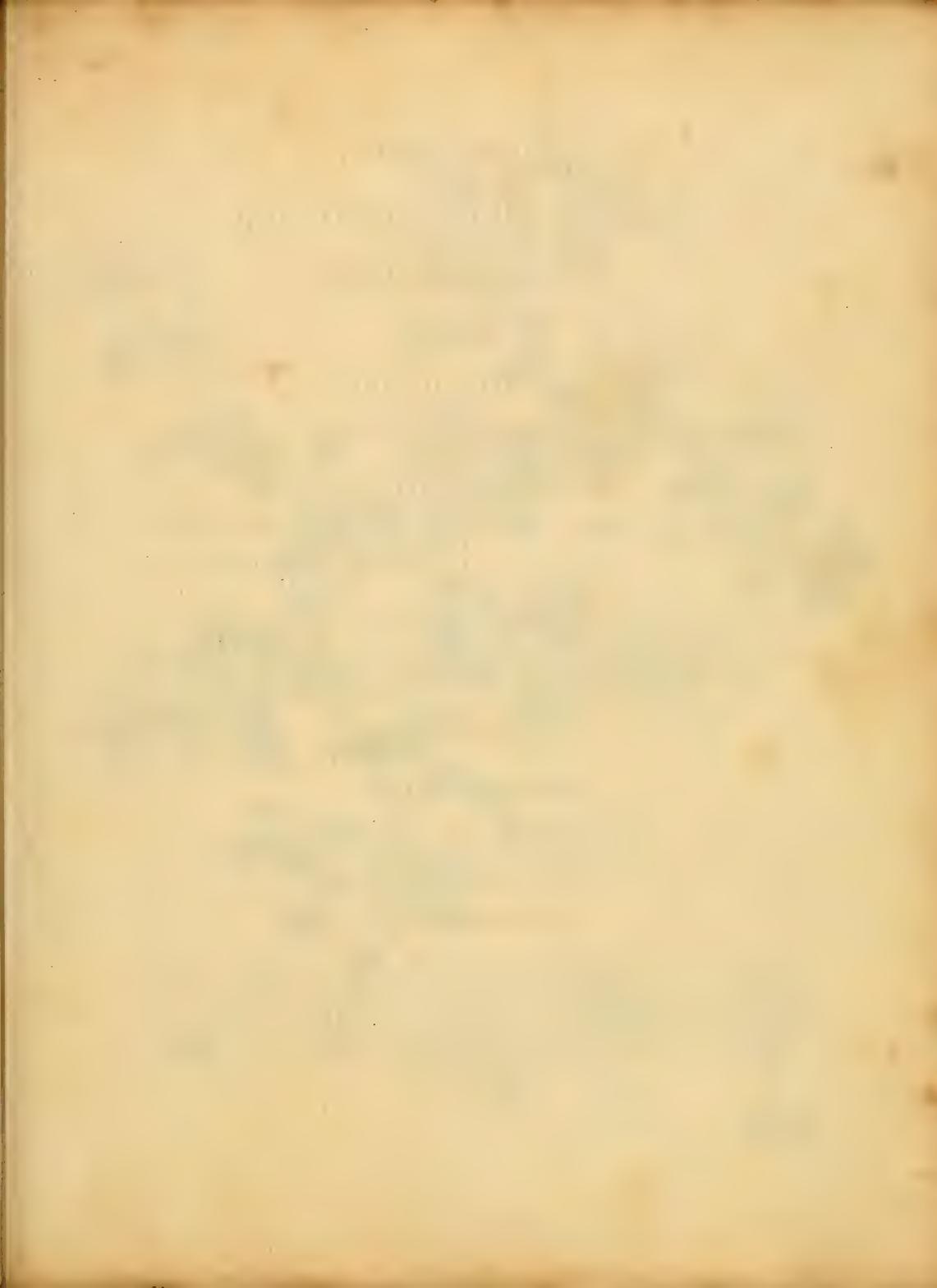


PLATE CLXXXII.

MALVA DIVARICATA.

Straddling-branched Mallow.

CLASS XVI. ORDER VI.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

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

Malva foliis lobatis, plicatis, dentatis, scabridis; ramis ramulisque divaricatis, flexuosis.		Mallow with lobed leaves, plaited, toothed, and rough; the large and small branches grow straddling, and zig-zagged.
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REFERENCE TO THE PLATE.

1. The double Cup.
2. A Flower spread open, with the threads remaining.
3. The Chives cut open, and magnified.
4. The Seed-bud, Shaft, and Summits, magnified.

As a lively, but little, green-house plant, this species of Mallow has not many equals; and its property of continuing to flower from June, till December, must considerably enhance its value. It is a native of the Cape of Good Hope, and was introduced to us, about four years since. Most collections now possess it, from its facility of increase, may be planted in rich earth, and is increased by cuttings, or seeds, which ripen perfectly in this country. The drawing was made at the Nursery, Hammer-smith.



Nolina discolorata



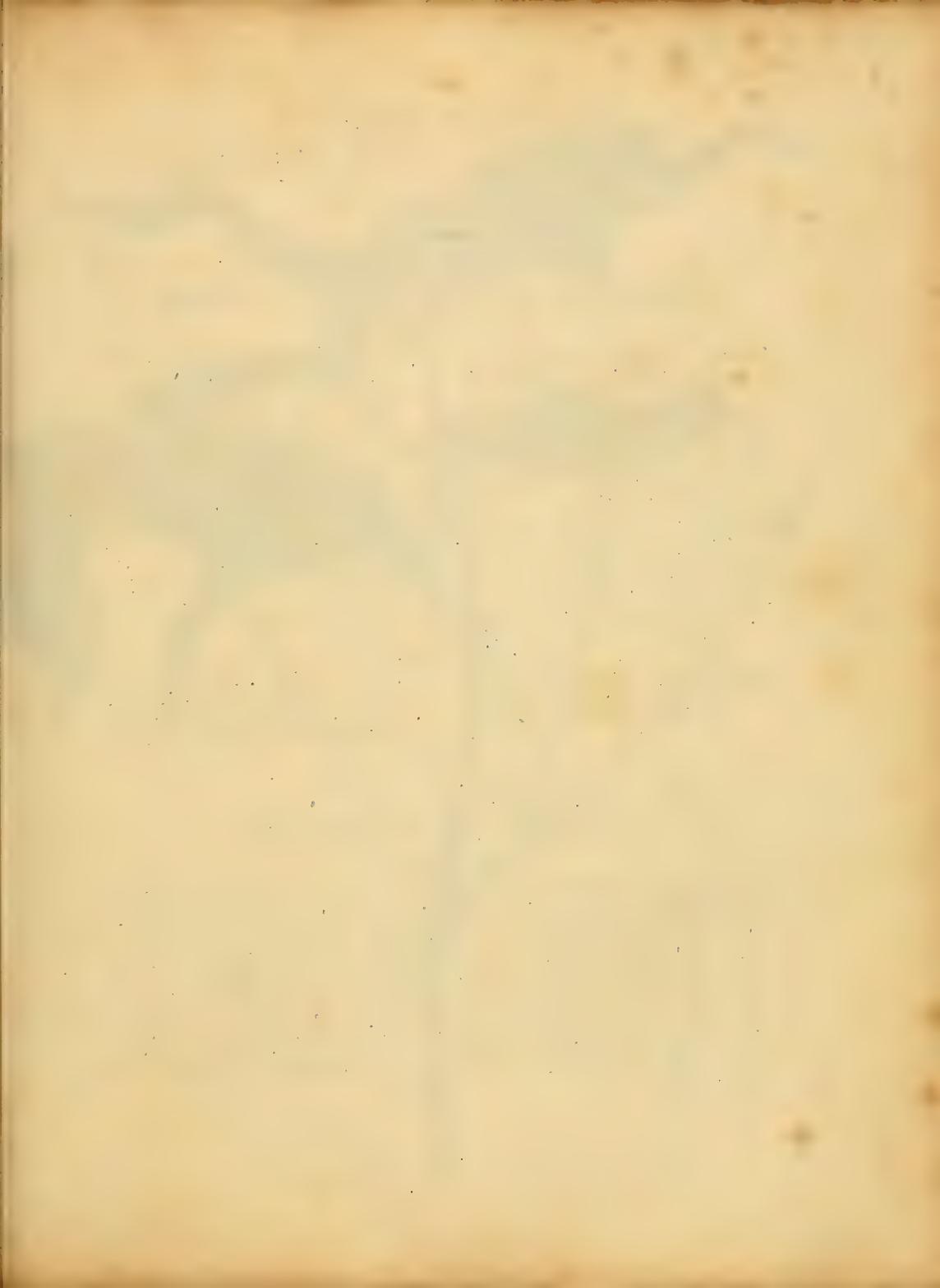


PLATE CLXXXIII.
GARDENIA TUBIFLORA.
Tube-flowered Gardenia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, superum, laciniis erectis, persistentibus.
COROLLA monopetala, infundibuliformis; tubus cylindricus, calyce longior; limbus planus, quinquepartitus.
STAMINA. Filamenta nulla. Antheræ quinque, ore tubi infertæ, lineares, striatæ, longitudine dimidia limbi.
PISTILLUM. Germen inferum. Stylus filiformis seu clavatus. Stigma exsertum, ovatum, obtusum, bilobum, sæpe fulcatum.
PERICARPIUM. Bacca ficca, uni bis seu quadrilocularis.
SEMINA plurima, depressa, per series imbricatum sibi imposita.

EMPALEMENT. Cup one leaf, five-cleft, above, segments upright, permanent.
BLOSSOM one petal, funnel-shaped; tube cylindrical, longer than the cup; border flat, five divisions.
CHIVES. Threads none. Tips five, fixed into the mouth of the tube, linear, striped, half the length of the border.
POINTAL. Seed-bud beneath. Shaft thread-shaped or club-shaped. Summit standing out, egg-shaped, obtuse, two-lobed, often furrowed.
SEED-VESSEL. A dry berry, one, two, or four-celled.
SEEDS many, flattened, lying upon one another in tiers.

SPECIFIC CHARACTER.

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

Gardenia without thorns; with elliptical, undulated leaves; flowers grow by threes; the segments of the blossom are twisted, linear, reflexed, the tube thread shaped, very long.

REFERENCE TO THE PLATE.

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

THE Tube-flowered Gardenia was introduced to Britain, in the year 1789, from Sierra Leone, and must, therefore, be treated as a tender hot-house plant. It grows, with us, to the height of about two feet before it flowers; and, from the beauty and size of the leaves, the regular, opposite manner in which it forms its branches, becomes a very handsome shrub. The flowers, which are produced in July, grow generally three together, at right angles, from the insertion of the leaves, in a bunch, which lasts about six or eight days, having but one flower open and perfect at a time, the decaying ones becoming brown. It is propagated, with ease, by cuttings, made in the month of March, and kept under a bell-glass, in a pot of stiffish loam, in the bark-bed of the hot-house, or a melon frame. The agreeable character, of a delicate fragrance, attendant on the blossoms of most species of this genus, is eminently powerful in this. Our drawing was made at the Hammermith nursery; where, it was first raised, from seeds received in a present, by Messrs. Lee and Kennedy, from the Hon. Sierra Leone Company.



Gardenia tubiflora



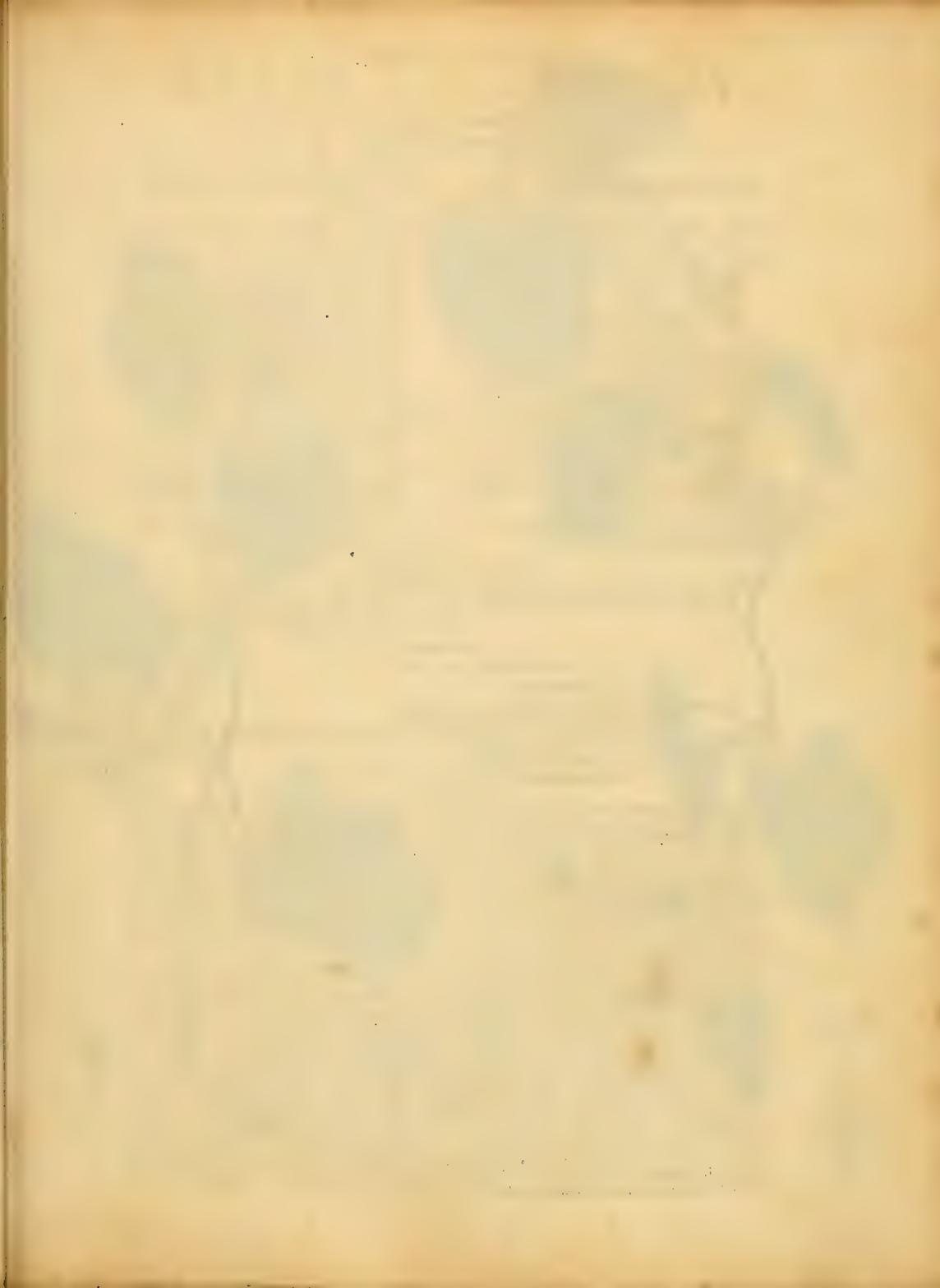


PLATE CLXXXIV.
P E R G U L A R I A M I N O R .

Smaller Pergularia, or West-coast Creeper.

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

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, erectum, acutum, persifens.

COROLLA monopetala, hypocrateriformis; tubus cylindricus, calyce longior; limbus quinquepartitus, planus; laciniis oblongis.

Nectarium, duplex; *exteriorum* quinquefidum, quinquedentatum, plicato-angulatum, dentibus acutis, incurvis, apice corniculis nutantibus, approximatis; *interium* quinquefidum, exteriori basi adnatum, squamulæ membranacæ, apice denticulatæ, obtusæ, singula involvens stamina duo, alterna.

STAMINA. Filamenta decem, capillaria, brevia, divaricata, per paria adnexa glandulis quinque stigmati affixis. Antheræ pellucidæ, luteæ, subrotundæ.

PISTILLUM. Germina duo oblonga. Stylus brevissimus, carnosus. Stigma corpusculum conicum, obtusum, carnosum.

PERICARPIUM. Folliculi duo, uniloculares, introrsum debiſcentes per longitudinem.

SEMINA numerosa, parva, subrotunda.

EMPALEMENT. Cup one leaf, five-cleft, upright, pointed and remaining.

BLOSSOM one petal, salver-shaped; tube cylindrical, longer than the cup; border five-divided, flat, segments oblong.

Honey-cup, double; *the outer*, five cleft, five toothed, plaited into angles, with the teeth pointed, incurved, approaching at the point by small nodding horns; the *inner* five cleft, growing to the base of the outer, scales skinny, toothed at the end, blunt, each covering two opposite chives.

CHIVES. Threads ten, hair-like, short, straddling, connected by pairs to five glands fixed to the summit. Tips transparent, yellow, roundish.

POINTAL. Seed-buds two, oblong. Shaft very short, fleshy. Summit a conical, obtuse, fleshy substance.

SEED-VESSEL. Two follicles, one-valved, splitting lengthways from the inside.

SEEDS numerous, small, roundish.

SPECIFIC CHARACTER.

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

Pergularia with heart-shaped leaves, sharp-pointed and twisted at the ends; the segments of the blossom are egg-shaped, upright, and yellow.

REFERENCE TO THE PLATE.

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

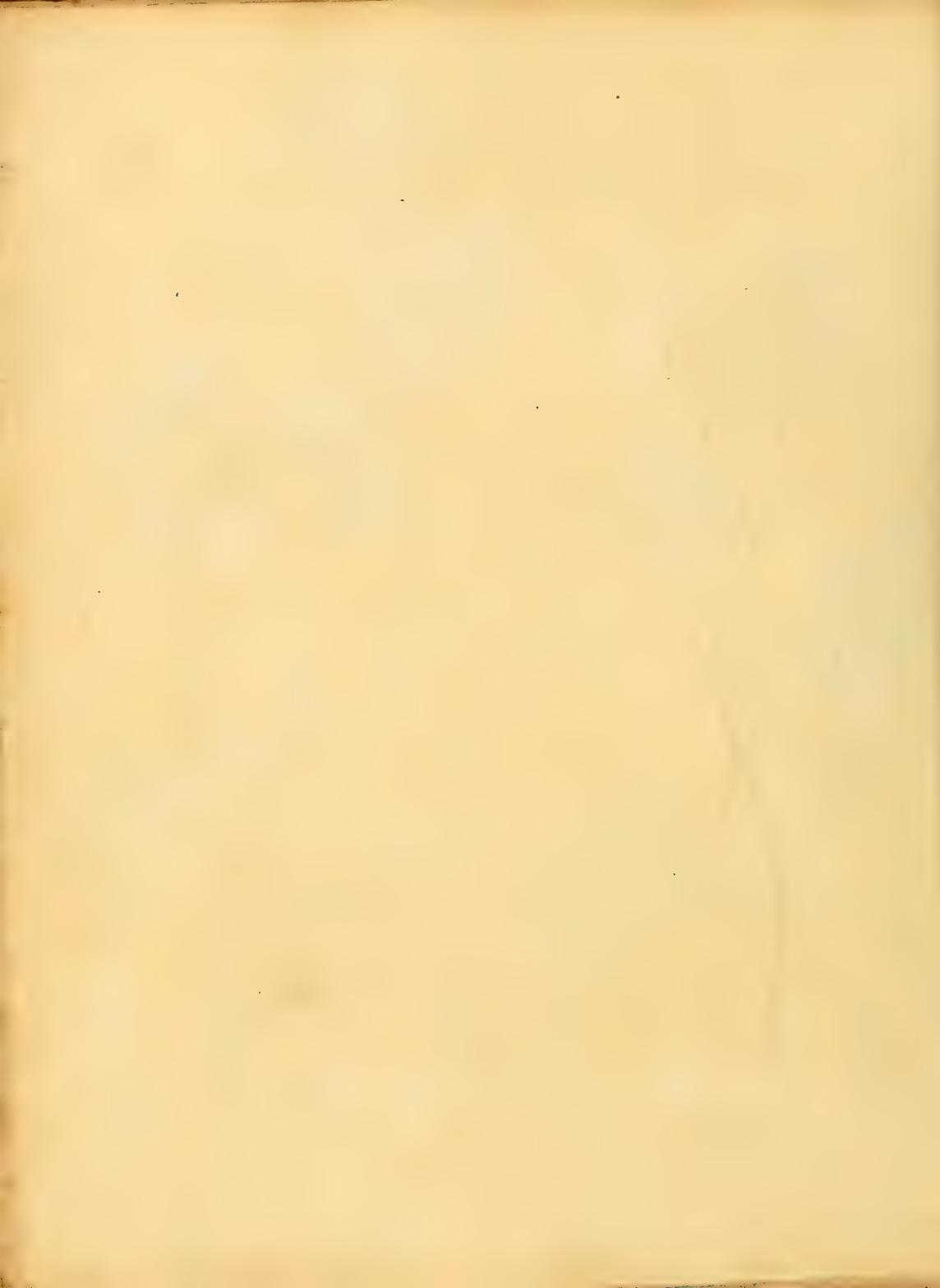
THAT a just judgment may be formed, upon what grounds we have taken up a specific distinction, between the only two species we possess of this genus; so dissimilar in our opinion, but, which have been considered as scarcely to be deemed varieties, by much abler botanists than ourselves profess to be; we have given the figures of both in consequence. Much is it to be regretted, that the whole natural order of plants forming the Apocinæ of Jussieu, so characterized in themselves, have not undergone a proper revision, in classification, upon the original Linnæan sexual principles; which, we must suppose, have been left in the present bewildered chaos, from the intricacy, singularity and minuteness of the parts, being so difficult to develope. From critical and actual observations, taken from the living plants, we are in hopes of being able to illustrate, and correct where necessary, the characters of such as may come under our review.

Upon the changing the class of this genus, there needs no comment; as most authors seem to allow, though they have not followed the hint, that it is properly Gynandrous; although they have not equally agreed as to the Order; some taking the glands, surrounding the summit, for the chives, and some, for the summits themselves, of a columnar shaft. Dr. Smith, who has figured our other species, has justly taken, the parts fixed to the five glands, for what they certainly are; as may be easily traced through the whole order of Orchidæ, where the chives are nearly similarly placed and so hooded.

The Genus is by no means new, in name, having been so titled by Linnæus, from the names of *Pergulans* and *Pergulanus* of Barman and Rumphius; who derived them from the use made of the plants by the natives, of the western coast of the peninsula of India; where, they are cultivated to form arbors, for the agreeable flavour of their flowers. This species was first introduced about the year 1784, by Sir Joseph Banks, Bart. some time before the other species; wherefore, we have given it the preference. It is propagated by cuttings, and should be treated in the same manner as directed for the *Cratæva capparoides* of our last Number, to have it flower in perfection. The figures of both species were taken, in August, from two plants in the collection of J. Vere, Esq. Kennington Gore; where, Mr. Anderson (to whom we must beg our sincere acknowledgments for his frequent and ready observations and assistance) informs us, they are treated in such manner.



Pyrola asarifolia



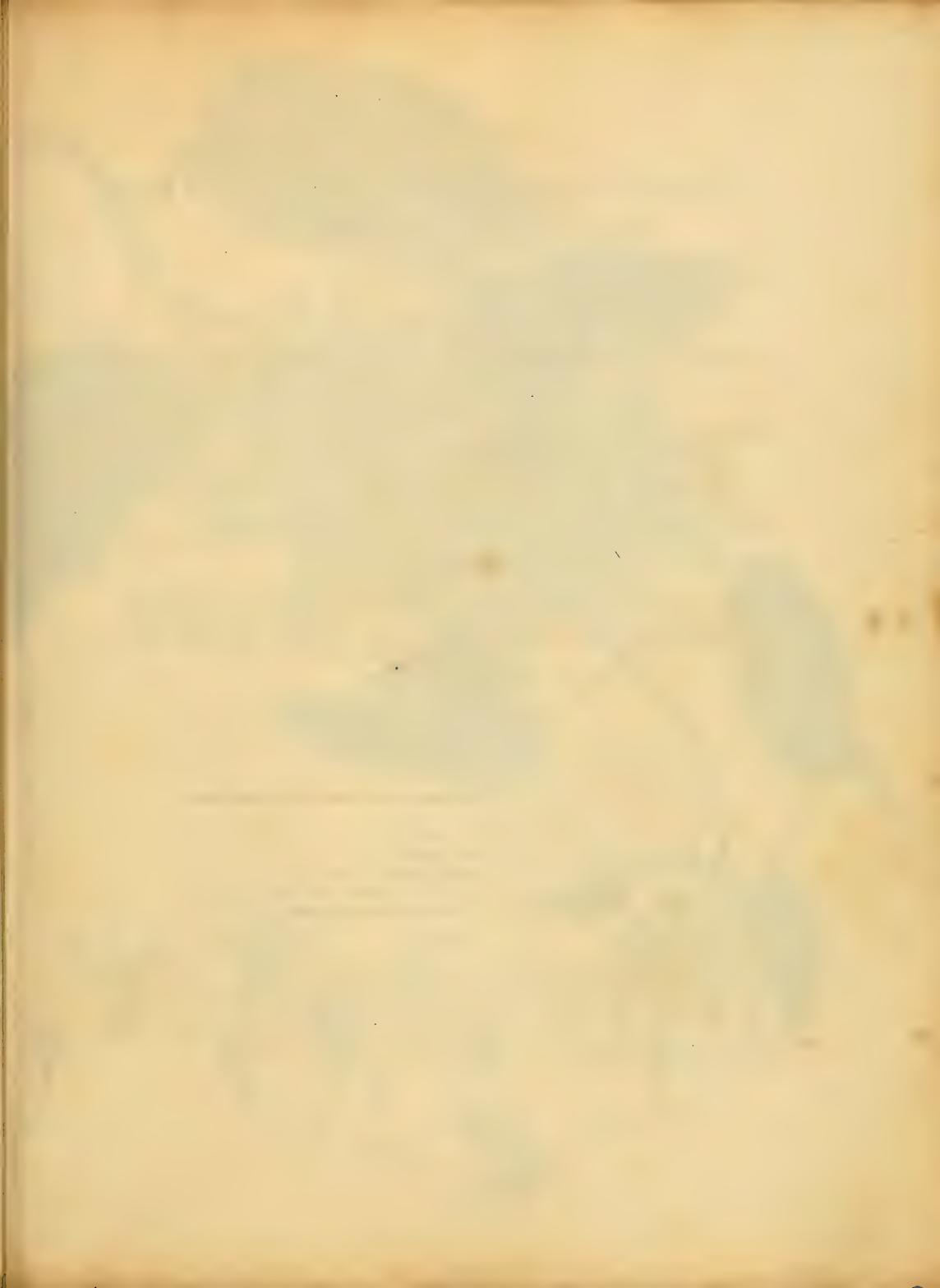


PLATE CLXXXV.

PERGULARIA ODORATISSIMA.

Sweet Pergularia, or Chinese Creeper.

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

GYNANDRIA DECANDRIA. Chives on the Pointal. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CONTORTA. Nectarium duplex, genitalia involvens; squamulæ exteriores quinque, cuspidatæ; quinque interiores, membranacæ, singula squamula occultans stamina duo alterna.

COROLLA hypocrateriformis.

CONTORT. Honey-cup double, concealing the parts of fructification; the outer scales are five, and spear-shaped; the five inner are skinny, each scale covering two alternate chives.

BLOSSOM salver-shaped.

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

SPECIFIC CHARACTER.

Pergularia foliis cordatis, senioribus submentosis; laciniis corollæ margine revolutis, tortis, linearibus, reflexis, viridibus.

Pergularia with heart-shaped leaves, the older ones rather downy; the segments of the blossom rolled back at the margin, twisted, linear, reflexed, and green.

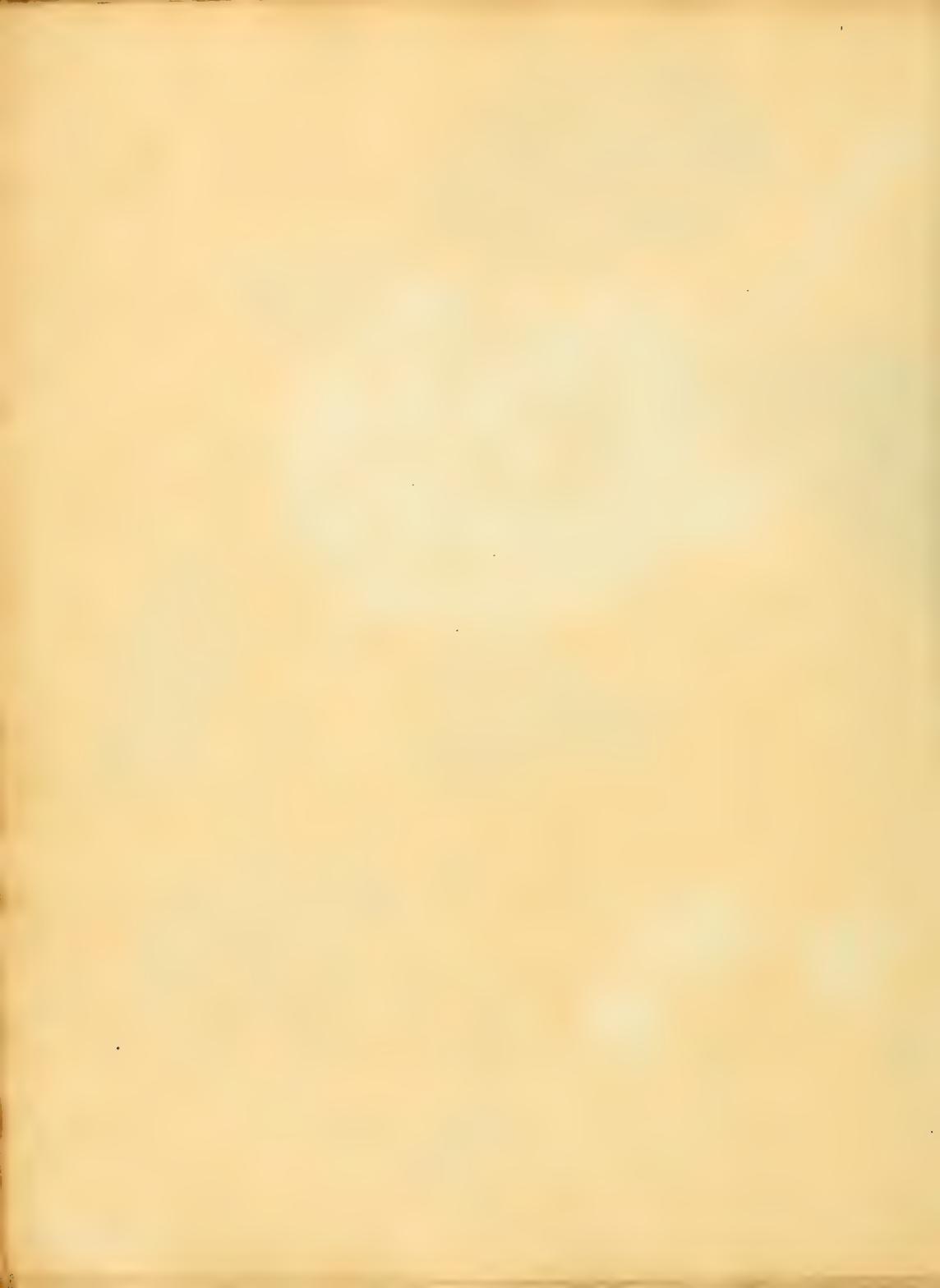
REFERENCE TO THE PLATE.

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

THIS species of Pergularia is a native of China, from whence it was received in the year 1789, by Lady Hume; in whose collection at Wormleybury, Herts, it first flowered in 1791. It is cultivated and increased in the same manner as the P. minor, and is equally fragrant. We have little doubt that our two species comprise four, of the different authors who have collated from each other; we shall take the last, Willdenow. The P. glabra and P. Japonica as our P. minor; and the P. purpurea and tomentosa as our P. odoratissima. The P. edulis of Thunberg is certainly Cynanchum.



Pergularia coccinea



THE HISTORY OF THE
CITY OF BOSTON



1780

PLATE CLXXXVI.

I X I A S P E C I O S A .

Deep crimson Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA fexpetala, patens, æqualis. Stamina
tria, erectiusculo-patula.

BLOSSOM six petals, spreading, equal. Chives
three, upright spreading.

See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis linearibus, medio costatis, gramineis;
scapus biflorus, filiformis; corollis sub-
campanulatis, profunde coccineis.

Ixia with linear leaves ribbed in the middle and
graffy; flower-stem two-flowered and thread-
shaped; blossoms rather bell-shaped and of
a deep crimson.

REFERENCE TO THE PLATE.

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

ALTHOUGH this species is not scarce, yet, from the general method of treating it, that is, by giving it no more heat than has been found necessary for the generality of Cape Ixias, few have seen its blossoms, though they possess the roots. To ensure their flowering, as soon as the bulbs are well rooted, which will be about January, if planted in October; they may be then put into the heat of a melon or cucumber frame, or taken into the hothouse, where they will flower about the latter end of May. This Ixia was first introduced, from Holland, about the year 1778, under the name of Ixia Kermofina speciosa; and, under that title, is to be found, in most collections; wherefore, considering it a distinct species, having drawings of two varieties, we have continued the specific name of speciosa. Our drawing was made at the HammerSmith nursery, in May 1799.



Lilia speciosa



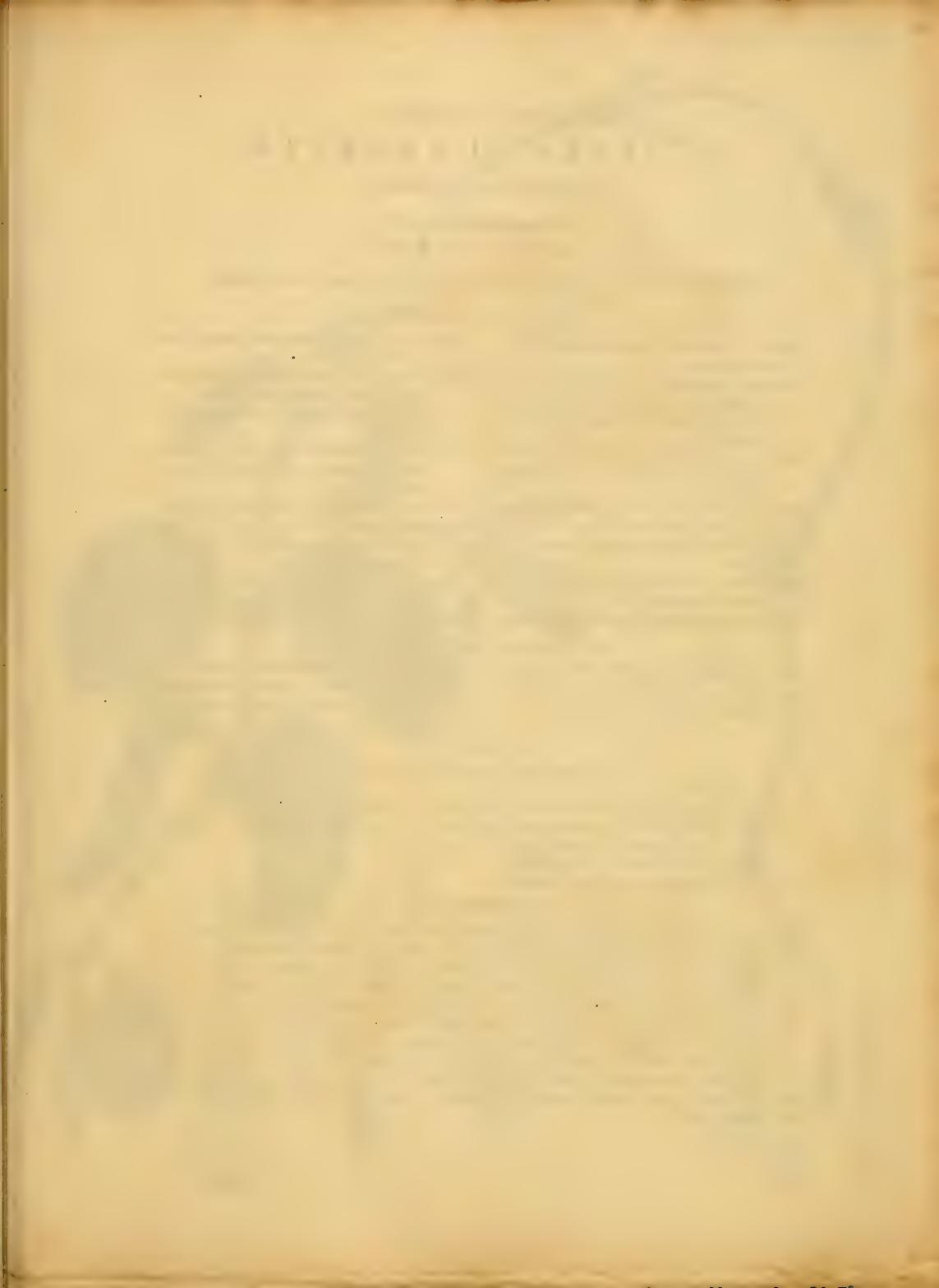


PLATE CLXXXVII.
ECHITES SUBERECTA
Oval-leaved Echites.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

<p>CALYX. Perianthium quinquepartitum, acutum, parvum.</p> <p>COROLLA monopetala, infundibuliformis; limbus quinquefidus, planus, patentissimus. <i>Nectarium</i> glandulis quinque, germen circumstantibus.</p> <p>STAMINA. Filamenta quinque, tenuia, erecta. Antheræ rigidæ, oblongæ, acuminatæ, apice convergentes.</p> <p>PISTILLUM. Germina duo. Stylus filiformis, longitudine staminum. Stigma oblongo-capitatum, bilobum, glutine antheris adnexum.</p> <p>PERICARPIUM. Folliculi duo, longissimi, uniloculares, univalves.</p> <p>SEMINA plurima, imbricata, coronata pappo longo.</p>	<p>EMPALEMENT. Cup five-parted, pointed, and small.</p> <p>BLOSSOM one-petal, funnel-shaped; border five-cleft, flat and spreading very much. <i>Honey-cup</i> five glands, standing round the bud.</p> <p>CHIVES. Five threads, slender, erect. Tips stiff, oblong, tapered, and closing together at the top.</p> <p>POINTAL. Seed-buds two. Shaft thread-shaped, the length of the chives. Summit oblong-headed, two-lobed, attached to the tips by a glutinous substance.</p> <p>SEED-VESSEL. Two follicles, very long, one celled, one valved.</p> <p>SEEDS many tiled, crowned with a long feather.</p>
--	--

SPECIFIC CHARACTER.

<p><i>Echites pedunculis racemosis; foliis ovalibus, obtusis, mucronatis; floribus luteis, amplissimis; corollæ tubus hirsutus.</i></p>	<p><i>Echites</i> with bunched foot-stalks; leaves oval, blunt and pointed at the ends; flowers yellow and very large; the tube of the blossom hairy.</p>
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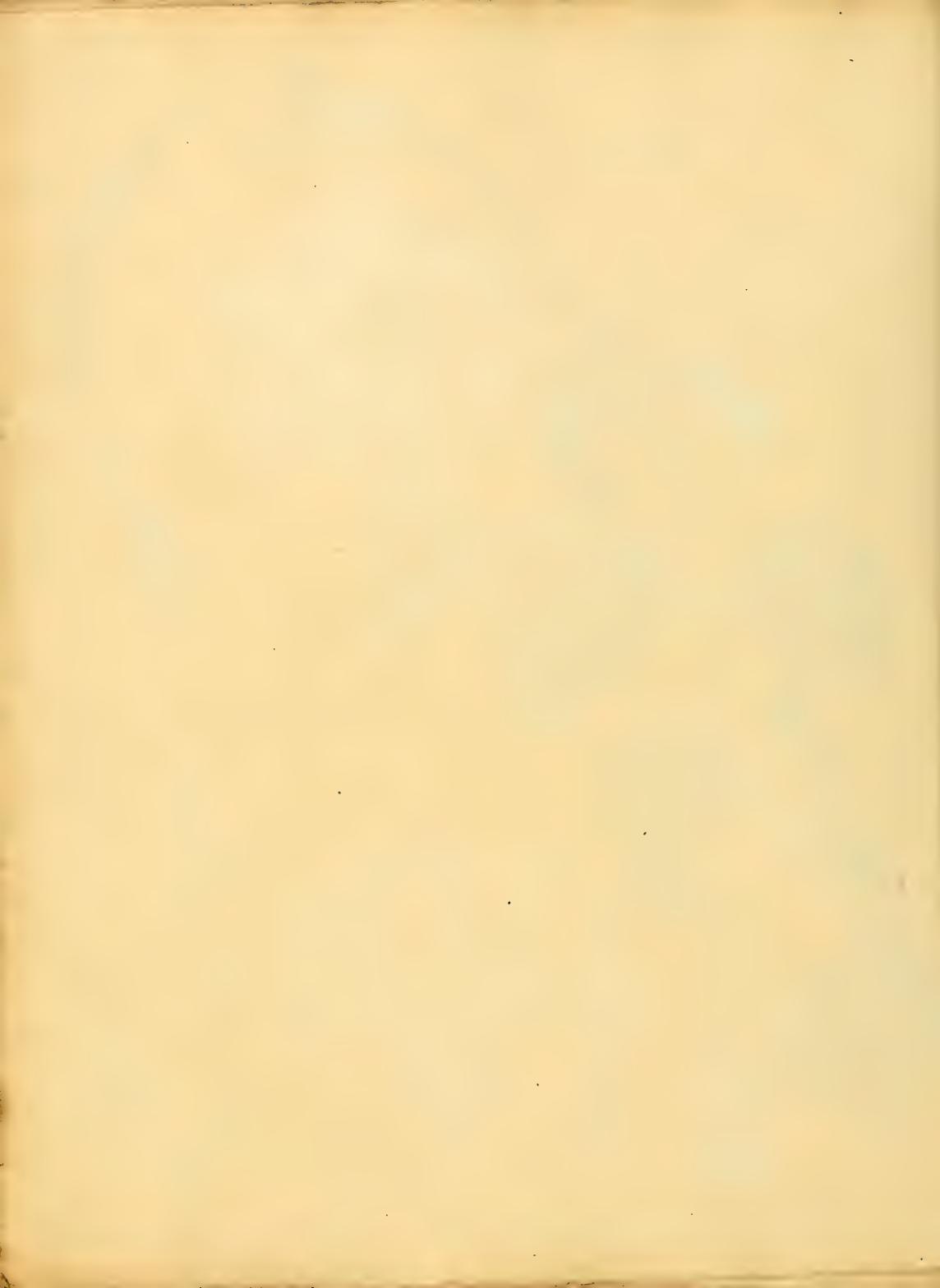
REFERENCE TO THE PLATE.

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

THE Lady Dowager De Clifford received this plant from the island of St. Vincent's, in the year 1794; and we much question, whether it was ever seen in Britain prior to that period; although said to be cultivated in 1759, by Millar, in the 7th Edit. of his Dictionary, and from thence, collated into the Kew Catalogue, p. 289, Vol. I. It is a climbing plant, if supported; but does not grow to any considerable height, if kept in a pot. The best method of treating this plant, is the same as that proposed for the *Cratæva capparoides*, Pl. 176. Vol. III. The specific name *Suberecta*, of Jacquin and Browne, must undoubtedly have been taken from the plants which grow in the Savannas; where, they seldom acquire above the height of two feet. The whole plant, from which, if any part is cut or broken, there issues a milky substance, is considered by Dr. Browne as poisonous. Our figure was taken at Messrs. Lee and Kennedy's, this year, in August. It is propagated by cuttings, put in about the month of May.



Mimulus aurantiacus



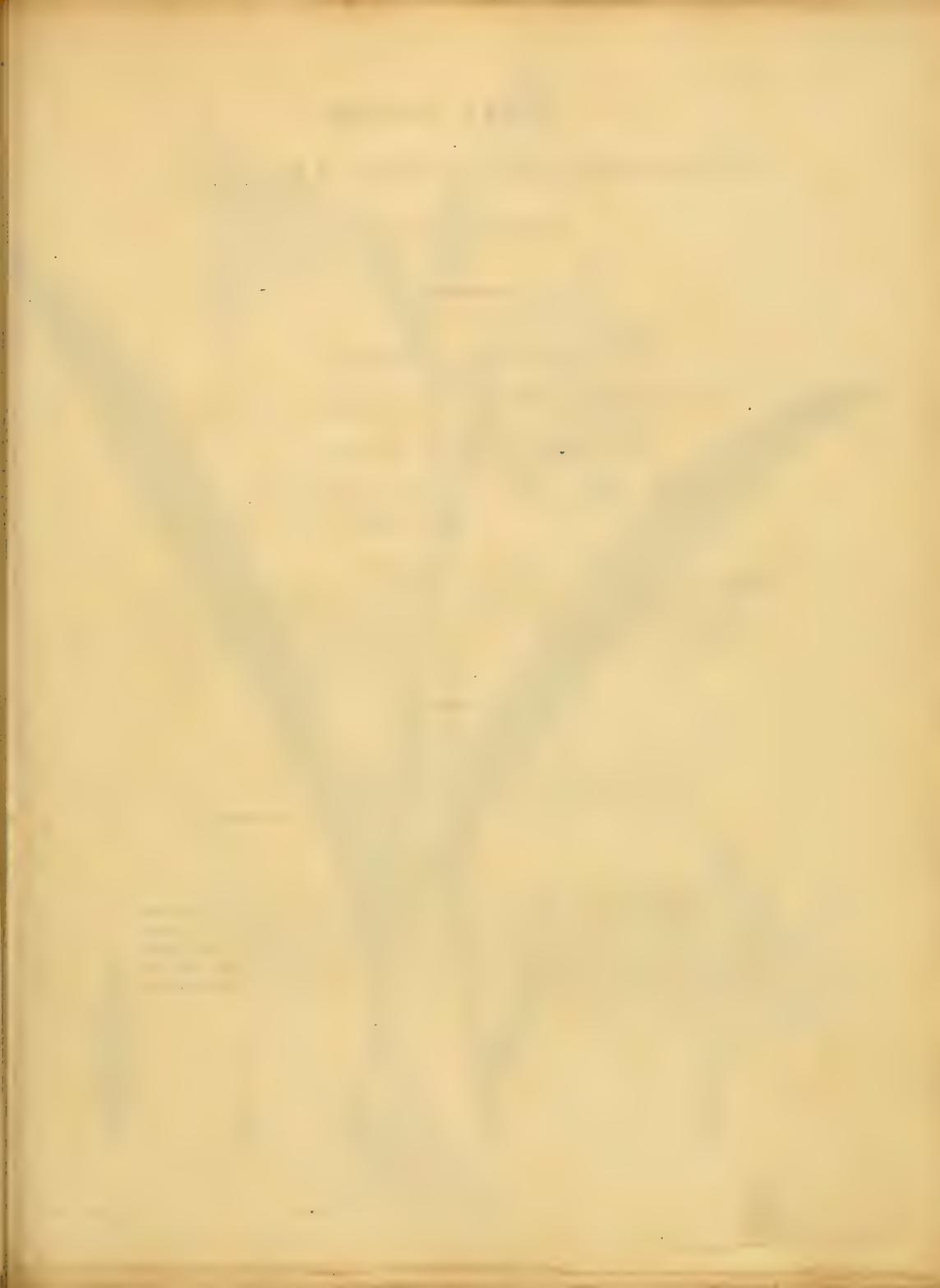


PLATE CLXXXVIII.

GLADIOLUS CAMPANULATUS.

Bell-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens.
STAMINA adscendentia.

|| Blossom six divisions, gaping.
|| CHIVES ascending.

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

SPECIFIC CHARACTER.

Gladiolus foliis lanceolatis, nervosis, glabris;
scapo subtrifloro, foliis longior; corolla sub-
campanulata, palidè purpurea, laciniis sub-
æqualibus; stigmatibus bifidis.

|| Gladiolus with lance shaped leaves, nerved and
|| smooth; flower-stem mostly three-flowered,
|| longer than the leaves; blossom rather bell-
|| shaped, of a pale purple, the segments nearly
|| equal, with the summits two-cleft.

REFERENCE TO THE PLATE.

1. The Sheaths of the Empalement.
2. A Flower spread open, with the Chives attached.
3. The Seed-bud, Shaft, and Summits, one Summit detached and magnified.

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



Adiantum campanulatum



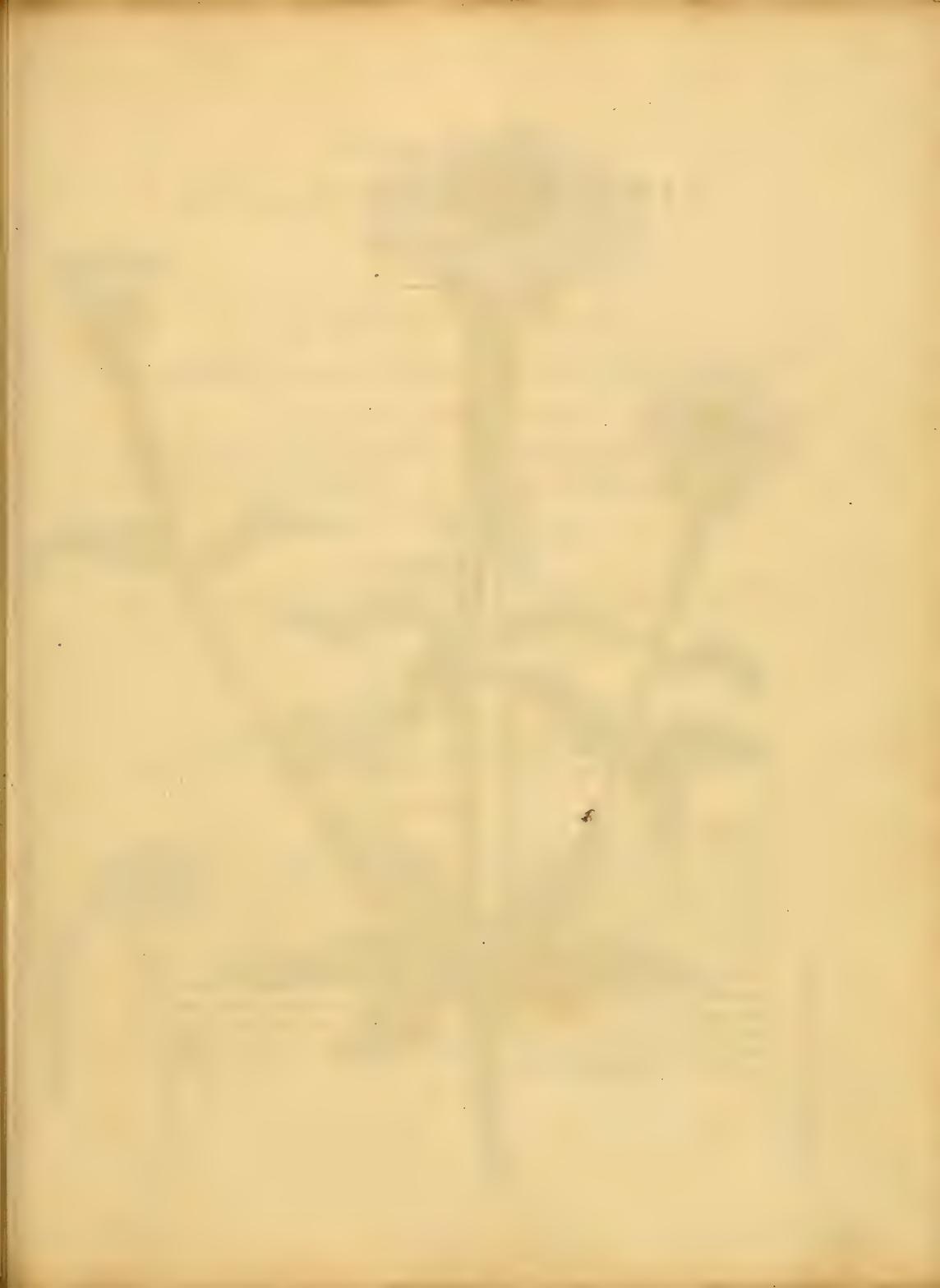


PLATE CLXXXIX.

ZINNIA VERTICILLATA.

Double Zinnia.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum. Pappus arifitidis 2 erectis. Calyx ovato-cylindricus, imbricatus. Flocculi radii 5, persistentes, integri.

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

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

SPECIFIC CHARACTER.

Zinnia foliis verticillatis, sessilibus; floribus pedunculatis; flocculi radii sæpe tria series.

Zinnia with leaves growing in whorls without foot-stalks close to the stem; flowers with foot-stalks; the florets of the ray often three rows.

REFERENCE TO THE PLATE.

1. An outer female Floret of the ray, the seed attached, a little larger than nature.
2. An inner hermaphrodite Floret of the disk, with its seed and skinny chaff, magnified.
3. The Chives, Pointal, and Seed of an hermaphrodite Floret, divested of its corolla, magnified.

THE English specific title to this plant, should seem to imply, that the flowers are such, as should not come into our arrangement; but, as the character is not constant in all the flowers, even on the same plant, it cannot be considered but as a specific character in this particular species, though the name has its proper force, in contradistinction to its congeners, in our language. It is a native of Mexico, South America; and was introduced to our gardens about the year 1789, by Mons^r Richard, from the Paris gardens, at the same time with the *Virgilia*; a most beautiful annual, of the habit of *Arctotis*, now lost in both countries from the difficulty of procuring ripened seeds. It is to be raised in the same manner as the other species, on a gentle hot-bed, in March, and planted out the beginning of May. The flowers make their appearance about the beginning of August, and continue, in succession, till they are destroyed by the frost. To be certain of the seed, the heads must be taken from the plant, whilst they appear yet fresh; as the petals are persistent, and have not the appearance of entire decay, though the seed is nearly ripe; for if the receptacle once begins to rot, (which it is very subject to,) the seeds are immediately contaminated and spoilt. Our figure was taken, this year, at the Hammermith Nursery, where, it was grown first in this kingdom.



Cinnna verticillata



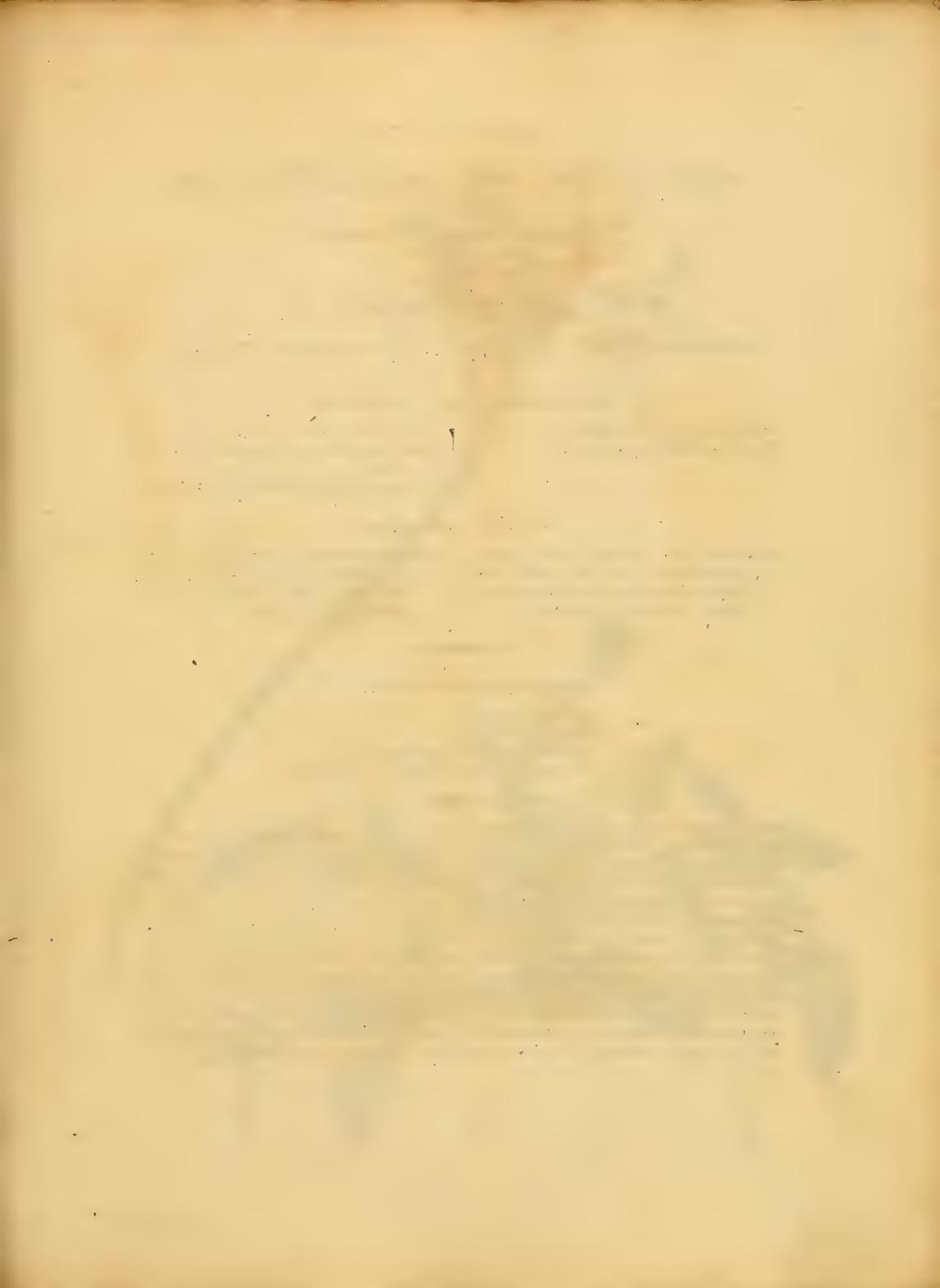


PLATE CXC.

GERANIUM ASTRAGALIFOLIUM.

Astragalus-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

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

One POINTAL. Five Summits.
FRUIT furnished with long awns; five dry berries.
See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

GERANIUM foliis pinnatis, hirsutis, foliolis rotundato-ovatis; calycibus monophyllis; petalis undulatis ad basin tortis; flaminibus quinque fertilibus; radice tuberosa.

GERANIUM with winged, hairy leaves; leaflets of a roundish-oval shape; cups one-leaved; petals waved, twisted at the base; five fertile chives; root tuberous.

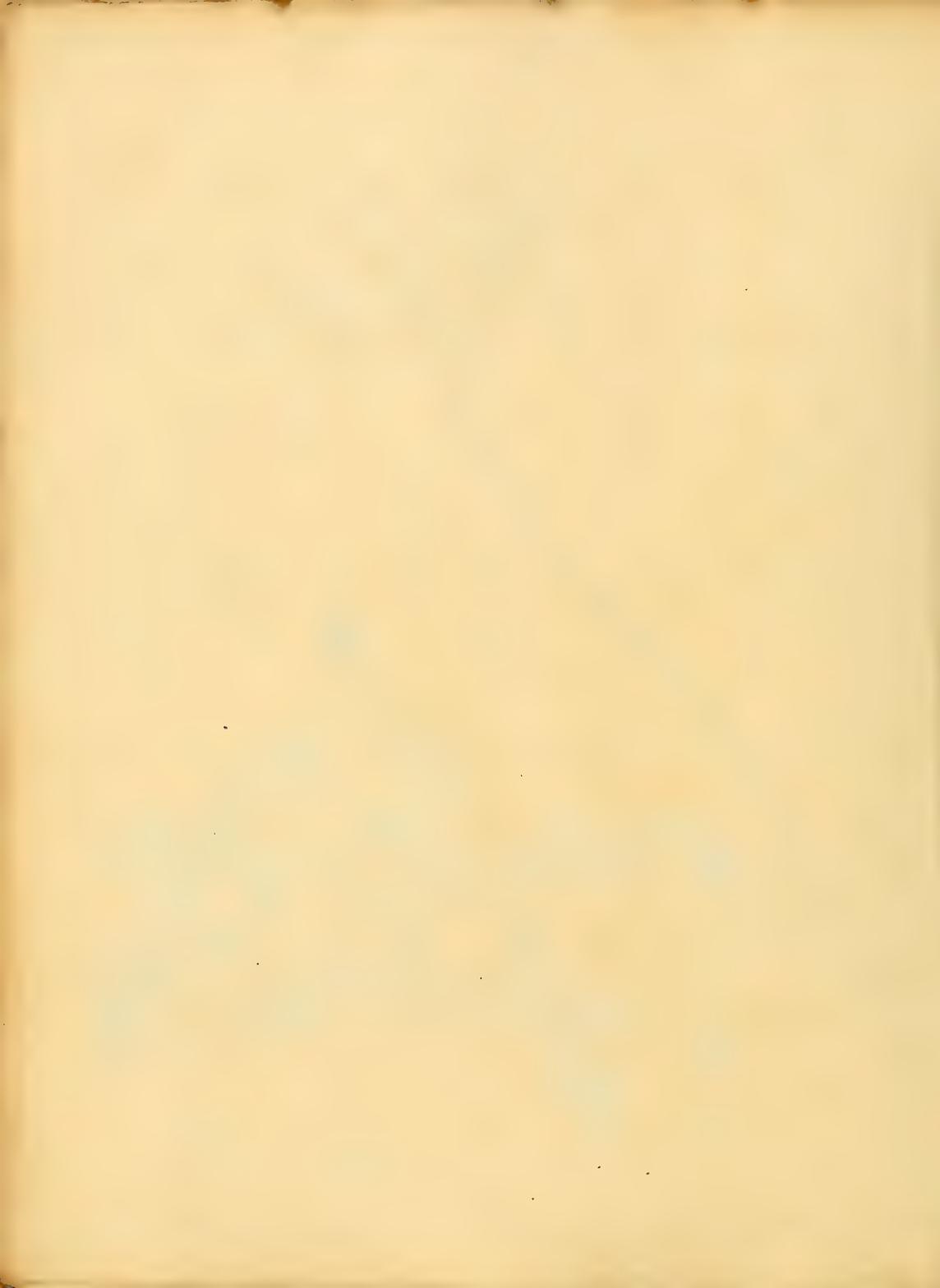
REFERENCE TO THE PLATE.

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

By the Kew Catalogue we are informed, that this species of Geranium, was introduced to this country, in the year 1788, by Mr. F. Masson. It is, like many of this branch of the extended family of Geranium, rather a tender Green-house plant; and will not flower, in perfection, without the assistance of the Hot-house. It loses its foliage after flowering, and remains in a state of inaction for at least three months; during which period, it should be watered but seldom, and that sparingly. To propagate it, the only mode is, by cutting small portions of the root off, and putting them into the strong heat of a hot-bed, about the month of March; as hitherto, it has not perfected any seeds with us, and the plant produces no branch, except the flower-stem may be so denominated. Our drawing was made from the Clapham Collection, in July, this year. This species has been considered by Professor Martyn, (see his edition of Mill. Dict. article Pelargonium 2.) as the same with *G. pinnatum*, and *G. prolificum* of Linn. Sp. Plan. But, however, the specific characters in Linnæus, of those species, may agree with our figure, the *G. Astragalifolium* of Jacquin and Cavanilles, they are, unquestionably, all different plants; drawings of the two former we have, and will be given in due course.



Geranium astragalifolium



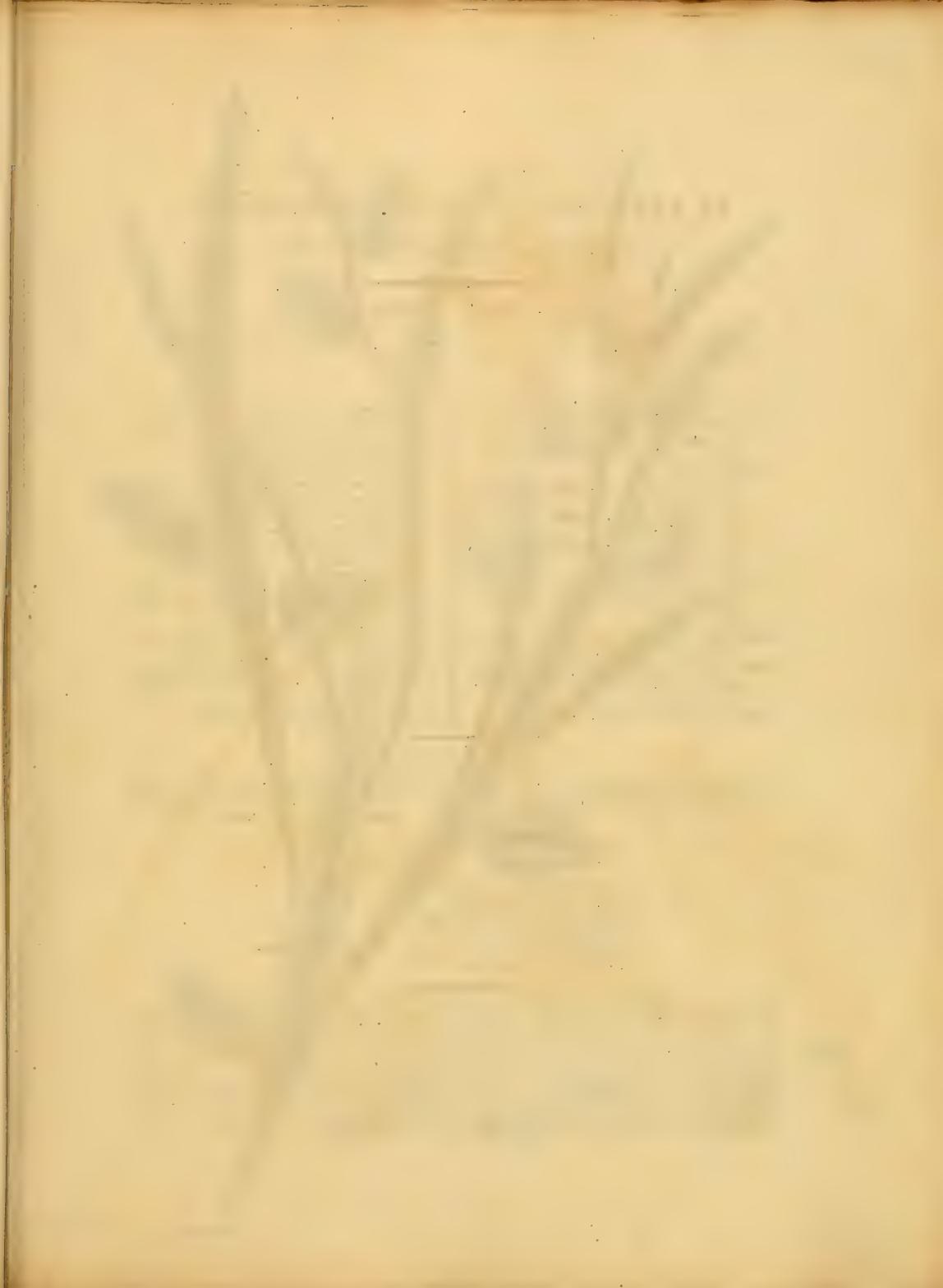


PLATE CXCI.
 PLATYLOBIUM SCOLOPENDRUM.

Scelopendra-like stemmed Flat-Pea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two Sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium, campanulatum quinque-
 dentatum; laciniis tribus inferioribus acutis,
 patentibus; duabus supremis maximis,
 obtusis, obovatis, vexillo adpressis.

COROLLA papilionacea.

Vexillum, obcordatum, emarginatum, erectum,
 maximum.

Alæ vexillo breviores, obtusæ, semi-obcordatae,
 basi denticulatæ.

Carina obtusa, compressa, longitudine et
 figura alarum.

STAMINA filamenta decem, coalita in vaginam,
 supra semifissam, apice libera, æqualia,
 affluentia. Antheræ subrotundæ, versatiles.

PISTILLUM. Germen lineare, pilosum. Stylus
 incurvatus, glaber. Stigma simplex.

PERICARPIUM. Legumen pedicellatum, compressum,
 obtusum, mucronatum, uniloculare,
 dorso alatum.

SEMINA, plurima, compressa, reniformia.

EMPALEMENT. Cup bell-shaped, five-toothed;
 the three lower segments pointed, spreading;
 the two upper very large, obtuse, pressed to the standard.

BLOSSOM butterfly-shaped.

Standard, inversely heart-shaped, notched at
 the end, upright, very large.

Wings shorter than the standard, obtuse, half
 inversely heart-shaped, toothed at the base.

Keel, obtuse, flattened, the length and shape
 of the wings.

CHIVES. Ten threads, united into a sheath,
 half cleft on the upper side, separate at the
 top, equal and turned upwards. Tips
 roundish, versatile.

POINTAL. Seed-bud linear, hairy. Shaft turned
 inwards, smooth. Summit simple.

SEED-VESSEL. Pod with a footstalk, flattened,
 obtuse, with a small point, one-celled, winged
 along the back.

SEEDS many, flattened, kidney-shape.

SPECIFIC CHARACTER.

Platylobium foliis ovatis, glabris; ramis ramu-
 lisque compressis, alatis, margine, cicatrifi-
 catis, floribus solitariis.

Flat-pea with egg-shaped smooth leaves, larger
 and smaller branches flat, winged and
 hatched at the edges; flowers solitary.

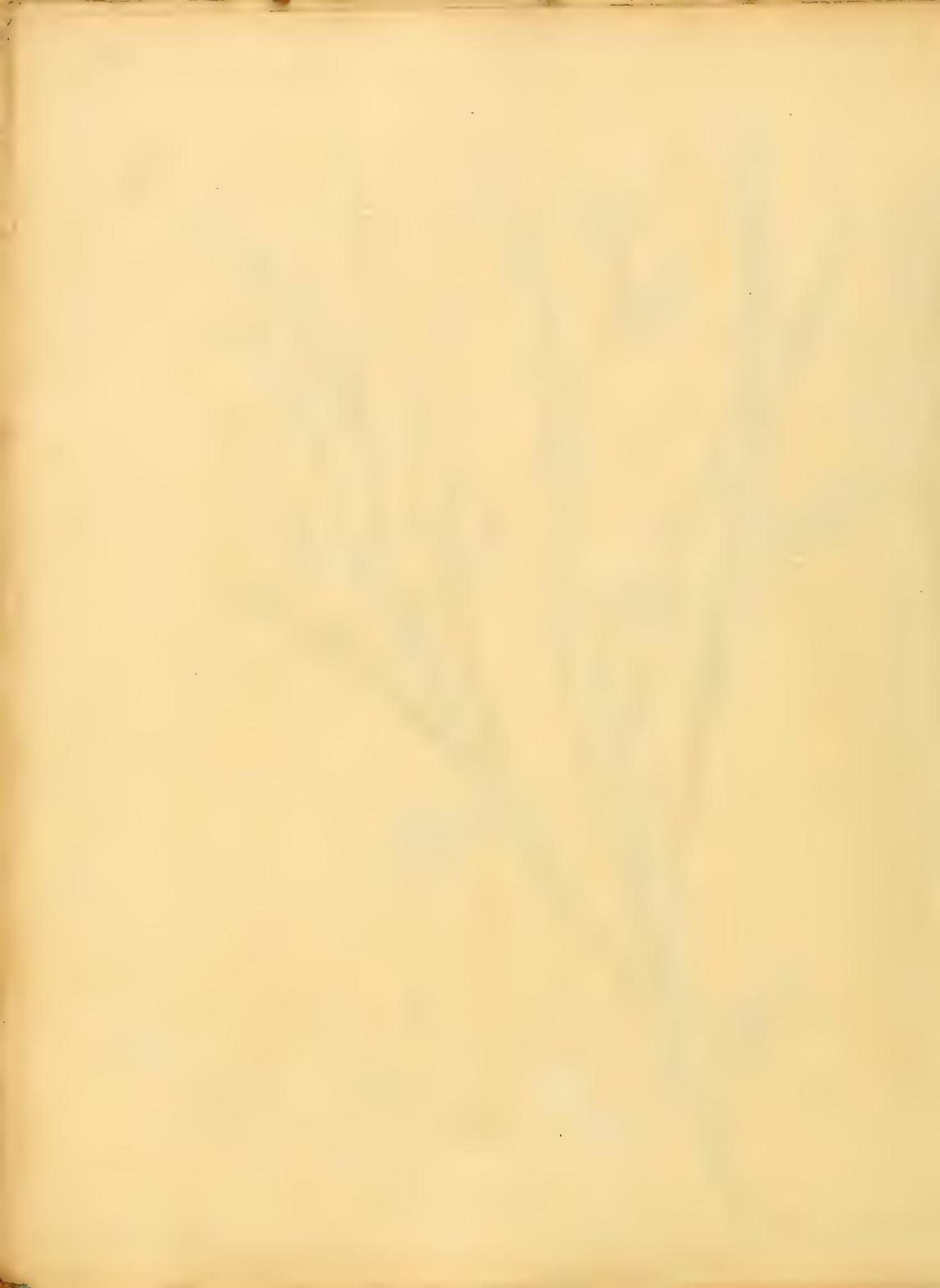
REFERENCE TO THE PLATE.

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

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



Platylobium scolopendrum.



THE HISTORY OF THE
CITY OF BOSTON

FROM 1630 TO 1800

BY

JOHN H. COOPER

AND

JOHN W. COOPER

EDITORS

BOSTON

1857

WILLIAMS AND GUNN

PRINTERS

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N. Y.

1857

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PLATE CXCH.
 ANTHOLYZA FULGENS.
Refulgent-flowered Antholyza.

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

ESSENTIAL GENERIC CHARACTER.

COROLLA tubulosa, irregularis, recurvata. Cap- sula infera.		BLOSSOM tubular, irregular and bent backward. Capsule beneath. See ANTHOLYZA RINGENS, Pl. XXXII. Vol. I.
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SPECIFIC CHARACTER.

Antholyza floribus tubiformibus, curvatis, cocci- neis, fulgentibus; laciniis corollæ maximis, patentibus; foliis longissimis, glabris, basi attenuatis.		Antholyza with trumpet-shaped flowers, curved, scarlet, and refulgent; the segments of the blossom very large, spreading; leaves very long, smooth, and tapered at the base.
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REFERENCE TO THE PLATE.

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

THIS most beautiful genus does not possess amongst its numerous species, (drawings of twenty-two of which we have) a rival to *A. fulgens*; whether, for the size of the plant, which grows to the height of three feet, or the extreme brilliancy of its blossoms, which frequently make a spike near a foot in length. The roots should not be taken from the pots, but shifted into fresh earth annually, which may be a composition of half sandy peat, and half loam, as the leaves do not decay, until fresh ones are produced. Our figure was taken at the Hammermith Nursery, in May 1800, to which it was first brought, from the Cape of Good Hope, in 1792. It increases by the root.

In a cotemporary, and something similar publication to our own, we were sorry to observe, a rising itch to do away, what, under the conduct of its original scientific proprietor, was allowed by all, to constitute its chief merit and utility; especially to those, "*who wish to become scientifically acquainted with the plants they cultivate.*" The late Mr. Curtis, pursuing the path he planned, with rigour, to prevent confusion, and avoid as much as possible the greatest difficulty of the science; seldom altered a commonly known, or established name; unless absolutely necessary to systematic arrangement. We were naturally led to these obvious observations, from the hints thrown out in the last Number of the Bot. Mag. in which, the *A. tubulosa* of all the collections, which possess the plant, and so named and figured by us, in the preceding Number of the Botanists Repository, has a new generic and specific title; and in which a gentleman "*with INFINITE skill*" of the name of Gawler, the acknowledged father of the innovation, is spoken of as qualified to scrutinize and rectify the "*errors, false synonyms, and blunders upon blunders, which have from carelessness, &c.*" crept into the, of course, insignificant labours of a Linnæus, a Jacquin, a Thunberg, a Willdenow, or a Curtis. It may perhaps be an acquisition to the science, that, since such confusion prevails amongst "*the most learned Botanists,*" from their "*acknowledged inability to determine those plants;*" which, nevertheless, they have all foolishly attempted to do, we have one at last, whose "*scrutinizing*" eye "*has been able to make out all Linnæus's and even Thunberg's species.*" This elucidation, of so intricate a subject, by a person whose knowledge of living plants, we fear, does not lead him, scarcely, to an acquaintanceship with the difference of face in a Plane from a Poplar, must be matter of infinite moment, to those, "*who wish to become acquainted with the plants they cultivate;*" and the small trouble, to most persons, of learning new, and ousting the old names for plants, which have been long rivetted to the memory by habitual use, will be amply compensated, by the pleasure of novelty, which must necessarily result, from the certain alteration in some part of the title, of every plant which has hitherto, or is to come under, this learned judge's dictatorial fiat. Our opinions, as do our labours, run counter to these new fashions, of rendering a difficult science easy; and our road must still be in the old track of the trifer Linnæus.



Antheliza fulgens.



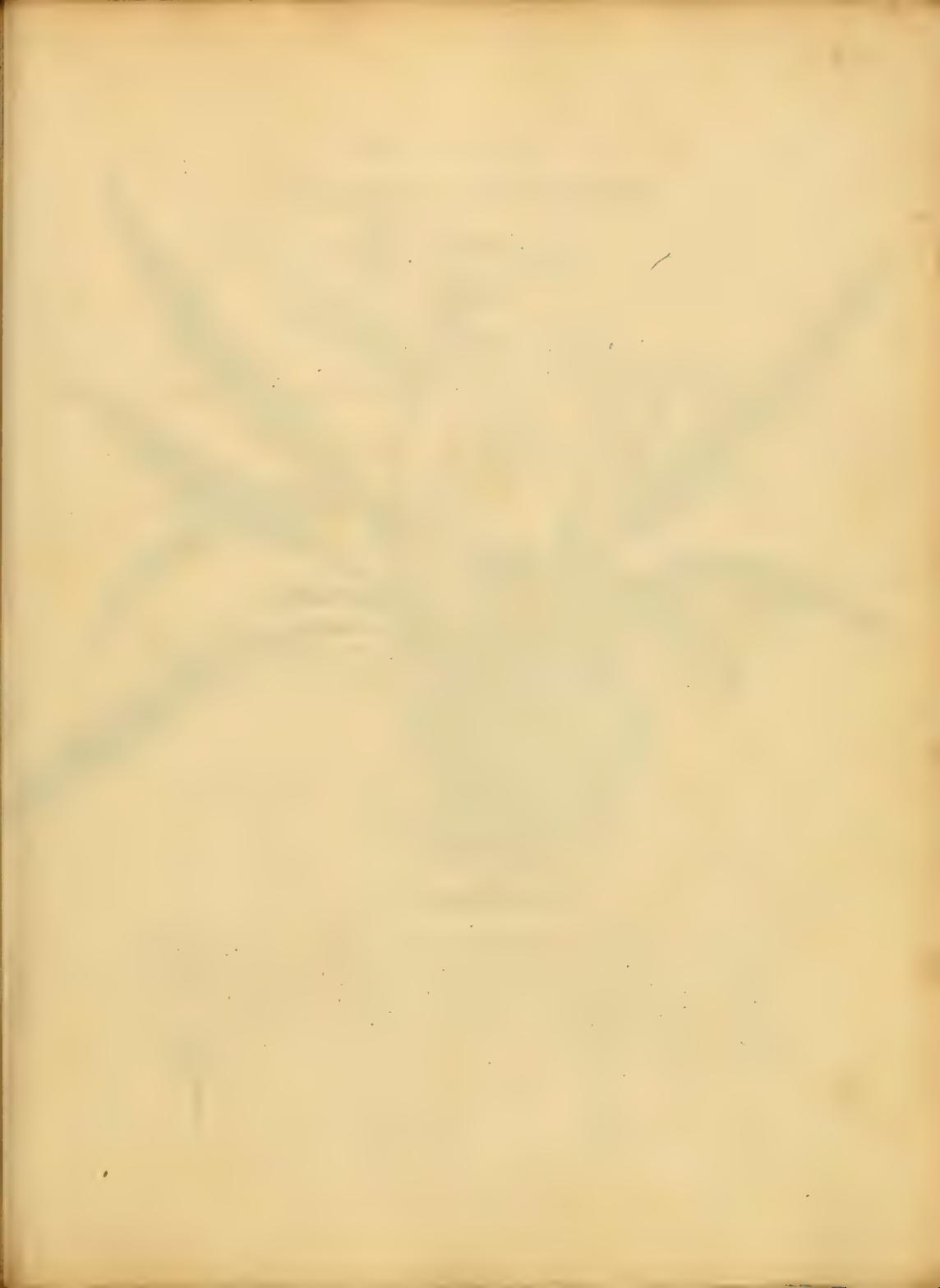


PLATE CXCH.
GERANIUM LINEARE.

Linear-petalled Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA 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, Pl. XII, Vol. I.

SPECIFIC CHARACTER.

GERANIUM foliis lanceolatis, obtusis, subfinu-
atis; petalis subæqualibus, linearibus; flo-
ribus pentandris; radice tuberosa.

|| GERANIUM with leaves lance-shaped, obtuse,
and a little fcolloped at the edges; petals
nearly equal, linear; flowers with five fer-
tile chives; root tuberous.

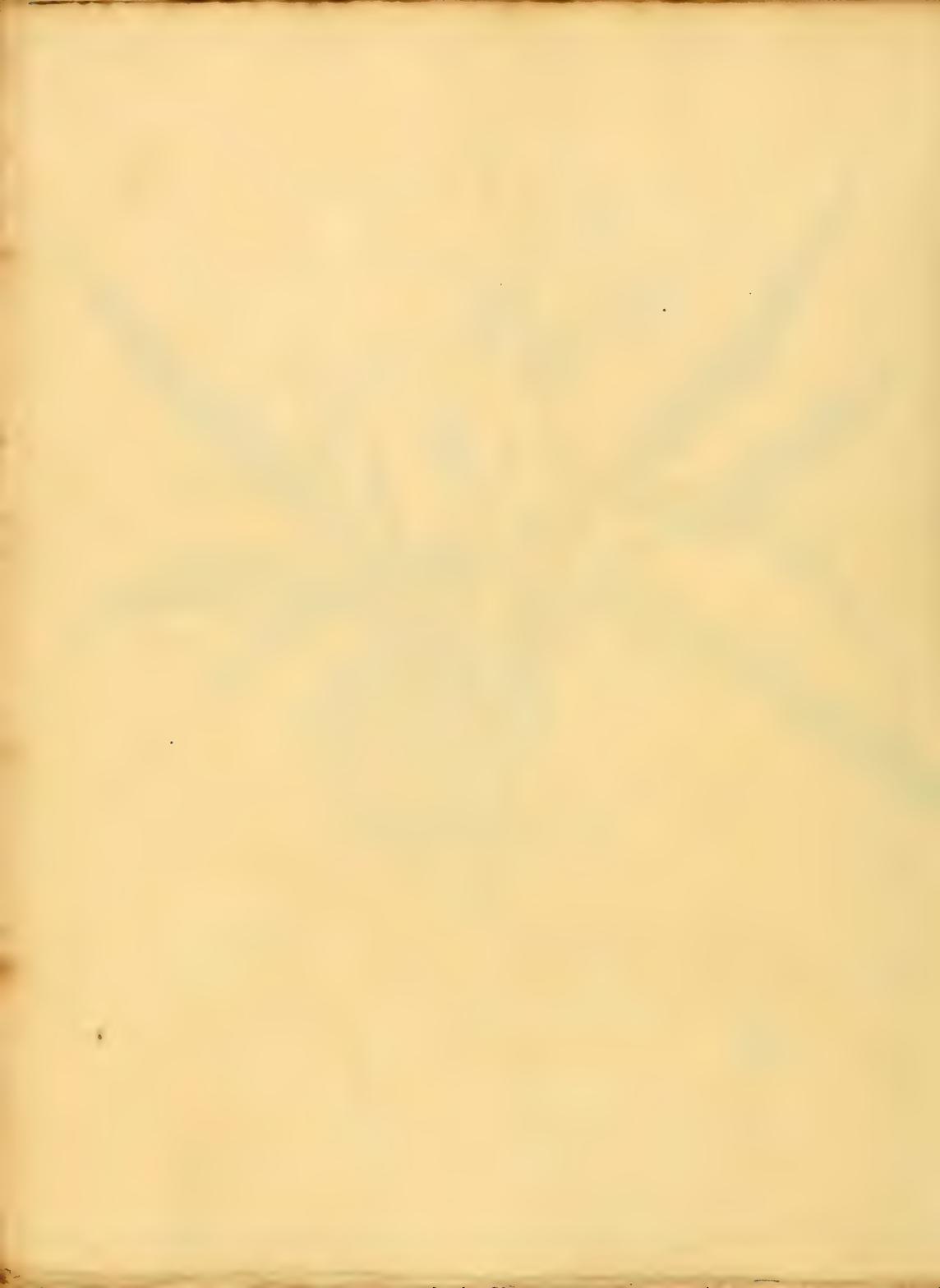
REFERENCE TO THE PLATE.

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

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



Geranium lineare



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PLATE CXCIV.
HEMEROCALLIS ALBA.
White Day-Lily.

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

ESSENTIAL GENERIC CHARACTER.

COROLLA campanulata; tubo cylindrico. Stamina declinata.		BLOSSOM bell-shaped; tube cylindrical. Chives declining. See HEMEROCALLIS CÆRULEA, Pl. VI. Vol. I.
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SPECIFIC CHARACTER.

Hemerocallis foliis cordatis, petiolatis; corolla alba, tubo longifloro.		Day-Lily with heart-shaped leaves that have foot-stalks; blossom white, tube very long.
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REFERENCE TO THE PLATE.

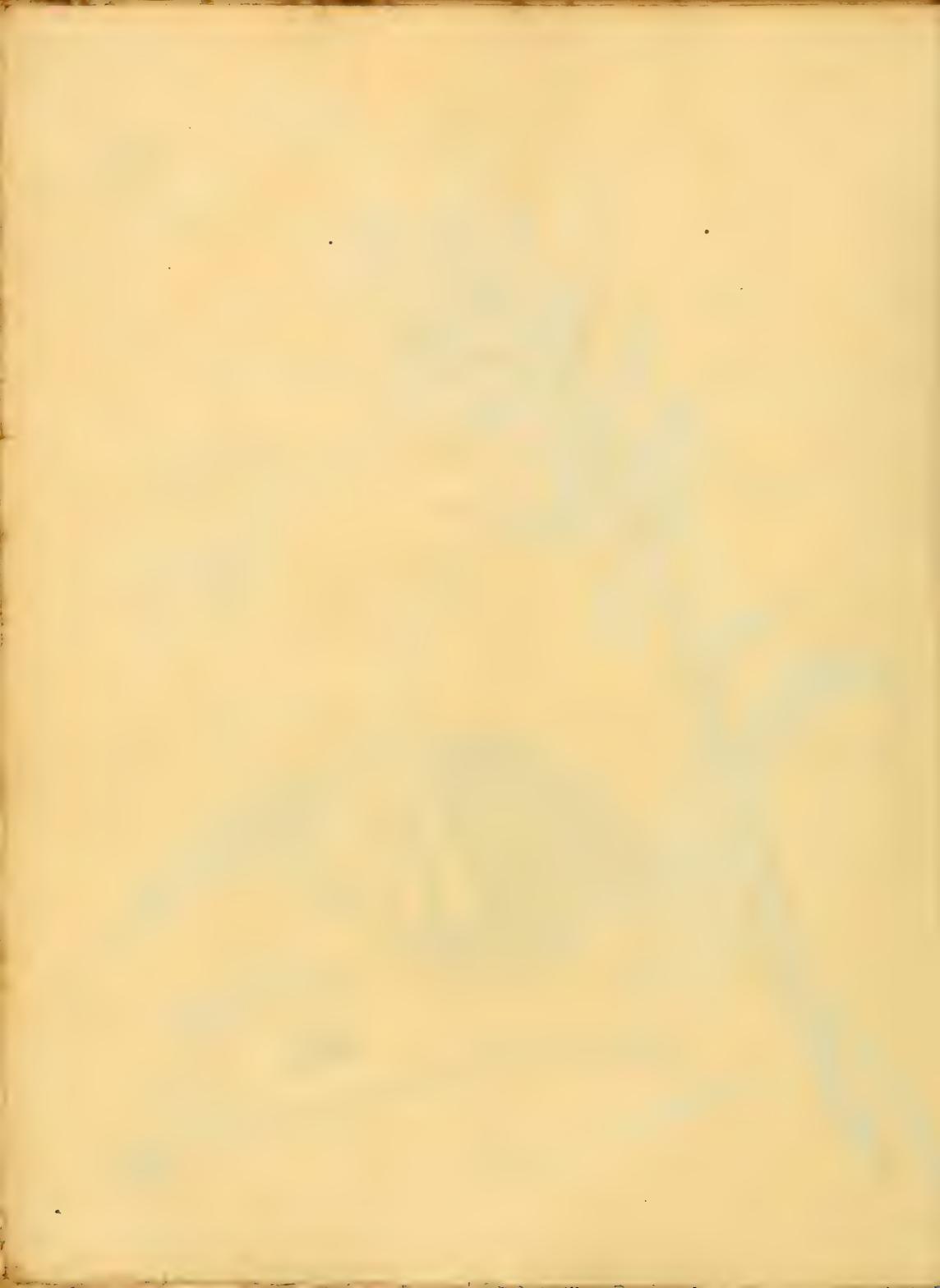
1. The Chives and Pointal, as they are placed in the flower.
2. The Seed-bud, Shaft, and Summit.
3. A ripe Seed-vessel of its natural size.
4. The Seed-vessel cut transversely, to shew the situation and number of the cells and valves.
5. A ripe Seed, natural size.

THE White Day-Lily is from the same country, and of the same date in our gardens, as the Blue; figured in the First Vol. Pl. VI. and was introduced through the same medium. It is herbaceous, and generally flowers, if kept in the hot-house, about August; having that true and constant character of the genus, and from which it had its name, the producing but one solitary, perfect flower, per diem, till all the blossoms on the spike are exhausted; which, in this species, are much more abundant than in any of the others. It is increased by the root or seed.

This plant, we presume, is the same as those specified under the different titles of *Lilium Longiflorum*, and *L. Japonicum*, in Willdenow's new edition of the *Species Plant.*; the *L. candidum*, and *L. Japonicum*, of Thunberg's Japan; and the *L. Longiflorum* of the *Linn. Transf. Vol. II. P. 333.* The *Hemerocallis* formerly figured by us, under the specific title of *Cærulea*, we take to be, the *Hemerocallis Japonica*, and *Lilium Cordifolium* of Willdenow; the *H. Cordata* of Thunberg's Japan; and the *Hemerocallis Japonica*, and *Lilium Cordifolium* of the *Linn. Transf. Vol. II. p. 332.* Willdenow, who had never seen even dried specimens of the plants in question, has hence been led to place the same plant, under different genera; and to consider the *Hemerocallis* of the *Botanists Repository*, as only a variety of *H. Japonica*, but still admitting it as an *Hemerocallis*. Now, as we have no doubt, (nor do we think any one can, that will take the trouble to examine the dissections given with each figure,) that if the one is an *Hemerocallis*, the other must be admitted of the same family; so, have we made no scruple in rejecting the generic name of *Lilium*, for the present plant; although we would gladly have adopted the specific one of *Longiflora*, had not that of *Alba*, already obtained so generally in our gardens; a rule, for our direction, paramount to all others as to specific denomination.



Hemerocallis alba



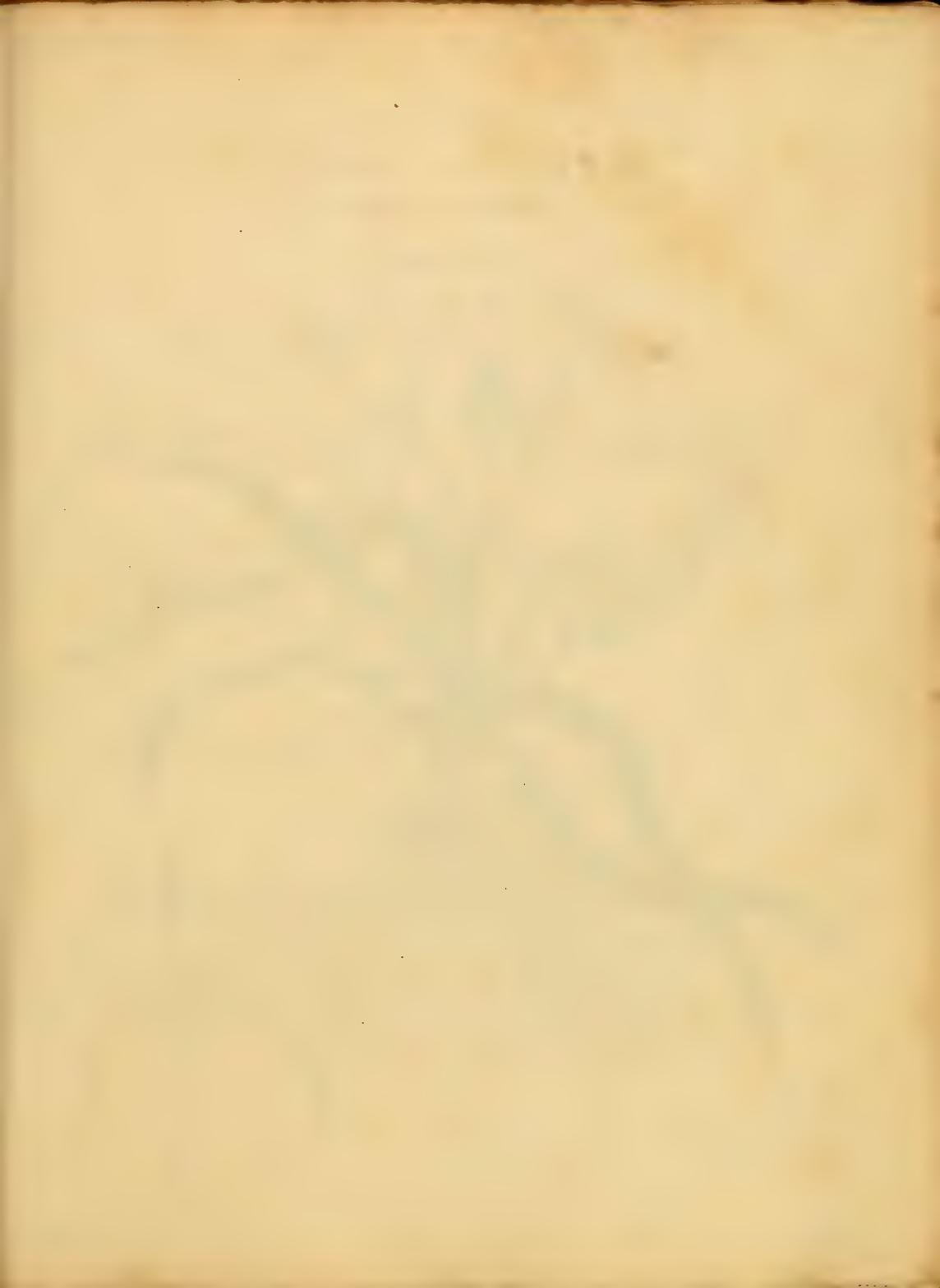


PLATE CXC.V.

HYPOXIS OBLIQUA.

Oblique-leaved Hypoxis.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sex-partita, persistens, supera. Cap-
fula basi angustior. Spatha bivalvis.

BLOSSOM six-parted, remaining, above. Capsule
narrower at the base. Sheath two-valved.
See HYPOXIS STELLATA. Pl. CI, Vol. II.

SPECIFIC CHARACTER.

Hypoxis scapo subtrifloro, piloso, longitudine
foliorum; pedunculis flore triplo longiori-
bus; foliis lineari-lanceolatis, oblique flexis,
glabris; radice fibrosa.

Hypoxis with mostly three flowers on the stem,
which is hairy, the length of the leaves;
foot-stalks three times the length of the
flower; leaves linearly lance-shaped, ob-
liquely bent downward, smooth; root
fibrous.

REFERENCE TO THE PLATE.

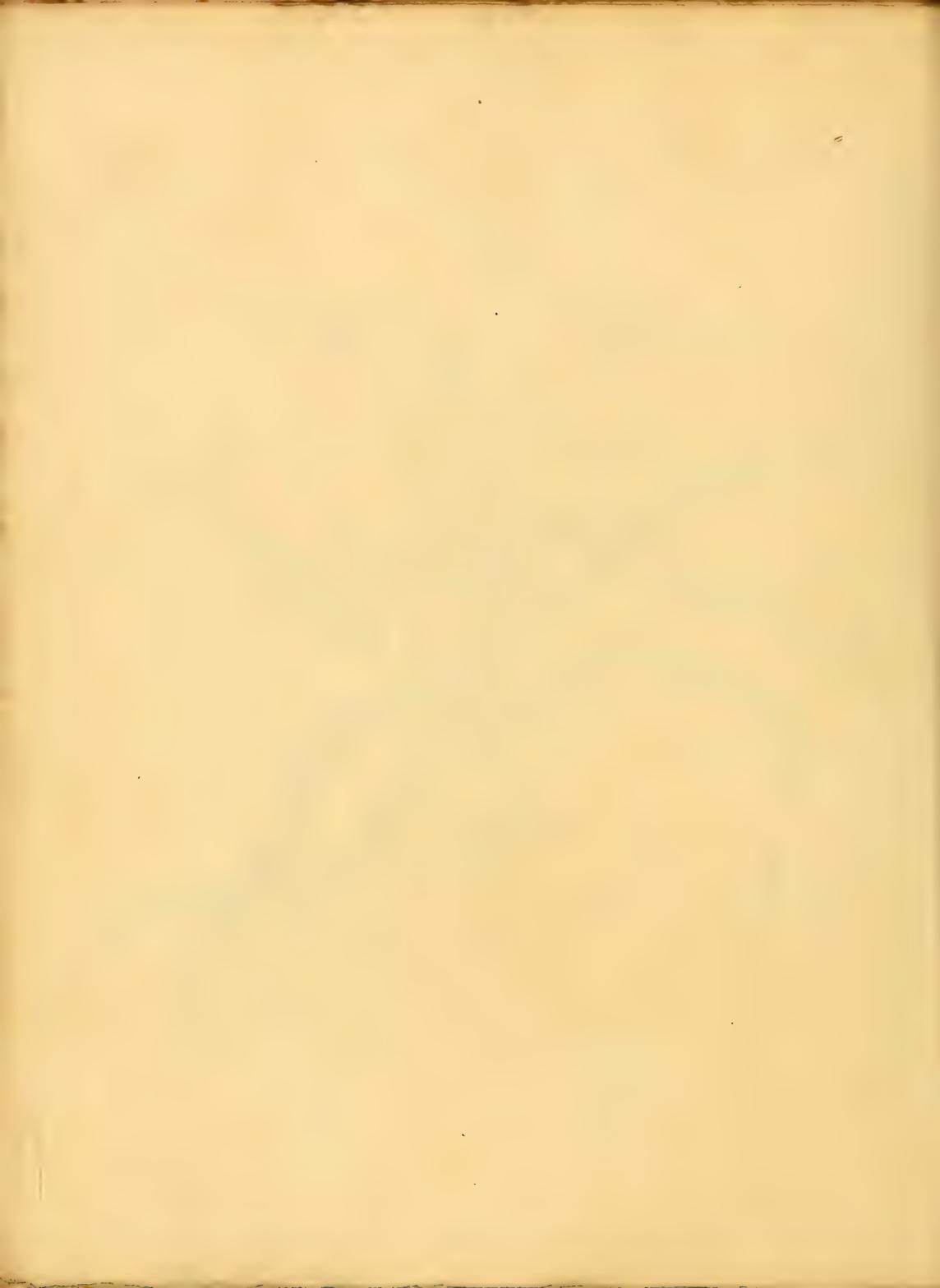
1. A Petal of the Blossom, with its Chive, as attached to its base.
2. The Seed-bud, on its foot-stalk, with a part of the tube of the blossom, to which the Chives are fixed.
3. The Seed-bud, Shaft and Summit, magnified.

THIS species of Hypoxis is from the Cape of Good Hope; and, we believe, solely in the possession of G. Hibbert, Esq. Clapham; from whose collection our drawing was made, in June, this year, 1801. It appears to be a hardy green-house plant; but, is certainly more curious than handsome, and, from its general character, we should judge the propagation would be from the root.

Professor Jacquin has given the Hypoxis Obligua in his *Icones Plantarum Rariorum*, 2. t. 371; and in his *Supplement to the Collectanea*, 54; but, we must suppose from a more vigorous specimen than ours; as, the appearance of a woolly character, at the margin of the leaves, was not to be traced in our plant, although every other part is exact. Wherefore, we have retained his name, though we have rejected the latter part of his specific character, to introduce one, which we consider, of more consequence, as opposed to those with bulbous roots, this being fibrous.



Hippuris obliqua



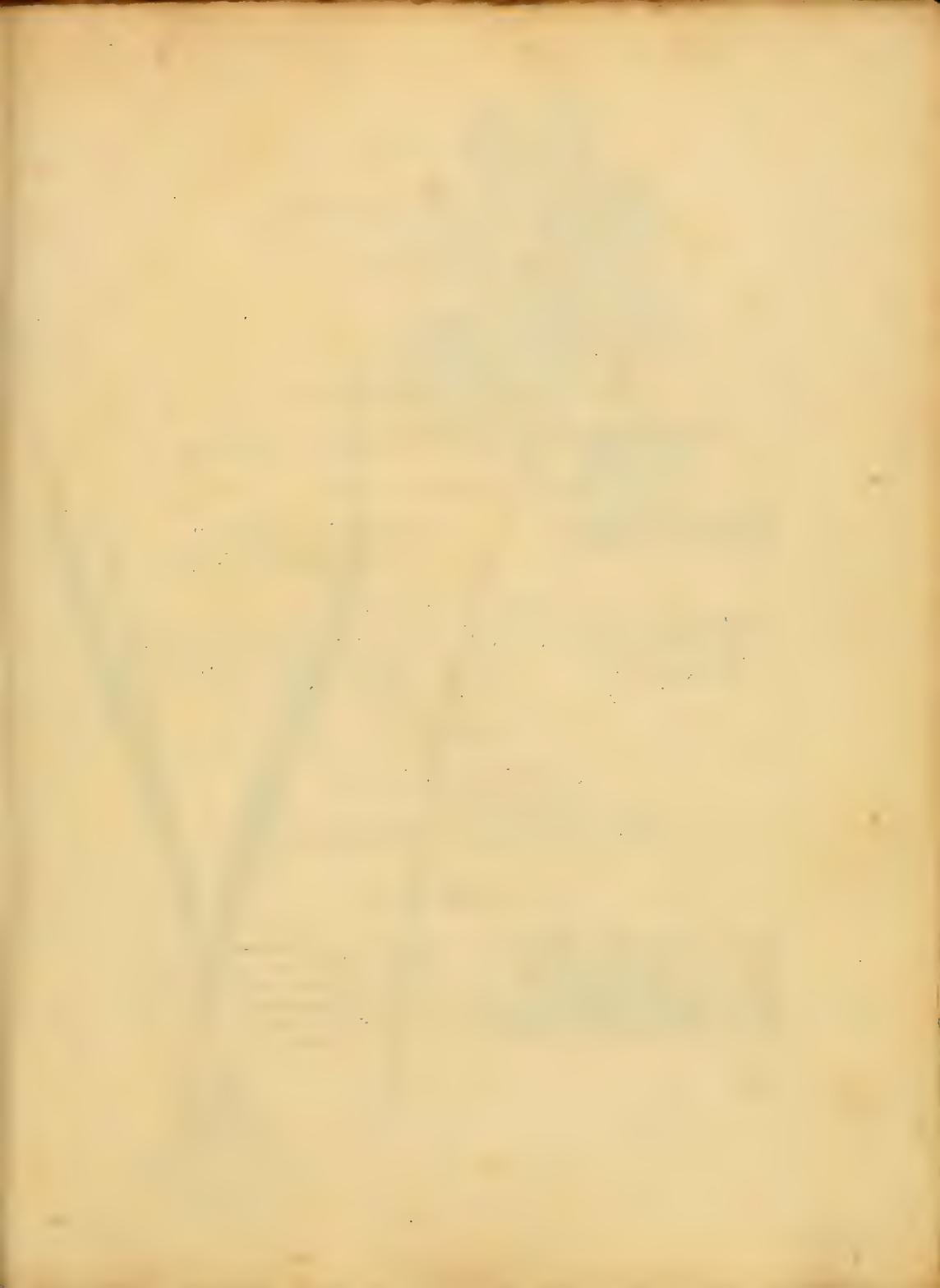


PLATE CXCVI.

IXIA MACULATA.

Spotted-flowered Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis.
STAMINA tria, erectiusculo-patula.

BLOSSOM 6 petals, spreading, equal.
CHIVES three, upright, spreading.

See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis ensiformibus, glabris, scapo duplo brevioribus; floribus alternis, subspicatis; petalis basi obtusis, ovatis, concavis; stigmatibus bifidis.

Ixia with sword-shaped, smooth leaves, half the length of the flower-stem; flowers alternate, rather spiced; petals dark at the base, egg-shaped and concave; summits two-cleft.

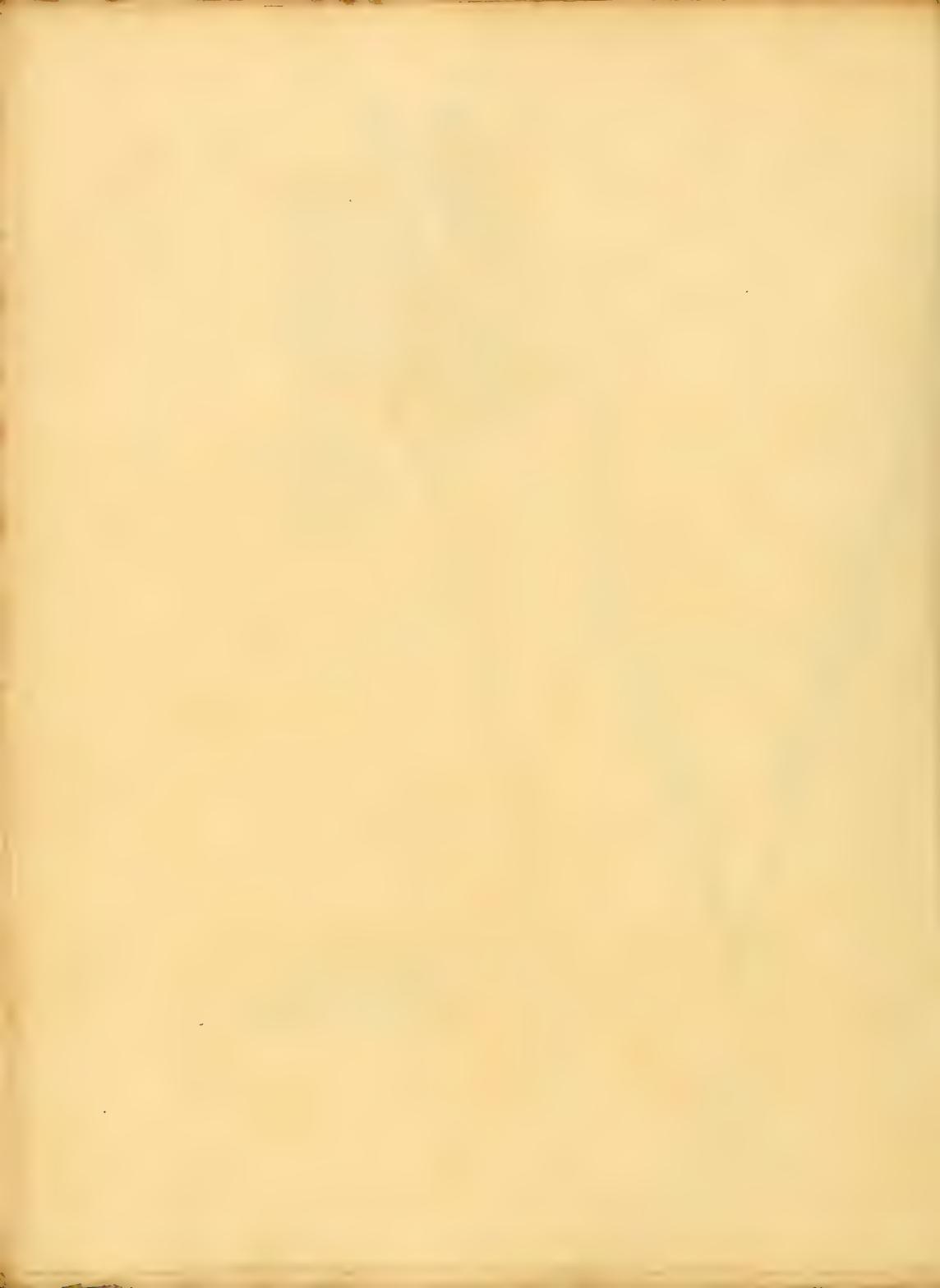
REFERENCE TO THE PLATE.

1. The two valves of the Empalement.
2. A Flower cut and spread open, with the Chives in their natural station.
3. The Pointal complete, with one of the Summits detached and magnified.

THIS *Ixia* has been long cultivated in Britain, so says Millar, &c. but, till within these few years, we have not seen it in our gardens; perhaps it has been (like many others) lost to us, and recently introduced with the multitude of other species, which now decorate our green-houses; either from the Cape of Good Hope or Holland. It is one of the most desirable of the genus, from the length of time it continues in flower; which is, at least a month, from the first flowers beginning to expand. It increases by the bulb, and is to be cultivated as other common *Ixias*. Flowers in May or June.



Scilla maculata



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PLATE CXCVII.
 NYMPHÆA CŒRULEA.

Blue Water-Lily.

CLASS XIII. ORDER I.

POLYANDRIA MONOGYNIA. Many Chives. One Pointal.

GENERIC CHARACTER.

<p>CALYX. Perianthium inferum, tetraphyllum, magnum, supra coloratum, persistens.</p> <p>COROLLA. Petala numerosa (quindecim sæpe,) germinis lateri infidentia, ferie plus quam simplicia.</p> <p>STAMINA. Filamenta numerosa (septuaginta sæpe,) plana, curva, obtusa, brevia. Antheræ oblongæ, filamentorum margini adnata.</p> <p>PISTILLUM. Germen ovatum, magnum. Stylus nullus. Stigma orbiculatum, planum, petato-fessile, radiis notatum, margine crenatum, persistens.</p> <p>PERICARPIMUM. Bacca dura, ovata, carnosa, rudis, collo angustata apice coronata, multilocularis (decem ad quindecim loculis,) pulpa plena.</p> <p>SEMINA plurima, subrotunda.</p>	<p>EMPALEMENT. Cup beneath, four leaved, large, coloured above, permanent.</p> <p>BLOSSOM. Petals numerous (often fifteen,) placed on the side of the seed-bud, in more than one row.</p> <p>CHIVES. Threads numerous (often seventy,) flat, curved, blunt, short. Tips oblong, fixed to the margin of the threads.</p> <p>POINTAL. Seed-bud egg-shaped, large. Shaft, none. Summit round, flat, central, fitting, marked in rays, fcolloped at the edge, remaining.</p> <p>SEED-VESSEL. Berry hard, egg-shaped, fleshy, rough, narrowed at the neck, crowned at the top, many-celled (from ten to fifteen cells,) full of pulp.</p> <p>SEEDS many, roundish.</p>
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SPECIFIC CHARACTER.

<p><i>Nymphæa</i> foliis cordato-orbiculatis, senioribus crenatis, lobis acutis imbricatis, acuminatis; petalis acutis, lanceolatis, cæruleis.</p>	<p><i>Nymphæa</i> with between heart-shaped and round leaves, the old ones fcolloped, lobes sharp, tiled, and tapered; petals sharp, lance-shaped, and blue.</p>
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REFERENCE TO THE PLATE.

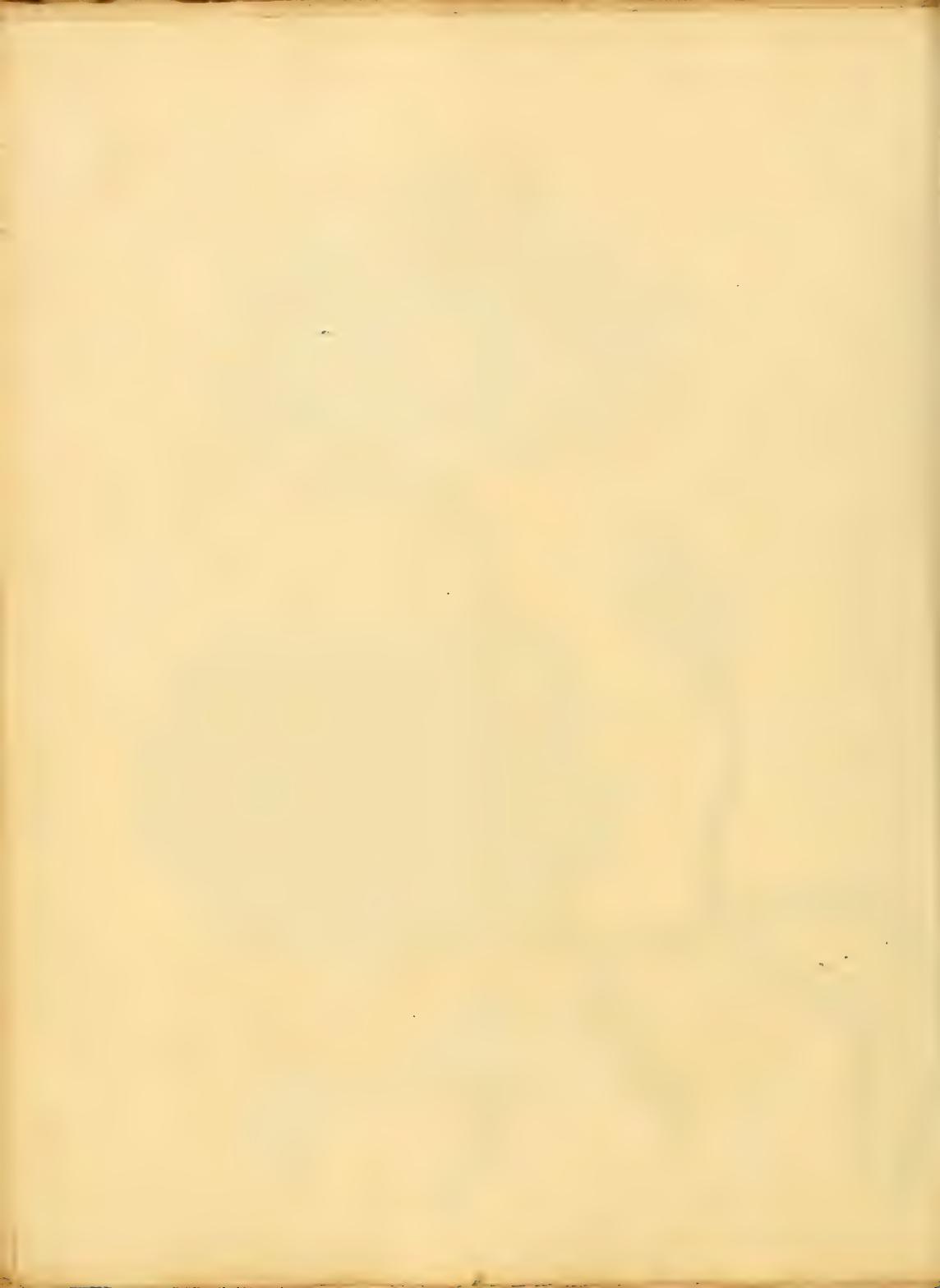
1. A Chive.
2. The Seed-bud and Summit.
3. The Seed-bud, cut transversely, to shew the number of cells.

AMONGST aquatic or water plants, the *Nymphæas* are undoubtedly the most desirable in cultivation; although, we should agree to the exclusion of *N. Nelumbo*, &c. now forming a distinct genus in the Sp. Plant. of Willdenow; taken from Usteri's Ed. of Jussieu's Gen. Plant. classed from the natural characters, under the title of *Nelumbium*'s. This plant may be kept in the green-house, or hot-house, in a large tub filled with water and a small portion of mud at the bottom. It propagates by the root, and the flowers, which are extremely fragrant, are produced in August, in which month, this year, our drawing was made, from a large plant in the Hibbertian collection; but, from an omission in the figure, we were obliged to finish the plate from a plant, in the collection of J. Vere, Esq. Kennington Gore, still in flower, the beginning of October. The leaves of this species are most beautifully fcolloped, and near a foot in diameter; but the indentations are scarcely to be perceived in the younger; one of which, as we could not introduce the larger, is shewn on the plate of the natural size.

It is a native of the Cape of Good Hope, and was introduced to the Royal Gardens, Kew, by Mr. F. Masson, about the year 1792.



Nymphaea candida



THE HISTORY OF THE

STATE OF

NEW YORK

From the first settlement to the present time
By JOHN BRANT, Esq. of the Bar at New York

Published by G. B. LEITCH, New York, 1825.

Entered according to Act of Congress, in the year 1825, by JOHN BRANT, in the Clerk's Office of the District Court of the Southern District of New York.

PLATE CXCVIII.
BAUERA RUBIODES.

Three-leaved Bauera.

CLASS XIII. ORDER II.

POLYANDRIA DIGYNIA. Many Chives. Two Pointals.

GENERIC CHARACTER.

<p>CALYX. Perianthium octophyllum, foliis perfitentibus, acuminatis, reflexis, dentatis.</p> <p>COROLLA. Petala octo, ovata, concava, patentia, aequalia, calyce majora.</p> <p>STAMINA. Filamenta numerosa, capillaria, corolla breviora, receptaculo inserta. Antheræ latiusculæ, obtusæ, erectæ.</p> <p>PISTILLA. Germina subovatum, villosulum. Stylia duo, filiformes, longæ, apice curvati. Stigmata simplicia.</p> <p>PERICARPIUM. Capsula subrotunda, pilosa, apice dehiscens, bilocularis, bivalvis.</p> <p>SÆMINA plurima, subrotunda.</p>	<p>EMPALEMENT. Cup eight-leaved, remaining, leaflets tapered, reflexed, and toothed.</p> <p>BLOSSOM. Eight petals, egg-shaped, concave, spreading, equal, larger than the cup.</p> <p>CHIVES. Threads numerous, hair-like, shorter than the blossom, fixed into the receptacle. Tips broadish, obtuse and erect.</p> <p>POINTALS. Seed-bud nearly egg-shaped, hairy. Shafts two, thread-shaped, long, curved at the ends. Summits simple.</p> <p>SEED-VESSEL. Capsule roundish, hairy, splitting at the top, two cells, two valves.</p> <p>SEEDS many, roundish.</p>
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SPECIFIC CHARACTER.

<p><i>Bauera</i> foliis ternatis, apice dentatis, sessilibus, oppositis.</p>	<p><i>Bauera</i> with leaves composed of three leaflets, toothed at the point, growing close to the stem, and opposite.</p>
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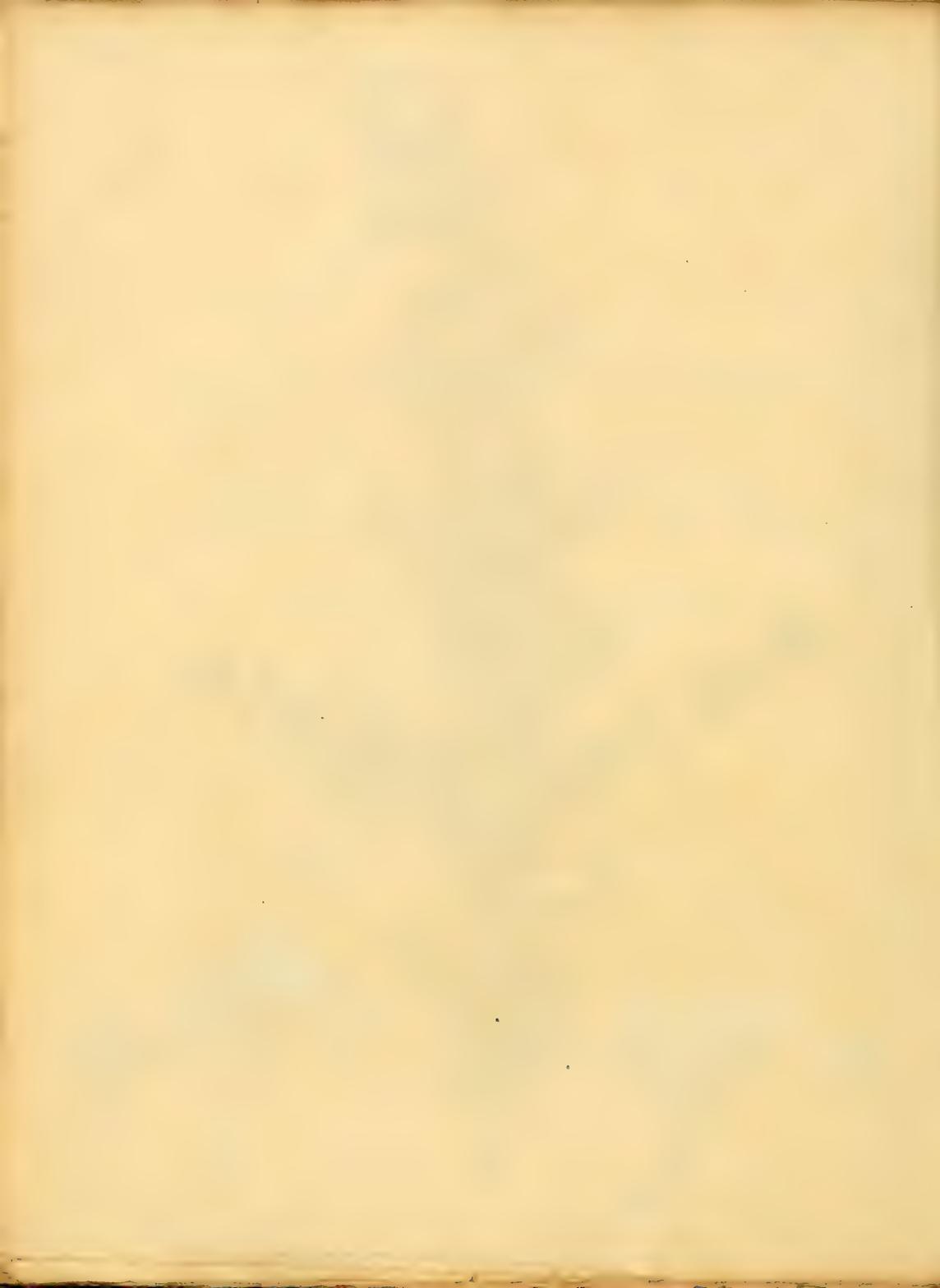
REFERENCE TO THE PLATE.

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

THIS handsome shrub, a native of Port Jackson, New Holland, was first raised at the seat of the Hon. the Marchioness of Rockingham, Hillingdon, Middlesex, in the year 1793; and, from a plant, in the conservatory, still in flower, this present month November, our drawing was made, at the Nursery, Hammer-smith. It is hardy, although delicate in structure, and flourishes in the green-house. The stem of the plant from which our figure was taken, although the oldest in the kingdom, and near six feet high, is scarce the thickness of a quill at the base, therefore must be supported. The young shoots and leaves are covered with a slight pile; the smaller branches stand out at right angles, proceeding from the insertion of the leaves, and the whole plant has, at first sight, much the appearance of a *Rubus*. It is propagated by cuttings, made in the month of March, and put under a small bell-glass on the heat of a hot-bed; the cuttings should be from the extreme ends of the young shoots. Sir J. Banks, Bart. P. R. S. &c. from whose natural genius and love for the science, and by whose fostering and liberal hand to promote it, the study of Botany has become so general a taste; has named this genus, in honour of two most eminent Botanical painters, of the name of Bauer, natives of Germany, and brothers. The one, now under the immediate patronage of Sir Joseph, as Botanical Painter to his Majesty at Kew; well known for his superb and excellent coloured engravings of Heaths, &c. in large folio. The younger considered no less able, engaged under the same influence, with the other artists, &c. who are now upon the last expedition for discovery to the South Sea; but not equally known to Botanists, as the person who accompanied the late Dr. Sibthorpe, on his voyages through Greece; and whose pencil has produced all those drawings, designed to decorate and illustrate the famous *Flora Græca*, preparing for the public, under the auspices of the intelligent Dr. Smith, P. L. S. &c. &c.



Bauera rubrioides



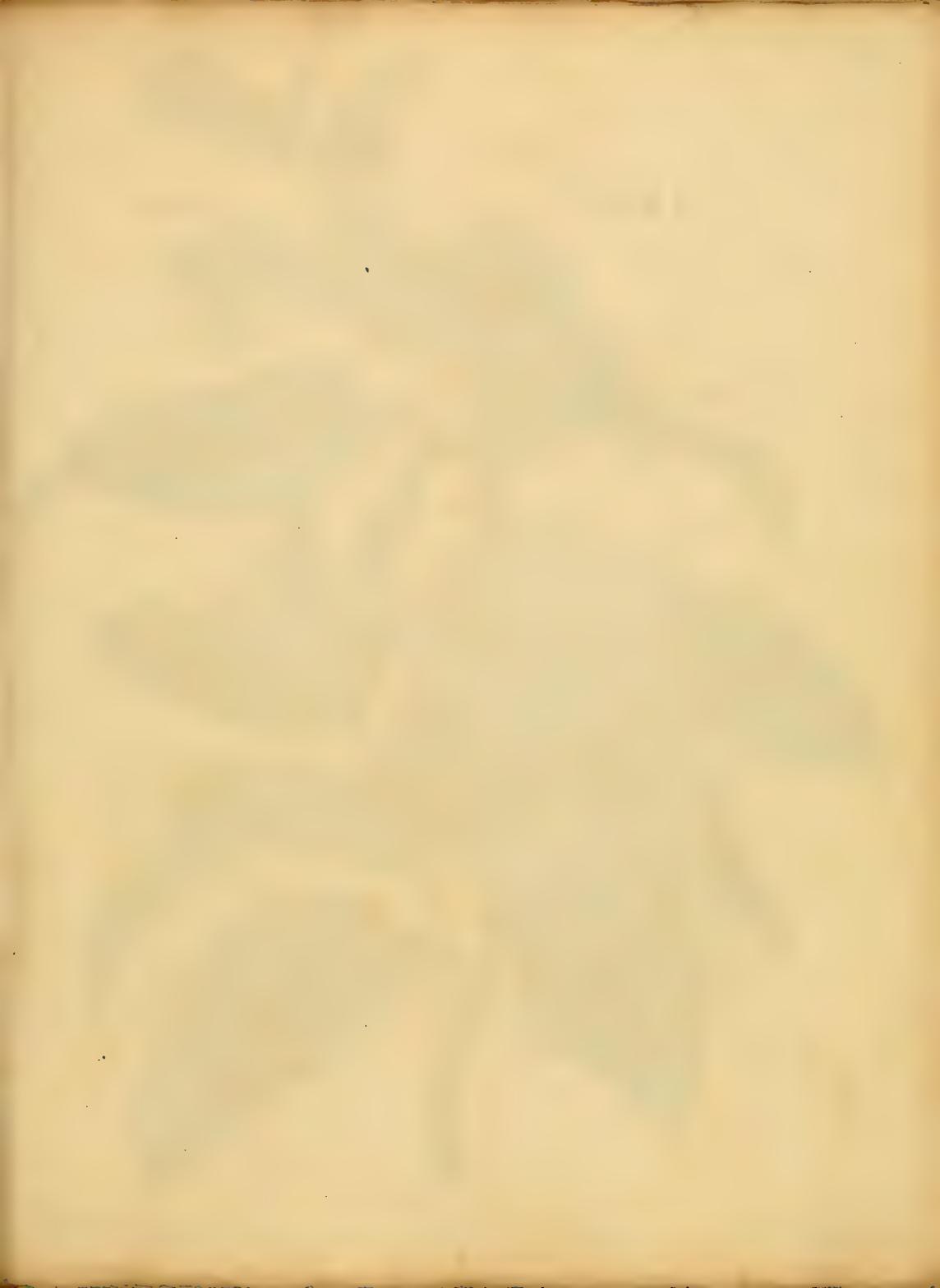


PLATE CXCIX.

CAMELLIA JAPONICA. *Var. flo rubro pleno.*

Double red Camellia.

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

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus, polyphyllus; foliis interioribus majoribus. || EMPALEMENT tiled, many-leaved; the inner leaflets the largest.

SPECIFIC CHARACTER OF VARIETY.

Camellia foliis senioribus basi attenuatis, junioribus rubentibus; petalis interioribus divaricato-erectis; floribus plenis, rubris. || Camellia with the older leaves tapered at the base, the younger ones reddish; the inner petals stand upright spreading different ways; flowers double and red.

AGAIN have we to call upon the indulgence of our Botanical friends for their sufferance, in a third intrusion on the forms of our own prescription. But, as we had given the two other varieties of this fine plant; and taking it for granted, by judging from our own feelings, that a figure of this very scarce variety would be agreeable to most; that they might be (by comparison) able to decide upon the difference which does exist, but has been denied by many, between this, and the Striped Var.; see our figure, Vol. II. Pl. XCI. It has been thought by most, who have not seen this plant; that it was but the Striped Var. which had lost its variegation. This is certainly not the case; for, it stands as distinct from the Striped, as from the White variety; which may be readily traced, either from the plants themselves, or our figures; by comparing the specific, or rather differing character we have assigned to each. The Double red Camellia was introduced about the year 1794 from China, by R. Preston, Esq. Woodford, Essex.

The largest plant now in Europe, of this variety, is in the select and most valuable collection of the Hon. T. Greville, Esq. Paddington, imported, last year, from China in the highest perfection. It is propagated by cuttings, or layers; and delights in a light, sandy loam; with about one-third of the pot, from the bottom, filled with peat earth. It flowers from November, till February, in the Hot-house; or from January, till April, if kept in the Green-house. Our figure was taken, in November, this year, at the Hammer-smith Nursery.



Camellia Japonica
var. *plena*

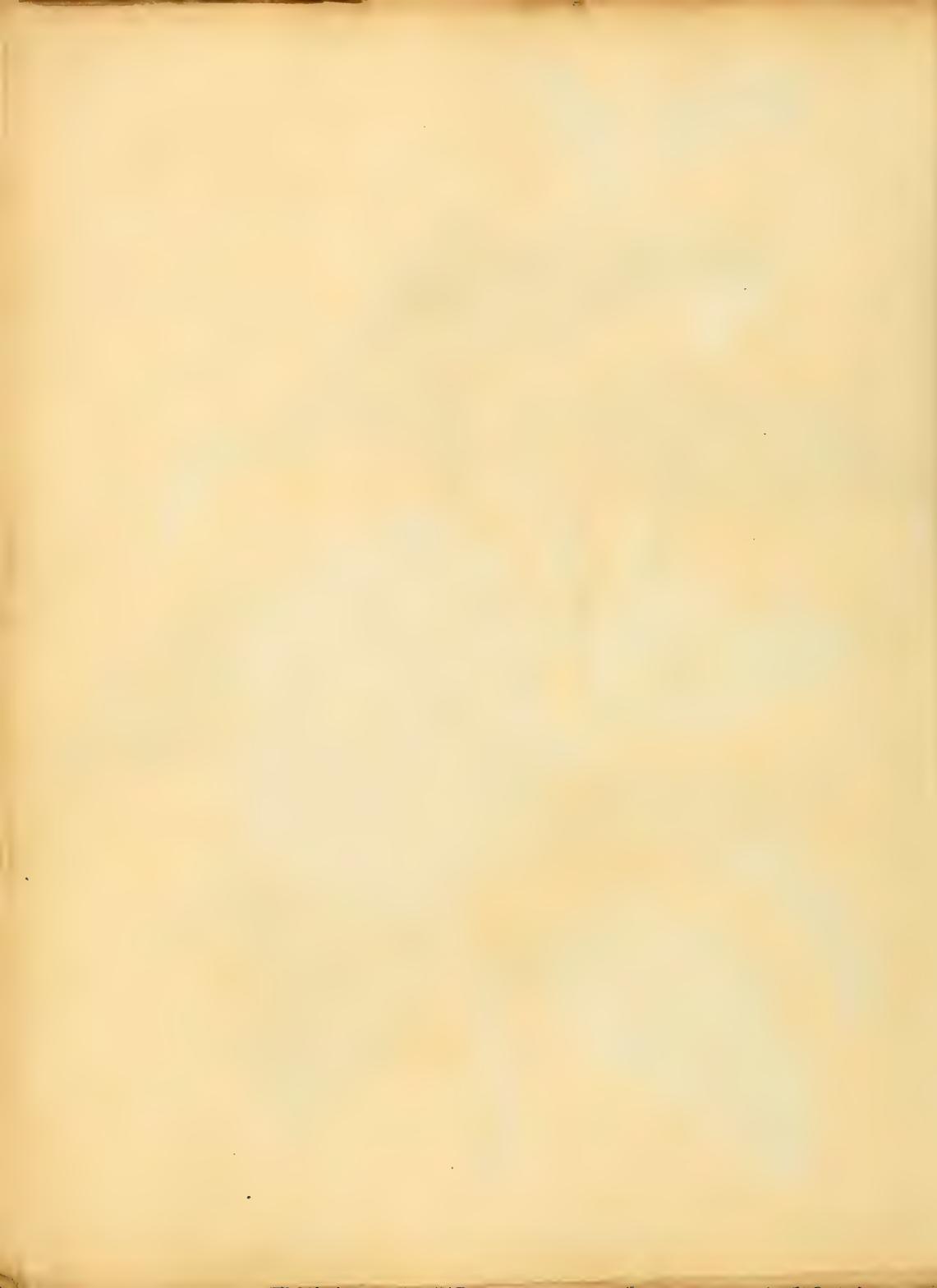




PLATE CC.

MELALEUCA HYPERICIFOLIA.

St. John's-wort-leaved Melaleuca.

CLASS XVIII. ORDER IV.

POLYADELPHIA POLYANDRIA. Threads in many Sets. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquefidus, semifuperus. Petala quinque. Filamenta multa, longissima, connata in quinque corpora. Pistillum unum. Capsula trilocularis.		CUP five-cleft, half above. Petals five. Threads numerous, very long, united into five bodies. Pointal one. Capsule three-celled.
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See MELALEUCA ERICÆFOLIA, Pl. CLXXV. Vol. III.

SPECIFIC CHARACTER.

Melaleuca foliis oppositis, elliptico-oblongis, uninnerviis; floribus confertis; filamentis longissimis, linearibus, apice radiato-multifidis.		Melaleuca with opposite leaves, elliptic-oblong, one-nerved; flowers clustered; threads very long, linear, rayed and many-cleft at the top.
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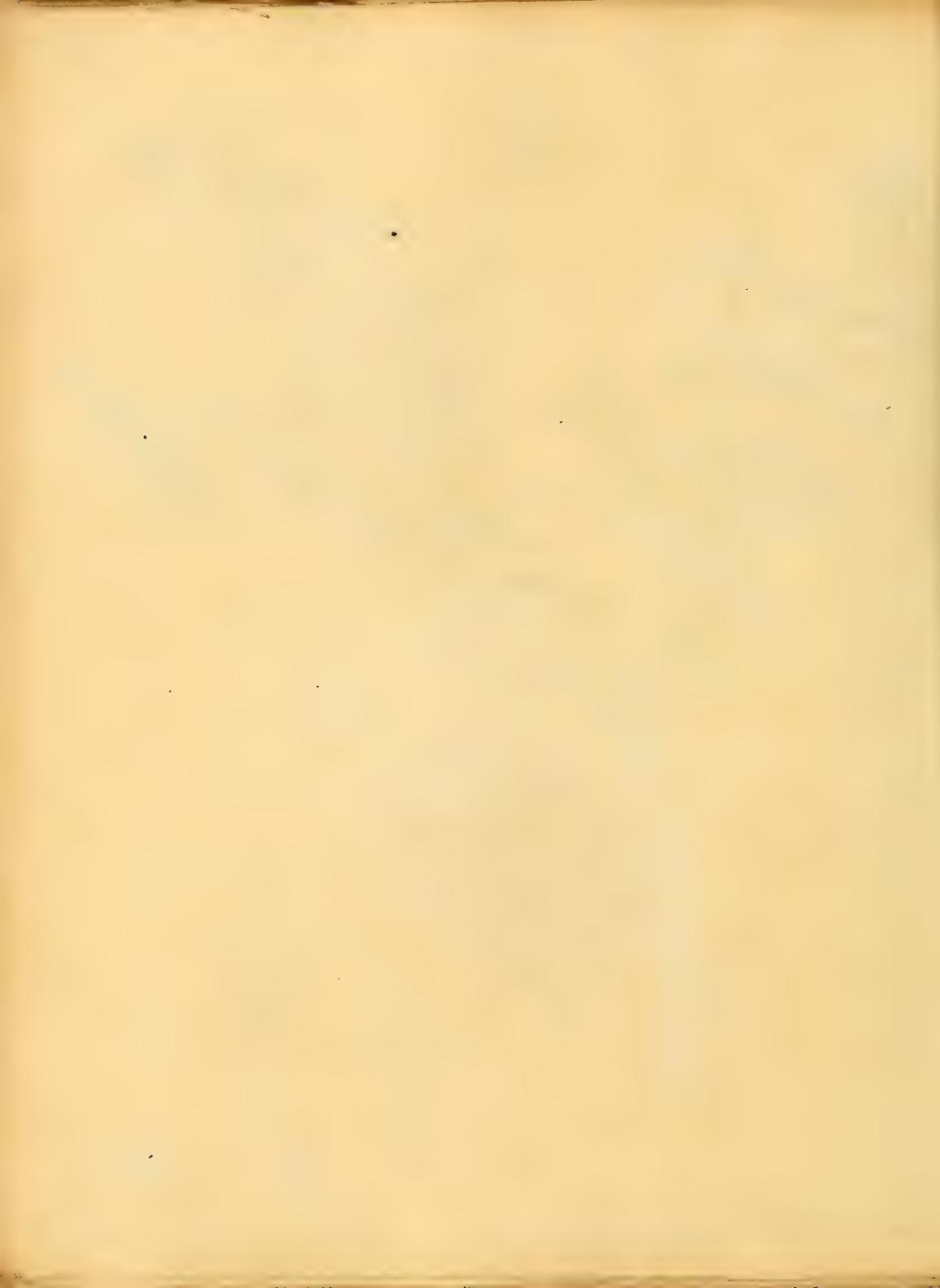
REFERENCE TO THE PLATE.

1. A flower, natural size.
2. One of the five bundles of Chives, with its petal, to which it is attached at the base, magnified
3. The cup, seed-bud, shaft and summit, natural size, the summit detached and magnified.

ABOUT the year 1792 this plant was first raised from seeds, by the late Mr. William Malcolm, Nurseryman, at Stockwell, Surry; and was, from the very great resemblance it bears to the St. John's-worts, so denominated, until it flowered. It has now become one of the commonest, of what are generally termed, Botany Bay plants; yet unquestionably ranks with the handsomest whether for its foliage, form of growth, or flowers, which are of a most beautiful red-purple, scarcely to be imitated in painting. The singular manner in which the flower-stem is thrown out, as it were, from the old wood, in a horizontal direction, is common to many other species of the Genus. It grows to the height of four or five feet, very erect in every part; is easily increased by cuttings, and thrives best in peat earth. Although it is said to grow in swampy grounds in New South Wales, see Linnæan Transactions, Vol. III. p. 279, nevertheless, with us, a dry, or damp situation in the green-house, appears equally congenial to it. In the month of September 1799, our drawing was taken at the Conservatory of R. James, Esq. Grosvenor Place.



Melaleuca hypericifolia



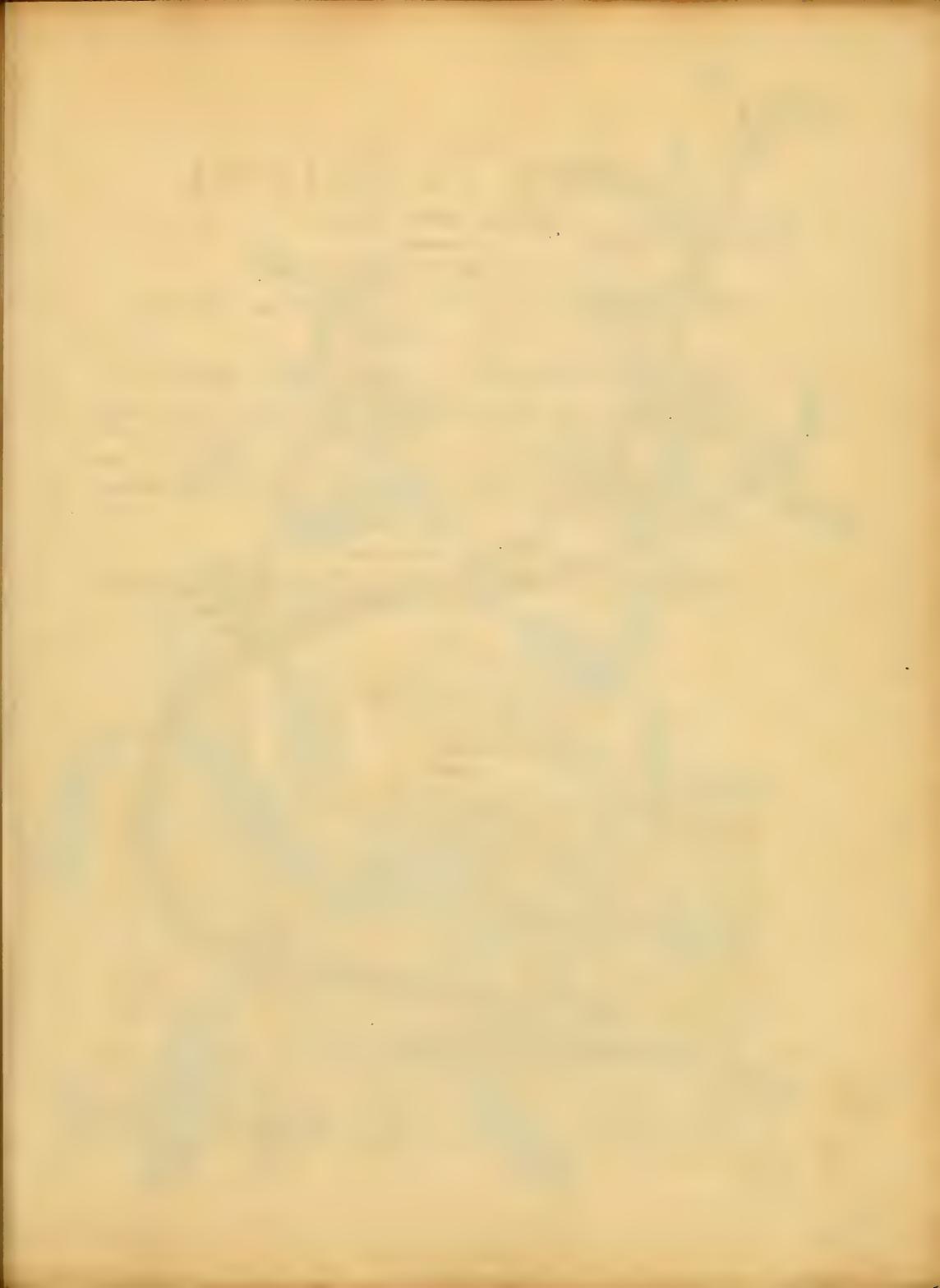


PLATE CCI.
AIZOON CANARIENSE.

Purslane-leaved Aizoon.

CLASS XII. ORDER IV.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

GENERIC CHARACTER.

<p>CALYX. Perianthium monophyllum, quinque-partitum; laciniis lanceolatis, persistentibus.</p> <p>COROLLA nulla.</p> <p>STAMINA. Filamenta plurima, capillaria, sinui calycis per phalanges inserta. Anthera simplices.</p> <p>PISTILLA. Germen pentagonum, superum. Stili quinque, simplices. Stigmata simplicia.</p> <p>PERICARPIUM. Capsula ventricosa, retusa, pentagona, quinquelocularis, quinque valvis.</p> <p>SEMINA plura, subrotunda.</p>	<p>EMPALEMENT. Cup one leaf, five-parted; segments lance-shaped, remaining.</p> <p>BLOSSOM none.</p> <p>CHIVES. Threads numerous, hair-like, inserted into the hollow part of the cup in bunches. Tips simple.</p> <p>POINTALS. Seed-bud five-sided, above. Shafts five, simple. Summits simple.</p> <p>SEED-VESSEL. Capsule bellied, dented, five-sided, five-celled, five-valved.</p> <p>SEEDS many, roundish.</p>
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SPECIFIC CHARACTER.

<p><i>Aizoon foliis cuneiformi-ovatis; floribus solitariis, subseffilibus, axillaribus.</i></p>	<p><i>Aizoon with leaves between wedge and egg-shaped; flowers solitary, growing almost close to the stem from the insertion of the leaves.</i></p>
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REFERENCE TO THE PLATE.

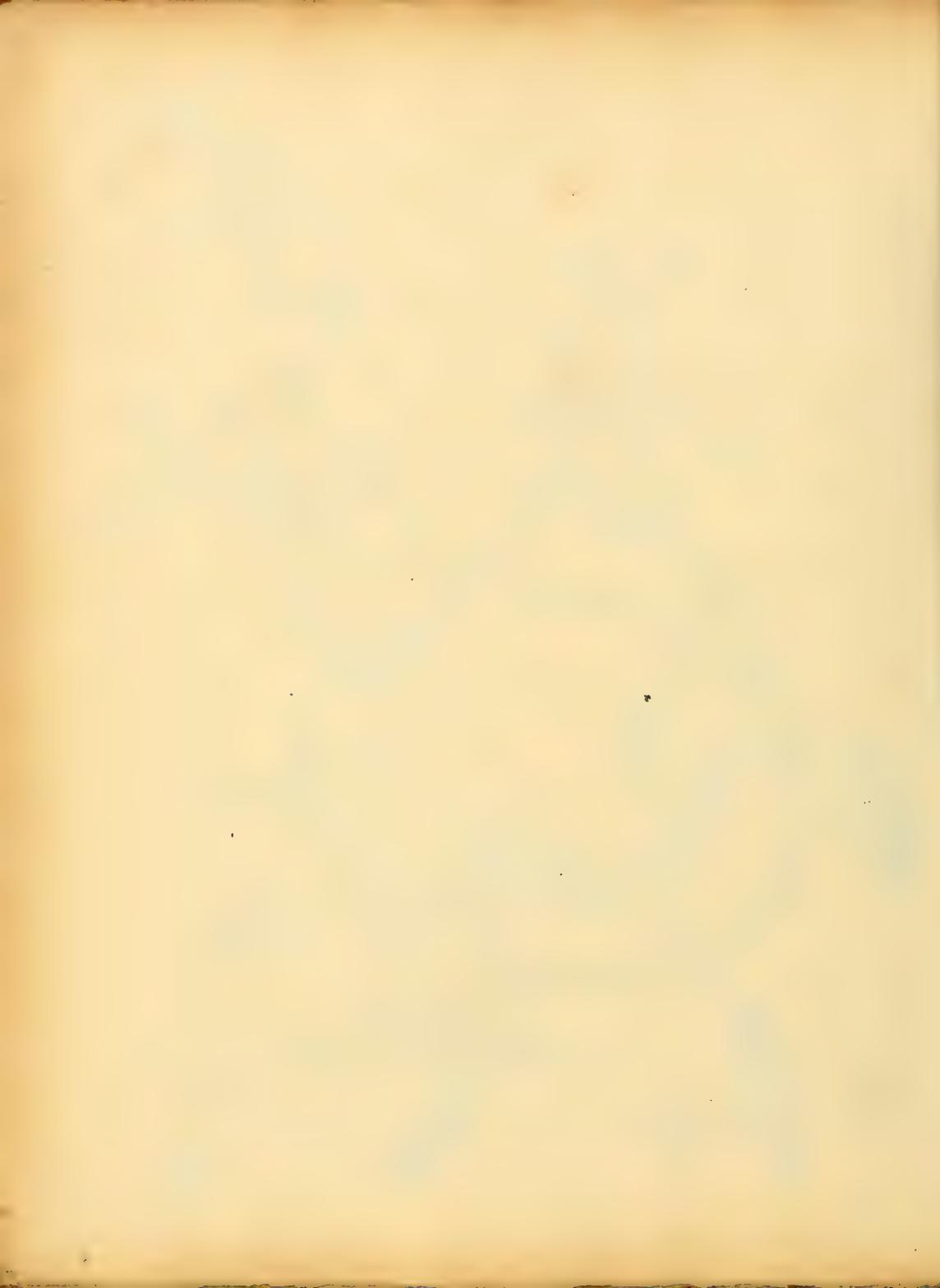
1. The Empalement shewn from the inside.
2. The same shewn from the outside.
3. A Chive magnified.
4. The Pointals natural size.
5. The same, magnified.

This plant is herbaceous, and is found near the sea coast, in most parts of the world, within the tropics. It has a character common to many Genera of the natural order of succulents, such as *Mesembryanthemum*, *Cassia*, &c. that of an indeterminate number of pointals; which, in this genus, extend from three, to five, on different plants; this circumstance not having been sufficiently attended to has unfortunately occasioned some confusion. Brown in his Natural History of Jamaica has described it as growing on that Island, and with five pointals, therefore placed it to its right genus. Plumier, Sloane, &c. treated it as *Portulaca*, to which, as the genus now stands, it in no way affines. Læfing in his *Iter Hispanicum*, published in 1758, having found the plant in Spain with three pointals, immediately placed it to another genus, *Halimum*; upon whose authority, corroborated by Jacquin, (who acknowledges a variation in the number of pointals, on different plants, found in the different Caribbee Islands,) Linnæus took up the plant, said to have but three pointals, under the title *Sesuvium*. As to the plant said to be cultivated by Miller in the Hort. Kew: under the last named genus, we have no difficulty in referring that, to the *Aizoon canariense* of the same work; as the time of flowering not being noticed, the distinction of character could not be observed, and the genus introduced, taken upon the *gratis dictum* of Miller. Burmann, in his Ed. of Rumphius's plants of Amboyna, has it as *Halimum*; and Plukenet as *Portulaca* from East Indian specimens; with numbers of other Botanists from different parts; as *Ægypt*, the Canary Islands, &c. &c. under different names.

Seeds received from Spain of our plant were sown by Mr. Anderson in 1793, at the gardens of J. Vere, Esq. Kensington Gore; since which time, it has annually died to the ground, about November, and re-appeared in Spring; from this circumstance, the great delicacy of the plant, and having been treated as an annual, it has been repeatedly lost to this country; though so constantly introduced, in almost every parcel of seeds which arrives from either the East or West Indies. It may be increased by cuttings made early in the year, and put in a hot-bed to accelerate their growth, and should be planted in rich loamy earth. It flowers from July till September. To preserve it more than one year, it must be kept in the hot-house.



Portulaca ananensis



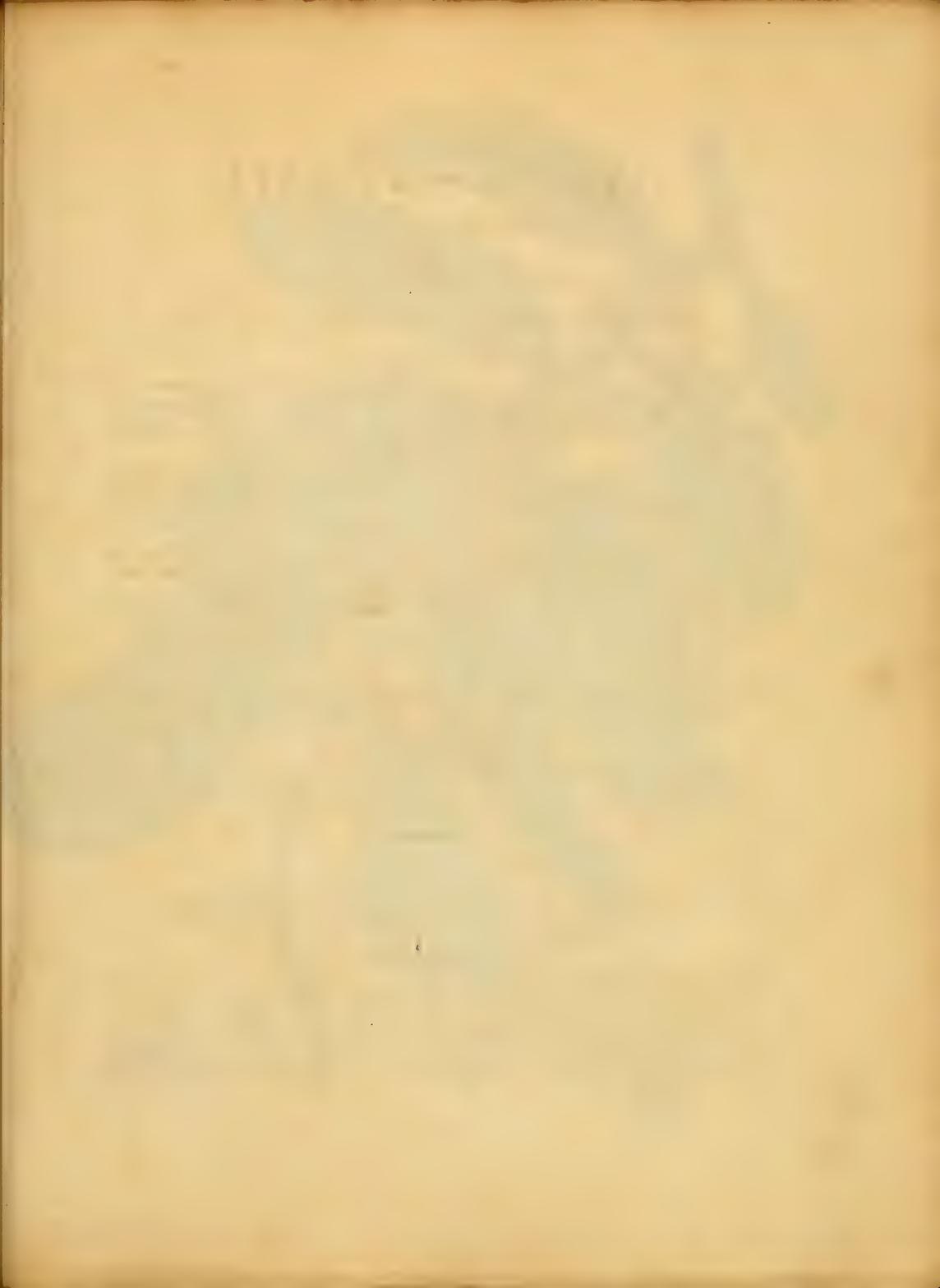


PLATE CCII.
SAMYDA SERRULATA.

Sawed-leaved Samyda.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, interne coloratum; tubus campanulatus, decemftriatus; limbus quinquefidus, laciniis ovatis planis, patentissimis, obtusis, duabus acumine acutis.

COROLLA nulla.

Nectarium monophyllum, conicum, truncatum, decemftriatum, longitudine fere calycis, eoque limbo ad basin inferum, ore obtuse 10 ad 18-dentato.

STAMINA. Filamenta nulla. Antheræ decem ad octo-decem, oblongæ, erectæ, parvæ, dentibus nectarii infidentes.

PISTILLUM. Germen ovatum. Stylus subulatus, erectus, longitudine nectarii. Stigma capitatum, obtusum.

PERICARPIMUM. Capfula subrotunda, quadrifurcata, coriacea, crassa, unilocularis, quadri-valvis.

SEMINA plurima, subovata, obtusa, basi foraminulo notata, valvulis affixa, obvoluta pellucula pulpofa.

EMPALEMENT. Cup one leaf, coloured within; tube bell-shaped, ten-friped; border five-cleft, segments egg-shaped, smooth, very much spread, obtuse, two lengthened by a pointed end.

BLOSSOM none.

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

CHIVES. Threads none. Tips from 10 to 18, oblong, upright, small, fixed to the teeth of honeycup.

POINTAL. Seed-bud egg-shaped. Shaft awl-shaped, upright, the length of the honeycup. Summit headed, blunt.

SEED-VESSEL. Capfulæ roundish, four-furrowed, leathery, thick, one-celled, four valves.

SEEDS many, nearly egg-shaped, blunt, marked with a small hole at the base, fixed to the valves, surrounded with a slight pulpy skin.

SPECIFIC CHARACTER.

Samyda floribus roseis, dodecandris; foliis ovato-oblongis, serrulatis.

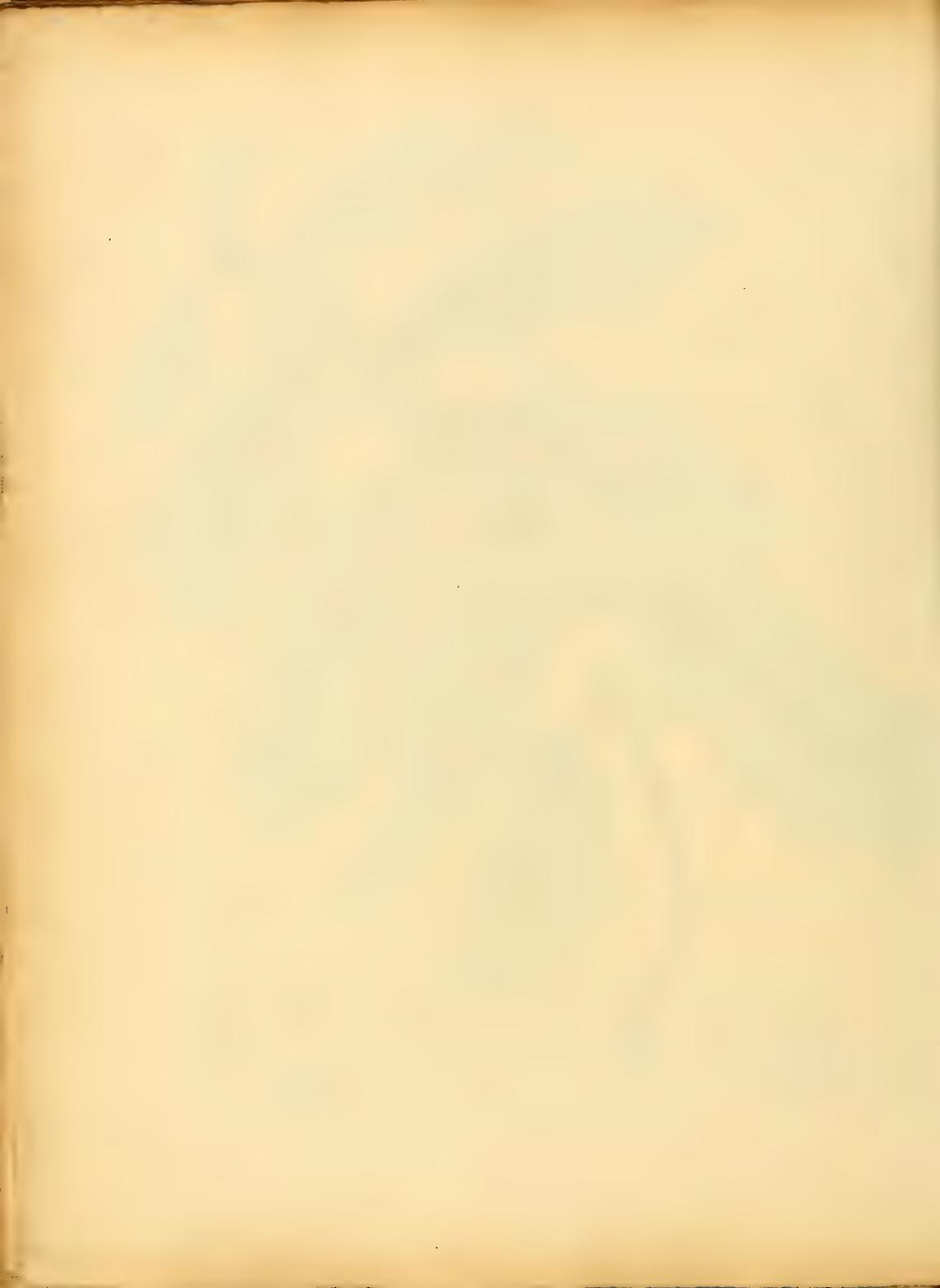
Samyda with rosy coloured flowers having twelve chives; leaves between egg-shaped and oblong, slightly sawed.

REFERENCE TO THE PLATE.

1. The Empalement, with its honey-cup, and the tips, cut and spread open.
2. The Pointal and seed-bud natural size, the summit detached and magnified.
3. The Seed-bud cut transversely and magnified, to shew the number of valves and situation of the seeds.

The Sawed-leaved *Samyda* is an inhabitant of most of the West India Islands, but was received in England, about the year 1795, from the Island of St. Vincent; transmitted from thence, by Mr. Anderson, curator of the Botanic garden, originally established there, under the sanction of our government, by Dr. Young. It is a very tender plant, grows to about three feet in height, making but few small branches, and rather weak in the stem. Our drawing was taken in July this year at the garden of T. Evans, Esq. Stepney, who we believe first had it to flower in this kingdom. It is propagated by cuttings; must be kept in the bark-bed of the hot-house, and should be planted in very rich mould.





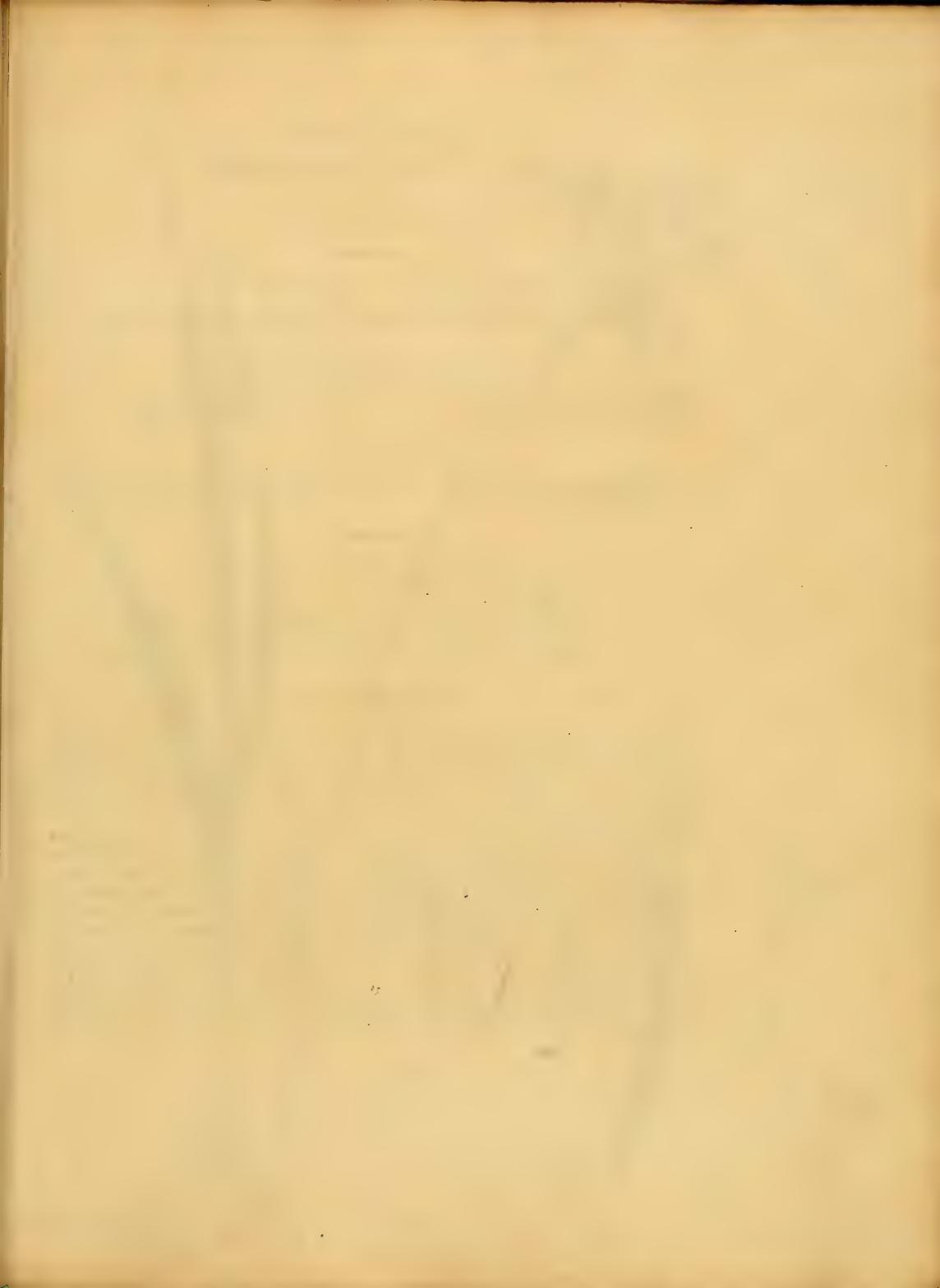


PLATE CCIII.
IXIA COLUMNARIS.

Columnar-chived Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis.
STIGMATA tria, erectiusculo-patula.

|| Blossom 6 petals. spreading, equal.
|| SummitS three, upright-spreading.

SPECIFIC CHARACTER.

Ixia filamentis basi cohærentibus; floribus capitatis; corollis purpureis.

|| Ixia with threads united at the base; flowers grow in heads; blossoms purple.

REFERENCE TO THE PLATE.

1. The two Valves of the empalement.
2. A Blossom cut open.
3. The Chives and Pointal, with the tube of the blossom, the border cut off.
4. The Chives cut and spread open, with the tube of the blossom, magnified.
5. The Pointal and Seed-bud, with one of the SummitS detached and magnified.

HERE we have a plant which presents one of those obstacles, constantly met, in all attempts to a systematic arrangement of the productions of nature. Every feature of *Ixia* we find positively expressed, but in the union of the Threads; a circumstance, which Linnæus in his system, always deemed of such singular moment, that a number of Genera have been formed, from this natural order of plants, hinging on this only character.

But, as this plant has been named, and accurately described by Mr. Salisbury, in the *Prodromus* to his garden 36. n. 18; and continued, from him, by Professor Martyn, in his *Edit. of Miller's Dict.* article *Ixia*, 50; in the following therefore such superior judgments to our own, we have thought it proper, not to make any alteration; and in consequence, have retained his Generic and Specific title. The extreme brilliance of the flowers of *Ixia Columnaris*, pervading all the varieties, (of which we have drawings of 6,) is not exceeded by any in the whole Genus; they generally, are not longer expanded than for about four hours, and that only under a hot sun; from about eight, till twelve o'clock; when they close for the day; but nevertheless they have a permanence not usual in *Ixias*, as the same blossoms will open diurnally for above a week. It is a native of the Cape of Good Hope, and came first to England, by the way of Holland, about the year 1794. It flowers in June and July, amongst the latest of the tribe, and increases by the root in abundance. Our figure was taken at the Hammer-smith Nursery.



columnaris





PLATE CCIV.

GERANIUM LACINIATUM. *Var. flore purpureo.*

Ragged-leaved Geranium. Purple, flowered Variety.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

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

One POINTAL. Five summits.
FRUIT furnished with long awns; five dry berries.

SPECIFIC CHARACTER.

GERANIUM foliis radicalibus, integris laciniatis, petiolis filiformibus; calycibus monophyllis; staminibus quinque fertilibus; radice tuberosa; floribus purpureis.

GERANIUM with leaves growing from the root, entire and jagged, footstalks thread-shaped; cups one-leaved; five fertile chives; root tuberos; flowers purple.

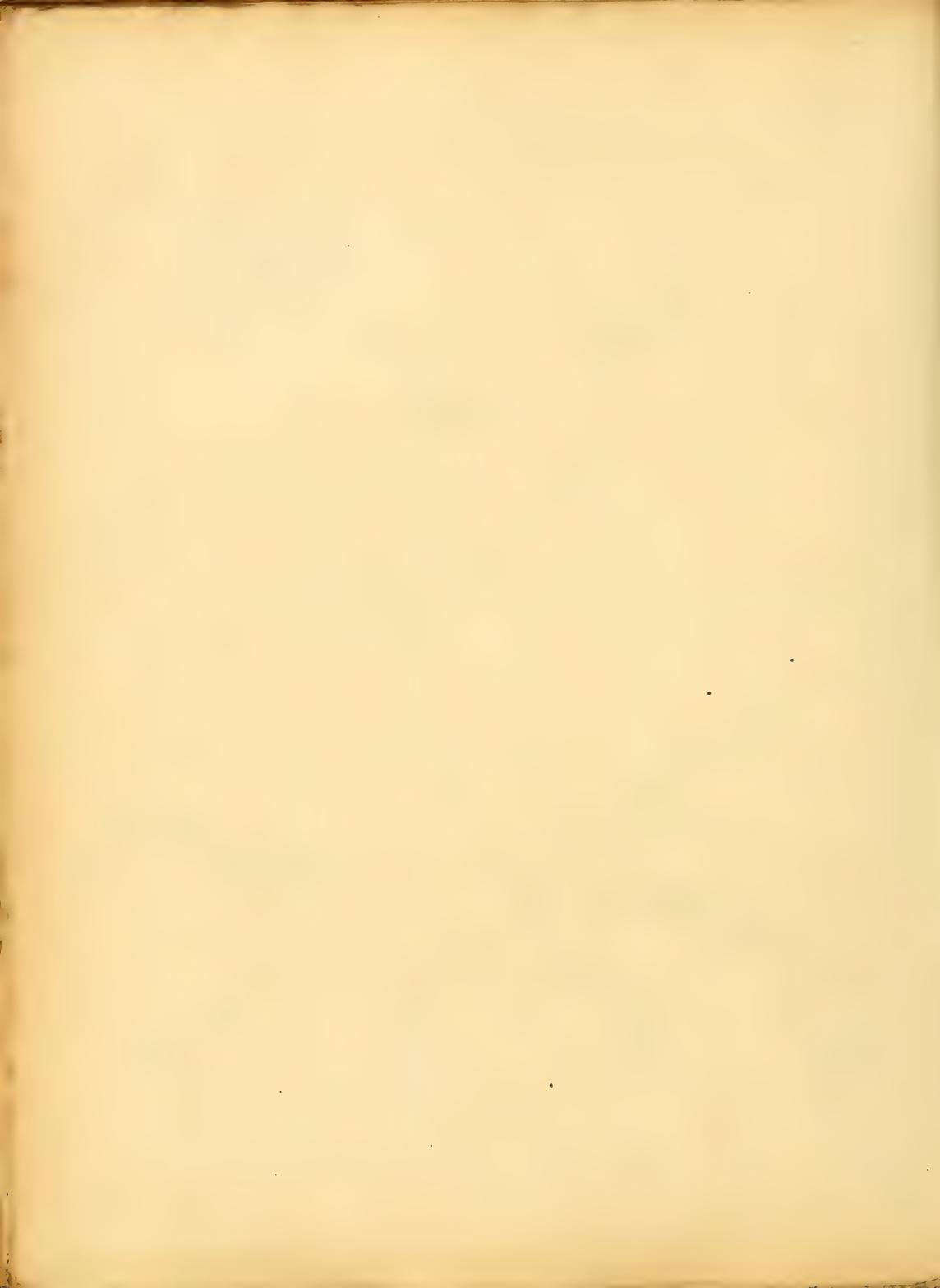
REFERENCE TO THE PLATE.

1. The Empalement magnified.
2. The Chives spread open.
3. The Pointal and seed-bud magnified.

THIS very handsome variety, (for we cannot consider it as a species,) of the *Geranium laciniatum*, was imported in 1800, from the Cape of Good Hope, by G. Hibbert Esq.; in whose collection it flowered, last year, in the month of June, when our drawing was taken; and we believe it is in no other at present in this kingdom. Mr. Allen, under whose care that collection is preserved in such high order and perfection, and to whose kind communications, we are much indebted; informs us, that he has not, as yet, been able to increase it; but, from every appearance, the plant, he has no doubt, may, by the root, as are the other species which have the tuberos character; and that he did not treat it differently from the rest of the *Geraniums* which compose this branch of that interesting family.



Geranium laciniatum
L'Her. Bot. France



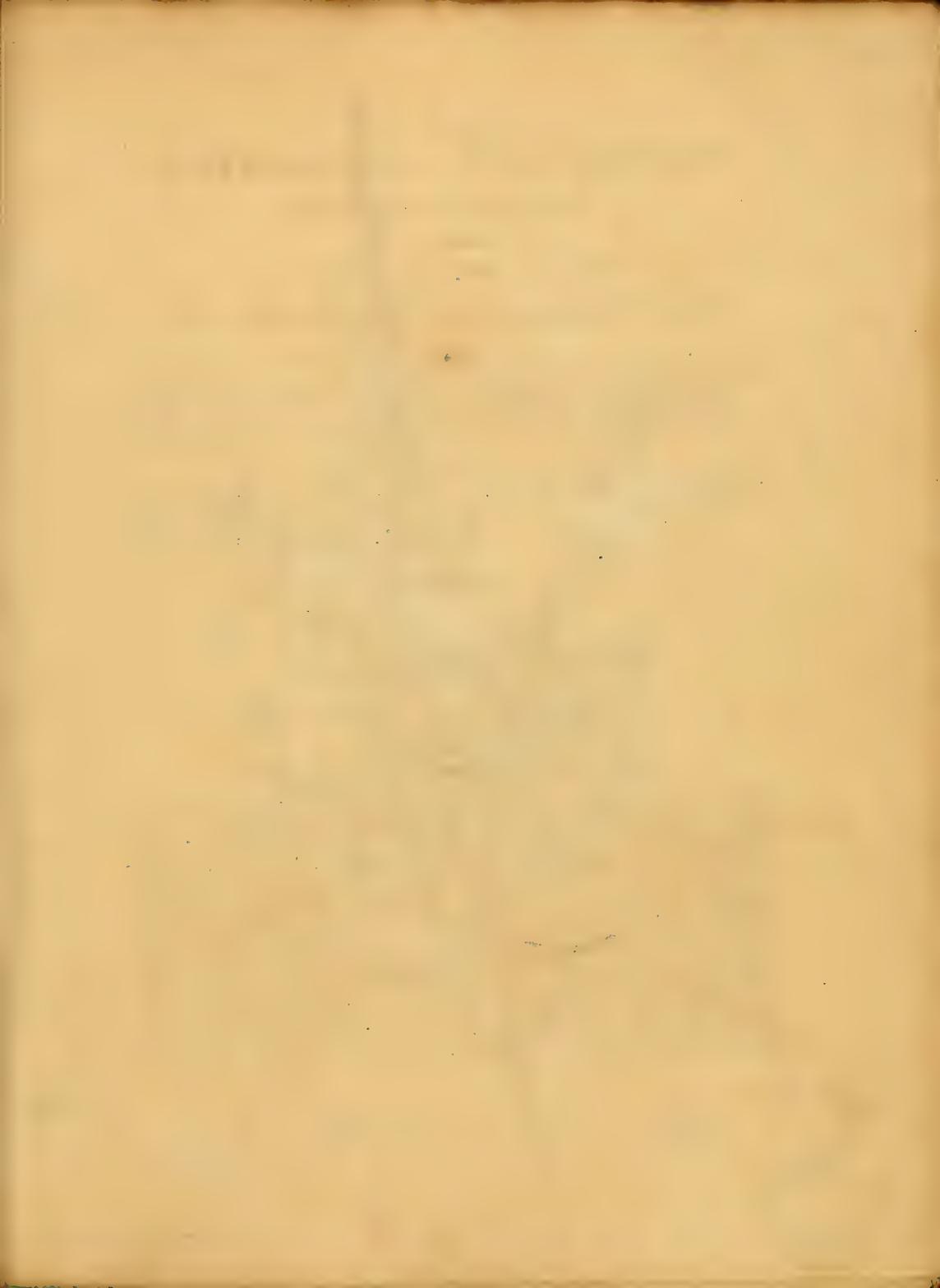


PLATE CCV.
PLATYLOBIUM LANCEOLATUM.

Lance-shaped-leaved Flat-pea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two Sets. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX campanulatus, quinquefidus; laciniis duabus supremis maximis, obtusis. Stamina omnia coalita. Legumen pedicellatum, compressum, dorso alatum; polyspermum.

Cup bell-shaped, five-cleft; the two upper segments very large and obtuse. Chives all united. Pod on a footstalk, compressed, winged along the back; many seeded.

See Plate CXCI. Vol. III. PLATYLOBIUM SCOLOPENDRUM.

SPECIFIC CHARACTER.

Platylobium foliis glaberrimis, distichis, linearilanceolatis; floribus solitariis, axillaribus; ramis junioribus sub-compressis.

Flat-Pea with very smooth leaves pointing opposite ways, linear-lance shaped; flowers grow solitary from the lower part of the leaves close to the branches; the younger branches are rather flatish.

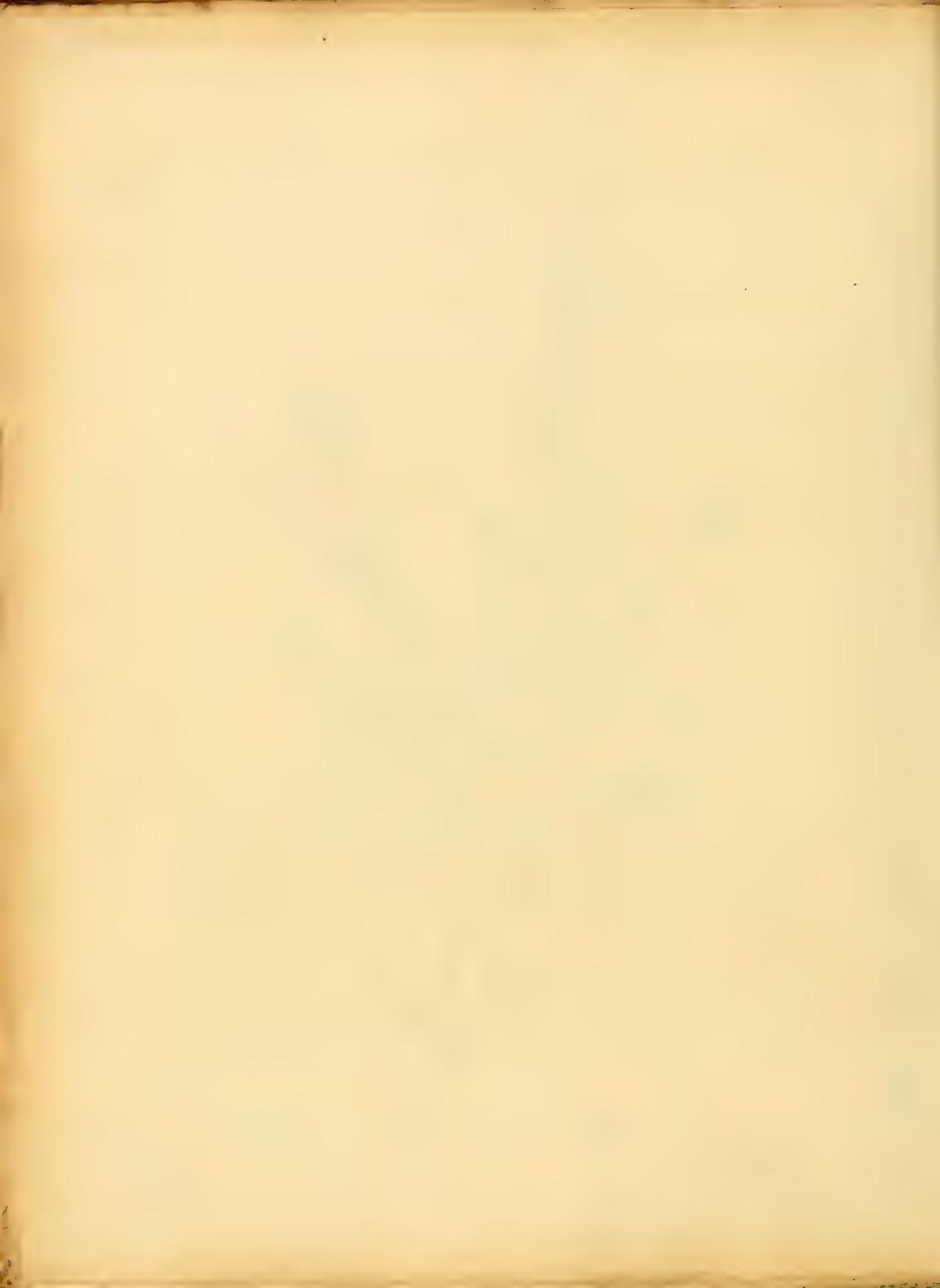
REFERENCE TO THE PLATE.

1. The Empalement of the flower.
2. The Standard, or upper petal of the blossom.
3. One of the Wings, or side petals of the blossom.
4. The two lower Petals, or keel of the blossom.
5. The Chives, natural size.
6. The same, magnified.
7. The Seed-bud, natural size.
8. The same magnified, but rather more mature.

No Class, amongst the 24, is more distinct in its natural character than Diadelphia; yet, since the discovery of New South Wales, no one has presented more difficulty to the botanist. From the great number of plants of that country, appertaining to this Class, and the strong differing characters which most of them exhibit, such indeed, as might formerly have been thought of sufficient moment to constitute new Genera; many must now bend a little for the ease of science; or otherwise they will in a short time become doubled in number; a matter of no small moment to weak although willing memories. Our having placed the *P. scolopendrum* of this Volume, Pl. CXCI., and our present plant to the Genus *Platylobium*, is the occasion of the above prelude; as it may be thought by some who have not seen the seed-vessel and seeds, the principal parts upon which the Genus is founded, that nature is a little outraged in so doing; but, without we had so joined them, we must have given them a new title. This plant was introduced at the same time as the *P. scolopendrum*, and the three other species now in Britain; not one of them, but has baffled all our most experienced cultivators to increase it, by any other mode than from the seed; some of which has been procured from the *P. formosum*, only. They all require to be kept in the driest part of the green-house, as they are impatient of damp. Our drawing was made in November 1801, at the Nursery of Messrs. Lee and Kennedy, Hammer-smith, by whom it was first raised in 1792. The general height of the *Platylobiums*, is about three feet and a half, at most, in this country, and they do not form bushy shrubs. They require a light, sandy peat soil, with rather less root room, than is in general necessary for plants of equal size.



Platylobium cancolatum



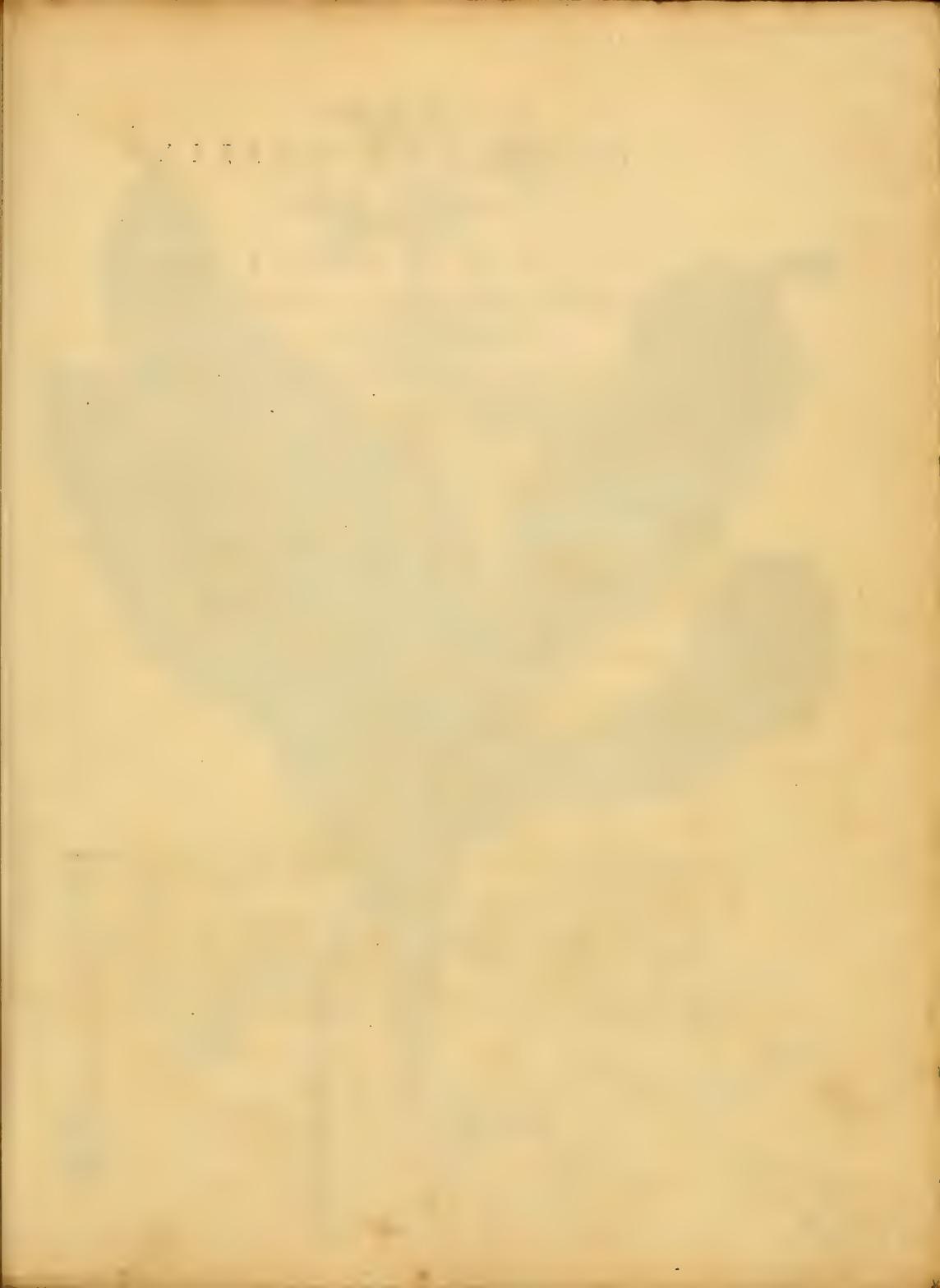


PLATE CCVI.
 DRACÆNA BOREALIS.

Oval leaved Dracæna.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointals.

GENERIC CHARACTER.

CALYX nullus.
 COROLLA. Petala sex, oblonga, erectiuscula, æqualia, unguibus coherentia.
 STAMINA. Filamenta sex, unguibus inserta, subulata, medio crassiora, basi membranacea, longitudine vix corollæ. Anthera oblongæ, incumbentes.
 PISTILLUM. Germen ovatum, sexstriatum. Stylus filiformis, longitudine staminium. Stigma trifidum, obtusum.
 PERICARPIUM. Bacca ovata, sexsulcata, trilocularis.
 SEMINA solitaria, ovato-oblonga, apice incurvata.
 OBS. Character fere Asparagi, habitus diversus.

EMPALEMENT none.
 BLOSSOM. Petals six, oblong, rather upright, equal, cohering by the claws.
 CHIVES. Threads six, inserted into the claws, awl-shaped, thicker about the middle, skinny at the base, almost the length of the blossom. Tips oblong, incumbent.
 POINTAL. Seed-bud egg-shaped, six-freaked. Shaft thread-shaped, the length of the chives. Summit three-cleft, obtuse.
 SEED-VESSEL. Berry egg-shaped, six-furrowed, three-celled.
 SEEDS solitary, oblong-egg-shaped, turned inward at the end.
 OBS. The Character is very near Asparagus, the habit different.

SPECIFIC CHARACTER.

Dracæna, herbacea, subcaulescens, foliis ellipticis.

Dracæna, herbaceous, rather aspiring to a stem, leaves elliptic.

REFERENCE TO THE PLATE.

1. A Petal with its chive.
2. A Chive, magnified.
3. The Pointal, magnified.
4. A ripe Berry.
5. The same, cut transversely.

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

Much we revere the name of Solander, and highly rate his merit as a Botanist; yet we cannot forbear stating our dissent from the arrangement of this plant, as a *Dracæna*, certainly nothing can be more dissimilar, in every part; this may be easily traced by comparing our figure and dissections, as connected with the Generic character. The whole natural habit of the plant, points out *Convallaria* for its genus, to which it is much nearer allied than *Dracæna*, even in the sexual characters. However, we only state our opinions, without even thinking of change, as the plant is known as *Dracæna*, having been figured and described in the First Vol. of the Kew Catalogue, page 454, under the present title.



Dracana borealis

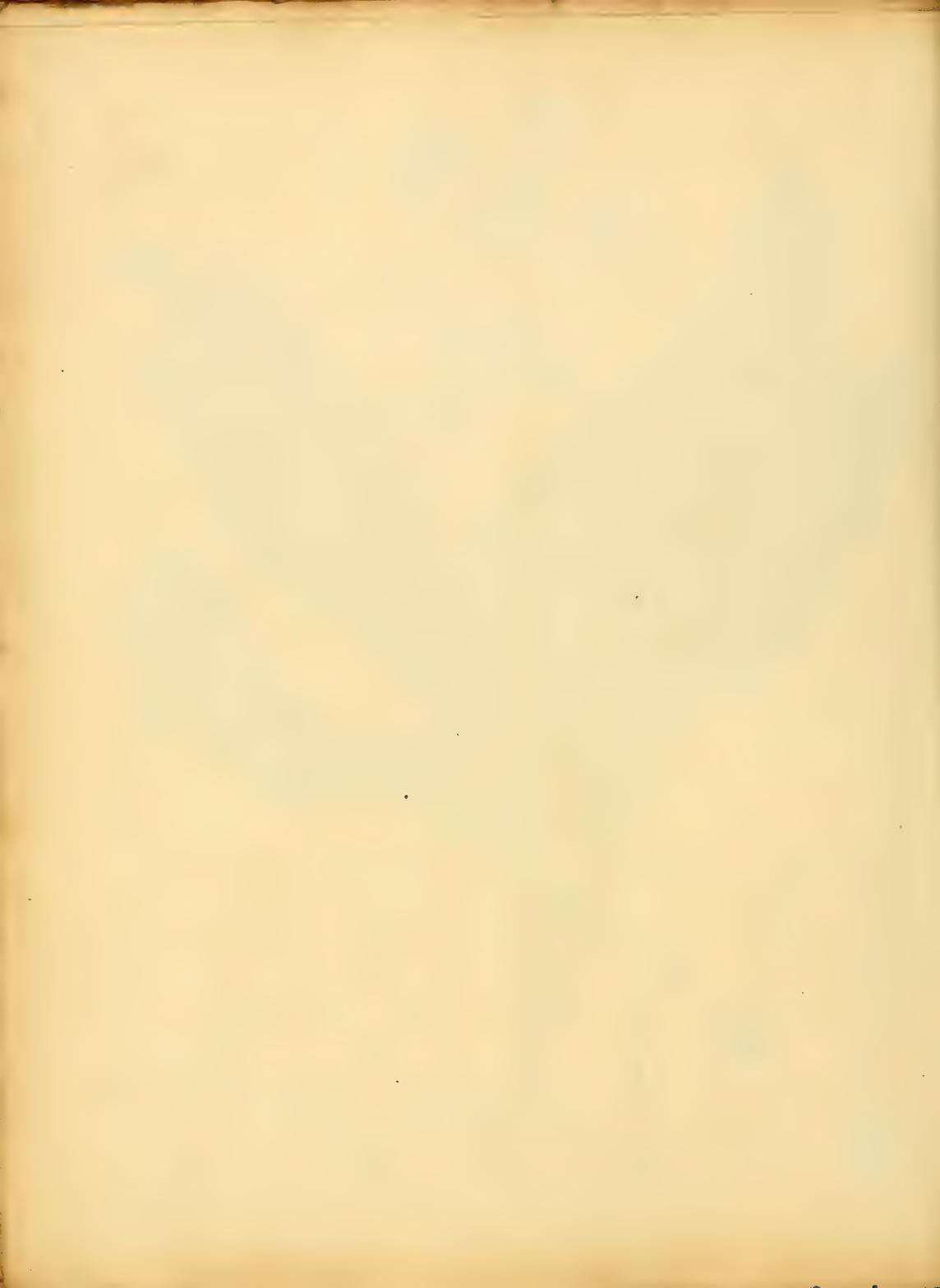




PLATE CCVII.
MIMOSA LONGIFOLIA.
Long-leaved Mimosa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various dispositions. Upon one Plant.

ESSENTIAL GENERIC CHARACTER.

Hermaphrod. CALYX 5-dentatus. Cor. 5-fida.
Stam. 5 feu plura. Pist. 1. Legumen.
Mascul. CALYX 5-dentatus. Cor. 5-fida. Stam.
5, 10, plura.

Hermaph. CUP five-toothed. Blos. 5-cleft.
Chives 5 or more. Pointal one. A pod.
Male. CUP 5-toothed. Blos. 5-cleft. Chives
5, 10, or more.
See MIMOSA STRICTA. Pl. LIII. Vol. I.

SPECIFIC CHARACTER.

Mimosa foliis integris longissimis, utrinque gla-
bris, obtusis; capituli geminati, racemosi,
longissimi, oppositi, lutei, subcernui.

Mimosa with entire, very long leaves, smooth on
both sides and blunt; flower heads grow
by pairs in very long bunches opposite to
each other, yellow and rather nodding.

REFERENCE TO THE PLATE.

1. A flower, magnified, shewn sideways.
2. The Empalement, magnified.
3. The Blossom, magnified.
4. A Chive, magnified.
5. The Pointal, magnified.

ABOUT the year 1792 J. Ord, Esq. of Purfers Cross, Fulham, received the seeds of this *Mimosa* from New South Wales; the plants were raised, the ensuing year, by Mr. White, who has managed, much to his credit, the select collection of that Gentleman near 20 years, and who obligingly sent us a fine specimen in March 1801, taken from a plant near 18 feet in height. Of the *Mimosas* now in Britain, we think, this species is likely to exceed them all in height; making a very handsome plant; and most beautiful at the season when covered with its long pendulous bunches of flowers. It is increased by cuttings, but with difficulty; and, as yet, seeds have not been perfected in this country. A light sandy earth is what it thrives in most, but it will grow in almost any soil.



Nemasa longifolia





PLATE CCVIII.
LASIOPETALUM FERRUGINEUM.

Rusty Woolly-blossom.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium triphyllum, foliolis subulatis, tomentosis, persistentibus, ferruginosis.

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

STAMINA. Filamenta quinque, brevia, erecta, germinis basi affixa. Antheræ erectæ, dorso bilobæ, apice poris duobus.

PISTILLUM. Germen ovatum, superum. Stylus minutus, filiformis, erectus. Stigma obsoletum.

PERICARPIUM. Capsula subrotunda, supera, trilobata, trilocularis, trivalvis, dissepimentis e medio valvularum.

SEMINA numerosa, subrotunda.

EMPALEMENT. Cup three-leaved, leaflets awl-shaped, downy, permanent, and of a rusty iron colour.

BLOSSOM, one petal, wheel-shaped, woolly, and five-cleft; segments egg-shaped, sharp pointed and incurved at the point.

CHIVES. Threads five, short, upright, fixed to the base of the seed-bud. Tips upright, two-lobed at the back, and two pores at the point.

POINTAL. Seed-bud egg-shaped, above. Shaft small, thread-shaped, upright. Summit obsolete.

SEED-VESSEL. Capsule roundish, above, three-furrowed, three cells, three valves, partitions from the middle of the valves.

SEEDS numerous, roundish.

SPECIFIC CHARACTER.

Lasiopetalum foliis sublinearibus, obtusis, inequaliter sinuatis, supra glabris, subtus lanuginosis; floribus racemosis, axillaribus.

Woolly blossom with nearly linear leaves, blunt, unequally indented, smooth above, woolly beneath; flowers grow in long bunches from the insertion of the leaves into the stem.

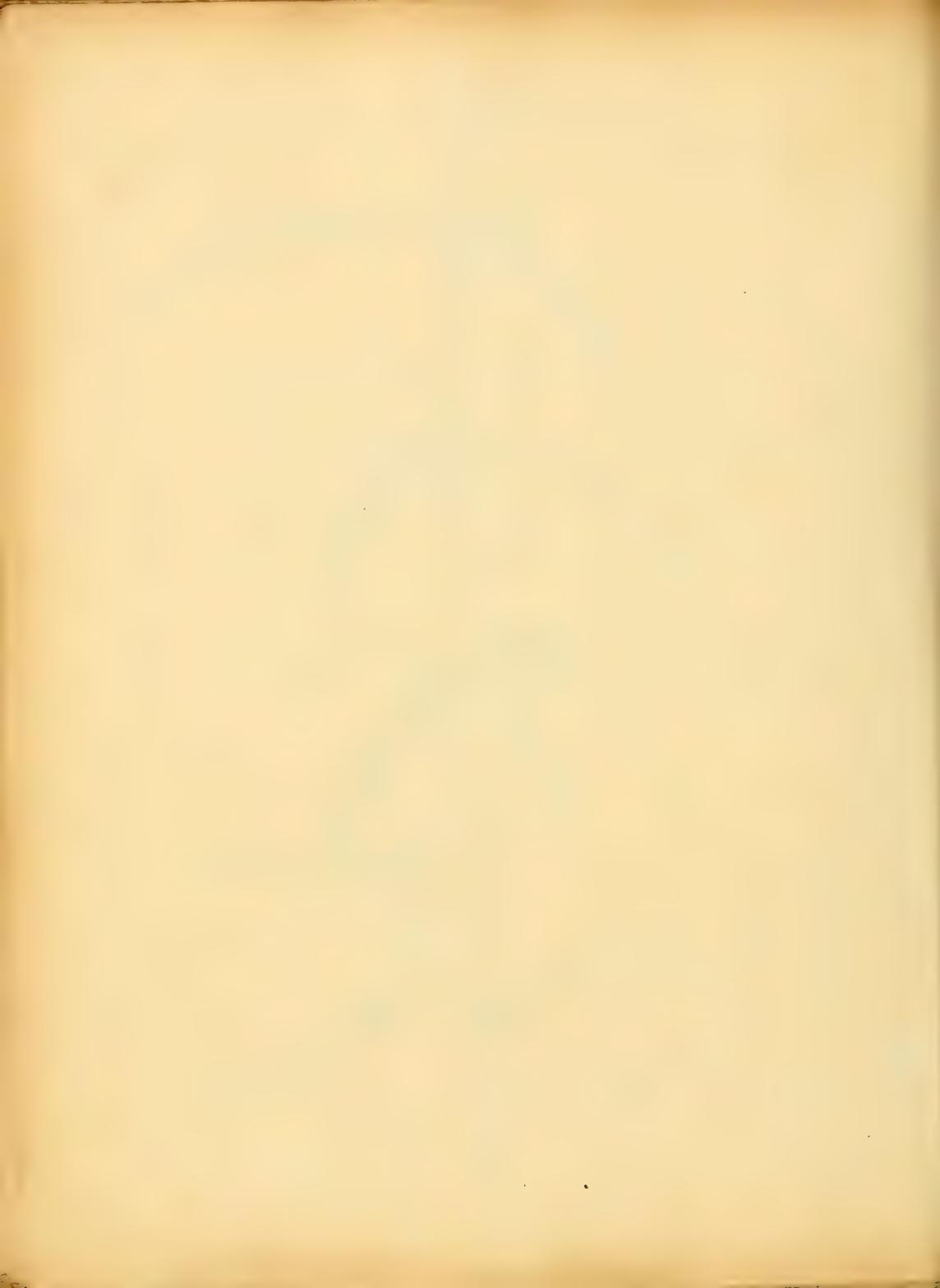
REFERENCE TO THE PLATE.

1. The Empalement.
2. The Blossom.
3. The Chives and Pointal.
4. A Chive, magnified.
5. The Pointal.
6. The same magnified.

The singularity of this plant recommends it to our notice, rather than its beauty. It is a native of New South Wales, near Port Jackson, and is found in marshy grounds; where its branches are seen to extend many yards, embracing all the under shrubs they meet; they seldom exceed the size of small twine, but are exceeding tough. The whole plant, when old, has a dirty or rusty brown appearance, the leaves becoming very small and narrow; although from culture in this country, we have seen the leaves, on some plants, near an inch in breadth, and three in length. For the Generic and Specific titles of this plant we are indebted to Dr. Smith, P. L. S. &c. and we do not think more appropriate ones could have been invented. The giving specific names and characters to plants, where only one has been discovered of the Genus, although a little from Linnæan principles, we must confess accords with our ideas; for, although, to compare is necessary to distinctive difference; yet, if the most ostensible, and novel appearance of the parts, are taken from the first discovered plant, for the specific character; there is no more danger of confusion, from any addition to the Genus, than if no such observations had been made; for, what must in future be taken as specific distinction must arise from an opposition to the first plant on which the Genus was founded: therefore we have adopted this manner, from the commencement of the work. This plant was first raised at the Hammermith Nursery, from seeds received from New South Wales in 1791. It is propagated by cuttings taken from the young shoots, in April; should be planted in very sandy peat earth, and kept very dry in winter. It is in flower nearly the whole year.



Lasiopetalum ferrugineum



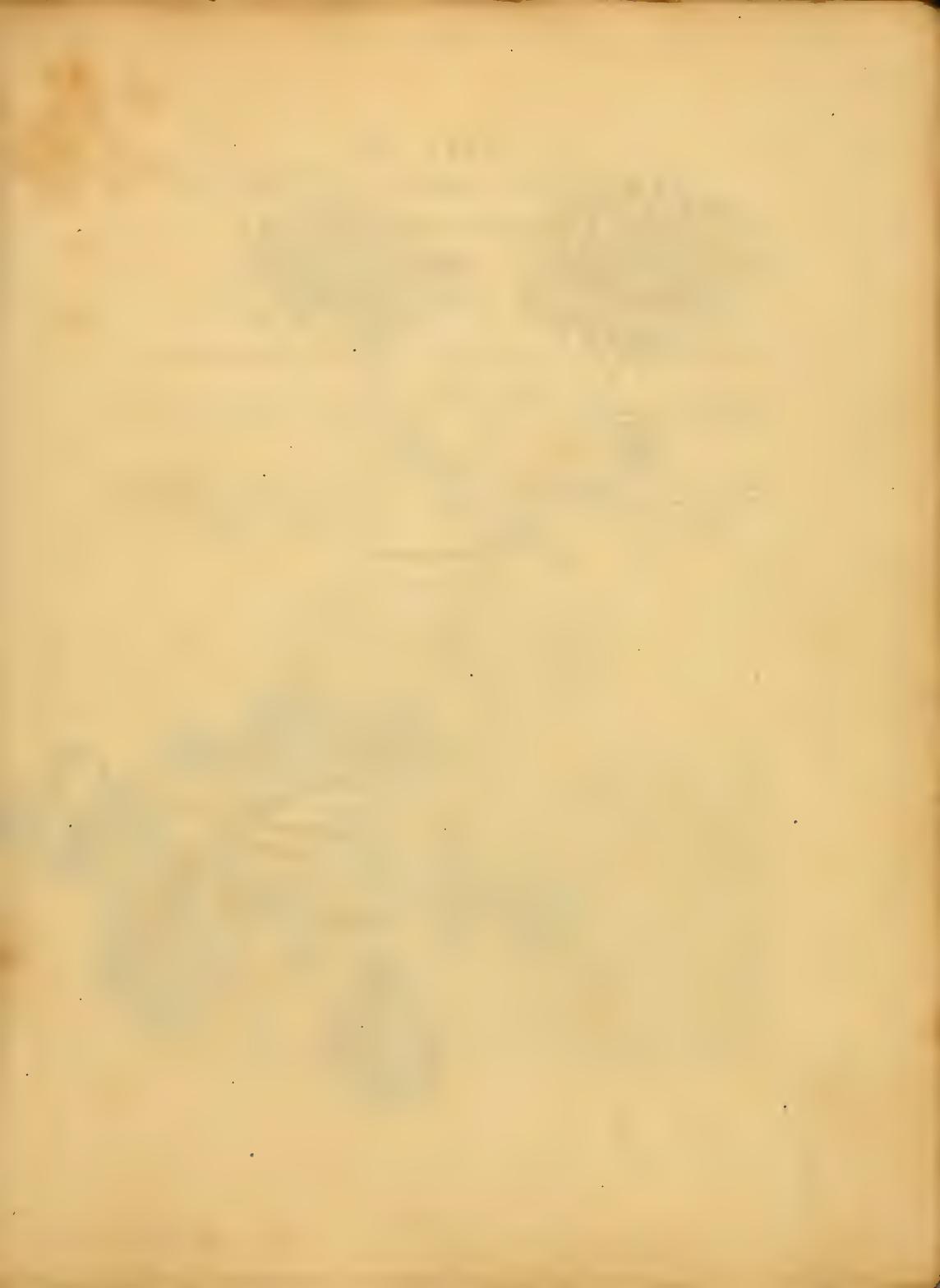


PLATE CCIX.
GERANIUM MELANANTHUM.

Black-flowered Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

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

SPECIFIC CHARACTER.

Geranium foliis lobatis integrisque, hispidis, obtusis; calycibus monophyllis, laciniis linearibus; floribus nigricantibus, dioicis; radice tuberosa. || Geranium with lobed, and entire leaves, hairy and obtuse; cups one leaved, segments linear; flowers blackish, with the chives and pointals distinct; root tuberous.

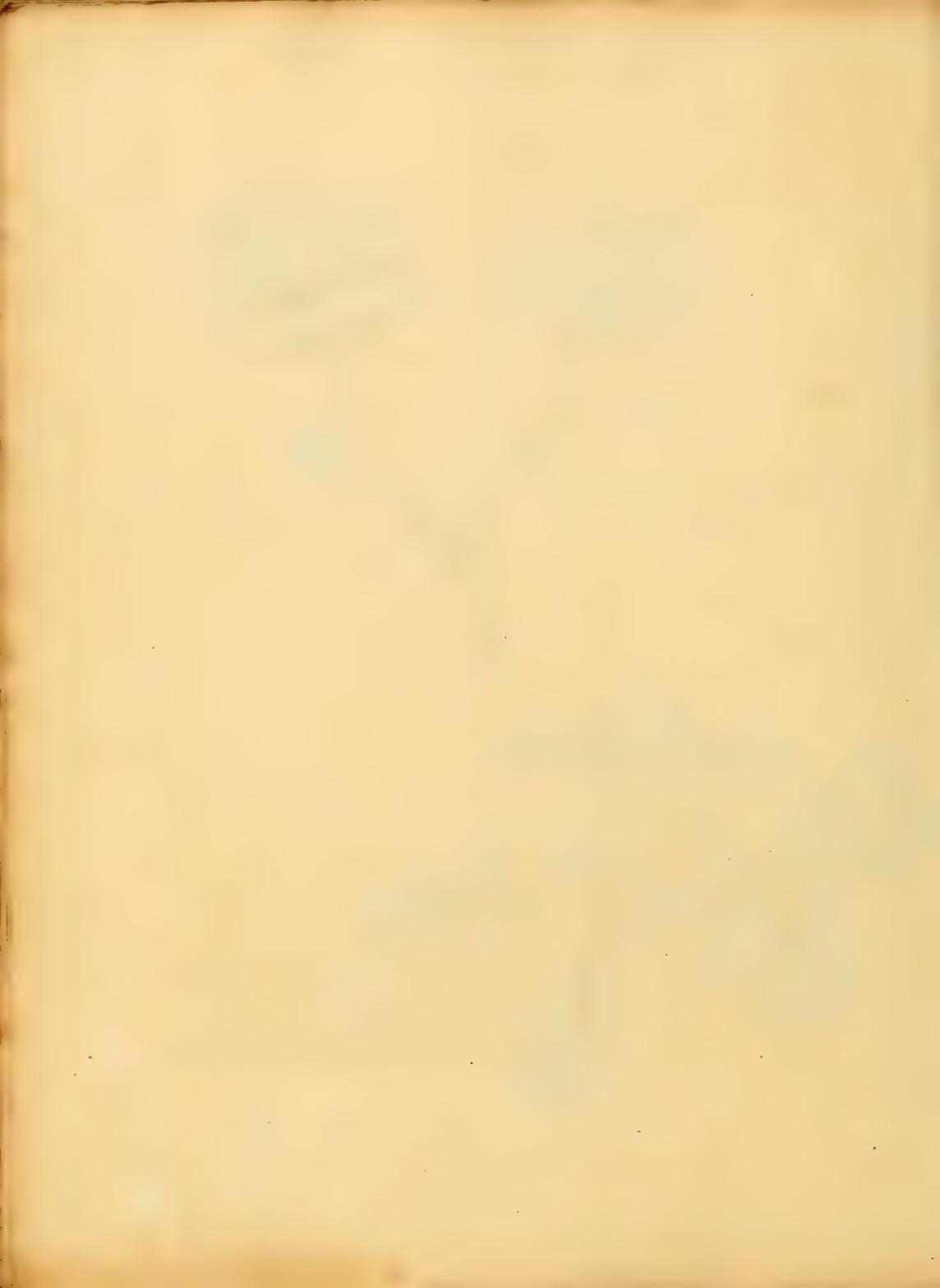
REFERENCE TO THE PLATE.

1. The Empalement, natural size, the tube cut open.
2. The Chives of a male blossom, natural size.
3. The same, cut open and magnified.
4. The abortive Pointal of a male blossom, natural size.
5. The same, magnified.
6. The abortive Chives of a female blossom, natural size.
7. The same, magnified.
8. The Pointal of a female blossom, magnified.

THIS species of Geranium has been given by Professor Jacquin in his Icon: rar. 514, and his Collectanea 4. 188; from him, we find it collated by Professor Martyn into his Edit. of Miller's Dict. under the article Pelargonium, 59. But, as no notice has been taken by Jacquin of so remarkable a circumstance as this species being Dioecious, or with male and female flowers on different plants; we may be led to suppose, that it has not flowered in Germany; or that the specimens he had seen, were from male plants, as he numbers the fertile chives as five, which could not have been discovered from a female specimen. Of five plants we had the good fortune to examine, which were all in flower at the same time, the roots of which had been imported from the Cape of Good Hope in the year 1793; three were male, with five fertile tips, the pointals obsolete; and two female, without the least trace of a tip, in either blossom, or bud. As the tips frequently fall upon the expansion of the flower, in many species, the bud is the only sure situs whence to determine this character. It is increased from seed, procured from female plants only, which are much more unfrequent than the male; likewise from the roots, which, (like to those of most of the species forming this link of the Genus,) are tuberous; forming small bulbs of unequal sizes, connected to the main root by slight radicles, and at a little distance from it: which, indeed, is the reason we have not adopted the term rapaceous, or turnip rooted, although it is a character which has been applied to them by very able Botanists, yet we think unadvisedly, or from their not having had the opportunity of examining them closely; as, we presume, this term cannot with propriety be given to any root which is composed of more than one body, as are the Turnip, Carrot, Parsnip, Radish, &c. where it applies. It must be planted in light peat earth, and kept in the driest part of the green-house, where it will flower about the month of July. Our figure was taken at Clapham in June, this year, from a male plant in the Hibbertian Collection.



Geranium melananthum.



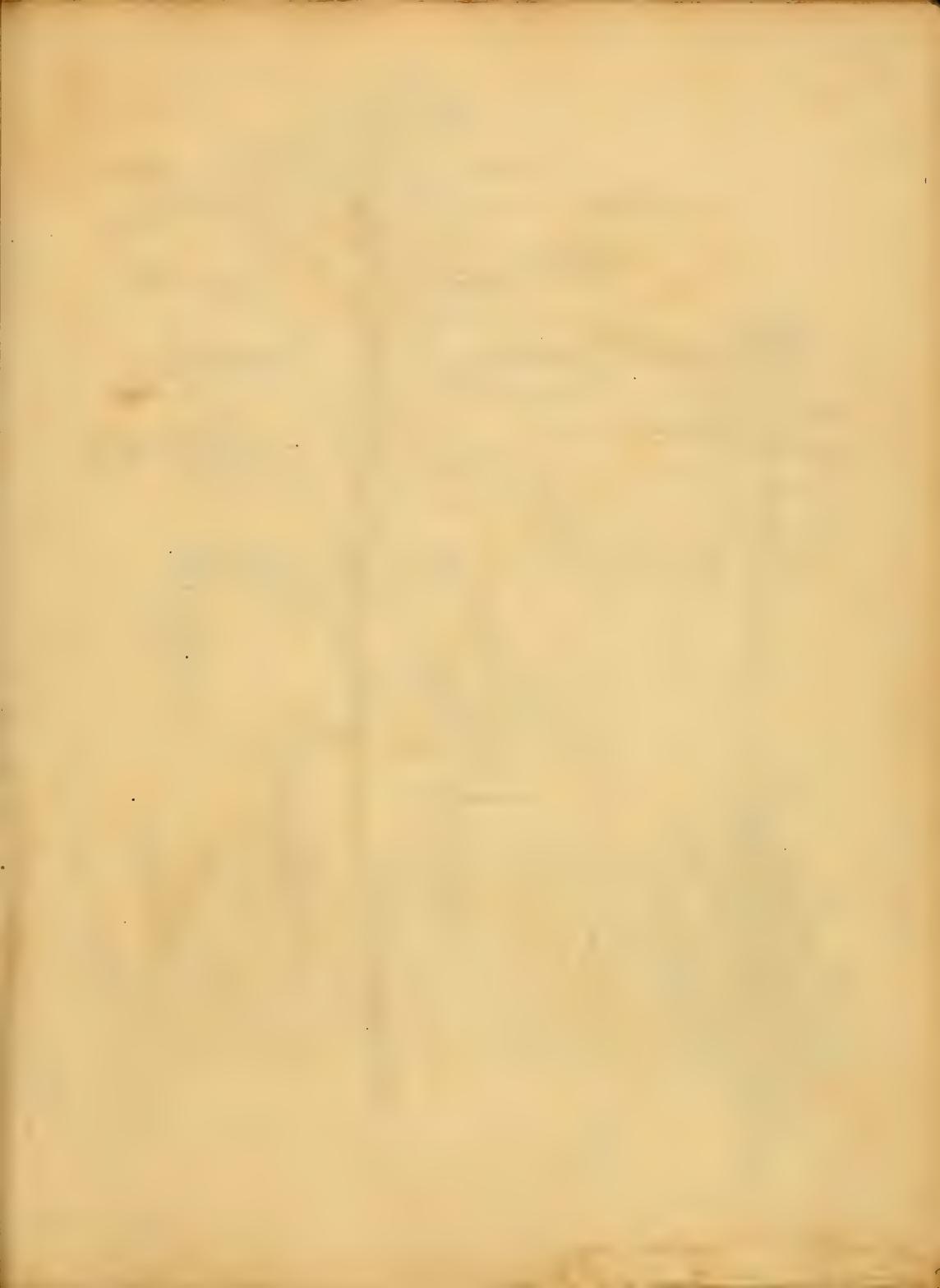


PLATE CCX.
ANTHOLYZA ÆTHIOPICA.

Broad-leaved 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 ANTHOLYZA RINGENS, Pl. XXXII. Vol. I.

SPECIFIC CHARACTER.

Antholyza foliis floribusque distichis; lacinia summa corolla recta, spathulata, basi serrata; spatulis rigidis, adpressis.

Antholyza with the leaves as well as the flowers pointing opposite ways; the upper segment of the blossom straight, spatula-shaped, and sawed at the base; sheaths harsh and pressed to the blossoms.

REFERENCE TO THE PLATE.

1. The whole plant, upon a diminished scale.
2. The Empalement.
3. A Blossom cut open, with the chives remaining.
4. The Seed-bud, Shaft, and Summits.

This very handsome Antholyza, which is seen so seldom to flower, in this kingdom, has been long an inhabitant of our gardens. So long ago as 1759, it is said to have been cultivated by Miller; and from the firm and hardy character of the root, we should question its having been since that period, ever, like many others of this natural order, lost to us. The unfrequency of its flowering has, perhaps, occasioned the inattention, which is in general shewn to its cultivation; though most collectors possess the bulbs, few have seen their flowers. Our figure was taken in the month of July, this year, from a plant in the collection of T. Evans, Esq. Stepney. It is increased from the roots, which should be removed from the pots in July, and replanted the end of October. We have not been able to procure any certain data on which to give directions to insure its flowering; but the plant in question, was planted in a very large pot, the earth was a compound of light peat one part, stiff loam one part, and old rotten dung one part. It has been thought by some, that the Antholyza we have figured in the Botanist's Repository, Plate XXXI, was the A. Æthiopica of Linnæus, &c; but, we have given it as a broad-leaved variety of the A. ringens of that author, as we have a drawing of the Narrow-leaved Var: taken from a living plant, to which, as well as to our present figure, it much affines; and, we are led to think, natural order would not be much violated, if we had treated them all as varieties of one species.



Antholyza Aethiopica

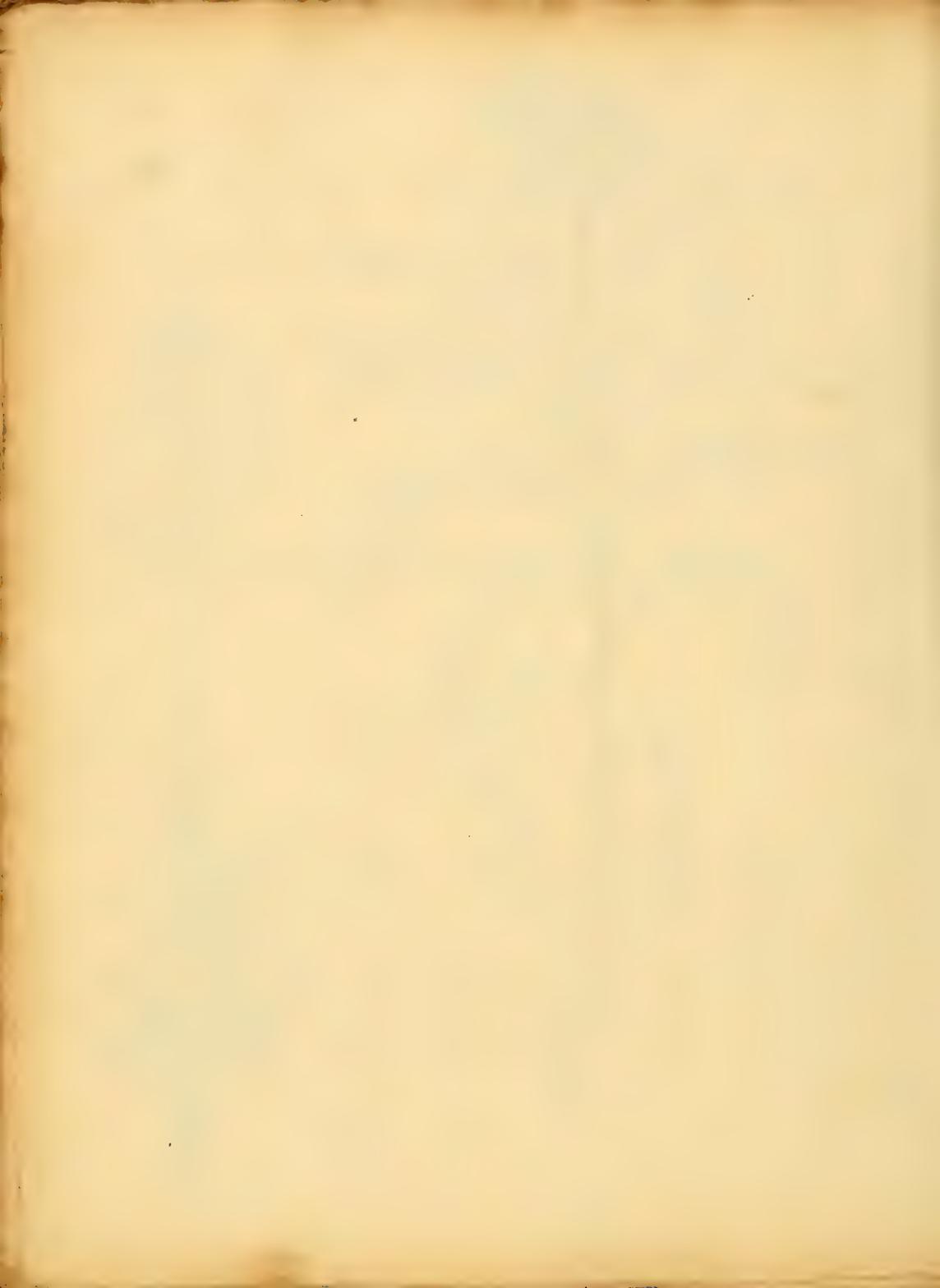




PLATE CCXI.

IXIA COLUMNARIS. *Var. versicolor.*

Columnar-leaved Ixia. Changeable-coloured var.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, equalis. Stigmata || Blossom 6-petals, spreading, equal. Summits
tria, erectiusculo-patula. || three, upright-spreading.

SPECIFIC CHARACTER.

Ixia filamentis basi cohærentibus; floribus sub- || *Ixia with threads united at the base; flowers*
capitatis; corollis varicoloribus. || *grow nearly in heads; blossoms change-*
able-coloured.

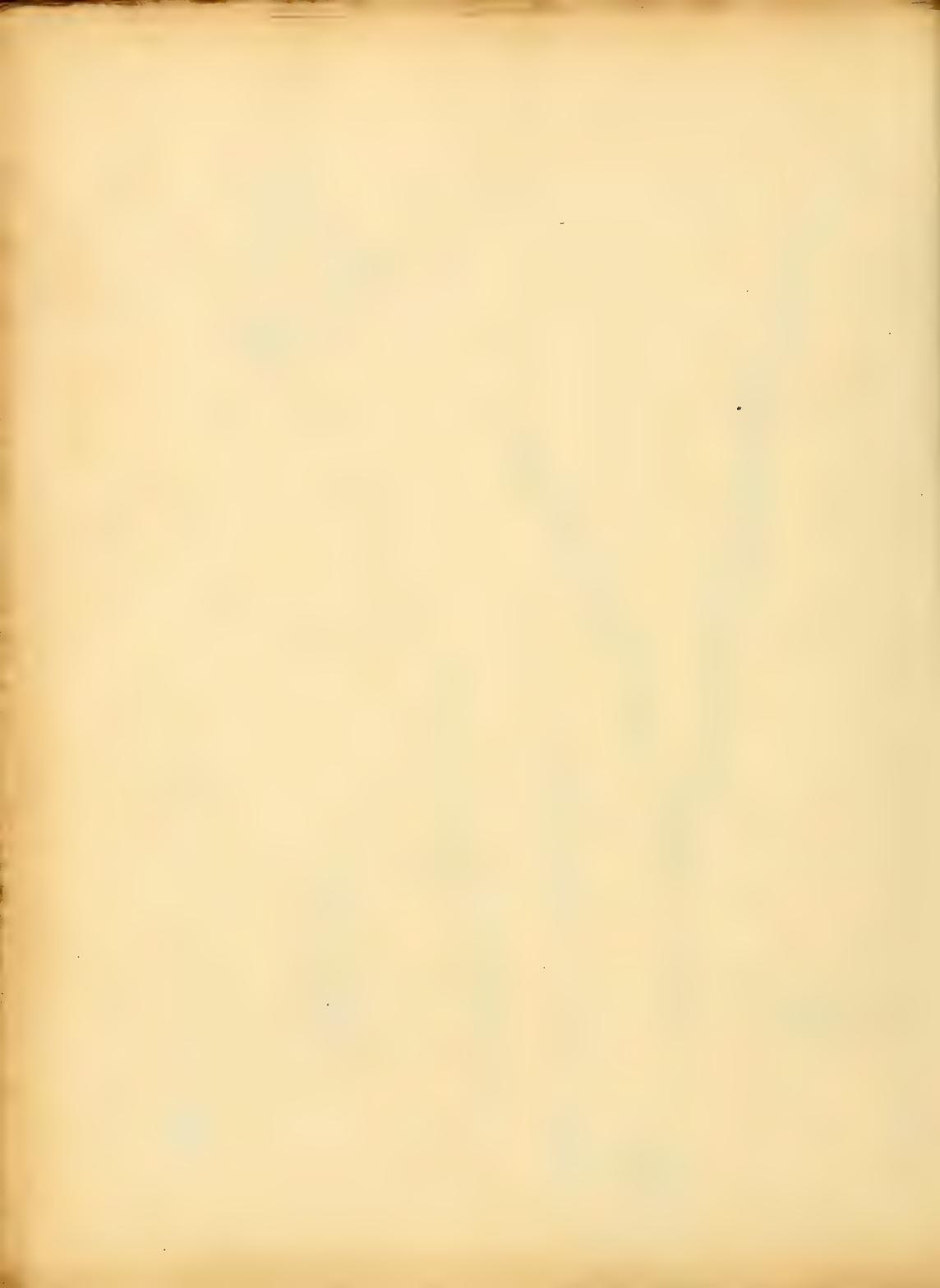
REFERENCE TO THE PLATE.

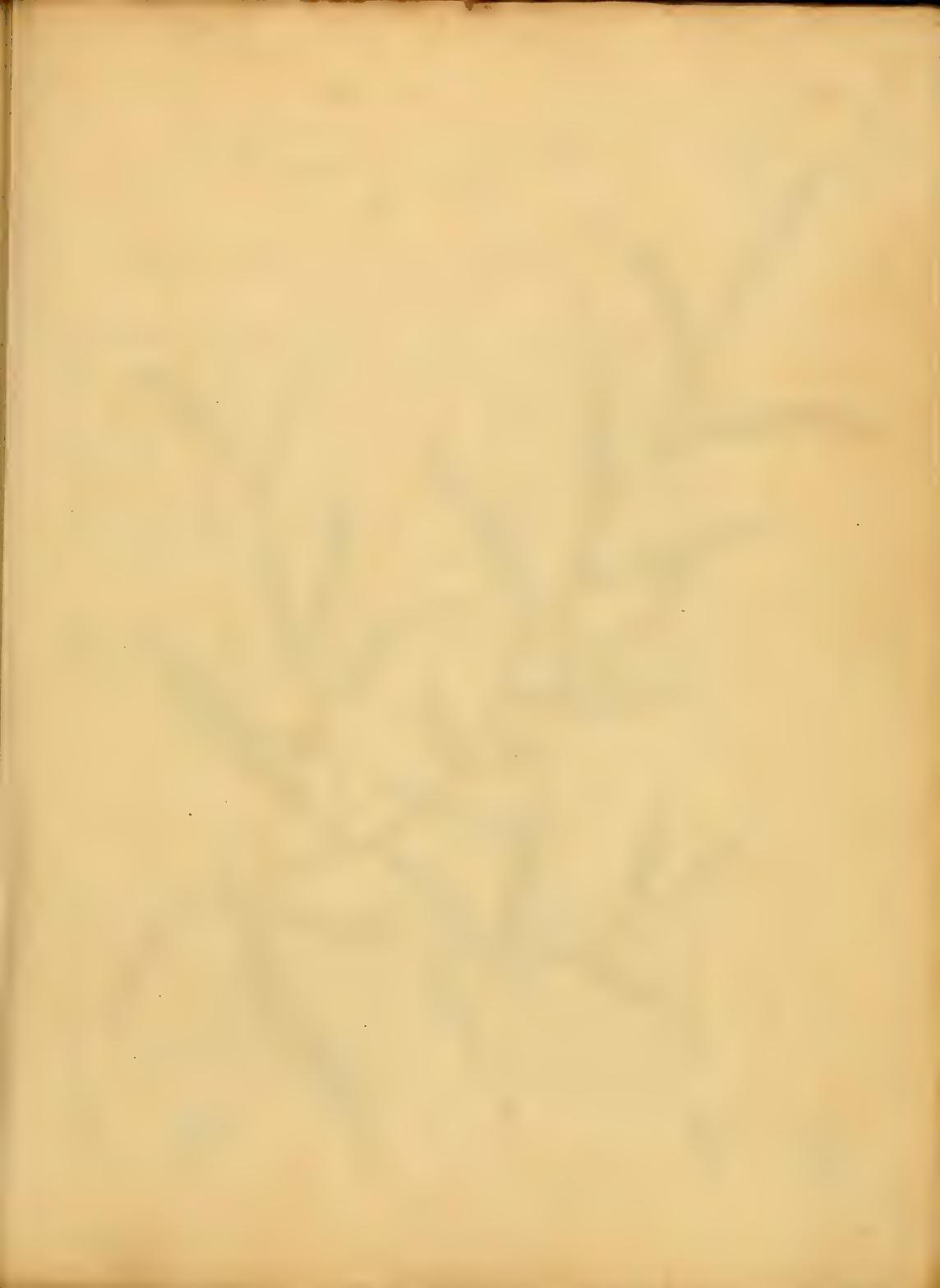
1. The Empalement.
2. A Blossom spread open.
3. The Seed-bud, with the Chives, as they stand upon the mouth of the blossom; the petals being cut off, and the summits as they appear through the tips, the whole magnified.
4. The Threads cut open, magnified.
5. The Seed-bud, Shaft, and Summits, magnified.

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



Ixia columnaris
Var. *vesicata*





POGONIA DEBILIS.

Slender-stemmed Pogonia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

<p>CALYX. Perianthium pentaphyllum persistens; foliolis lanceolatis, erectis, acutis, apicibus reflexis.</p> <p>COROLLA monopetala, infundibuliformis, tubus cylindricus, longitudine calycis, ore villis clauso; limbus femiquinquehdus, laciniis concavis, acutis.</p> <p>STAMINA. Filamenta quinque, tubo supra medium inserta. Antheræ erectæ, sagittatæ, intra faucem.</p> <p>PISTILLUM. Germen ovatum. Stylus filiformis, apice parum curvatus, longitudine tubi, persistens. Stigma concavum.</p> <p>PERICARPIMUM. Bacca ovata, compressa, calyci accreta.</p> <p>SEMEN. Nux quadrilocularis, putamine durissimo; nuclei oblongi.</p>	<p>EMPALEMENT. Cup five-leaved, permanent; leaflets lance-shaped, upright, pointed, and reflexed at the ends.</p> <p>BLOSSOM one petal, funnel-shaped, tube cylindrical, the length of the cup, the mouth closed with soft hairs; border half five-cleft; segments concave and pointed.</p> <p>CHIVES. Threads five, inserted into the tube above the middle. Tips upright, arrow-shaped, within the mouth.</p> <p>POINTAL. Seed-bud egg-shaped. Shaft thread-shaped, a little curved at the end, the length of the tube, remaining. Summit concave.</p> <p>SEED-VESSEL. An egg-shaped, flattened berry, growing to the cup.</p> <p>SEED. A four-celled nut, shell very hard; kernels oblong.</p>
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SPECIFIC CHARACTER.

<p><i>Pogonia foliis lanceolatis, apicibus sæpe ferrulatis, distichis; floribus foliariis, axillaribus, cæruleis; cortice scabroia.</i></p>	<p><i>Pogonia</i> with lance-shaped leaves, often slightly sawed at the ends, and pointing opposite ways; flowers solitary, growing from the insertion of the leaves into the stem, and blue; bark rough.</p>
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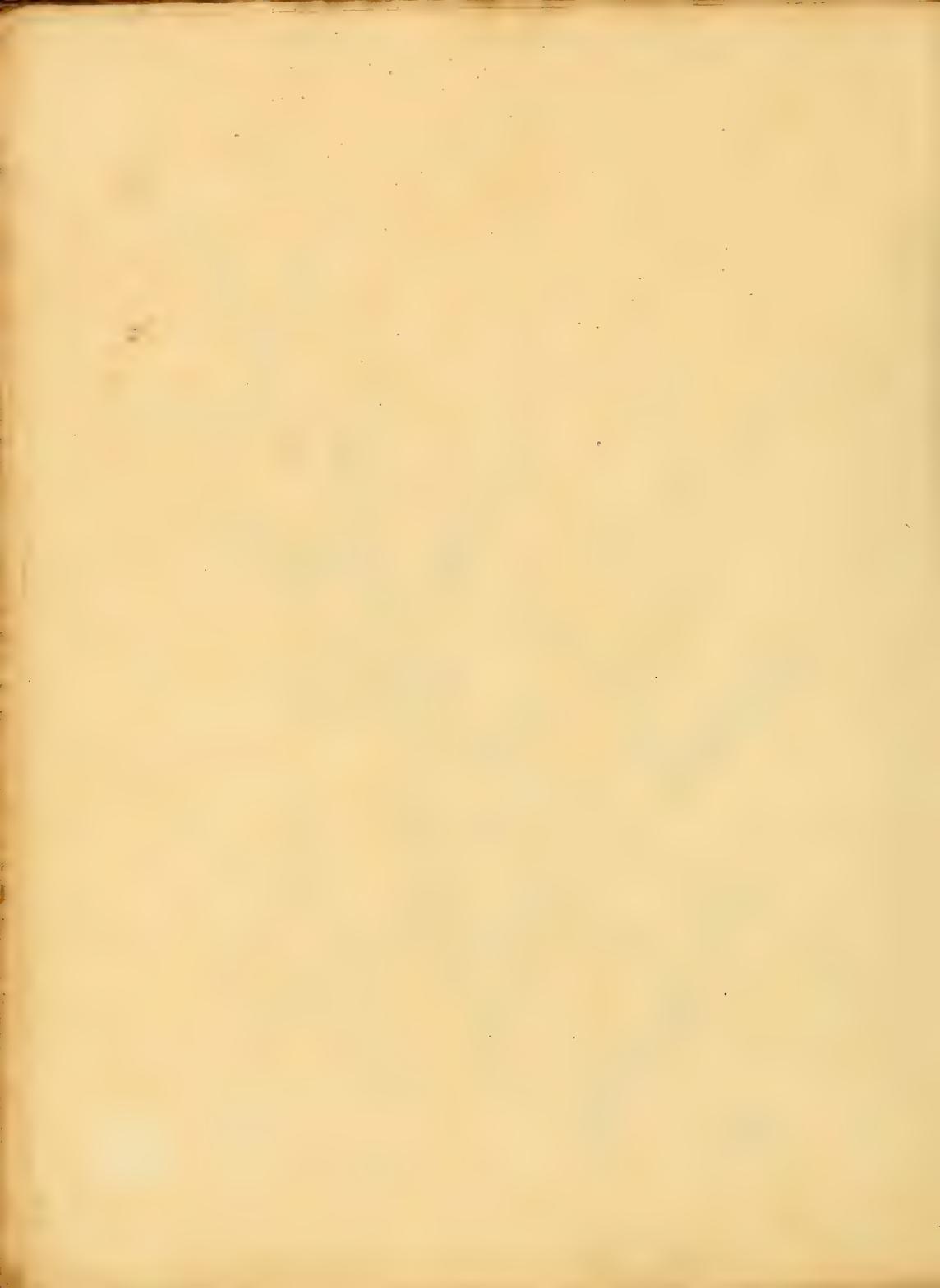
REFERENCE TO THE PLATE.

1. The Empalement.
2. A Flower cut open, with the Chives as they stand in the blossom.
3. A Chive, magnified.
4. The Pointal.
5. Summit, with part of the Shaft, magnified.
6. The Cup, with the ripe Berry, the shaft remaining, and the cup a little enlarged.
7. A Berry cut tranversely, to shew the situation of the kernels in the cells.

The *Pogonia* here figured, is the only one of the genus we at present possess; it is a native of Port Jackson, New South Wales, and was first transmitted to England, by Col. Paterfon, in the year 1793. It is a climbing plant, the branches acquiring a considerable length, the bark being covered with small tubercles, like glands, and the younger branches covered, their whole length, with blossoms. Although this is not to be reckoned amongst the handiomet of the productions of that country, yet, from the lively colour of the flowers, the profusion of them which the plant produces, and their continued succession, from April, till September, it must be considered as a valuable addition to the small number of scandent plants, as yet in our green-houses; more particularly at the present juncture, when, from fashion, a trellis has become a necessary appendage to them. It is propagated from the seeds, which ripen in this country; as well as from cuttings, which should be made in May, and kept in the heat of a cucumber-frame, or hot-house, till they are rooted. It is grown best in sandy peat. Our figure was taken at the Hammermith Nurseries, where it was first raised in this kingdom. The name, *Pogonia*, is derived from the appearance of the mouth of the flower which is bearded; Πωγωνιον, *Pogonion*, signifying a little beard.



Paonia delilis



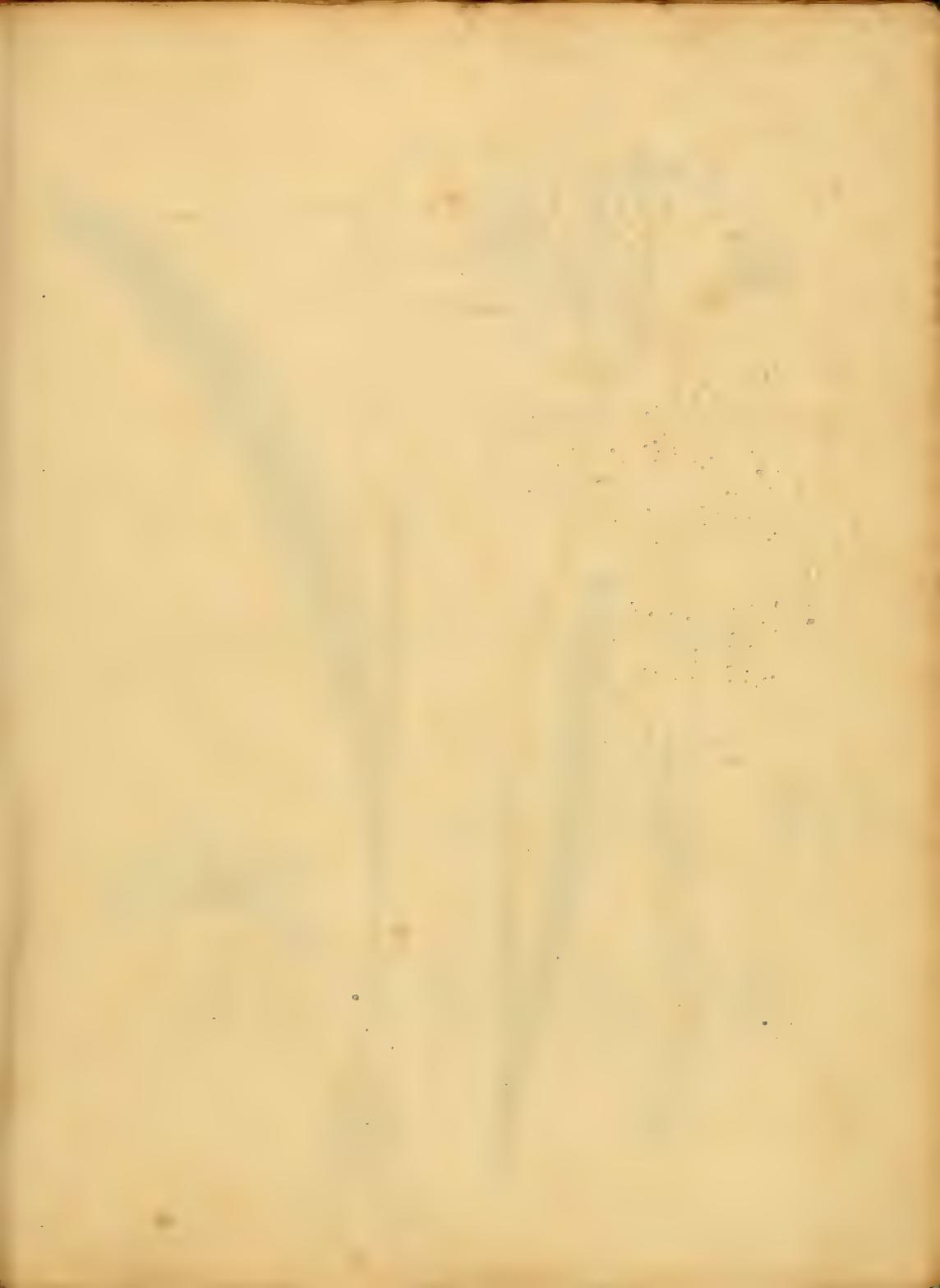


PLATE CCXIII.

IXIA COLUMNARIS. *Var. latifolia.*

Columnar-chived Ixia. *Broad-leaved var.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, equalis. Stigmata || Blossom 6-petals, spreading, equal. Summits
tria, erectiusculo-patula. || three, upright-spreading.

SPECIFIC CHARACTER.

Ixia filamentis basi coherentibus; floribus sub- || *Ixia* with threads cohering at the base; flowers
capitatis; corollis pallide caeruleis; foliis la- || grow nearly in heads; blossoms pale-blue;
tioribus, falcatis. || leaves broader, scimitar shaped.

REFERENCE TO THE PLATE.

1. The Enpalement.
2. A Blossom cut open, with the chives remaining attached.
3. The Tube of a blossom, with the chives, the petals cut off.
4. The same, cut open and magnified.
5. The Seed-bud, Shaft, and Summits; the summits detached and magnified.

THE variety here given, was introduced to England, with the changeable-flowered variety, in 1799, from Holland. It is the strongest marked variety of the six we possess; it flowers in May. The petals of this variety are remarkably thick at the insertion into the tube, and have a soft, beautiful brown on the outside, when the flower is closed, which still is never so fully so, but a small margin of the blue appears; which gives them a most beautiful appearance in that state. No particular regime is necessary to this plant, more than what is necessary to all the common species.



Iris columbiana
var. *latifolia*

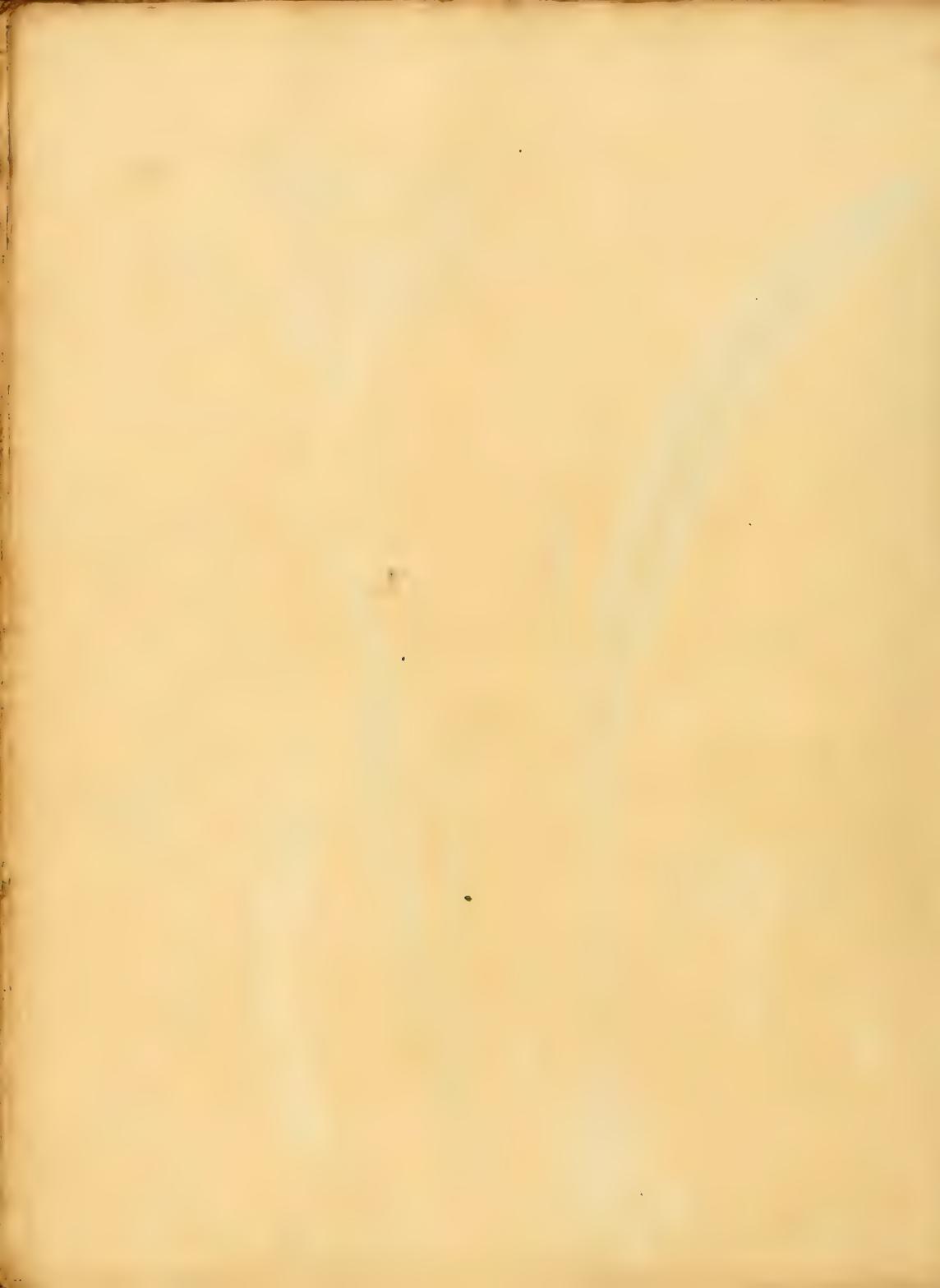




PLATE CCXIV.
WESTERINGIA ROSMARINACEA.

Rosemary-like Westeringia.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, sub-cylindricum, erectum, persistens, quinquedentatum, æquale; bracteis binis suffultum.

COROLLA monopetala; petalum tubulatum calyce paulo longius; limbus patens, quinquepartitus, sub æqualis; laciniis duabus superioribus emarginatis.

STAMINA. Filamenta quatuor, filiformia, fauci tubi inserta, quorum duo superiora longiora, fertilia; duo breviora sterilia. Antheræ loculis oblongis, duæ superiores dependentes; duæ inferiores erectæ, sagittatæ, squamiformes.

PISTILLUM. Germen tetragonum. Stylus filiformis, parum curvatus, longitudine tubi. Stigma bifidum, reflexum.

PERICARPIUM nullum. Calyx in fundo semina continens.

SEMINA quatuor, ovalia.

EMPALEMENT. Cup one-leaf, nearly cylindrical, upright, remaining, five-toothed, equal; supported by two leaflets.

BLOSSOM one petal; petal tubular, rather longer than the cup; border spreading, five-divided, nearly equal; the two upper segments notched at the end.

CHIVES. Four threads, thread-shaped, inserted into the mouth of the tube, of which the two upper ones are longer, and fertile; two shorter, and sterile. Tips with oblong cells, the two upper ones hang down; the two lower are upright, arrow-shaped, and like thin scales.

POINTAL. Seed-bud four-sided. Shaft thread-shaped, a little curved, the length of the tube. Summit two-cleft, reflexed.

SEED-VESSEL none. Cup containing the seeds at the bottom.

SEEDS four, oval.

SPECIFIC CHARACTER.

Westeringia foliis verticillatis, sub-linearibus, acutis, subtus sericeis; floribus axillaribus, spicatis.

Westeringia with leaves growing in whorls, nearly linear, pointed and silky underneath; flowers grow from the base of the leaves close to the stem, in spikes.

REFERENCE TO THE PLATE.

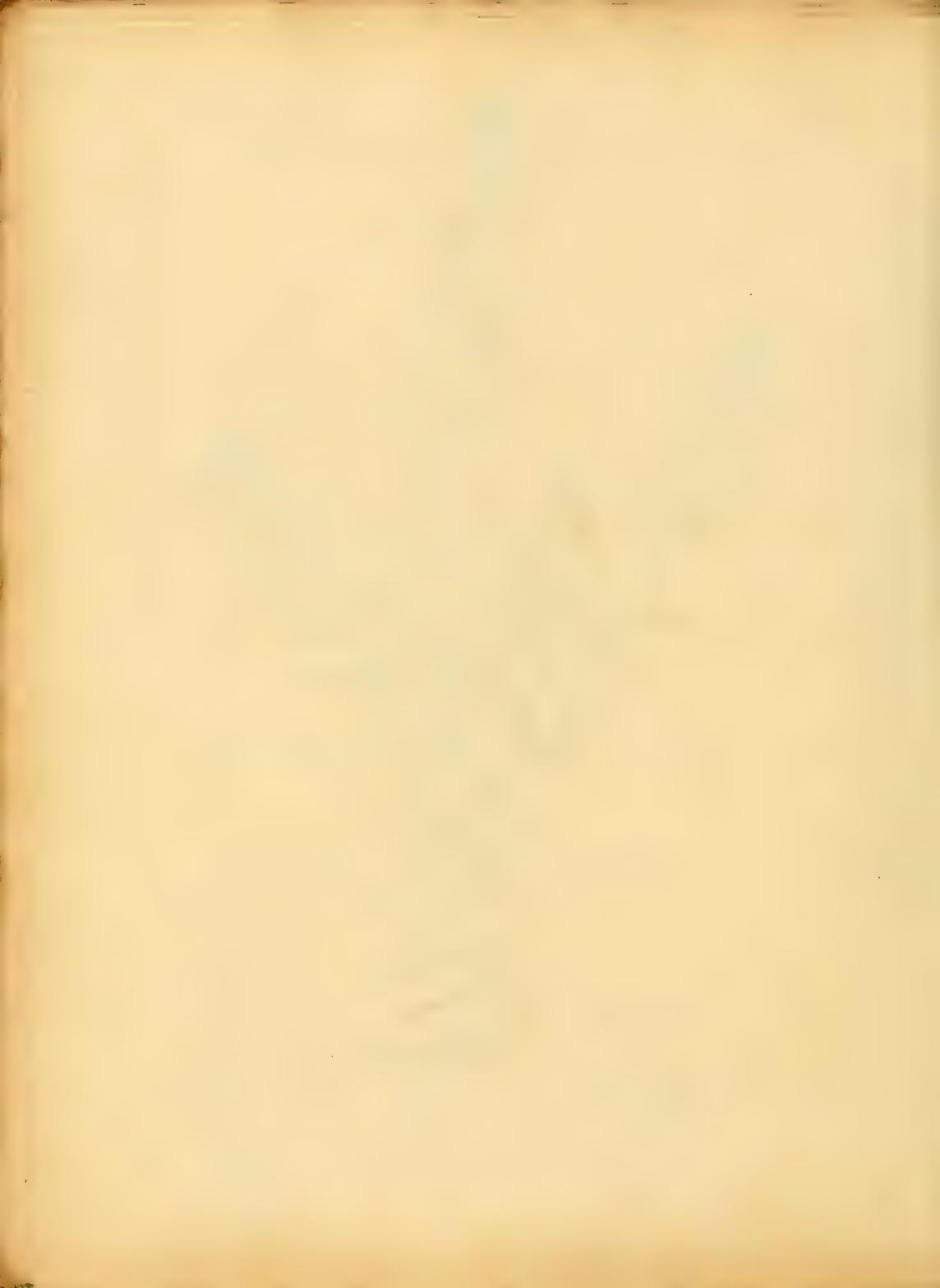
1. The Empalement, with the two props attached to the base.
2. A Flower spread open, with the chives in their place, magnified.
3. The Pointal, natural size.
4. The same magnified.

The present plant was introduced to our gardens, in the year 1791, from New South Wales, by Mess. Lee and Kennedy, Hammersmith. It was first named *Cunila verticillata*, and, from what we can judge, it might, without much forcing of the characters of the genus, have been so continued; but our opinions shall always give way, when the decision is past from such superior talents as those of Dr. Smith; by whom it has been thought to possess a sufficiency of distinctive character, on which to form a new genus, under the title it here bears. It is a bushy shrub, grows to the height of three feet, the branches standing out almost horizontally, in whorls, and the whole plant bearing a great resemblance to the Rosemary. It is propagated by cuttings made in March from the end of the small branches; approves most of light sandy peat, and is in flower from March till November. The whole plant is scentless.



Westringia rosmarinacea

Westringia rosmarinacea



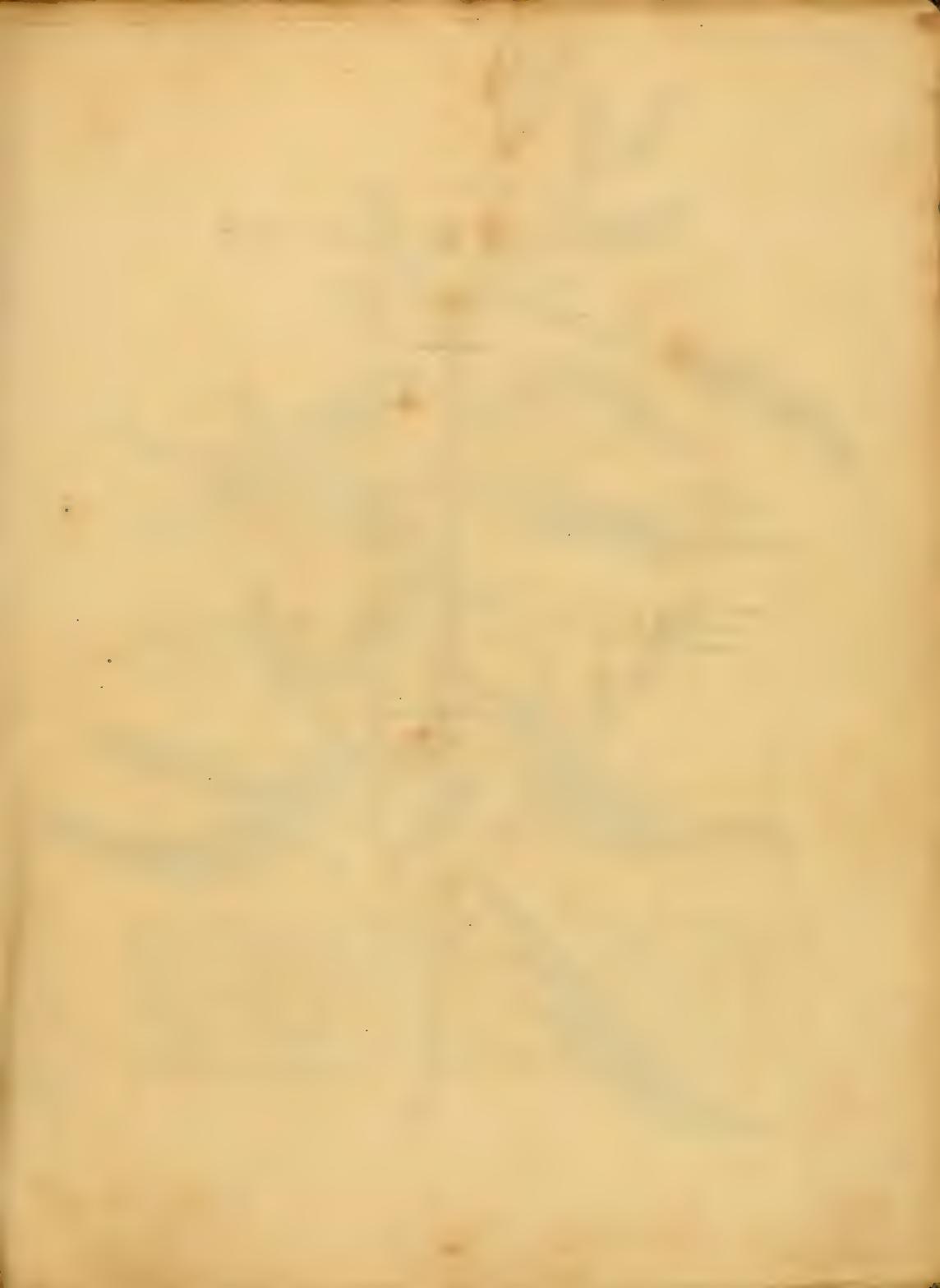


PLATE CCXV.
EMBOTHRIUM SALIGNUM.

Willow-like Embothrium.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Cor. tetrapetala. Stamina limbo petalorum inferta. Folliculus polyspermus. Sem. alata.		Empalement none. Bloss. four-petalled. Chives inferred into the limb of the petals. One- celled-pod, many seeded. Seeds winged. See EMBOTHRIUM SERICEUM, Pl. C. Vol. II.
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SPECIFIC CHARACTER.

Embothrium foliis lanceolatis, uninervis, utrinque glaberrimis; umbellulis axillaribus; corollis subalbidis.		Embothrium with lance-shaped leaves, one nerved, very smooth on both sides; the small umbels of flowers grow from the infertion of the leaves into the stem; blossoms whitish.
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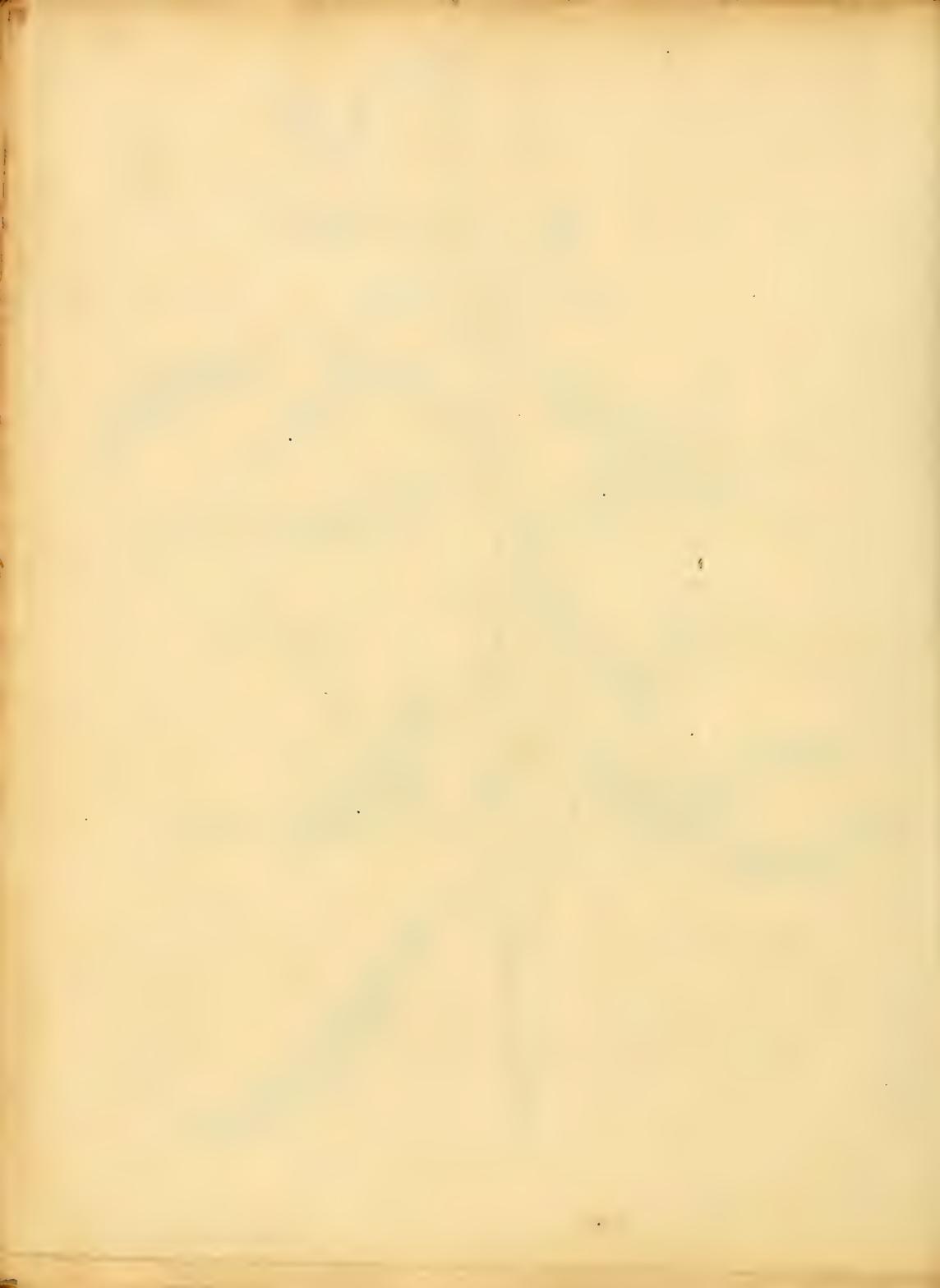
REFERENCE TO THE PLATE.

1. A flower complete, with the summit relieved from the petals, magnified.
2. The same with the summit yet restrained by the petals.
3. One petal with the tip, magnified.
4. The Seed-bud, Shaft, and Summit, magnified.

THIS Genus, if we may judge from what we already possess, amounting to 6 species, promises to furnish an ample feast for Botanists; for we have no doubt, but the species are as numerous as of any one from New Holland. The Willow-like Embothrium makes a very handsome bushy green-house plant; the leaves are not subject to damp, and the stem acquires the height of 5 or 6 feet. It flowers about May, and from the manner in which the leaves rather fall downwards, from their infertion, leaving the bunches of flowers fully exposed, at their base, it has a very picturesque appearance, as the whole plant is sometimes covered with blossoms. It thrives best in sandy peat earth, and is increased by cuttings, made about March, or April, and placed in the heat of the Hot-house, or a cucumber frame. Our figure was taken at the HammerSmith Nursery; where, it was first raised from seeds, in the year 1791.



Embothrium salignum



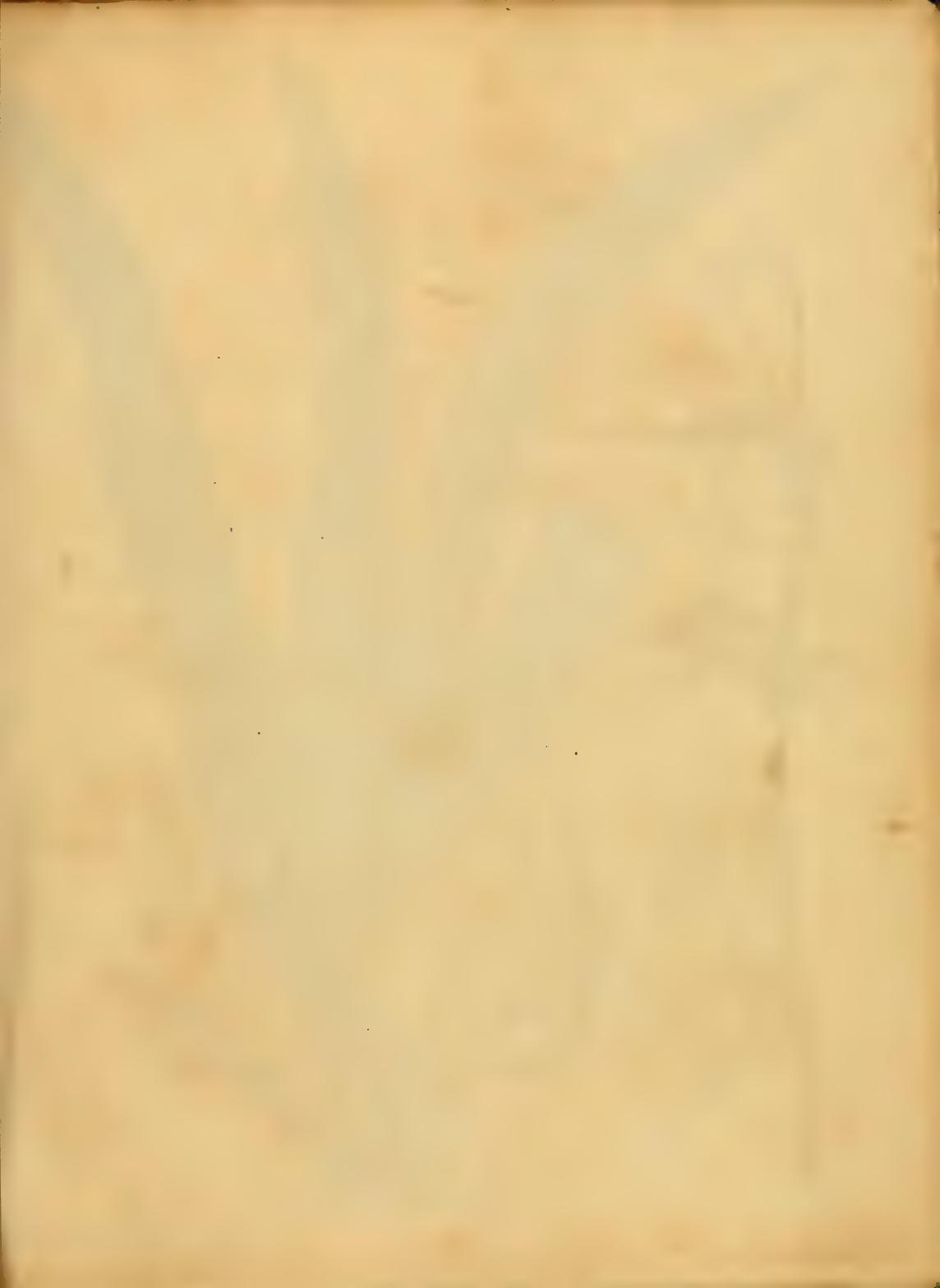


PLATE CCXVI.
EPIDENDRUM SINENSE.

Chinese Epidendrum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

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

SPECIFIC CHARACTER.

Epidendrum foliis ensiformibus, nervosis, radicalibus; nectario revolutato, punctato; petalis striatis. || Epidendrum with sword-shaped leaves, nerved, and growing from the root; honey-cup rolled back, and dotted; petals striped.

REFERENCE TO THE PLATE.

1. A flower, one of the petals and the honey-cup cut off; to shew the situation, and place of the parts of fructification.
2. The Honey-cup.
3. The Seed-bud, Shaft, Summit, and Chives; the final hood which covers the Chives, lifted up.

THIS long genus of plants, so little known hitherto, but in our books, bids fair to become one of the greatest ornaments of our hot-houses; 20 species we already enumerate, in the different collections in the vicinity of London; one of which, the present plant, has not flowered in this kingdom, till this year, although introduced, so long ago as 1793, by the late J. Slater, Esq. of Layton-stone; at the same time with the two varieties of the Double Camellia, from China. Our figure was taken in September 1801, from a plant which had been placed in the spring of the same year, in the Conservatory built on purpose for the protection of Chinese plants, and where they flourish to a degree, not seen before in this country, in the garden of G. Hibbert Esq. Clapham common. It is propagated by offsets, from the root; is rather a hardy hot-house plant; and thrives most in a mixture of sandy loam, and peat; about one fourth of the loam, and three fourths peat, or leaf-mould.

Upon the first observation of this plant, we were inclined to think it the species designed by Thunberg in his *Icon. Plant. Japon.* 28, under the Genus *Limodorum*; and afterwards, altered by him, in the *Linnæan Transf.* Vol. ii. p. 327, to *Epidendrum striatum*. But upon close examination of it, as answering his descriptions, &c. we cannot but think it, if not a different species, at least a very strong variety of his plant; wherefore, we have retained the name it is in common known by, in the various collections in which we have seen it. If we were to decide on the subject, it should be to place both that and this plant again to *Limodorum*; to which, they hold greater affinity than to *Epidendrum*; but indeed, we have an opinion, that one title might readily serve for the plants constituting both genera.



Epidendrum sinensis



Vol. IV.

of the
Botanists Repository

Comprising

Colour'd Engravings

of

New and Rare Plants

ONLY

With Botanical Descriptions

in

Latin and English.

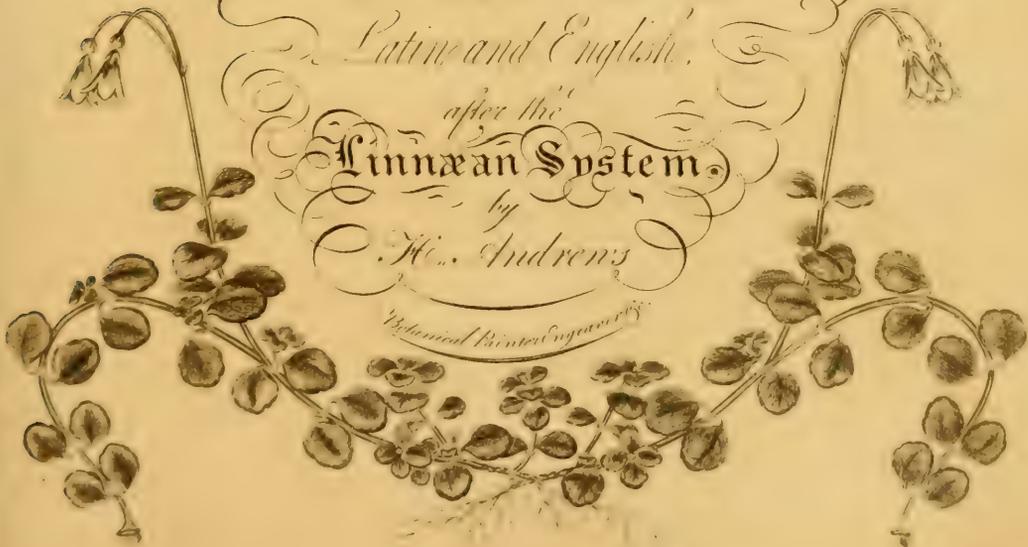
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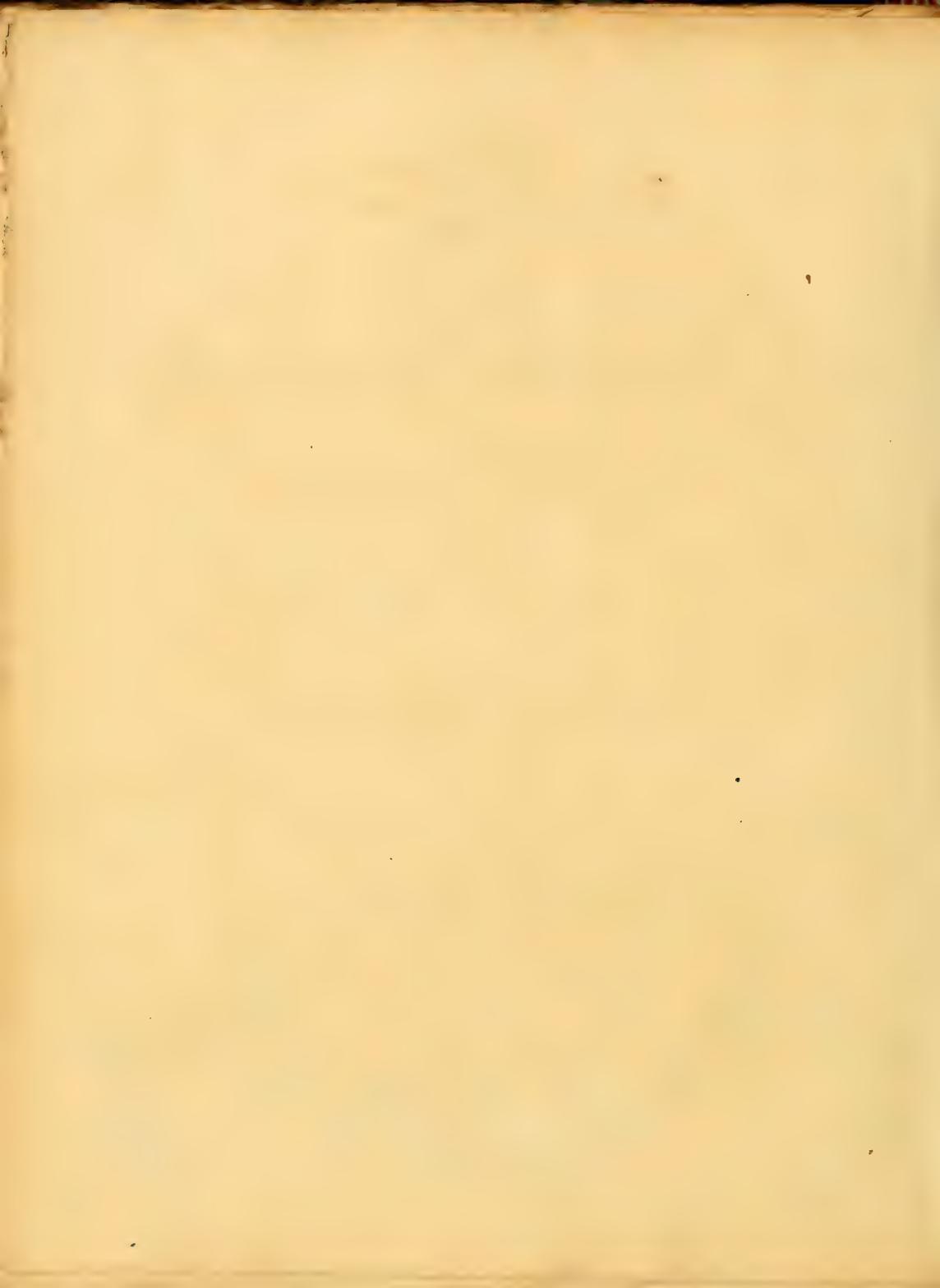
Linnaean System.

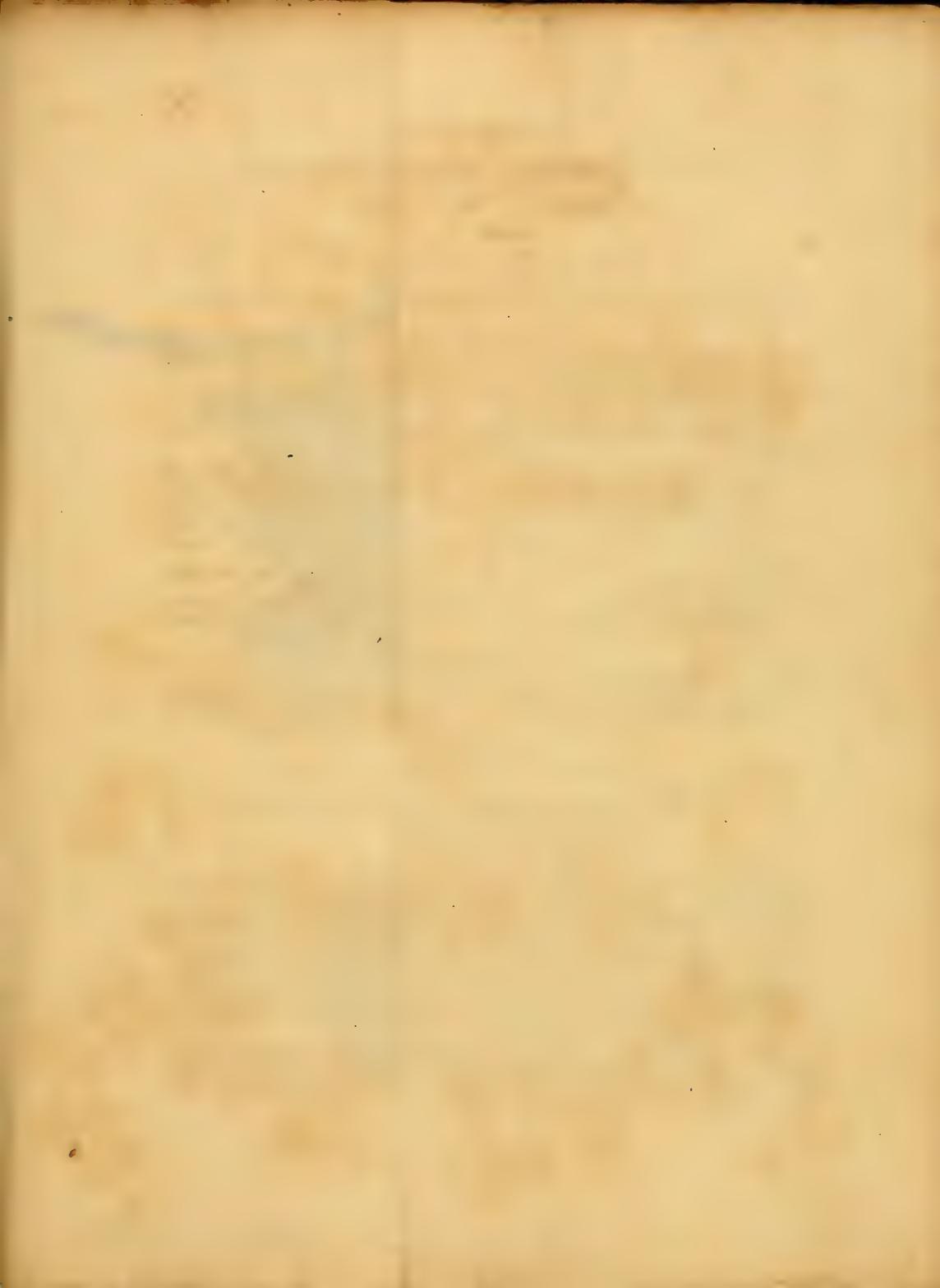
by

Wm. Andrews

Botanical Printer, Englewood







X
 PLATE CCVII.
 PASSIFLORA MALIFORMIS.

Apple-fruited Passion-Flower.

CLASS XX. ORDER IV.

GYNANDRIA PENTANDRIA. Chives on the Pointal. Five Chives.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum, planum, coloratum, petalis conforme.
COROLLA. Petala quinque, semi-lanceolata, plana, obtusa, magnitudine et figura calycis. *Nectarium* corona triplex; exterior longior, intra petala stylium cingens, superne magis coarctata.
STAMINA. Filamenta quinque, subulata, ad basin germinis columnæ annexa, patentia. Antheræ incumbentes, oblongæ, obtusæ.
PISTILLUM. Germen subrotundum, apici columnæ cylindraceæ, rectæ infidens. Stylis tres, superne crassiores, patuli. Stigmata capitata.
PERICARPIMUM. Bacca carnosâ, subovata, unilocularis, pedicellata.
SEMINA plurima, ovata, arillata.
Receptaculum seminum triplex, cortici pericarpium longitudinaliter adnatum.

EMPALEMENT. Cup five-parted, flat, coloured, like the petals.
BLOSSOM. Petals five, half lance-shaped, flat, blunt, of the size and shape of the cup. *Honey-cup*, a triple crown; the outer longer, encircling the shaft within the petals, more contracted above.
CHIVES. Five threads, awl-shaped, fixed to the base of the column of the seed-bud, spreading. Tips fixed by their backs, oblong, obtuse.
POINTAL. Seed-bud roundish, falling into the end of a cylindrical, upright column. Three shafts, thicker above, spreading. Summits leaved.
SEED-VESSEL. A fleshy berry, nearly egg-shaped, one-celled, pedicelled.
SEEDS many, egg-shaped, covered by a seed-coat. *Receptacle* of the seeds triple, fixed longitudinally to the rind of the berry.

SPECIFIC CHARACTER.

Passiflora foliis indivisis, cordato-oblongis, integerrimis; petiolis biglandulosis; involucri triphylo, flore majore; fructu maliformi.

Passion-Flower with undivided leaves, heart-shaped-oblong, quite entire; foot-stalks with two glands, hence three-leaved, larger than the flower; fruit like an apple.

REFERENCE TO THE PLATE.

1. A ripe fruit.
2. A Flower cut perpendicularly through the middle, to shew its interior structure, with the parts of fructification complete.

This species of Passion-Flower is said to be a sojourner with us since the year 1731, and to have been then cultivated by Miller. It is likewise said to be a native of Dominica, but it is found in all the West India islands. It rarely flowers in this climate; and we should not now have been able to gratify our friends with this figure, but for the particular ingenuity, in the treatment of hot house plants, by Mr. Anderson, superintendent of the rich collection of plants in the gardens of J. Vere, Esq. Kensington Gore, who by a long experience in cultivation, added to a particular love for the profession, has placed his knowledge in the treatment of exotics, in particular, much beyond most cultivators of the present day. Our figure was taken from a plant which continued in flower from July till November; it was planted in a border of rich earth, close to the tan-pit, and trailed along the front rafter of the house; the only method, we presume, by which it can be induced to flower, as we have never seen it elsewhere. It is propagated with ease by cuttings.

Much contention has arisen among Botanists, since the days of Linnæus, where to place this tribe of plants. Swartz placed it to Monadelphia, who is lately followed by Willdenow. Schreber, Thunberg, &c. have thrown it to Pentandria. But our antiquated notions of the capability of that great man, in classifying to his own system, those plants which came under his actual review, has occasioned our retaining it, under its old class, just as he left it.

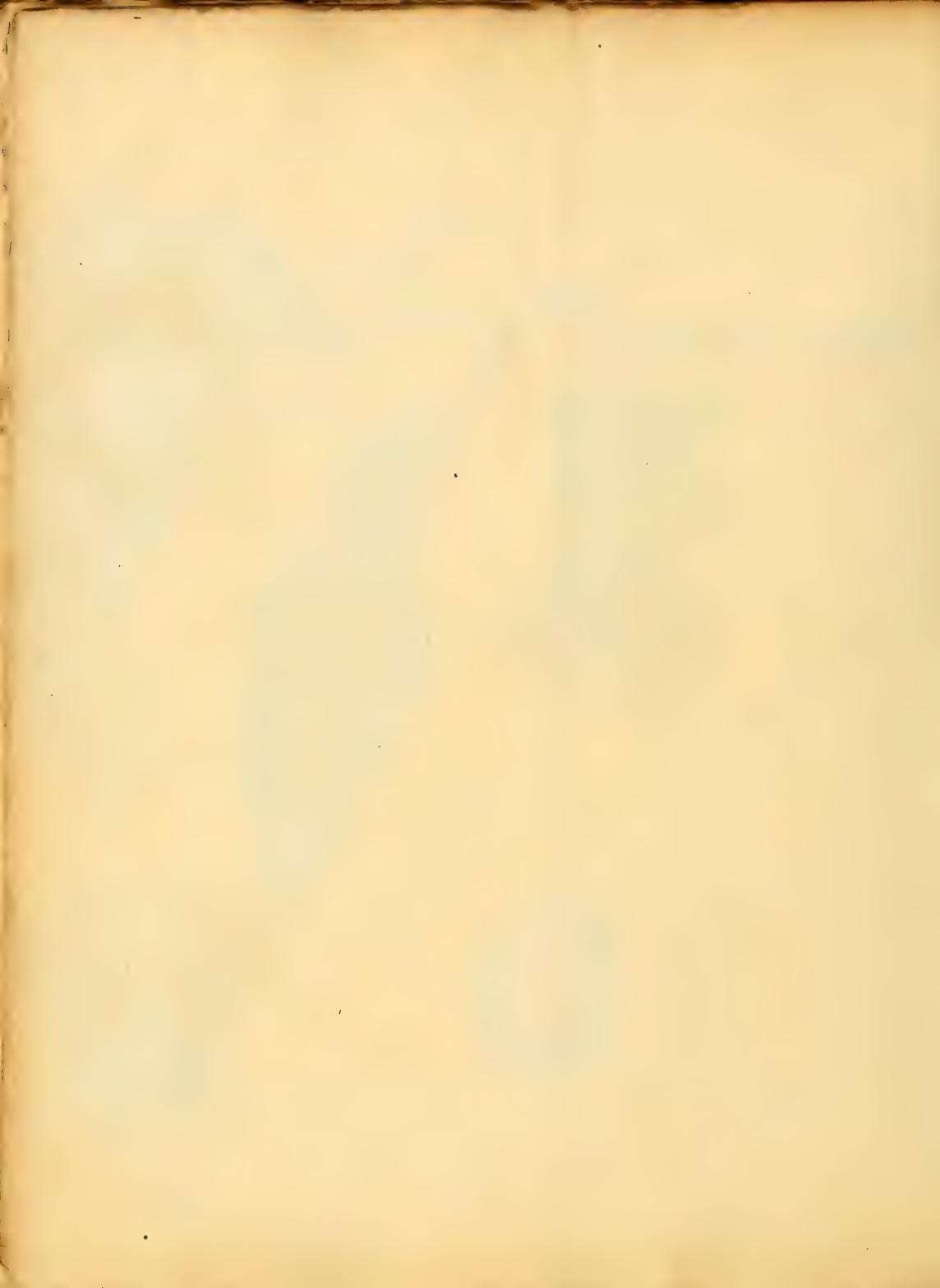


Papilionera volubilis

1777



Passiflora maliformis



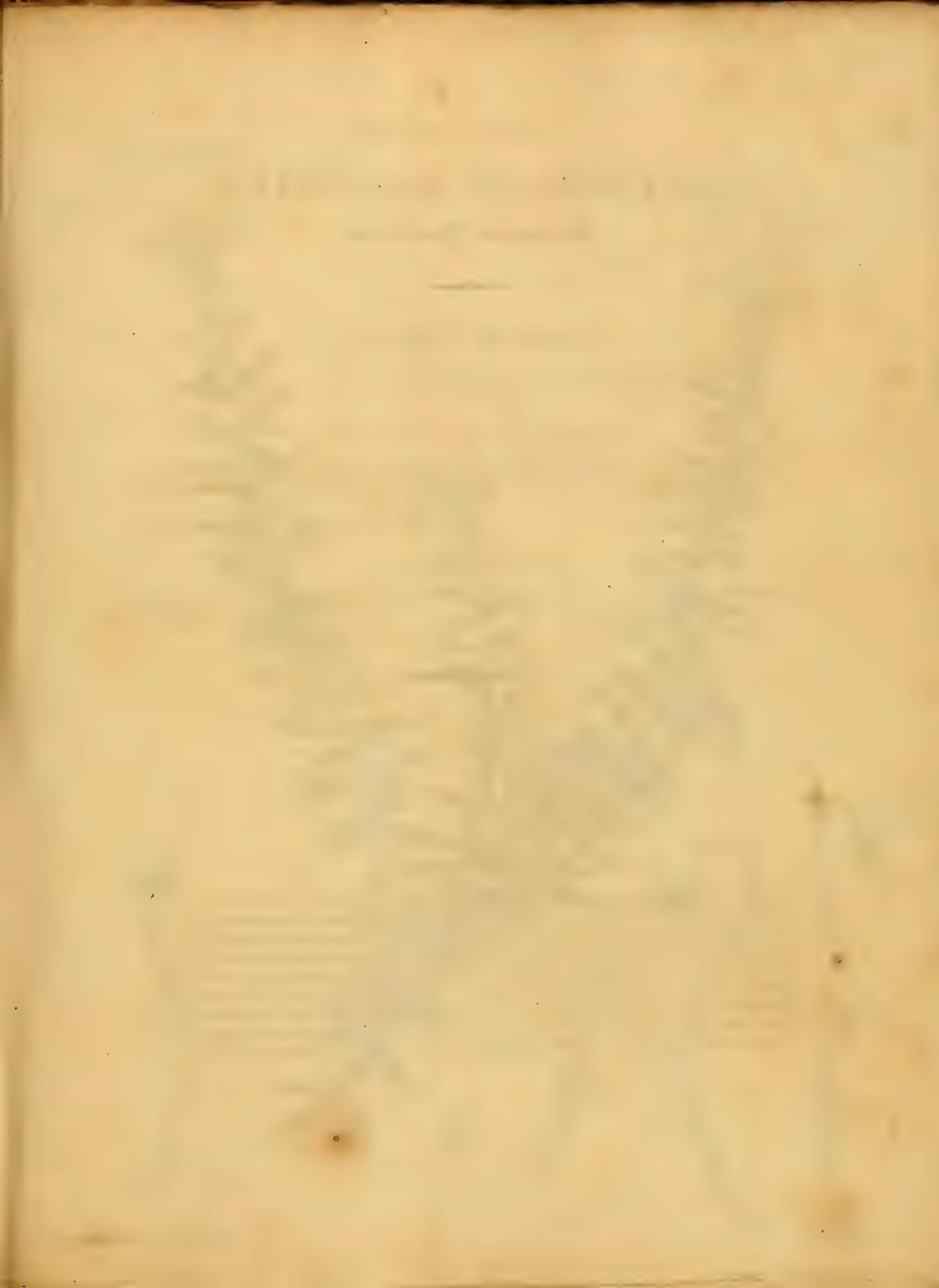


PLATE CCXVIII.

EMBOTHRIUM BUXIFOLIUM.

Box-leaved Embothrium.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA tetrapetala. Stamina limbo inferta.
Folliculus polyspermus. Semina alata.

BLOSSOM four-petals. Chives inferted into the
limbs. One-celled pod, many feeded. Seeds
winged.

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

SPECIFIC CHARACTER.

Embothrium foliis ellipticis, integerrimis, margi-
ne revolutis, pubescentibus; umbellis
terminalibus; folliculo villoso.

Embothrium with elliptical, entire leaves, rolled
back at the edge, and downy; umbels ter-
minal; feed-pod hairy.

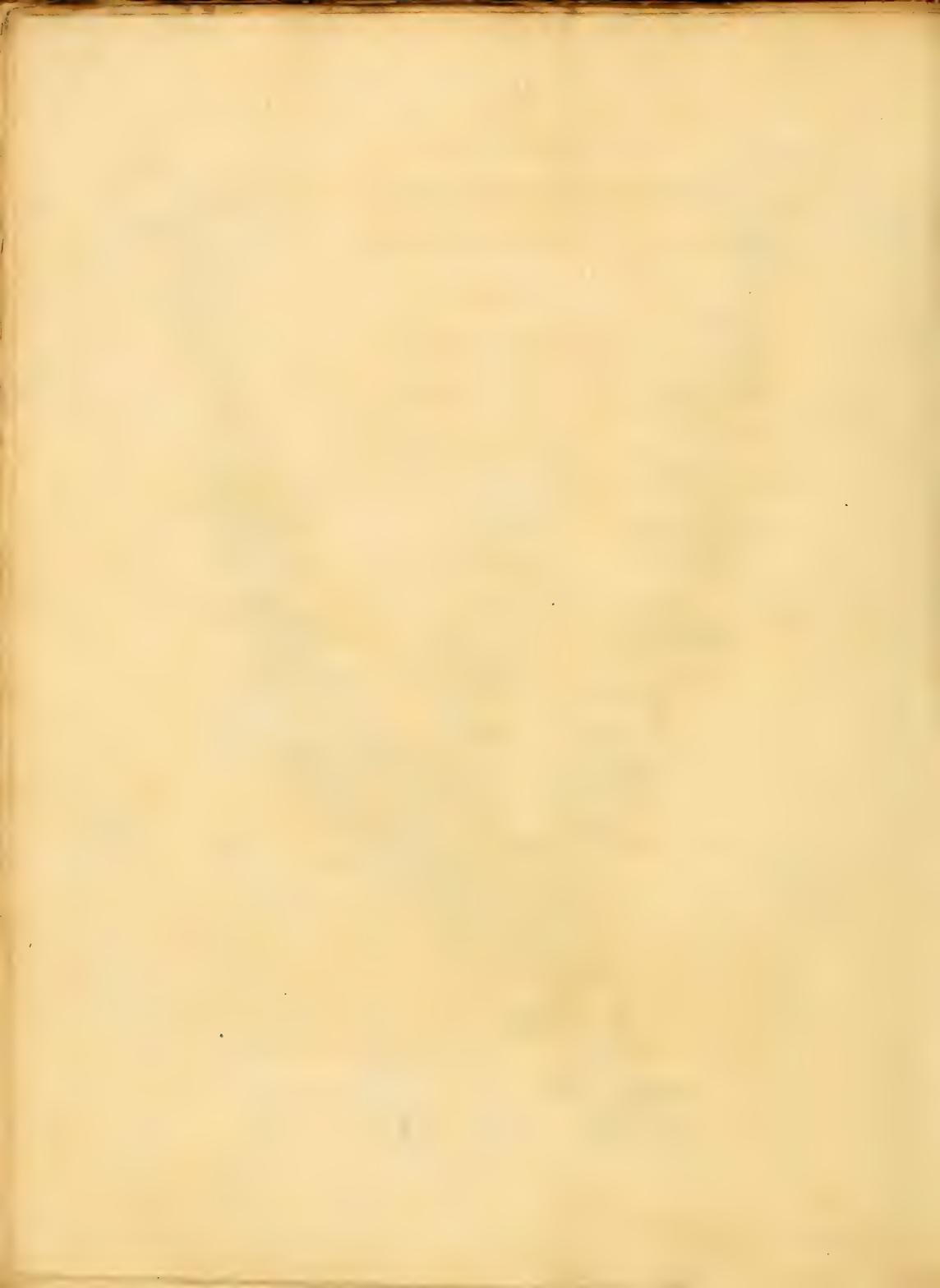
REFERENCE TO THE PLATE.

1. A Flower, magnified, the petals yet attached to each other.
2. The same, the petals difengaged.
3. The Pointal, magnified.
4. A Seed-vesfel, natural size.
5. A ripe Seed, natural size.

THIS we believe is amongst the most rare of the plants, hitherto introduced, from New Holland. It has been figured in the third Number of New Holland Botany, published by Dr. Smith in 1793: it is there said not to have been, at that time, in England; but, as it had not then flowered, the plant was not known, although in the collection of Messrs. Lee and Kennedy, three years precedent to that publication; and where, it first flowered in 1795. Our figure was taken in September 1789 from a plant (we fear the only one at present in this kingdom) in the Hibbertian collection. It has not yet been propagated with us, and the feeds do not mature. The plant is nearly four feet high, and forms a handsome, bushy shrub, continuing in flower nearly the whole summer. Over the whole plant there is a brown, or rusty-like appearance, which takes much from its beauty. It flourishes in peat earth.



Embolium laxifolium



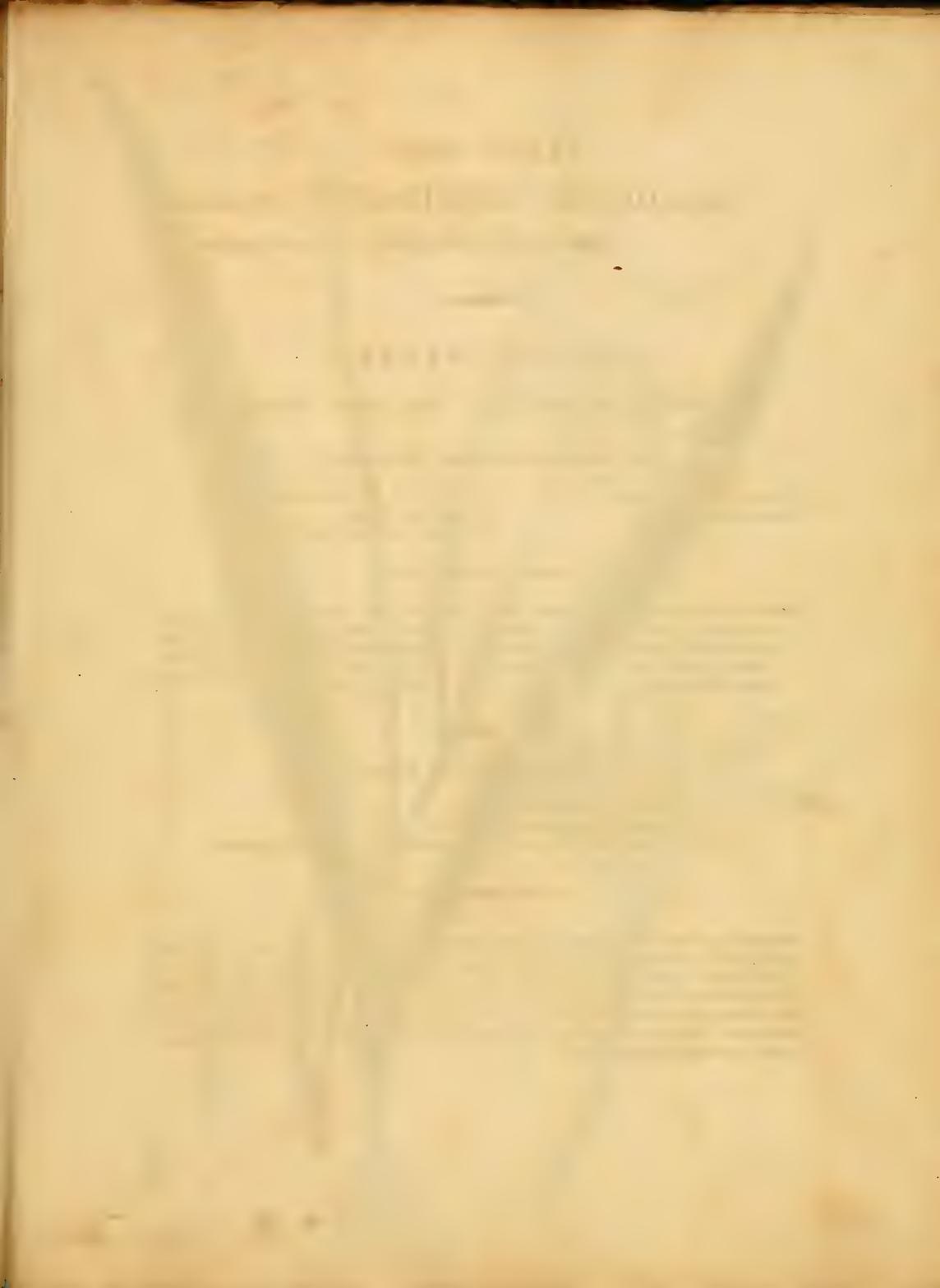


PLATE CCXIX.

GLADIOLUS CUSPIDATUS. *Var. petalis crispis.*

Spear-spotted Gladiolus. *Var. with crisped petals.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sex-partita, ringens.
STAMINA adscendentia.

|| Blossom six divisions, gaping.
|| CHIVES ascending.

See GLADIOLUS ROSEUS, Plate XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis lineari-ensiformibus, glabris; corolla ringente; laciniis longissimis, acuminatis, crispatis, subæqualibus, tribus inferioribus in medio macula oblonga notatis; corollis albicantibus.

|| Gladiolus with linear-sword-shaped smooth leaves; blossom gaping, segments very long, tapered to the point, crisped and nearly equal, the three lower ones in the middle have an oblong spot; blossoms whitish.

REFERENCE TO THE PLATE.

1. The two valves of the Empalement.
2. The Blossom cut open, with the chives.
3. The Seed-bud, Shaft and Summit, one division of the summit magnified.

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



Gladiolus cuspidatus var. *petalis cuspidatus*



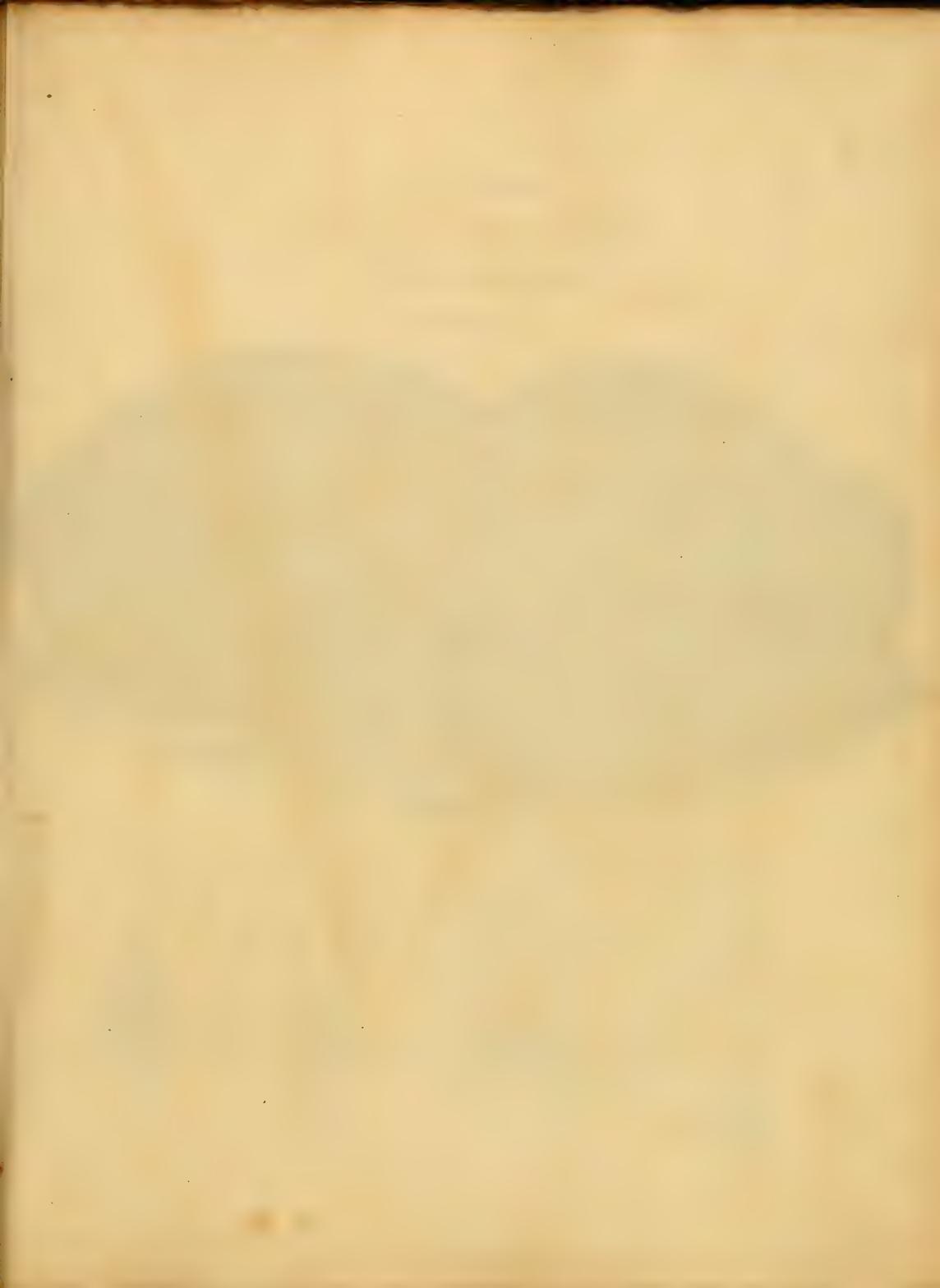


PLATE CCXX.

MASSONIA SCABRA.

Rough-leaved Massonia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA infera, limbo 6-partito. Filamenta collo tubi imposta. Capsula 3-alata, 3-locularis, polysperma.		BLOSSOM beneath, border 6-divided. placed on the neck of the tube. 3-winged, 3 celled, many-seeded.	Threads of the tube. Capsule
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See MASSONIA VIOLACEA, Pl. 46. Vol. I.

SPECIFIC CHARACTER.

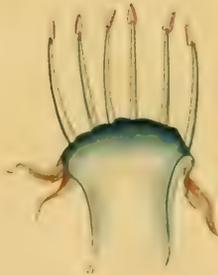
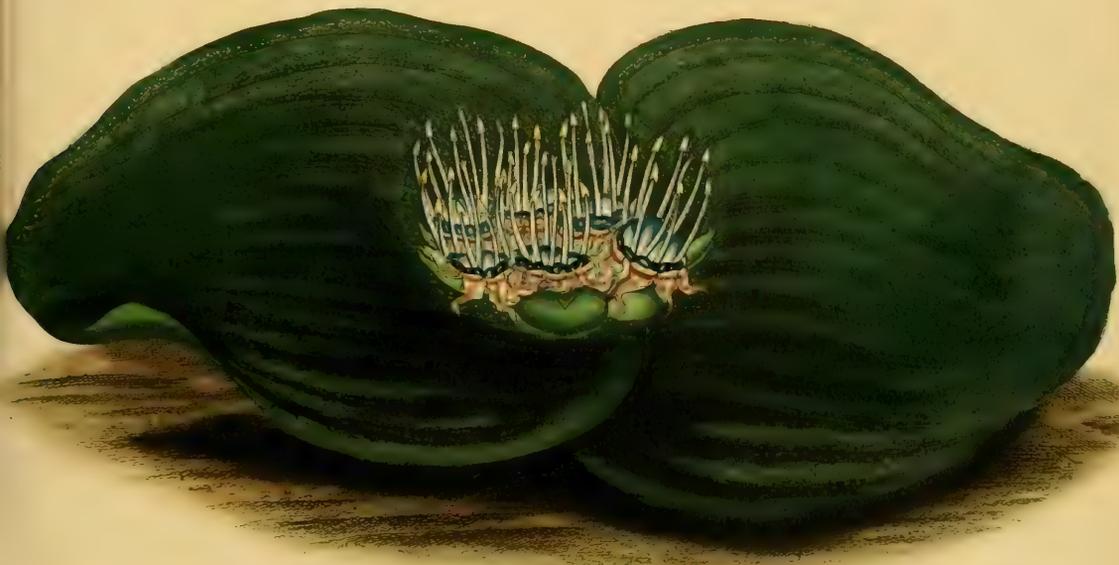
Massonia foliis cordato-orbiculatis, supra scabris; laciniis corollæ reflexis.		Massonia with leaves between heart-shaped and round, rough on the upper side; the segments of the blossom reflexed.
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REFERENCE TO THE PLATE.

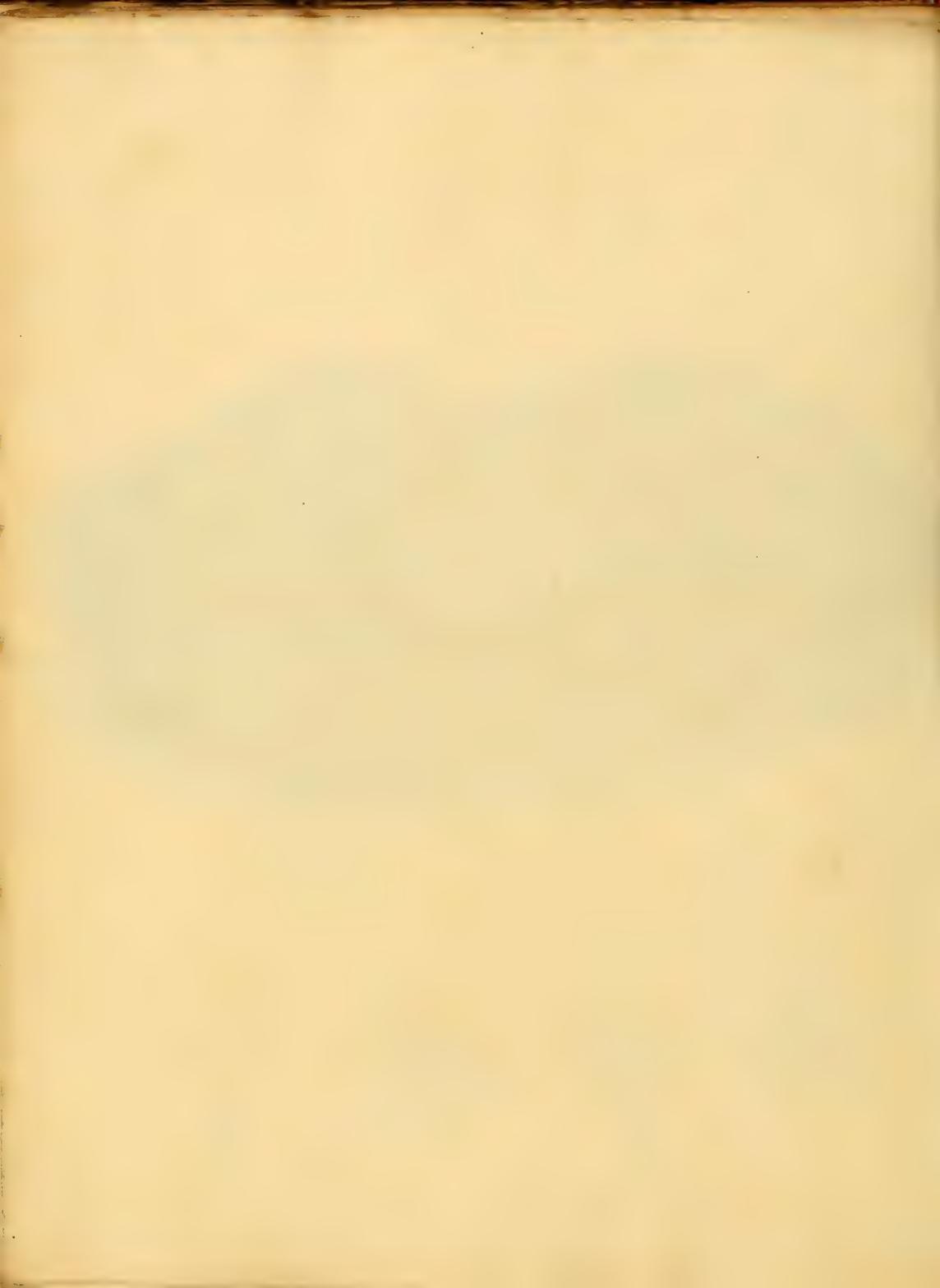
1. A skinny sheath, one being attached to each flower, at the lower part of the foot-stalk.
2. A Flower complete.
3. The Blossom cut open, to shew the insertion of the chives into the mouth, just within the honey-cups.
4. The Seed bud, shaft and summit.

THE rough-leaved Massonia is, as well as all the hitherto discovered species of the genus, a native of the Cape of Good Hope, and was introduced to Britain, in the year 1796, by Messrs. Lee and Kennedy; at whose nursery, our figure was taken in the year 1800; where, it had then flowered for the first time, in this kingdom. It is a hardy greenhouse bulb; propagates from the root, and perfects its seeds; flowers in February and March, and loses its leaves in June. It stands quite distinct from *M. latifolia*, both in the character of the leaves and blossoms; though, at first sight, it has much the appearance of that species. A leamy soil lightened by a small mixture of sandy peat is that it most approves. The roots should not be taken from the pots after the decay of the leaves, but kept rather dry till the leaves begin to re-appear.

Much will it contribute to the illustration of science, to find our present figure, when copied into a certain magazine at some future period, (and of which we have no doubt,) specifically denominated, smooth-leaved; as unfortunately, the other species figured by us, Pl. 46. Vol. I. with obovate, blunted, or spatula-shaped leaves, has been, by a certain locus-pocus conjuror, and *our very good friend*, converted into sword-shaped! *risum teneatis.*



Magnolia scabra



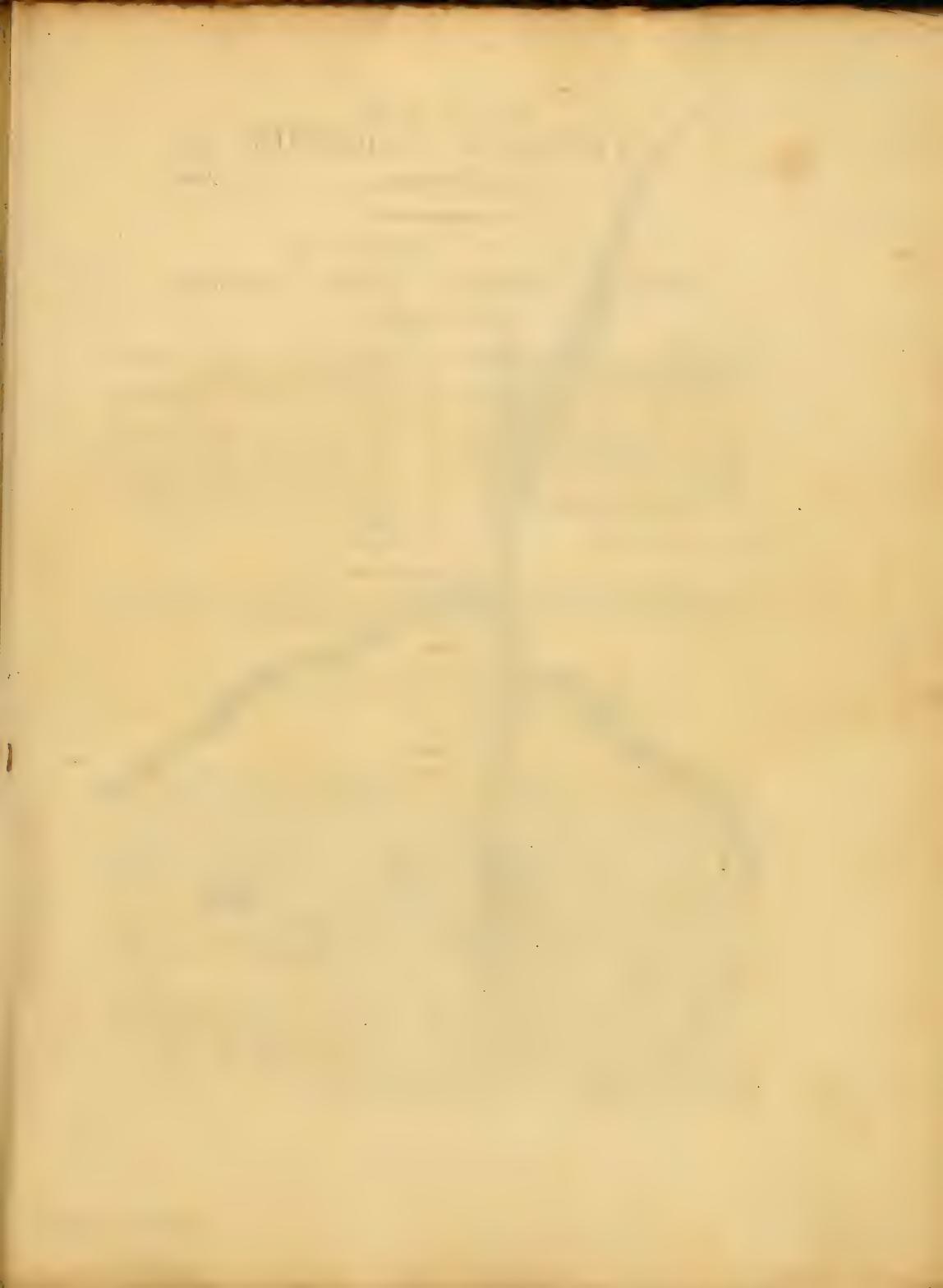


PLATE CCXXI.
WURMBEA CAPENSIS. *Var. β.*
Cape Wurmbea. *2. Var.:*

CLASS VI. ORDER III.

HEXANDRIA TRIGYNIA. Six Chives. Three Pointals.

GENERIC CHARACTER.

CALYX nullus.
COROLLA monopetala, sexfida, infera; laciniis lanceolatis, acutis, erectis.
STAMINA. Filamenta sex, filiformia, erecta, fauci corollæ infertæ. Antheræ erectæ, didymæ.
PISTILLA. Germen triquetrum, apice tripartitum, glabrum, superum. Styli tres, triquetri, subulati, incurvi, longitudine staminum. Stigmata obsoleta.
PERICARPIUM. Capsula oblonga, triquetra, trifurca, trilocularis, a medio tripartita.
SEMINA plurima, rotunda.

EMPALEMENT none.
BLOSSOM one petal, six-cleft, beneath; segments lance-shaped, pointed and upright.
CHIVES. Threads six, thread-shaped, upright, inserted into the mouth of the blossom. Tips upright, double.
POINTALS. Seed-bud three-fided, three-divided at the top, smooth and above. Shafts three, three-fided, awl-shaped, turned inwards, the length of the Chives. Summits obsolete.
SEED-VESSEL. Capsule oblong, three-fided, three-furrowed, three-celled, three-divided from the middle.
SEEDS many, round.

SPECIFIC CHARACTER.

Wurmbea foliis cucullatis, lanceolatis; spica multiflora; floribus sessilibus, atro-purpureis.

Wurmbea with hooded, lance-shaped leaves; spike many-flowered; flowers sitting close to the stem and dark-purple.

REFERENCE TO THE PLATE.

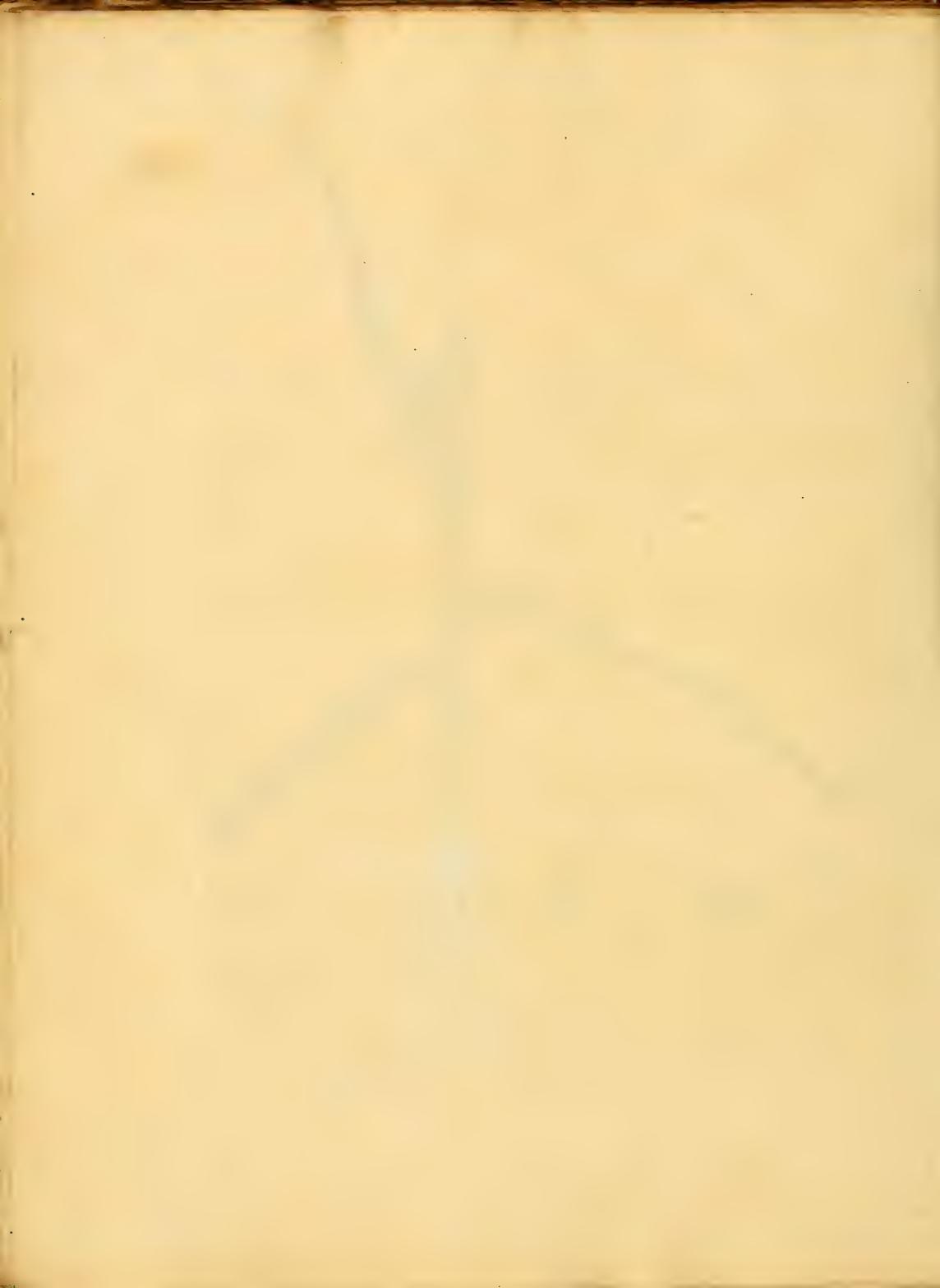
1. A Blossom cut and spread open, with the Chives in their place.
2. The Pointals, natural size.
3. The same, magnified.

THIS genus was first formed by Thunberg as distinct from *Melanthium*, in his *Dissertatio Nova Genera Plantarum*, under the title *Wurmbea*, from the construction of the blossom; which in this, is formed of one petal, but in that, is composed of six; a distinction which has always been considered as momentous, in determining the limits of the different genera of this class; since which, however, it has been abandoned by him, and thrown to *Melanthium*; although Schreber, in his *Genera Plantarum*, G. 617. p. 239, Vol. I. made no scruple in adopting it. Willdenow has, in his *Species Plantarum*, G. 703. p. 265. T. 11. P. 1. we think with propriety, renewed its claims to particular distinction, under the first title; but with this difference, that out of the four varieties given by Thunberg, all under the specific name of *capensis*, he has made three species; reserving his opinion on the fourth, our present plant, and the second *Var.* of Thunberg, for want, as he observes, of proper documents. Now, as our ideas run not exactly with Willdenow, in this alteration; but thinking with Thunberg, who must have seen the plants alive, and thence, of course, the best judge; we have the rather followed him; as we possess drawings of two more of the varieties quoted by him, taken from living specimens, and whose trifling difference of character does not warrant them to be treated as specifically different, but as mere varieties of each other.

The roots of this species, with the others, of which we have drawings, were received by G. Hibbert, Esq. in the year 1800, from the Cape of Good Hope. The bulbs are solid like those of *Ixia*, &c. but of a most singular form, having an appendage at the base like the pat of a mole. None of the varieties we have seen produce more than three leaves, which sheath the flower-stem one above the other, and are rather longer than it. It flourishes in sandy peat earth, and flowers in May or June; but has, certainly, more to recommend it to our notice from its singularity, as forming a separate genus; than from its beauty. Our figure was taken from the Clapham collection.



Thurbergia capensis
var. β



THE HISTORY OF THE
CITY OF BOSTON



PLATE CCXXII.

GERANIUM RADIATUM.

Rayed-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOCYNA. Stigmata quinque. Fructus rotatus, pentacoccus. || One POINTAL. Five summits. Fruit furnished with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis sub-obovatis, crassiusculis, integerrimis, radiatis, humi adpressis; calycibus monophyllis, laciniis erectis; floribus pentandris, maximis, luteis; radice tuberosa. || Geranium with leaves nearly obovate, thickish, quite entire, placed in a ray about the stem, and lying on the ground; cups of one leaf, the segments erect; flowers with five fertile chives, very large and yellow; root tuberous.

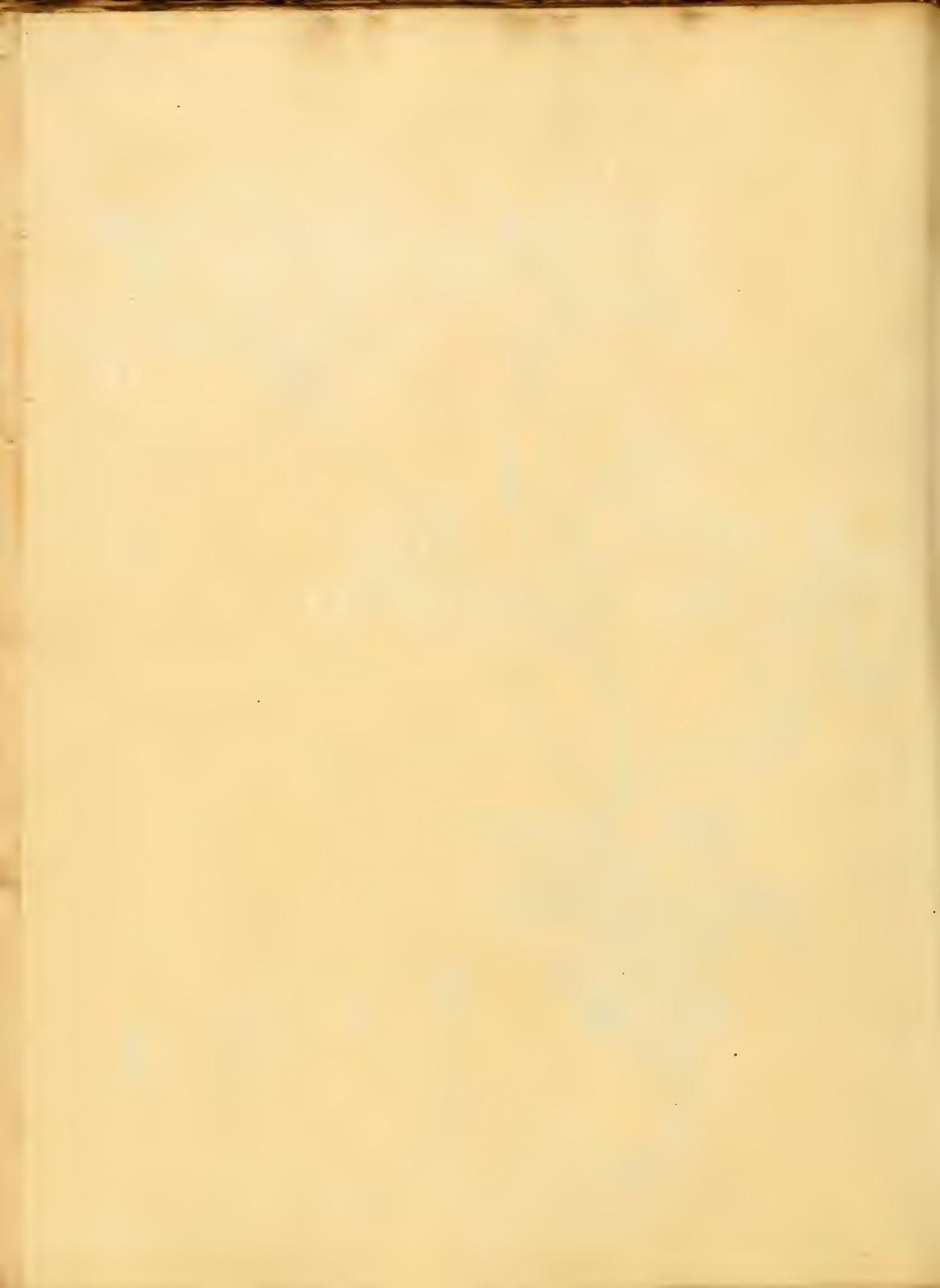
REFERENCE TO THE PLATE.

1. The Cup laid open, to shew its hollow structure.
2. The Chives and Pointal, natural size.
3. The Chives spread open, to shew the number and situation of the fertile ones.
4. The Pointal, magnified.

THE only plants of this species of Geranium are to be found in the Clapham collection; they were among the last, received by Mr. Hibbert from the Cape, in 1801. To affix any particular period as the exact season of its flowering, would be premature; as, the plant from which our figure was taken, in the month of August, last year, had been kept constantly in the green-house; and, we must presume, as the root arrived nearly dry, the regular season of its flowering must have been materially altered. It appears to flourish in a light sandy soil. The propagation must be from the seeds, or from the root.



Passiflora radiata



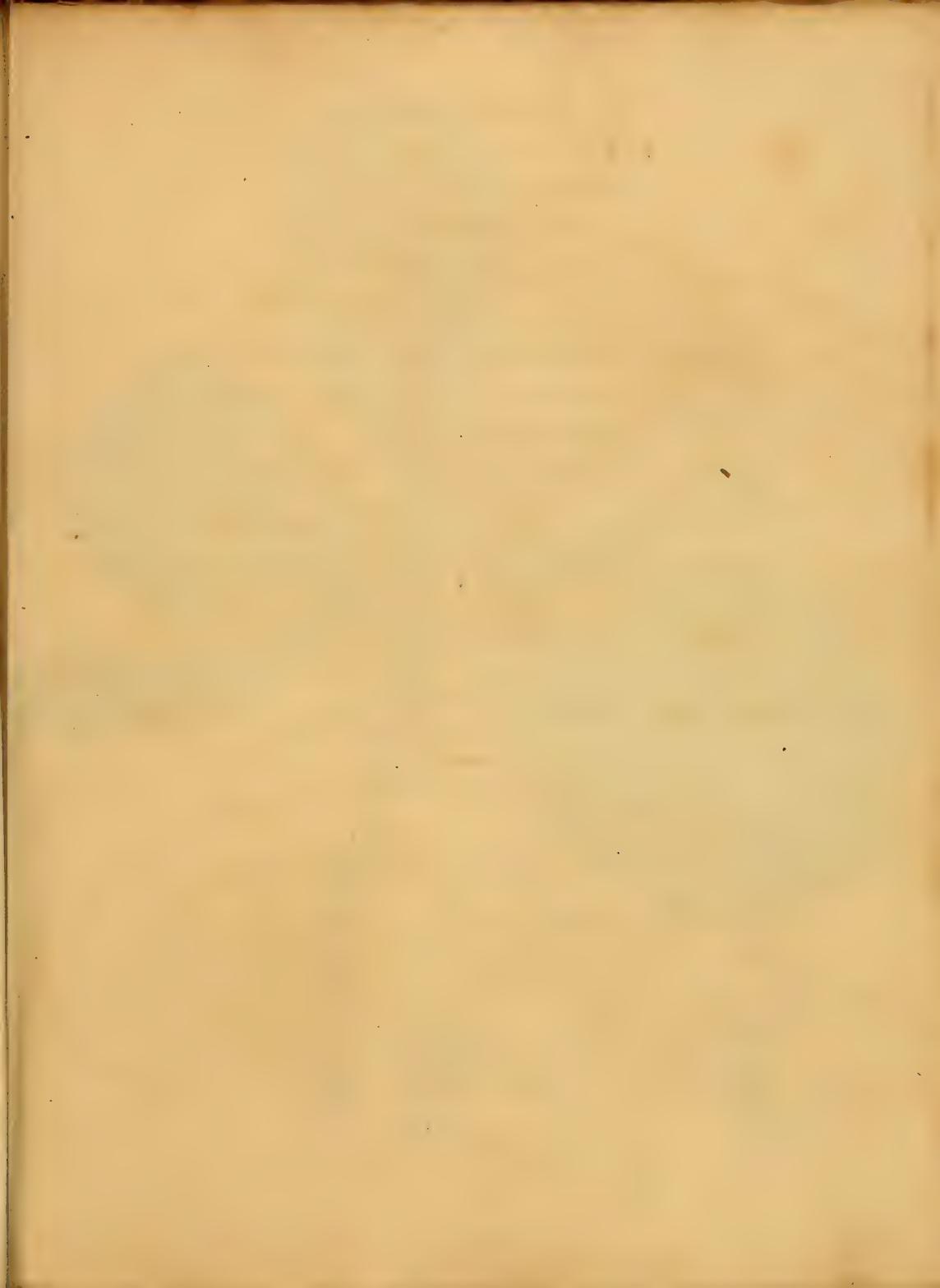


PLATE CCXXIII.
CLUSIA FLAVA.
Yellow-flowered Balsam-Tree.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various dispositions. Upon one plant.

GENERIC CHARACTER.

CALYX. Perianthium imbricatum; foliolis concavis, persistentibus, exterioribus gradatim minoribus.
COROLLA. Petala 4, 5, 6, subrotunda concava, crassa, cochleata.
STAMINA. Filamenta plura, simplicia, corolla breviora. Antheræ simplices, apicis lateri adnatæ.
PISTILLUM. Germen ovato-oblongum. Stylus nullus. Stigma stellatum, planum, obtusum, persistentis.
PERICARPIUM. Capsula ovata, fulcis exerata, locularis, valvis tum radiatim dehiscentibus.
SEMINA numerosa, ovata, pulpa oblecta, affixa receptaculo columnari, anguloso.
Obs. Numerus in parte fructus differt a quatuor ad duodecim proportione observata in figmate, valvulis, loculis, &c. Flores alii a parte masculina, alii a feminina steriles sunt.

EMPALEMENT. Cup tiled; leaflets concave, remaining, the outer ones gradually smaller.

BLOSSOM. Petals 4, 5, 6, roundish, concave, thick and shell-like.

CHIVES. Threads many, simple, shorter than the blossom. Tips simple, growing to the side of the point.

POINTAL. Seed-bud oblong-egg-shaped. Shaft none. Summit starred, flat, obtuse, remaining.

SEED-VESSEL. Capsule egg-shaped, strongly furrowed, celled, the valves bursting into a starred form.

SEEDS numerous, egg-shaped, covered with pulp, fixed to an angular, columnar receptacle.

Obs. The number in the parts of the fruit differs from four to twelve, according to the proportion observed in the summit, valves, cells, &c. Some of the flowers are sterile with respect to the male organs, and others with respect to the female ones.

SPECIFIC CHARACTER.

Clusia foliis aeniis; corollis tetrapetalis, luteis.

Balsam Tree with veinless leaves; blossoms with four petals, and yellow.

REFERENCE TO THE PLATE.

1. A Flower complete.
2. A petal shewn from the inside.
3. A petal shewn sideways.
4. The Pointal and Chives, one Chive detached, magnified.
5. The Pointal cleared of the Chives, the Seed-bud and Summit detached and magnified.

THE Balsam Tree is a native of all the West India Islands, and has been described by Plumier, Sloan, Jacquin, Browne, &c.; but no good figure of the plant, according with our ideas, has hitherto been given of it. The *C. rosea*, *C. alba*, and *C. flava* of Jacquin, the three various species, are said to grow to different heights, in the different Islands; which we are led to think, are but varieties of the same plant. Linnæus has taken them up as species, upon his authority; although Jacquin himself allows, that the one he denominates *flava*, varies in its blossoms to red and white. This plant does not grow to above the height of eight or nine feet, in this country, and seldom flowers. Our figure was taken last year in September 1801, from a plant in the Stepney Collection. Miller says it was cultivated by him in 1759; and had been introduced by Mr. Parker, of Croydon, in Surrey, from Barbadoes. It is readily propagated from cuttings, and thrives in rich, dungy earth. A slight mistake occurs, in the quotation from Browne, in Martyn's Edition of the Dictionary; where, the petals are described as screw-shaped; Browne has it, "*cochleata*," or shell-shaped, a most expressive term for the shape of these petals.



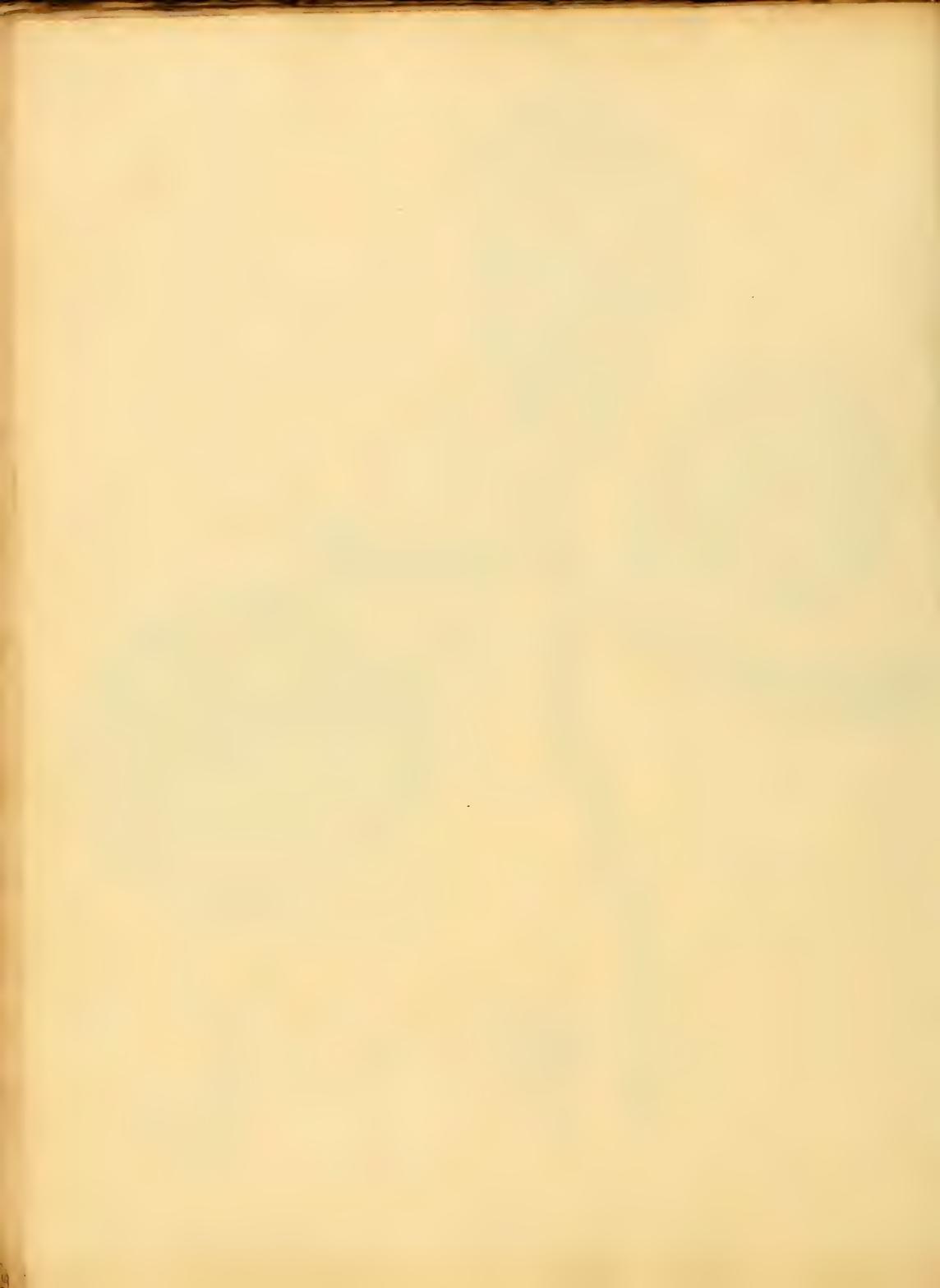




PLATE CCXXIV.

GERANIUM REFLEXUM.

Reflexed-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Chives united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

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

SPECIFIC CHARACTER.

Geranium foliis longe petiolatis, trifoliatis; foliis lobato-incisis, recurvis; floribus umbellatis, pentandris; staminibus duobus superioribus stigmatibusque reflexis; radice tuberosa. || Geranium with leaves, that have long foot-stalks, and three leaflets; leaflets gash-lobed, and rolled back; flowers grow in umbels; have five fertile chives, with the two upper chives and the summits reflexed; root tuberous.

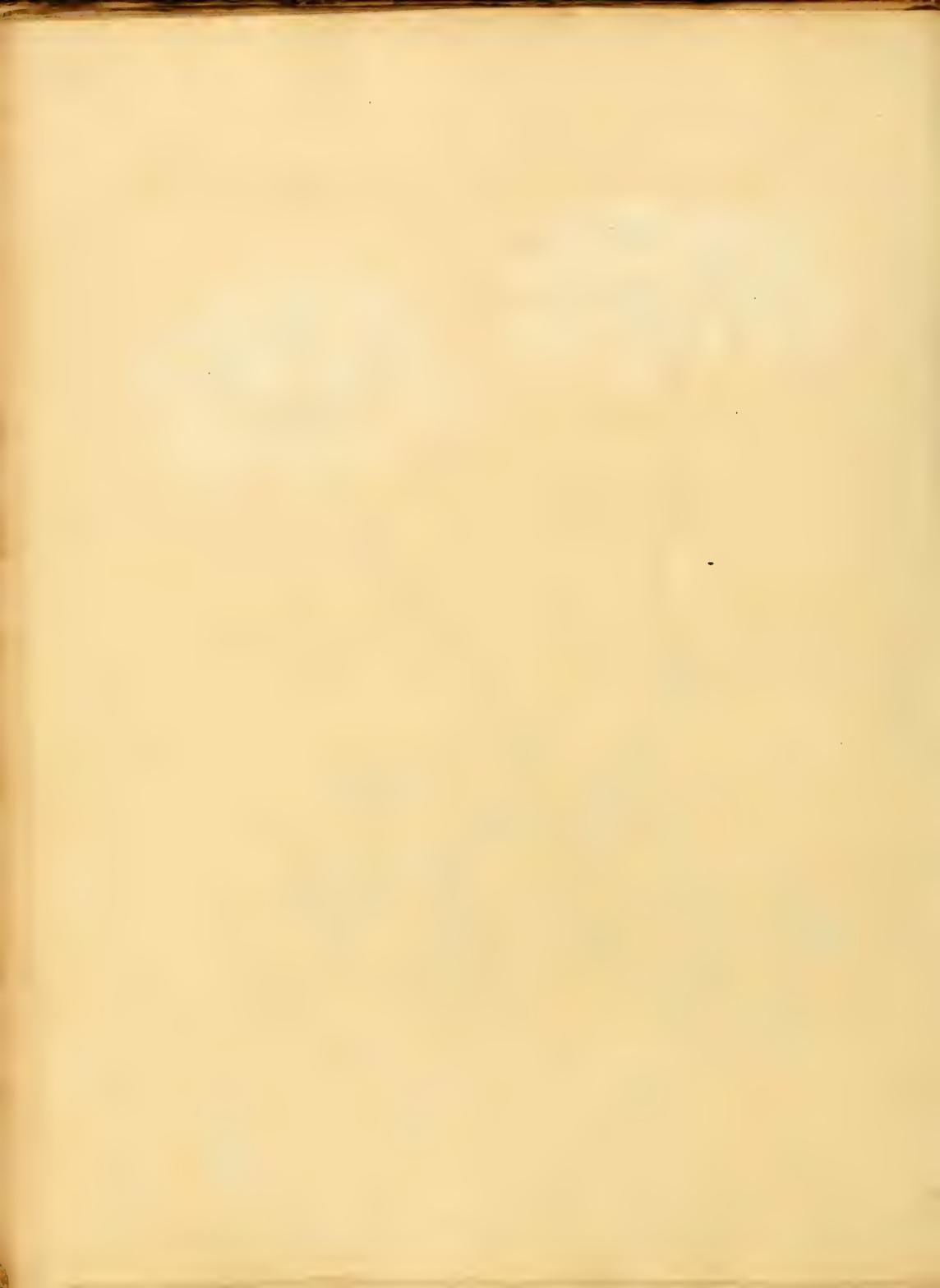
REFERENCE TO THE PLATE.

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

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



Geranium reflexum



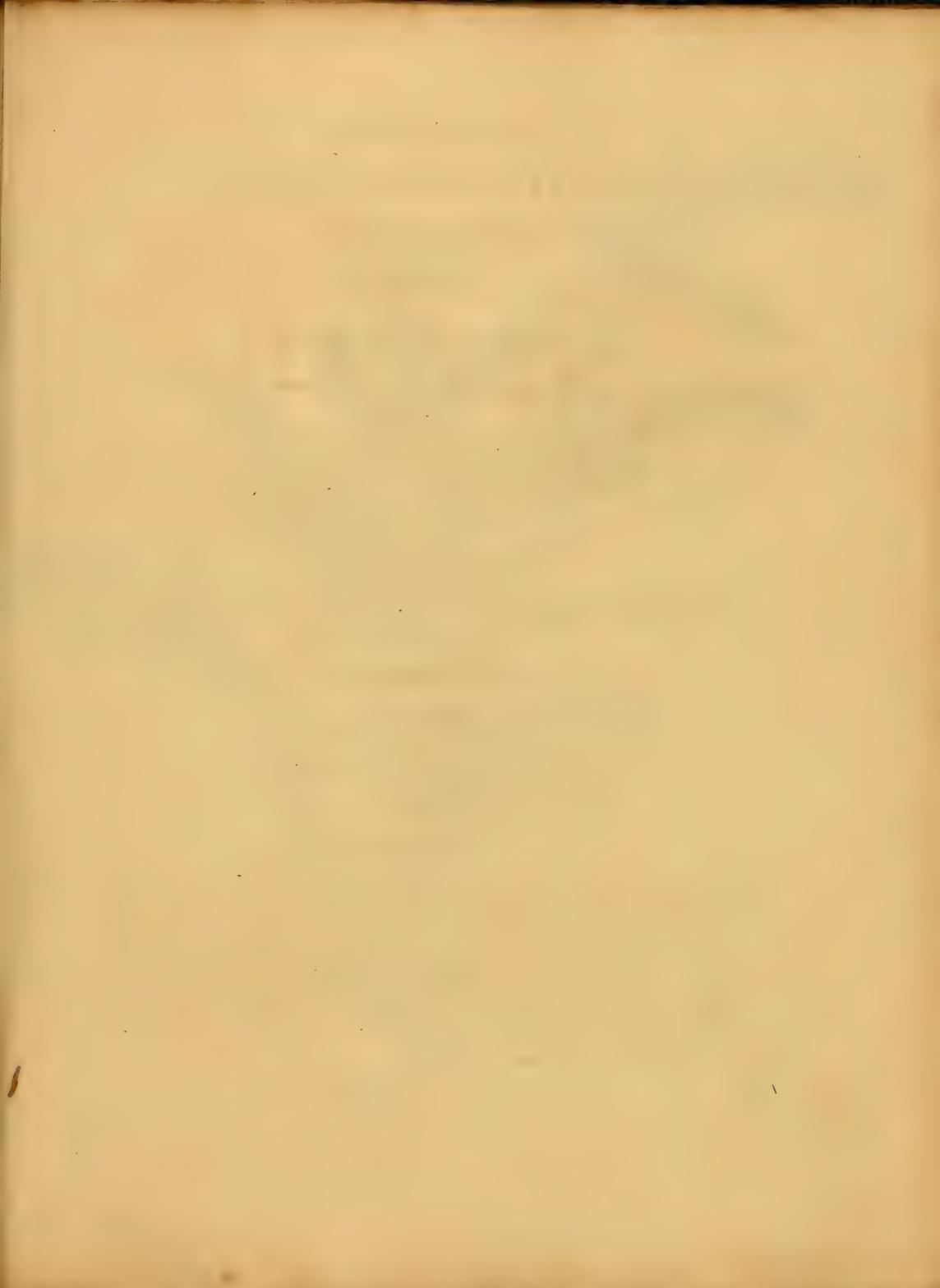


PLATE CCXXV.

GNIDIA OPPOSITIFOLIA.

Opposite-leaved Gnidia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX infundibuliformis, quadrifidus. Petala
quatuor, calyci inferta. Semen unicum,
fubbaccatum.

EMPALEMENT funnel-shaped, four-cleft. Petals
four inferted into the empalement. One
feed. berry-like.

See GNIDIA PINIFOLIA, Pl. LII. Vol. I.

SPECIFIC CHARACTER.

Gnidia foliis ovatis, oppositis, concavis, tomen-
tosis; floribus terminalibus, tomentosis.

Gnidia with egg-shaped, opposite, concave,
downy leaves; flowers terminate the branches,
and are downy.

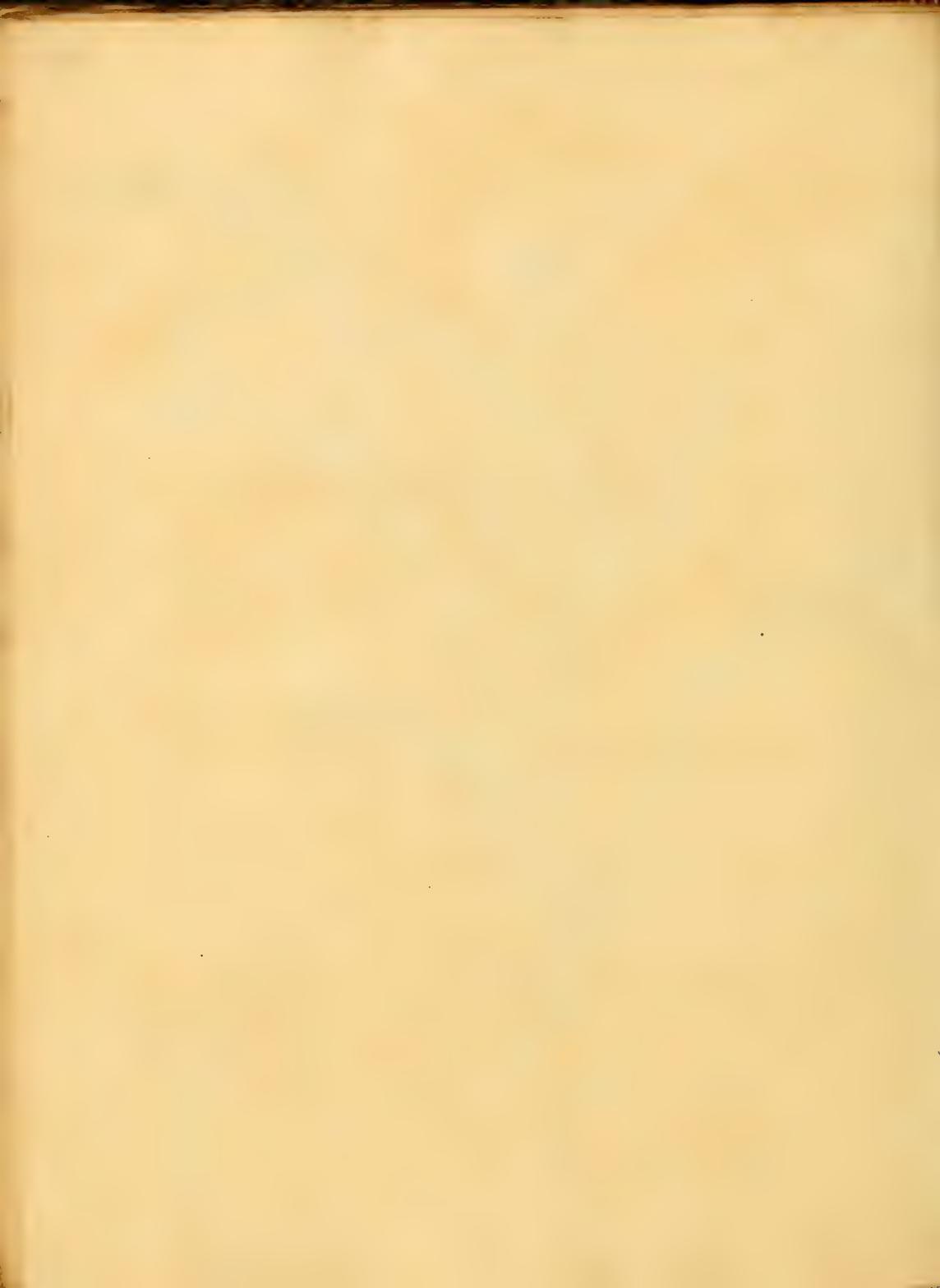
REFERENCE TO THE PLATE.

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

The Opposite-leaved Gnidia is from the Cape of Good Hope, and must be treated as a tender greenhouse or dry stove plant; as, but a little excess of wet, in the winter, is sure to destroy it; even in summer, much rain, if it is exposed to it for a few days, will overwhelm it. The Kew Catalogue mentions this species to have been introduced in the year 1788, by Mr. F. Masson. The plant grows to the height of three feet, with a very slender stem, and, often, loses most of its leaves to a considerable height from the earth, which gives it rather a disagreeable appearance towards the lower part. A mixture of two-thirds loam, and one of sandy peat, is a soil it most approves. It is increased by cuttings, made in the month of April, from the tender shoots. Our figure was taken in July, from a plant in the Hibbertian Collection.



Gnidia oppositifolia



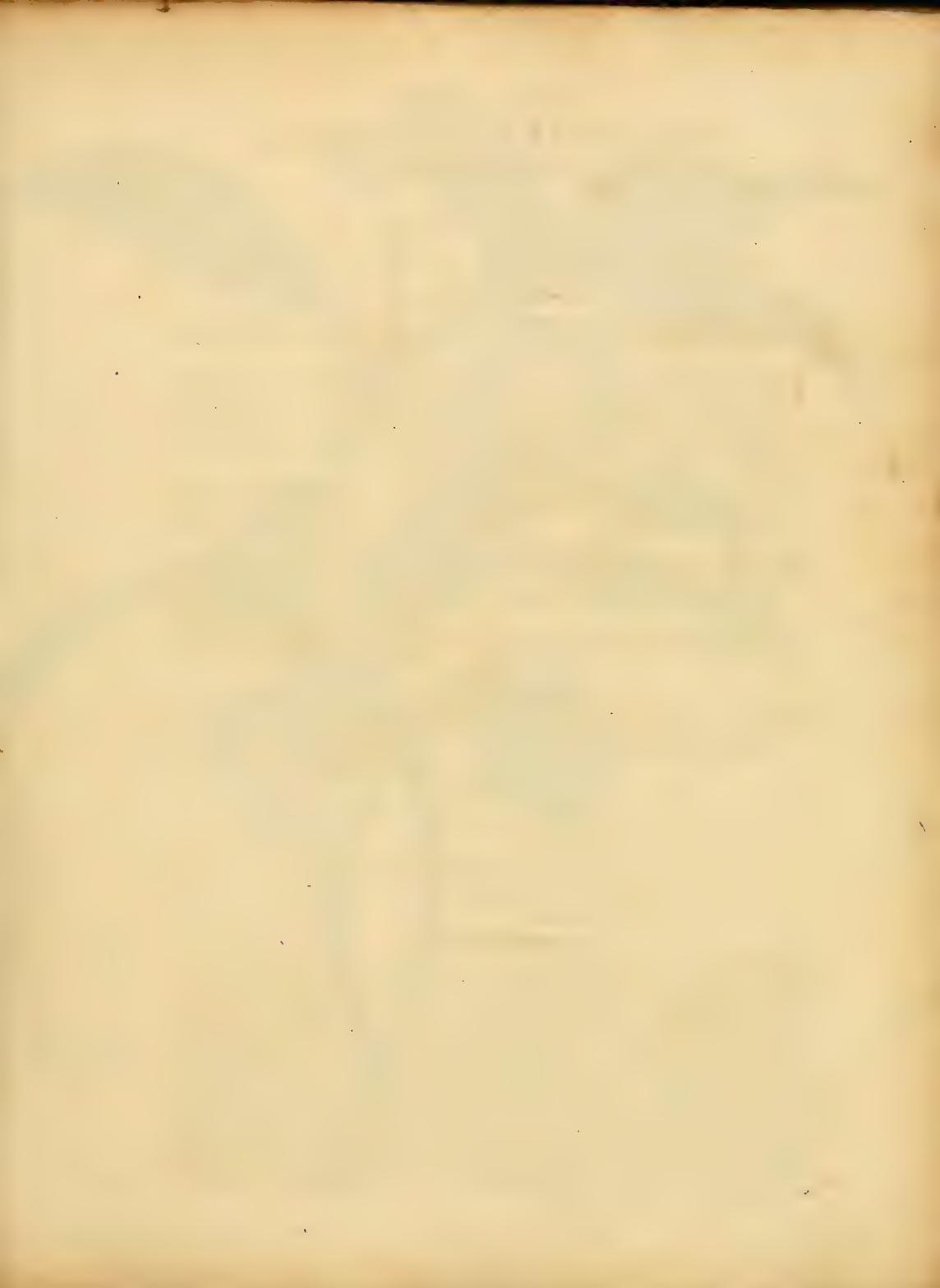


PLATE CCXXVI.
MAGNOLIA PUMILA.
Dwarf Magnolia.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

GENERIC CHARACTER.

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

COROLLA. Petala novem, oblonga, concava, obtusa, basi angustiora.

STAMINA. Filamenta numerosa, brevia, acuminata, compressa, receptaculo communi pistillorum infra germina inserta. Antheræ lineares, margini filamentorum utrinque adnatæ.

PISTILLA. Germina numerosa, ovato-oblonga, bilocularia, receptaculum clavatum tegentia. Styli recurvi, contorti, brevissimi. Stigmata longitudinalia styli, villosa.

PERICARPIUM. Strobilus ovatus, tectus capsulis compressis, subrotundis, vix imbricatis, confertis, acutis, unilocularibus, bivalvibus, seffilibus, extrorsum dehiscentibus, persistentibus.

SEMINA bina seu solitaria, subrotunda, baccata, filo pendencia ex sinu singulæ squamæ frobili.

EMPALEMENT. Cup three-leaved; leaflets egg-shaped, concave, the form of the petals, falling off.

BLOSSOM. Nine petals, oblong, concave, obtuse, narrower at the base.

CHIVES. Threads numerous, short, tapered, flattened, inserted below the seed-buds into the common receptacle of the Pointals. Tips linear, fixed on side to the margin of the threads.

POINTALS. Seed-buds numerous, oblong-egg-shaped, two-celled, covering a club-shaped receptacle. Shafts turned backward, twisted, very short. Summits grow out of the shafts longitudinally, hairy.

SEED-VESSEL. Cone egg-shaped covered with capules which are flattened, roundish, scarcely tiled, crowded, pointed, one-celled, two-valved, fitting close to the receptacle, splitting from the outside and remaining.

SEEDS by twos or solitary, roundish, like berries, hanging by a thread from the inside of each scale of the cone.

SPECIFIC CHARACTER.

Magnolia foliis ellipticis, undulatis, acuminatis, subglaucis; floribus nutantibus, albis; petalis carnofis, obovatis, concavis.

Magnolia with elliptic, waved leaves, tapered to a point, rather glaucous; flowers hanging down and white; petals thick, inversely egg-shaped and concave.

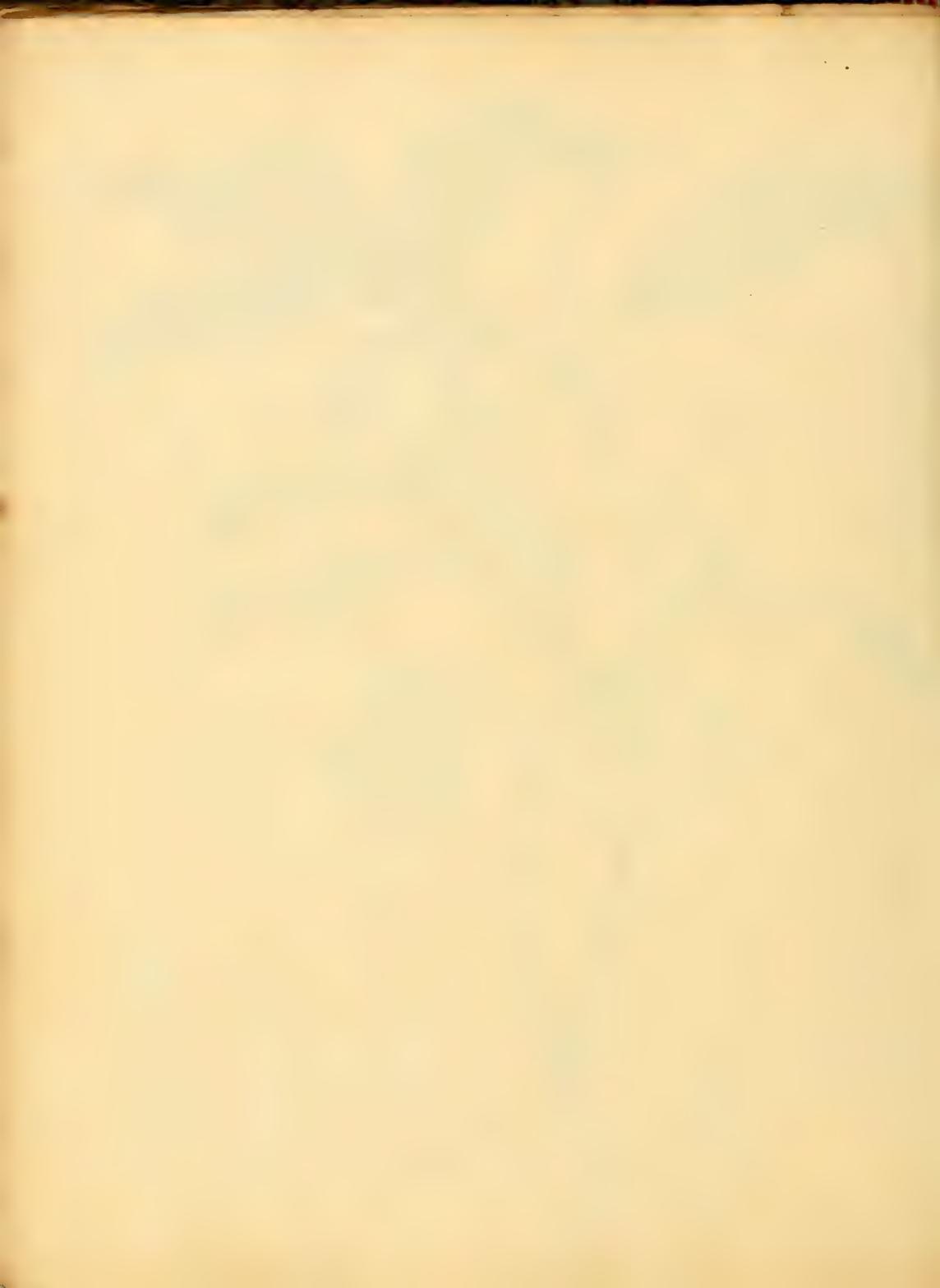
REFERENCE TO THE PLATE.

1. One of the outer petals.
2. An inner petal.
3. The Chives and Pointals, on the receptacle.
4. The outside of one of the Chives.
5. The inside of the same.
6. The same, magnified.
7. The Pointals.

The Magnolia pumila, (as are, generally, all plants upon their first arrival from China,) has been hitherto treated as a hothouse plant; by which means, a continued foliage has been preserved: but, from every appearance of the plant, it is by nature deciduous, and, certainly hardy enough to be preserved in the greenhouse, if not to bear the exposure of the open ground. It grows to the height of about two feet, flowers in the hot-house about September or later, and is propagated by cuttings. The blossoms are very fragrant, but of short duration. To the late J. Slater, Esq. of Laytonstone, we owe this plant; which was one of that rich cargo brought home in the Carnatic, for him, by Captain Connor, in the year 1793. Our figure was taken at the Hammermith nursery. The accession to this magnificent Genus has been considerable within a very few years: to the species formerly cultivated in Britain, viz. the *grandiflora* with its four varieties, the *glauca* and its two varieties, the *acuminata* and *tripetala*, are now added; the *auriculata* and *maxima*, from America; the *pumila*, *fuscata* and *tomentosa* or *Yow-long*, from China; making in all, with the varieties, fifteen. The short acquaintance we have with the three last from China, or the knowledge of what part of that extensive country they are natives, does not enable us to decide, whether they will endure our winters; although we may on the two from America, as being hardy plants, or at least equally hardy with the *grandiflora*, being from the same part of America.



Magnolia parviflora



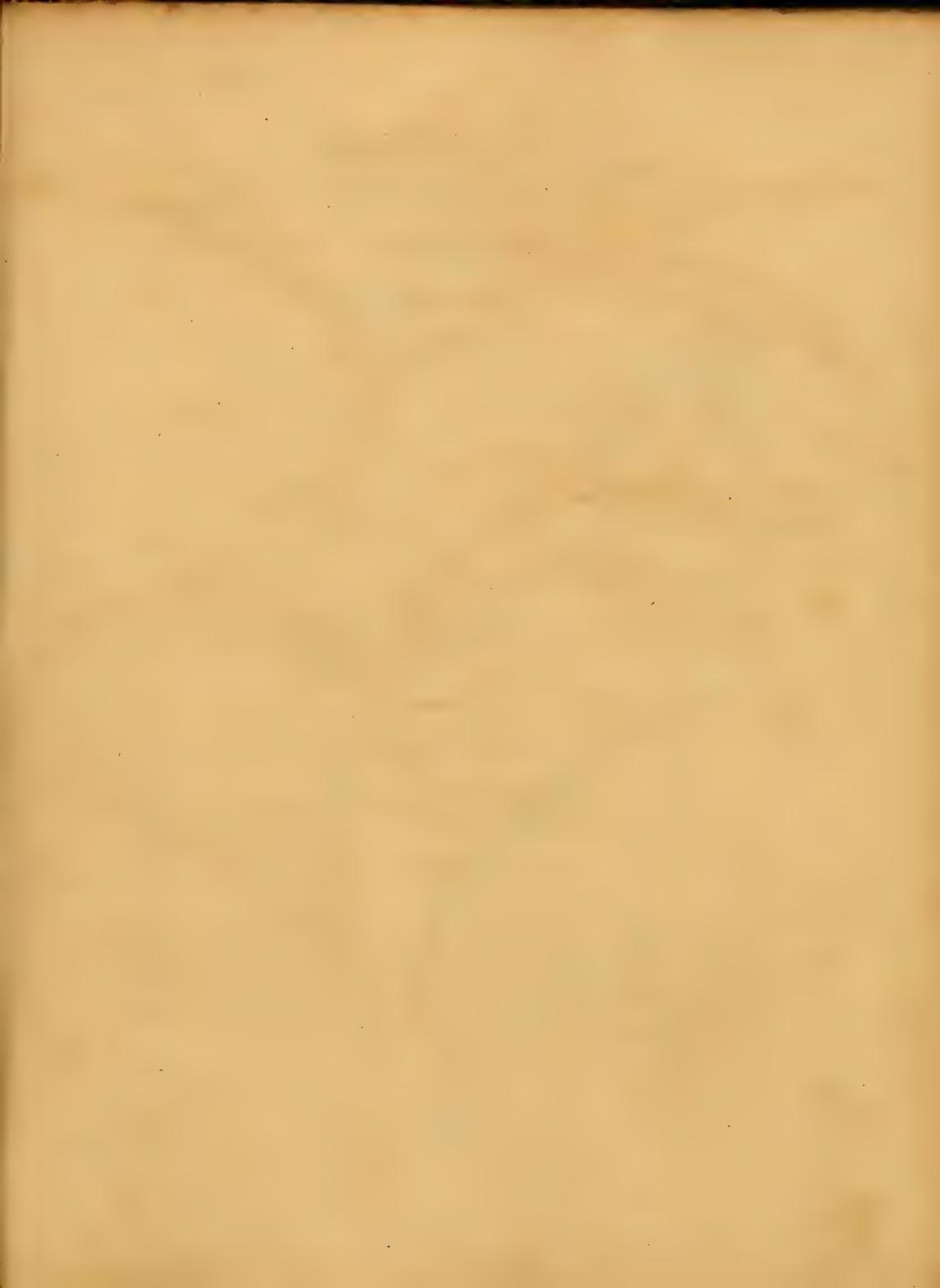


PLATE CCXXVII.

GLADIOLUS RINGENS. *Var. multiflorus.*

Gaping Gladiolus. *Many-flowered Var.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sex-partita, ringens.
STAMINA adscendentia.

BLOSSOM six-divided, gaping.
CHIVES ascending.

See GLADIOLUS ROSEUS, Plate XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis sub-linearibus, costatis; floribus
ringentibus cineris, odoratiffimis; scapo
multifloro.

Gladiolus with nearly linear-ribbed leaves; blof-
foms gaping, ash-coloured, and very sweet
scented; stem many flowered.

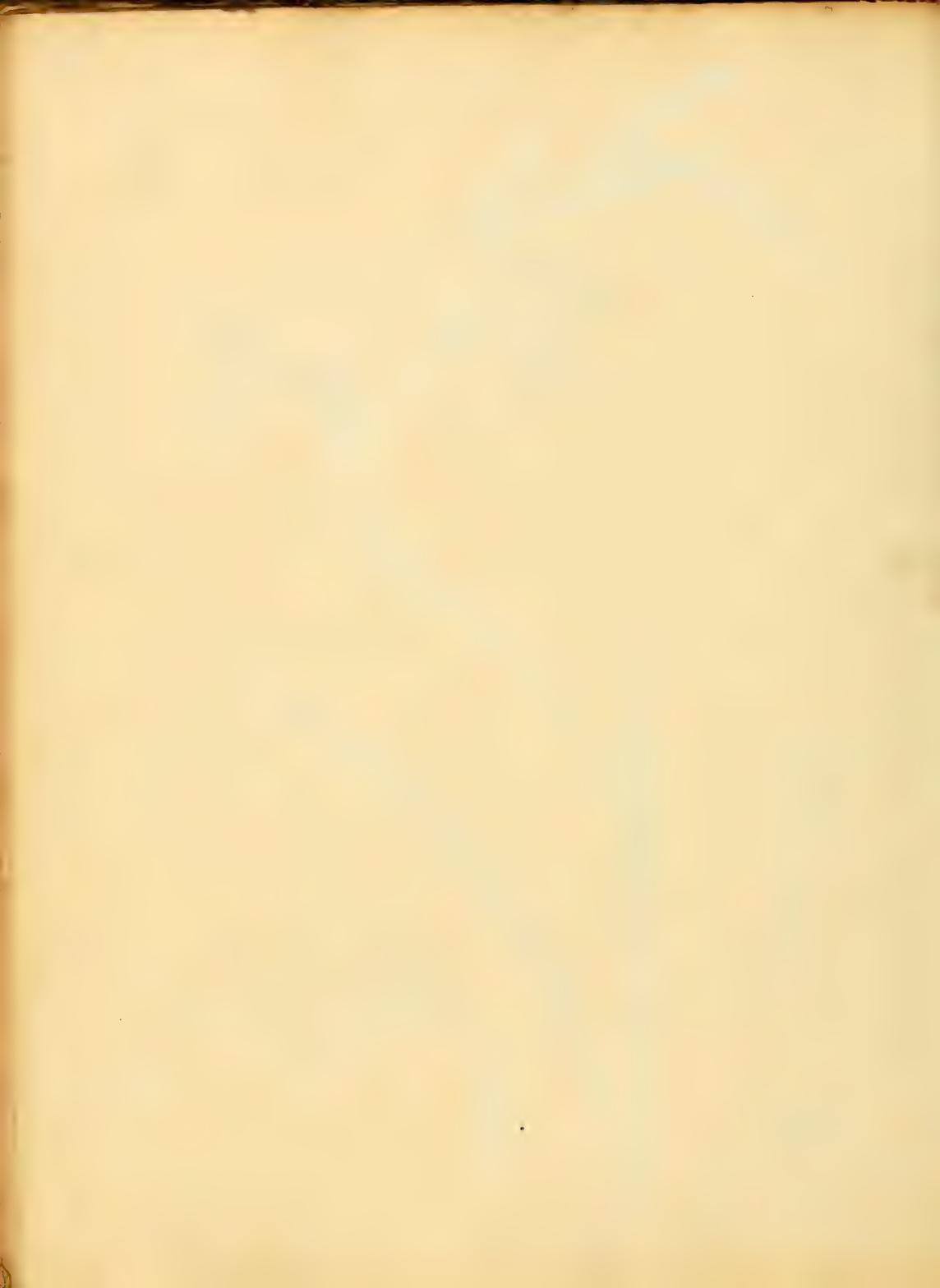
REFERENCE TO THE PLATE.

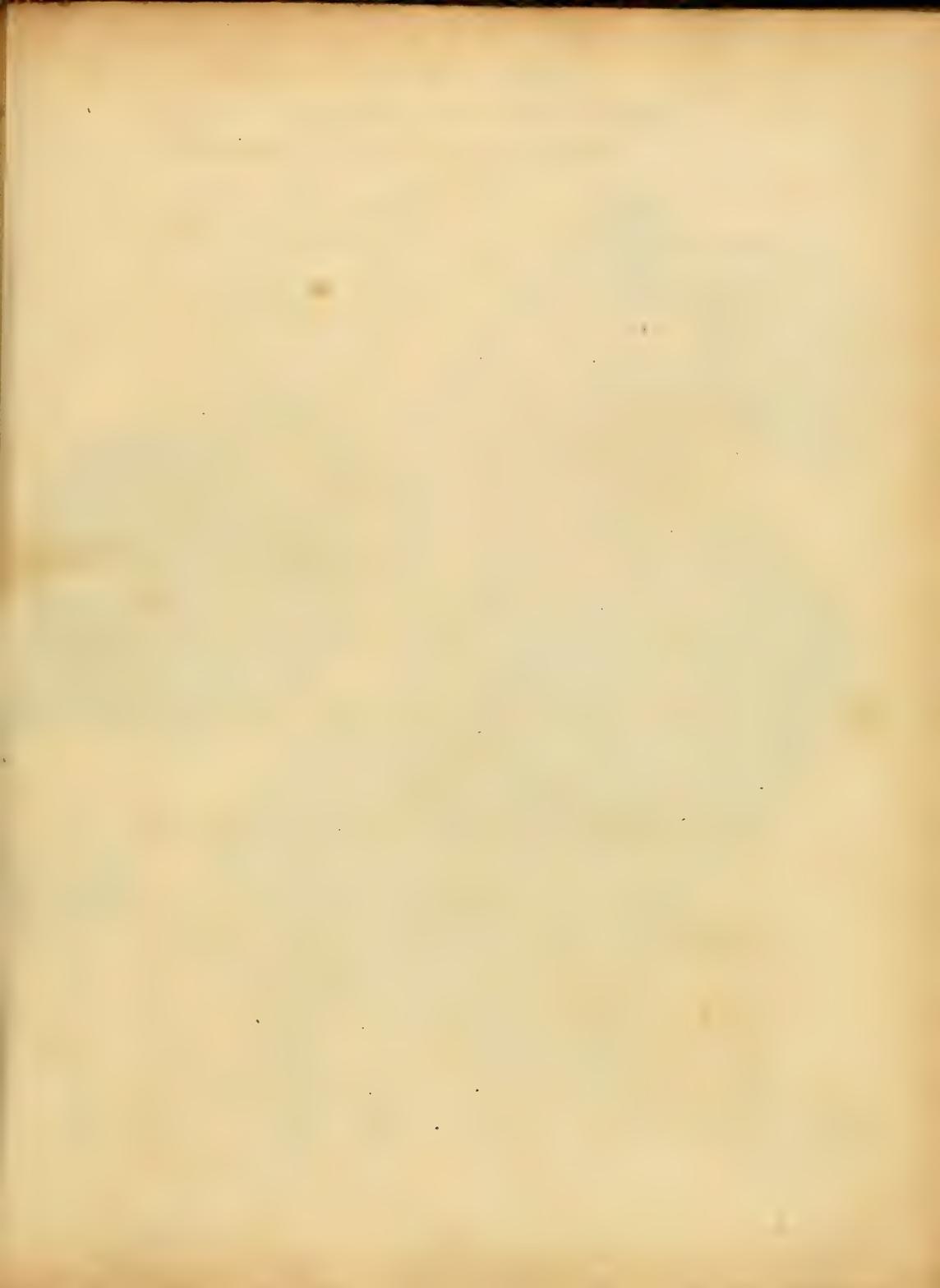
1. The two-valved Sheath.
2. A Blossom, with the chives in their place, spread open.
3. The Pointal complete.

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



Glycyrrhiza sibirica L.





HIBISCUS MUTABILIS. *Var. flore pleno.*

Changeable-Rose Hibiscus. *Double-flowered Var.*

CLASS XVI. ORDER VI.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

GENERIC CHARACTER.

CALYX. Perianthium duplex.

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

Interius monophyllum, cyathiforme, femi-quinquefidum, persistens; seu quinque-dentatum, deciduum.

COROLLA. Petala quinque, subrotundo-oblonga, basi angustiora, patentia, tubo flaminum inferne adnata.

STAMINA. Filamenta plurima, inferne coalita in tubum, superne (in hujus apice et superficie) divisa et laxa. Antheræ reniformes.

PISTILLUM. Germen subrotundum. Stylus filiformis, flaminibus longior, superne quinquefidus. Stigmata capitata.

PERICARPIUM. Capsula quinquelocularis, quinquevalvis; dissepimentis contrariis, duplicatis.

SEMINA folitaria seu plura, ovato-reniformia.

Obs. Capsula aliis ovata, aliis longa; calyx exterior 3-12-phyllus.

EMPALEMENT. Cup double.

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

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

BLOSSOM. Petals five, roundish-oblong, narrower at the base, spreading, fastened at bottom to the tube of the chives.

CHIVES. Threads numerous, united at the base into a tube, at top (in its apex and surface) divided and loose. Tips kidney-shaped.

POINTAL. Seed-bud roundish. Shaft thread-shaped, longer than the chives, at top five-cleft. Summit headed.

SEED-VESSEL. Capsule five-celled, five-valved; partitions contrary, doubled.

SEEDS folitary, or many, between egg and kidney-shaped.

Obs. The capsule of some species is egg-shaped, of some long; the outer cup, 3-12-leaved.

SPECIFIC CHARACTER.

Hibiscus foliis cordatis, angulatis, quinquelobis, acuminatis, dentatis; calyce exteriori octophyllo; capsula villosa; caule arboreo; floribus plenis.

Hibiscus with heart-shaped leaves, angled, five-lobed, pointed and toothed; outer cup eight-leaved; capsule hairy; stem growing to a tree; flowers double.

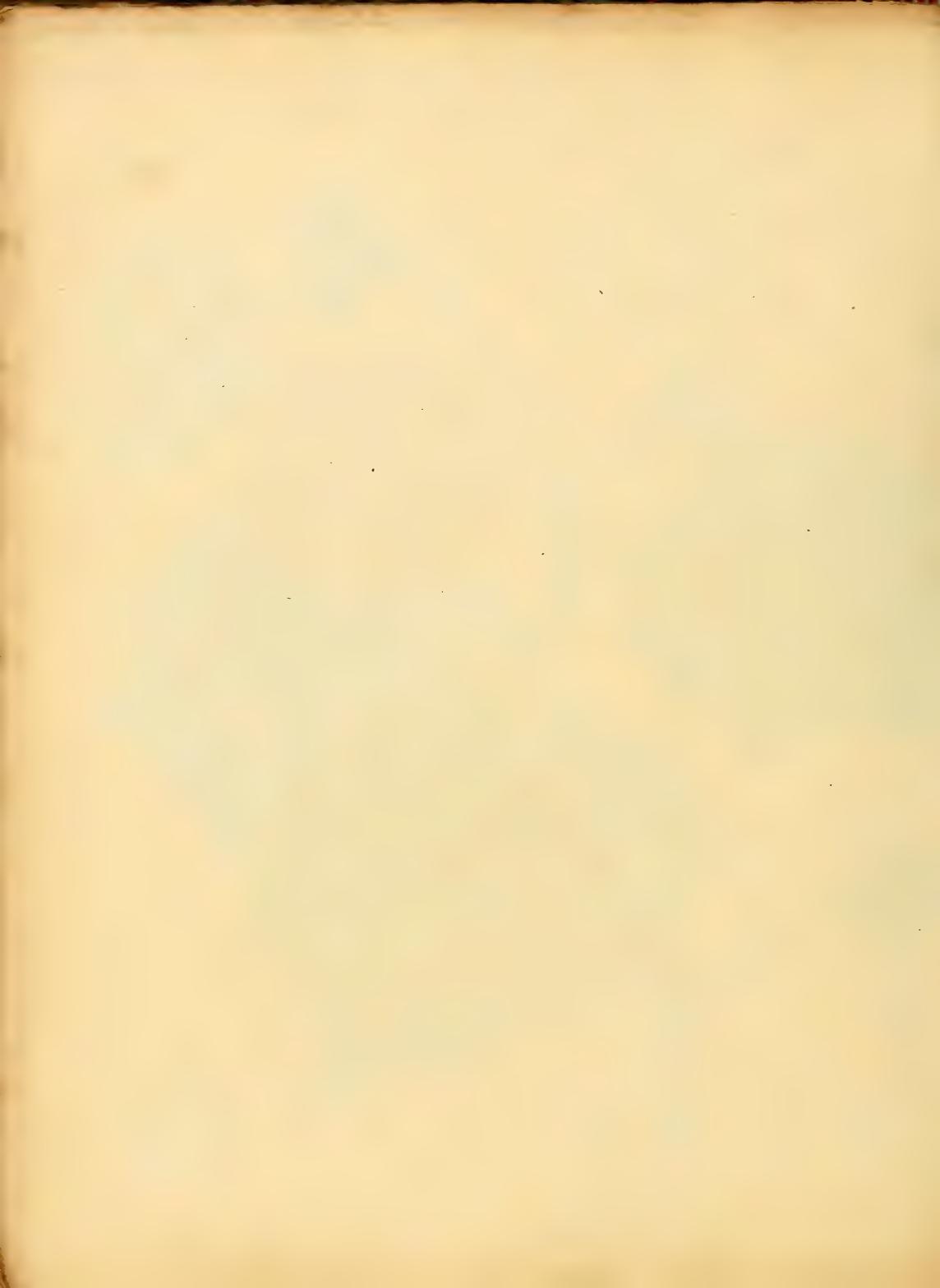
REFERENCE TO THE PLATE.

1. The double cup with the Seed-bud, Shaft, and Summits in their place.
2. The Threads cut and spread open, with those which are perfect and have the tips, remaining; those which give the plant the double flowered character being cut away; one tip detached and magnified.
3. The Seed-bud, cut transversely to shew the perfect seeds in their cells.

BARNARD DICKINSON, Esq. of Monks-Houfe, near Devises, Wilts, we believe to be, at present, the only possessor, in Britain, of this fine variety of *Hibiscus mutabilis*. The plants were produced in 1788, from some Jamaica seeds, which were sown at Bowden, another adjoining seat of that gentleman, and where they have flowered for several years. Although the flowers are double; yet good seeds are produced, which is common to most plants of this natural order, such as *Alcea Malva*, &c. the fullness of the blossoms being, as usual, formed from some of the chives becoming petals, many nevertheless remaining perfect; which in these plants stand particularly distinct from the pointal, being seated on the upper part of the tube, formed by the connection of the lower part of the threads, leaving the pointal as perfect as in a single flower. It is also propagated by cutting, and thrives in rich earth. It may be considered rather a tree, than shrub, as even in this country, it acquires the height of from 15 to 20 feet. It is a native of Japan, China, and the East Indies; where it is much esteemed for the extreme beauty of its flowers, as well as in our West India islands, where it is also cultivated. The Single-flowered has been known in England above a century, having, says the Kew Catalogue, been introduced by Mr. Bentinck in the year 1690. The specific title is assumed on the singular change of the flower, from white to flesh colour, before its decay, as shewn in our figure; which was taken from a fine branch received in a perfect state from Bowden in the month of November 1801, and obligingly communicated, to the author, by Mrs. Dickinon.



Hibiscus mutabilis



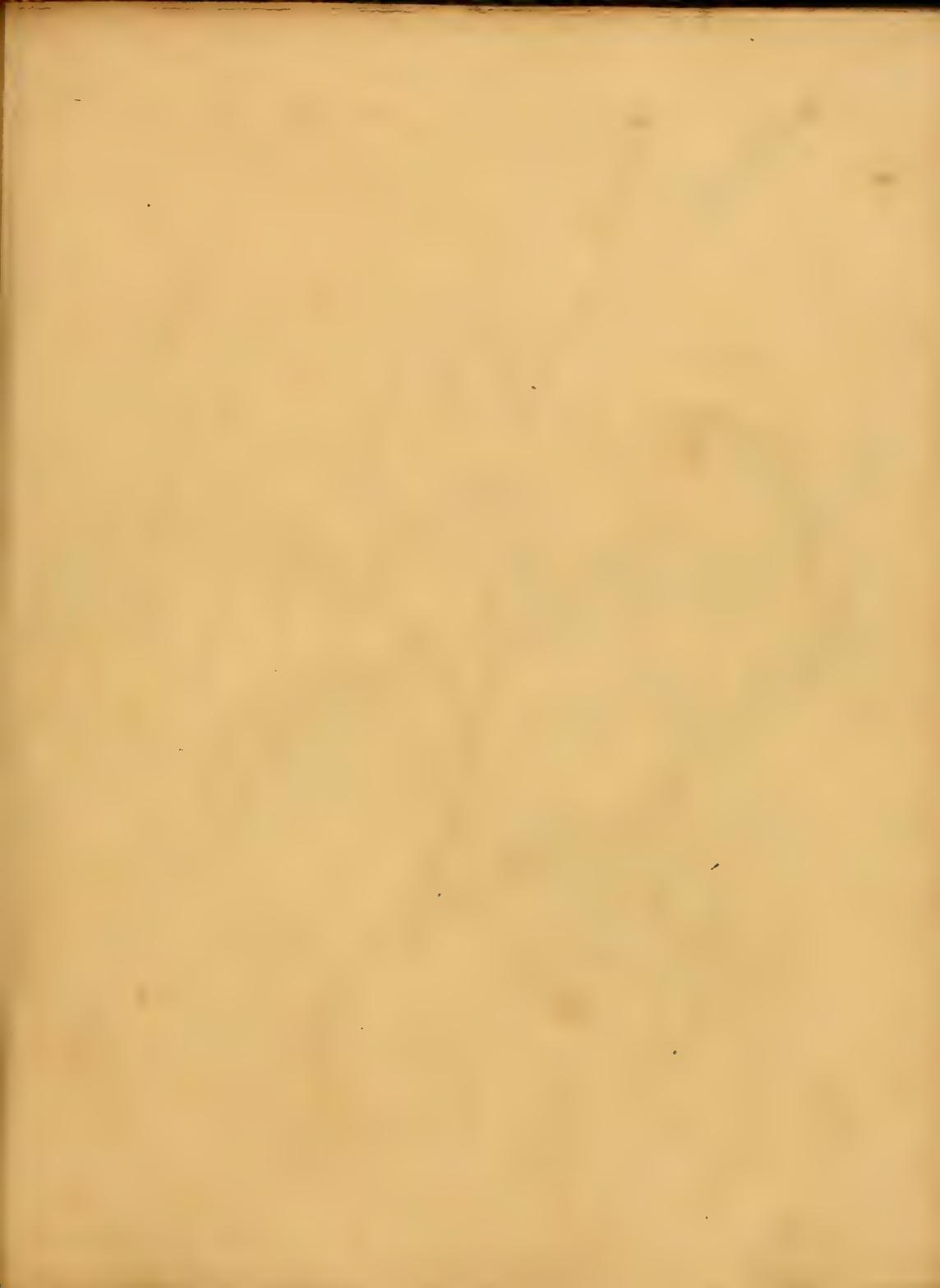


PLATE CCXXIX.
MAGNOLIA FUSCATA.

Brown-stemmed Magnolia.

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

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 3-phyllus. Petala 6-12. Capfulæ 2-valves,
imbricatæ. Semina baccata, pendula.

CUP 3-leaved. Petals 6-12. Capfules 2-valved,
tiled. Seeds, berries, pendulous.
See MAGNOLIA FUMILA, Pl. 226. Vol. IV.

SPECIFIC CHARACTER.

Magnolia foliis ellipticis, senioribus glabris, junioribus ramulisque tomentosis, fuscatis; petalis interne subalbidis, marginibus elegantissime coloratis.

Magnolia with elliptical leaves, the old ones smooth, the younger as well as the small branches are downy, and browned; petals whitish within, the margins elegantly coloured.

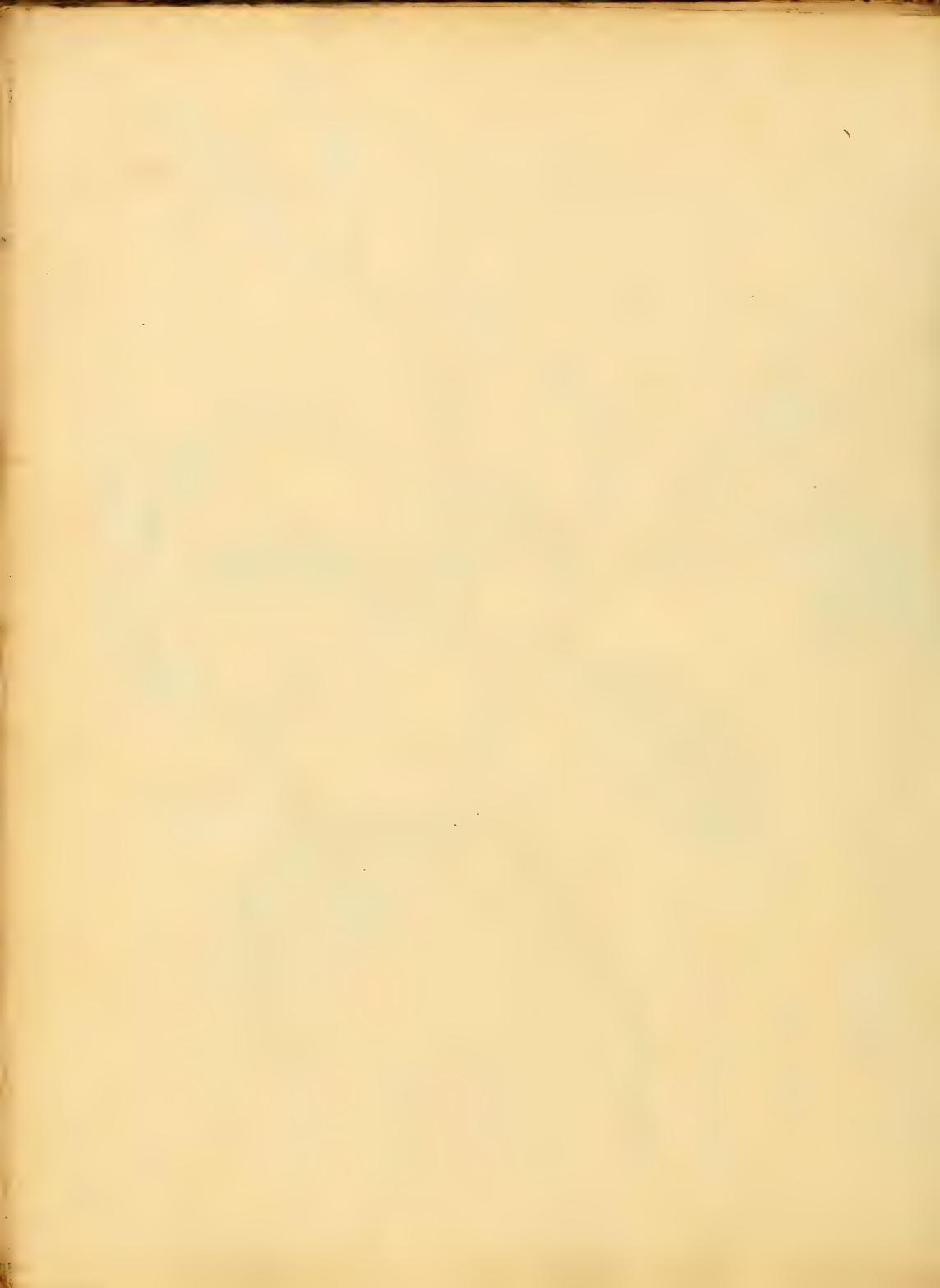
REFERENCE TO THE PLATE.

1. The outer fence of the flower, which falls off before the flower expands.
2. An outer petal of the blossom.
3. A Chive, with the parts complete, before the pollen has been emitted, a little magnified.
4. The same shewn from the outside.
5. A Chive shewn from the inside with the tips burst, magnified.
6. The Chives and Pointals, natural size.
7. The Pointals, as they are placed on the columnar shaft, the Chives being removed, natural size.

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



Magnolia fuscata



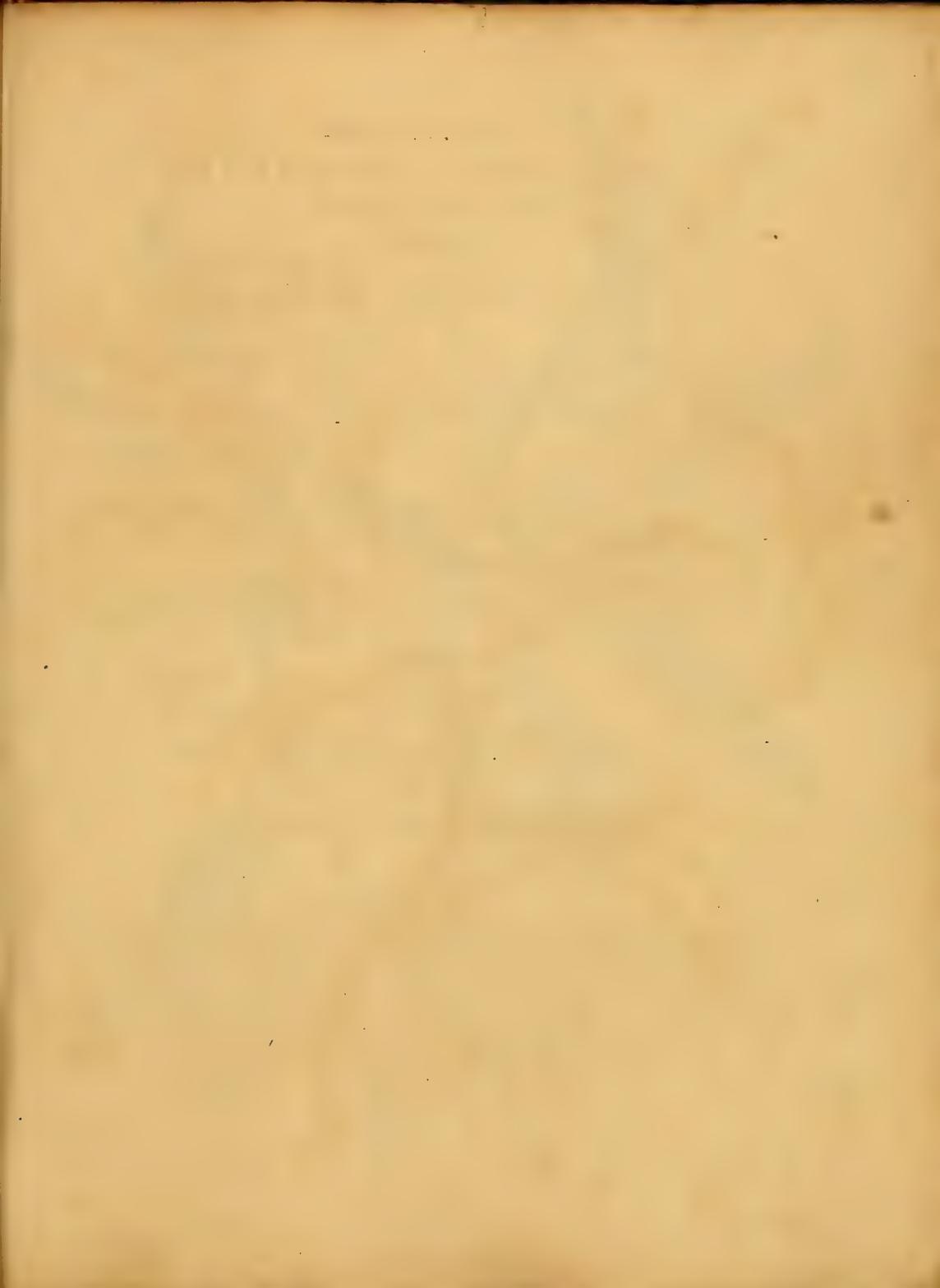


PLATE CCXXX.
DODONÆA TRIQUETRA.

Three-sided Dodonæa.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium tetraphyllum, planum; foliolis ovatis, obtusis, concavis, deciduis.	EMPALEMENT. Cup four-leaved, flat; leaflets egg-shaped, obtuse, concave, falling off.
COROLLA nulla.	BLOSSOM, none.
STAMINA. Filamenta octo, brevissima. Antheræ oblongæ, arcuatæ, conniventes, longitudine calycis.	CHIVES. Eight threads, very short. Tips oblong, curved, approaching, the length of the cup.
PISTILLUM. Germen triquetrum, longitudine calycis. Stylus cylindricus, trifurcatus, erectus. Stigma subtrifidum acutiufculum.	POINTAL. Seed-bud three-sided, the length of the cup. Shaft cylindrical, three-furrowed, upright. Summit nearly three-cleft rather pointed.
PERICARPIUM. Capsula trifurca, inflata, trilobularis; angulis membranaceis, magnis.	SEED-VESSEL. Capsule three-furrowed, swelled out, three cells, angles skinny, large.
SEMINA bina, subrotunda.	SEEDS by twos, nearly round.

SPECIFIC CHARACTER.

Dodonæa foliis lanceolatis, utrinque attenuatis, glaberrimis; ramulis triquetris; floribus dioicis.	Dodonæa with lance-shaped leaves, tapered to both ends, very smooth; the small branches three-sided; flowers with chives and pointals distinct.
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REFERENCE TO THE PLATE.

Male Flower.

1. The Empalement, magnified.
2. The Empalement and Chives, before the bursting of the tips, magnified.
3. The same, when the tips have emitted the pollen, magnified.

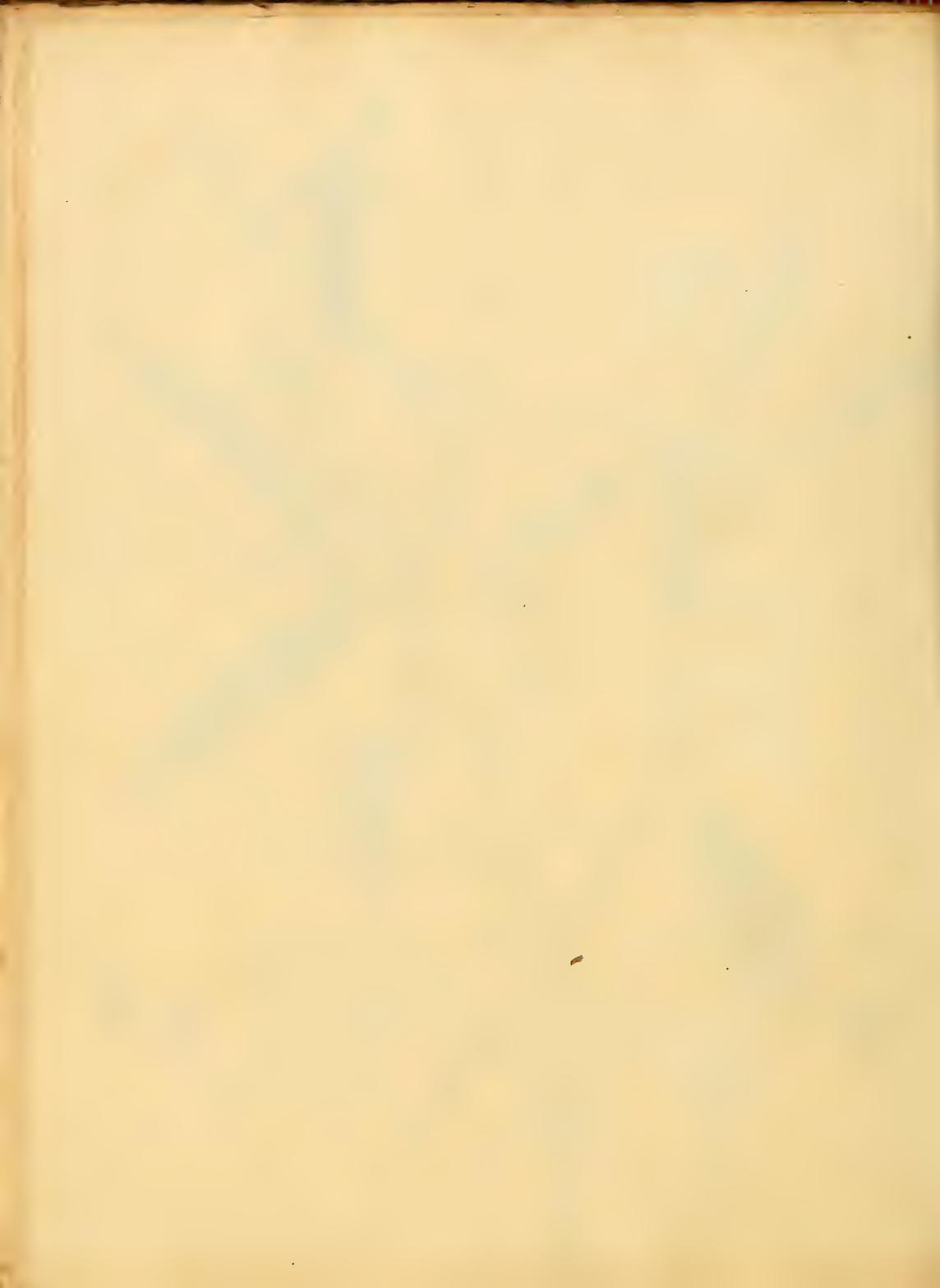
Female Flower.

1. The Empalement, magnified.
2. The Empalement, seed bud, shaft and summit, magnified.
3. A ripe capsule, natural size.
4. One of the divisions of the capsule.
5. A ripe seed, natural size.

THE species here figured of Dodonæa is from New Holland; where, Forster says he found it, as we have given it, with the chives and pointals distinct; but, that the same species was hermaphrodite, when growing in New Zealand, which may perhaps be the fact, though we should suspect, from such circumstance, they were different species. Martyn in his Ed. of Miller's Dict. mentions this plant, and throws it to the broad-leaved species found in the tropical climates of America and Asia. Willdenow, in his Sp. Plant. Tom. 11. P. 1. p. 345, has made it a species, without any observation on its parts of fructification; which leads us to suppose, he had not seen flowering specimens. It is as hardy as any greenhouse plant we possess, but will not resist the severity of our frosts; is easily propagated by cuttings, and thrives in almost any earth. It is so very common in New Holland, that, scarce a parcel of seeds has arrived from thence, but has contained some of the seeds. The two figures were taken from two plants at the nursery HammerSmith.



Stemodia trigyna



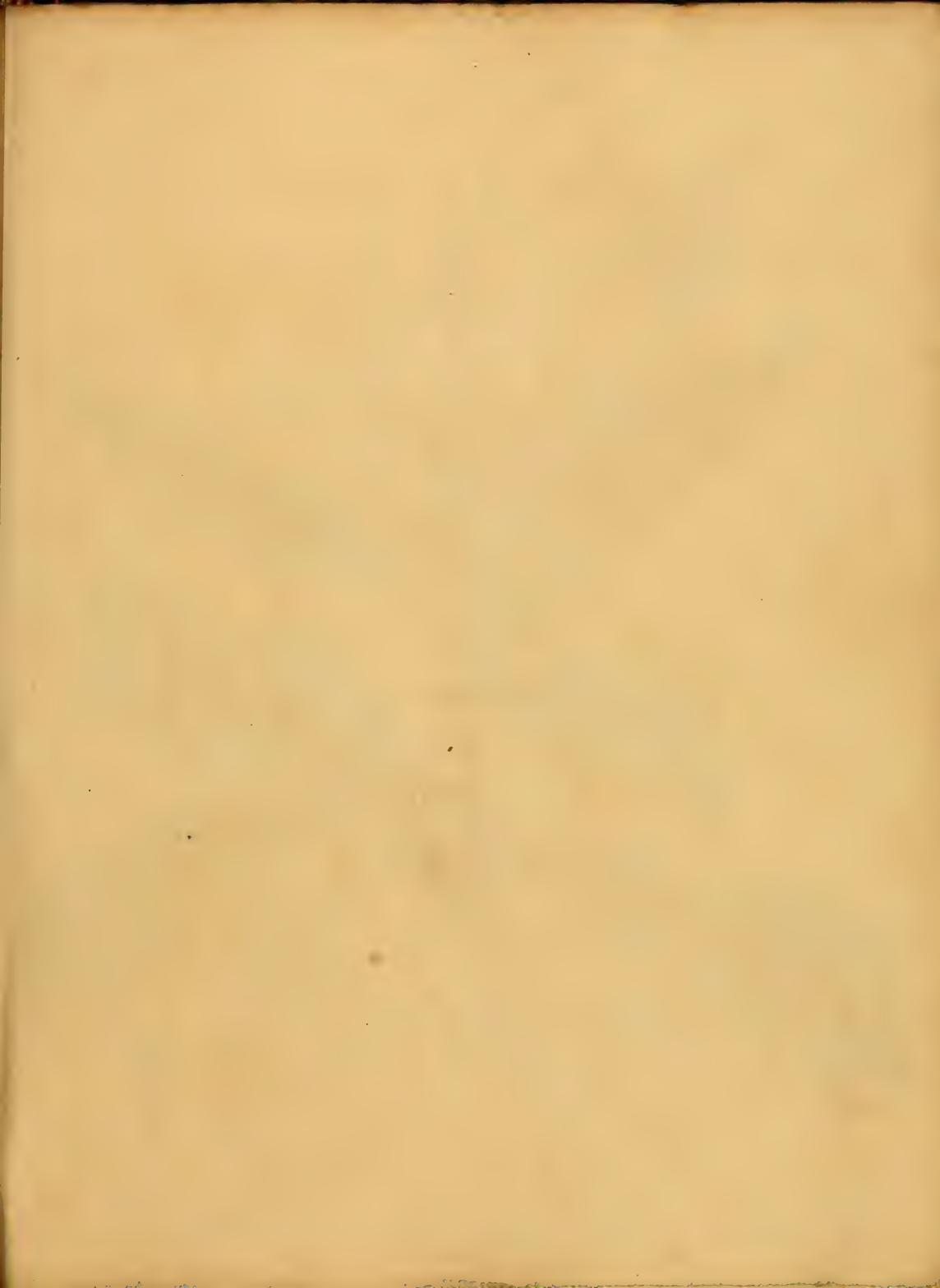


PLATE CCXXXI.

CERBERA AHOUI.

Oval-leaved Cerbera.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CONTORTA. Drupa monosperma. Corolla infundibuliformis. || FLOWERS contorted. Pulpy seed-vessel, one-seeded. Blossom funnel-shaped.
See Plate 130, Cerbera undulata, Vol. II.

SPECIFIC CHARACTER.

Cerbera foliis ovatis, acutis, laciniis corollæ undulatis; calycis foliolis reflexis. || *Cerbera* with egg-shaped, pointed leaves; segments of the blossom waved; leaflets of the cup reflexed.

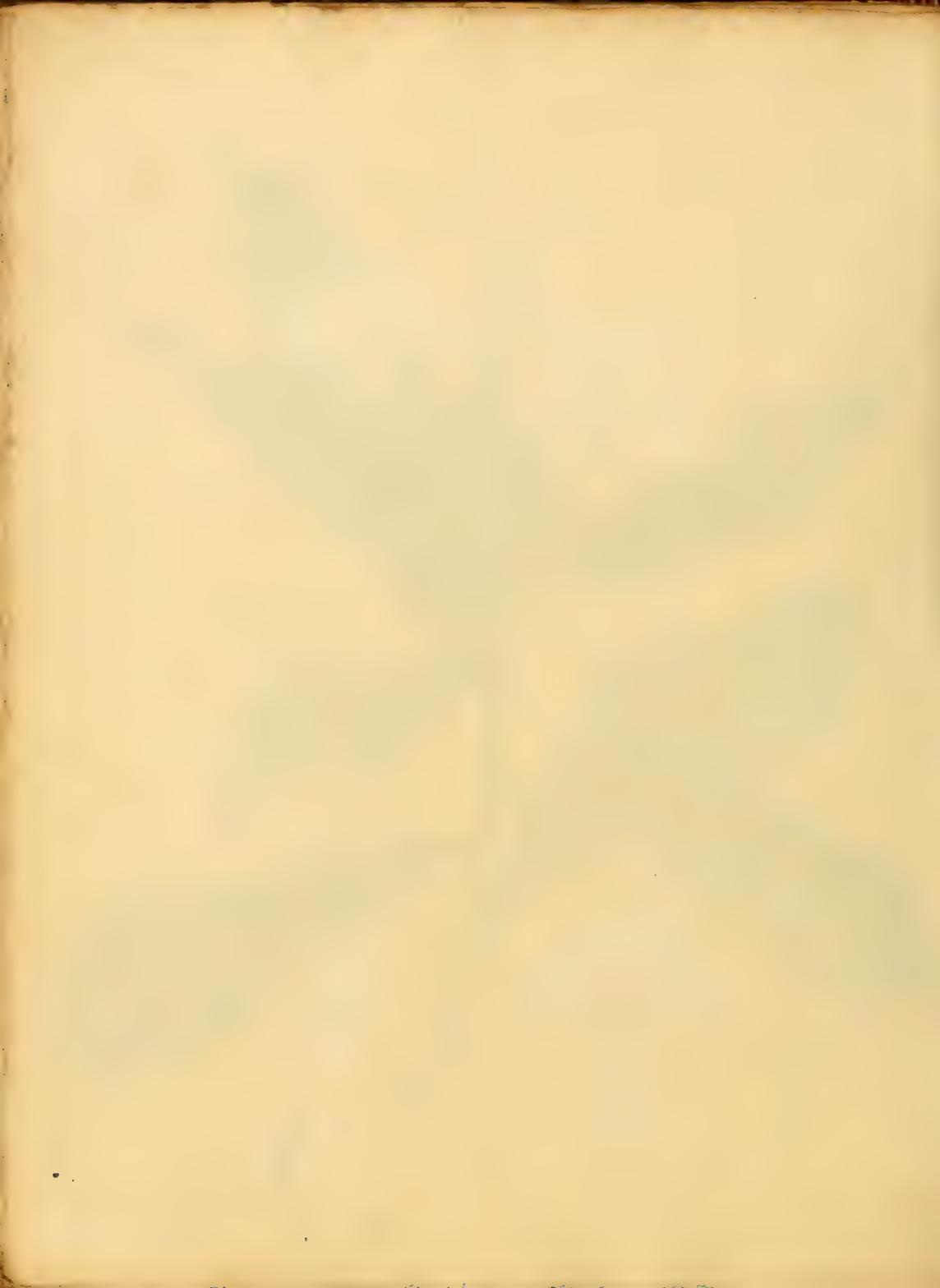
REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom cut open, the Chives in their place.
3. The Seed-bud, Shaft and Summit; with the summit detached, magnified.

THE oval-leaved *Cerbera* is a native of the continent of South America, in Brazil and the other provinces within the tropics; therefore, must be treated as a tender hot-house plant. It is increased by cuttings, delights most in a rich soil, and flowers in July, or August. It is said to acquire the height of ten feet, in its native clime, but, with us, it seldom attains to three; becoming a handsome, bushy shrub. The flowers have a faint smell, as have most of this natural order; the whole plant is replete with a whitish juice, of a most deleterious quality; and the wood when rubbed emits a disagreeable odour. The fruit is considered by the Indians as a deadly poison against which there is no antidote. Our figure was taken from a plant in the Hibbertian Collection, Clapham. Introduced to England, (or rather cultivated about that period) says the Kew Catalogue, by Mr. Miller, in the year 1739.



Berberis Alouin



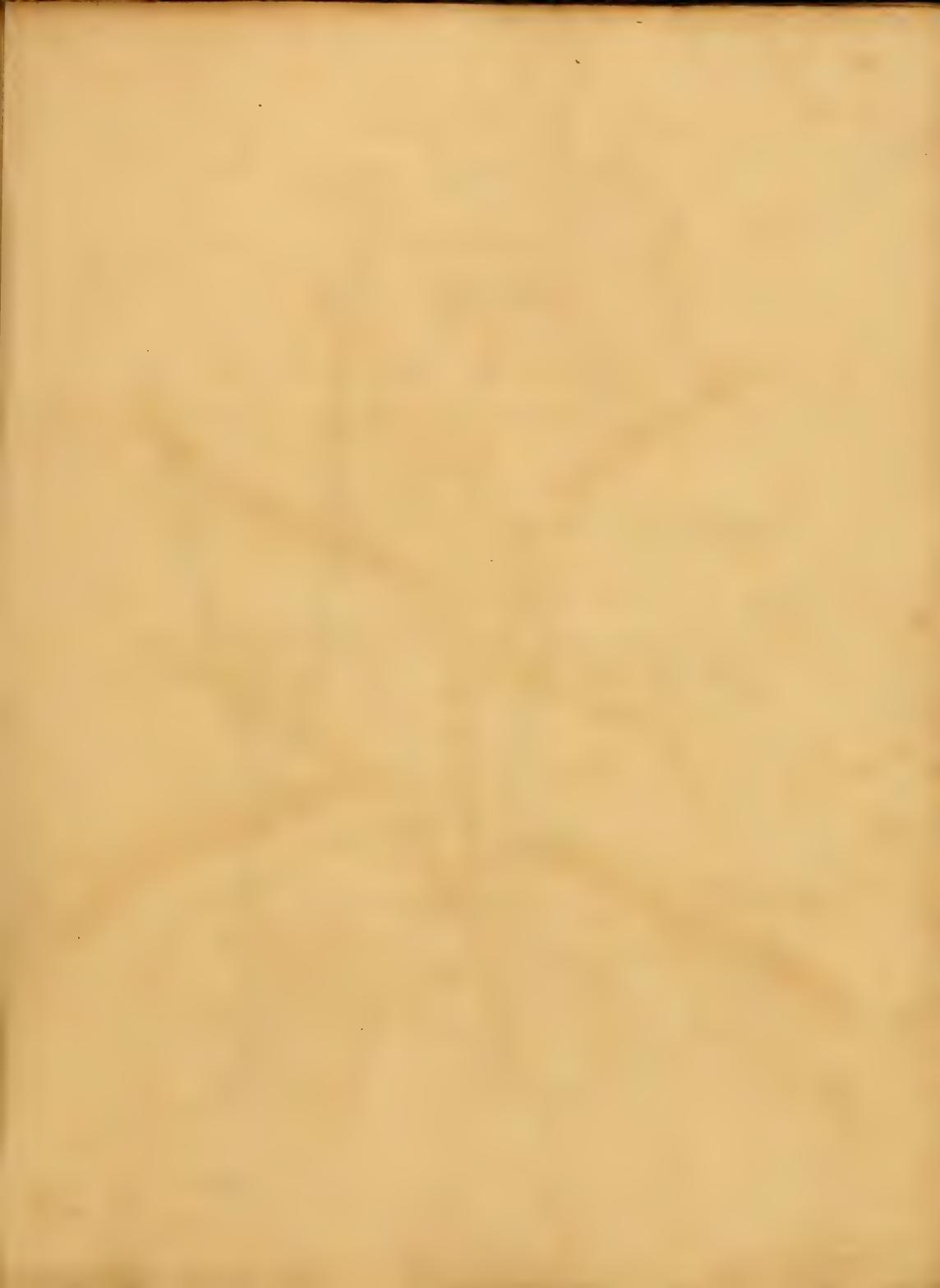


PLATE CCXXXII.

IXIA CAPITATA. *Var. Stellata.*

Bunch-flowering Ixia. *Var. Star-flowered.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

Ixia foliis ensiformibus, erectis, scapo brevioribus; floribus capitatis, confertis, pallide carneis; petalis basi stellatis.		Ixia with sword-shaped leaves, upright shorter than the stem; flowers grow in heads, crowded, of a pale flesh-colour; petals starred at the base.
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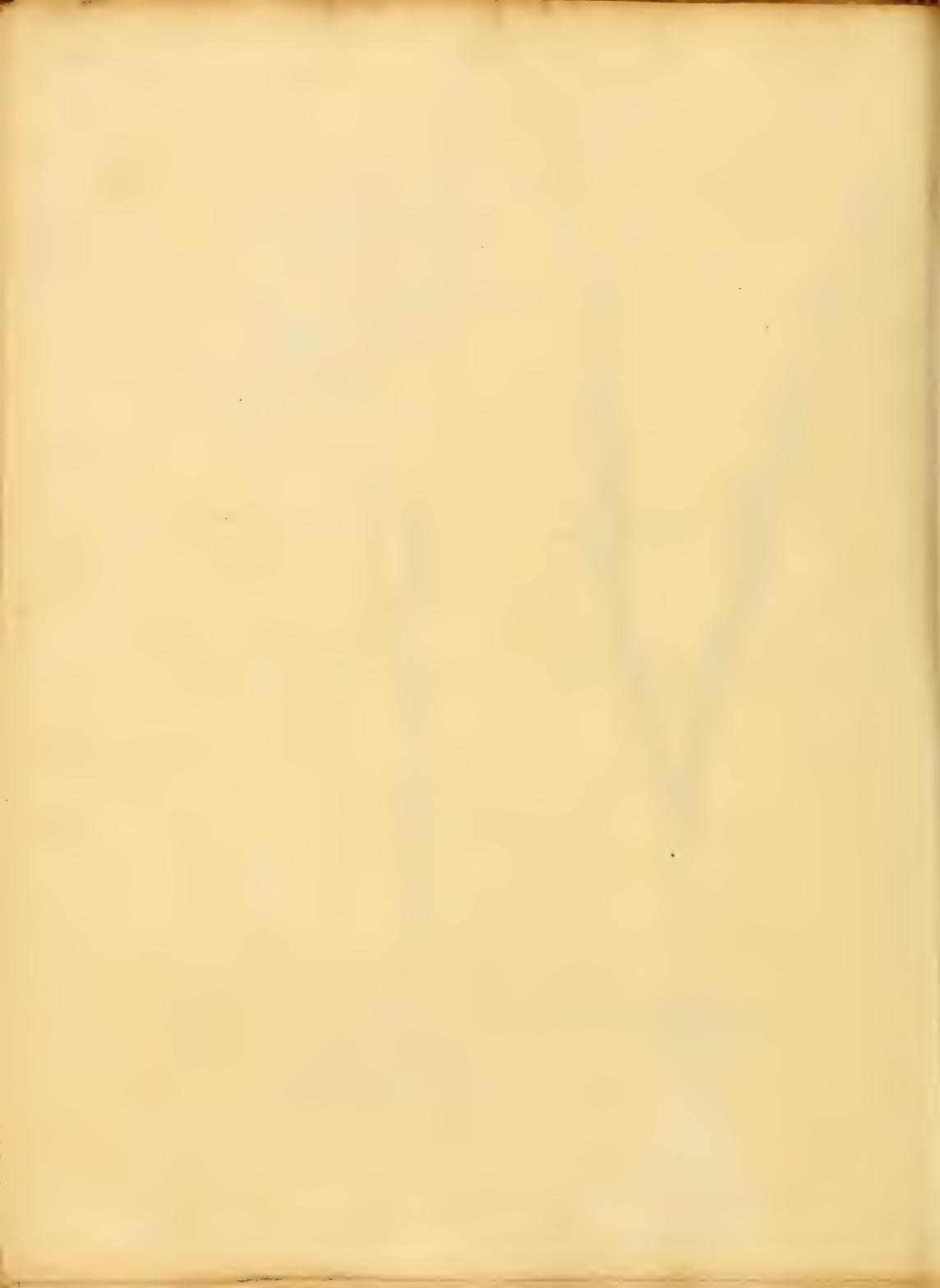
REFERENCE TO THE PLATE.

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

As we cannot think this plant possesses sufficient distinctive character, to entitle it to a particular specific title, we have placed it as above; although we must confess that the root, in this plant, is very dissimilar from most of the bunch-flowering species. It is a very hardy bulb, and in no ways liable to rot, increasing very abundantly, and flowering, without any assistance from heat, about the end of May. Our figure was taken at the Hammermith nursery in 1799; to which it had been introduced, about four years previous.



capitata
stellata



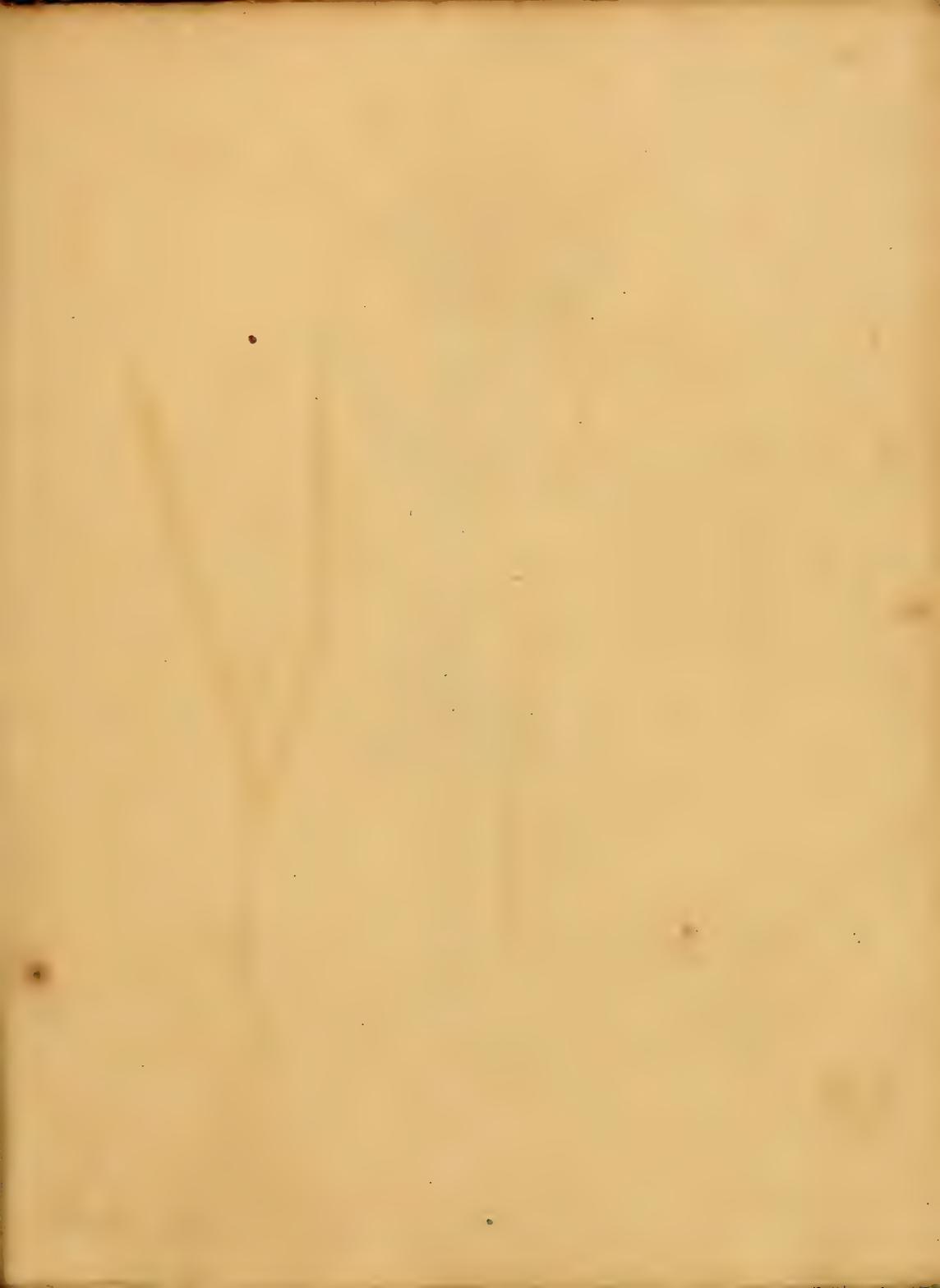


PLATE CCXXXIII.
MELANTHIUM VIRIDE.

Green-flowered Melanthium.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.

COROLLA. Petala sex, ovato-oblonga, patentia, unguibus linearibus longioribus, persistentia.

STAMINA. Filamenta sex, filiformia, erecta, longitudine corollæ, cui inserta supra unguis. Antheræ globosæ.

PISTILLA. Germen conicum, striatum. Styli tres, distincti, curvi. Stigmata obtusa.

PERICARPIUM. Capsula ovata, trigona, trifurca, trilocularis, ex capsulis tribus, introsum unitis.

SEMINA plurima, compressa, semiovata.

EMPALEMENT, none.

BLOSSOM. Six petals, oblong egg-shaped, spreading, with linear longer claws remaining.

CHIVES. Threads six, thread-shaped, upright, the length of the blossom into which they are inserted above the claws. Tips globular.

POINTALS. Seed-bud conical, streaked. Shafts three, distinct, curved. Summits blunt.

SEED-VESSEL. Capsule egg-shaped, three-sided, three furrowed, three-celled, formed of three capsules united within.

SEEDS numerous, flattened, half egg-shaped.

SPECIFIC CHARACTER.

Melanthium foliis ovato-lanceolatis, scapo vaginantibus, erectis; corollis viridi-purpureis, reflexis.

Melanthium with leaves between lance and egg-shaped, sheathing the stem and upright; blossoms greenish-purple, reflexed.

REFERENCE TO THE PLATE.

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

The Green-flowered Melanthium was introduced to the Kew collection, by Mr. F. Maffon, in the year 1788, as we are informed by the catalogue of that garden, from the Cape of Good Hope. The plant from which our figure was taken, had been sent to the Clapham collection amongst other bulbs which were received from Mr. Niven in the year 1800; it flowered the succeeding year, when our drawing was made. We believe, at present, it is in no other collection than that of Mr. Hibbert; nor do we think, without a fresh supply, it will be long seen in this country, as it has been often introduced, and as often lost; nor does it increase with us by the root, and the seeds have not, as yet, matured in this country; it appears to grow luxuriantly in sandy peat earth, and flowers in July.



Melantherum viride

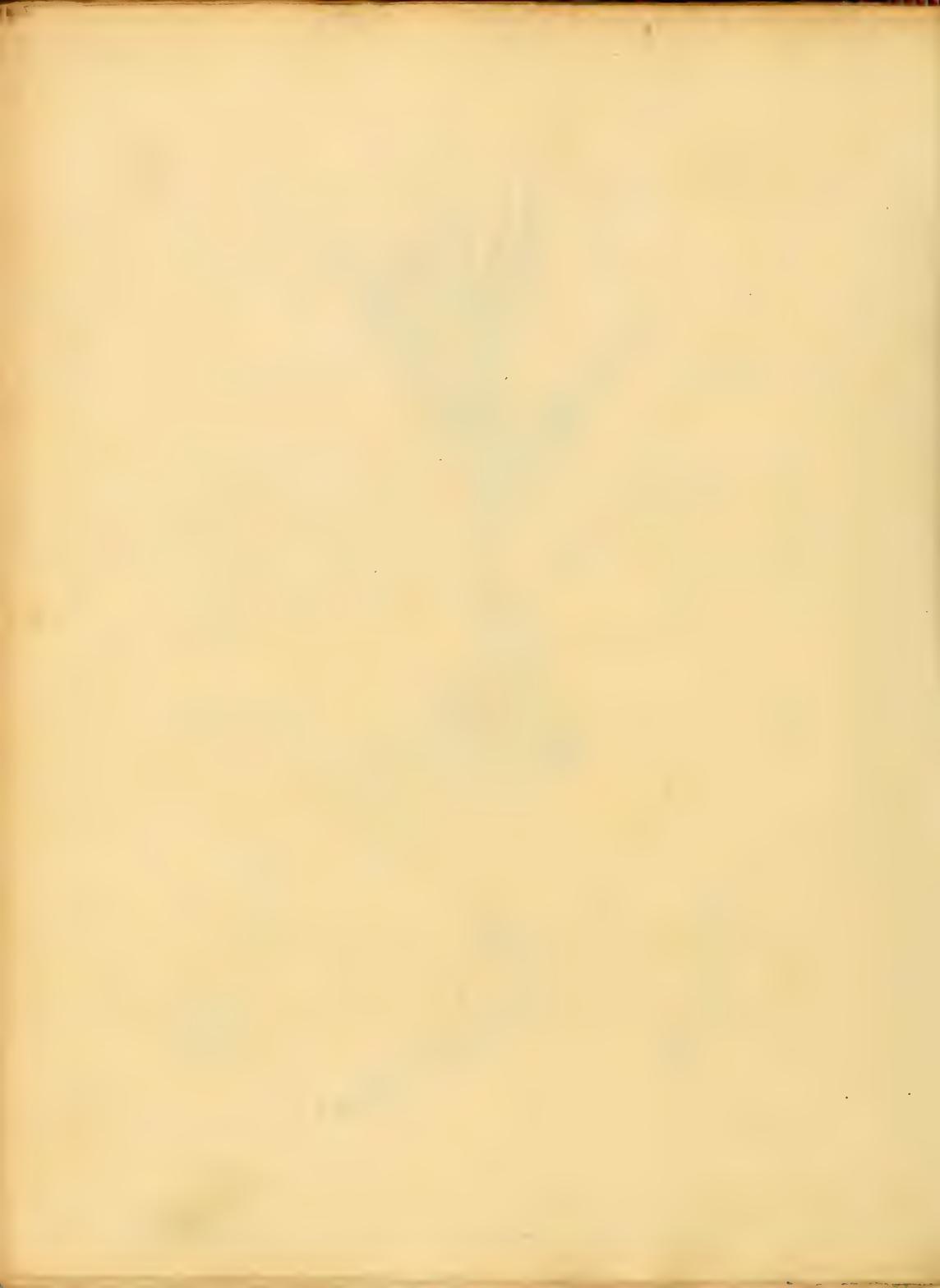




PLATE CCXXXIV.

PROTEA SPICATA.

Spike-flowered Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida seu 4-petala. Antheræ lineares, infertæ petalis infra apicem. Calyx proprius nullus. Semina folitaria.		BLOSSOM 4-cleft or 4-petalled. Tips linear, inserted into the petals below the point. Proper cup none. Seeds folitary. See <i>PROTEA FORMOSA</i> , Plate XVII. Vol. I.
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SPECIFIC CHARACTER.

Protea foliis bipinnatis, subfiliformibus, pinnulæ canaliculatæ, apice glandulosæ; capitula spicata, quadriflora.		Protea with twice-divided leaves nearly thread-shaped, small divisions channelled and glandular at the end; small heads in spikes and four-flowered.
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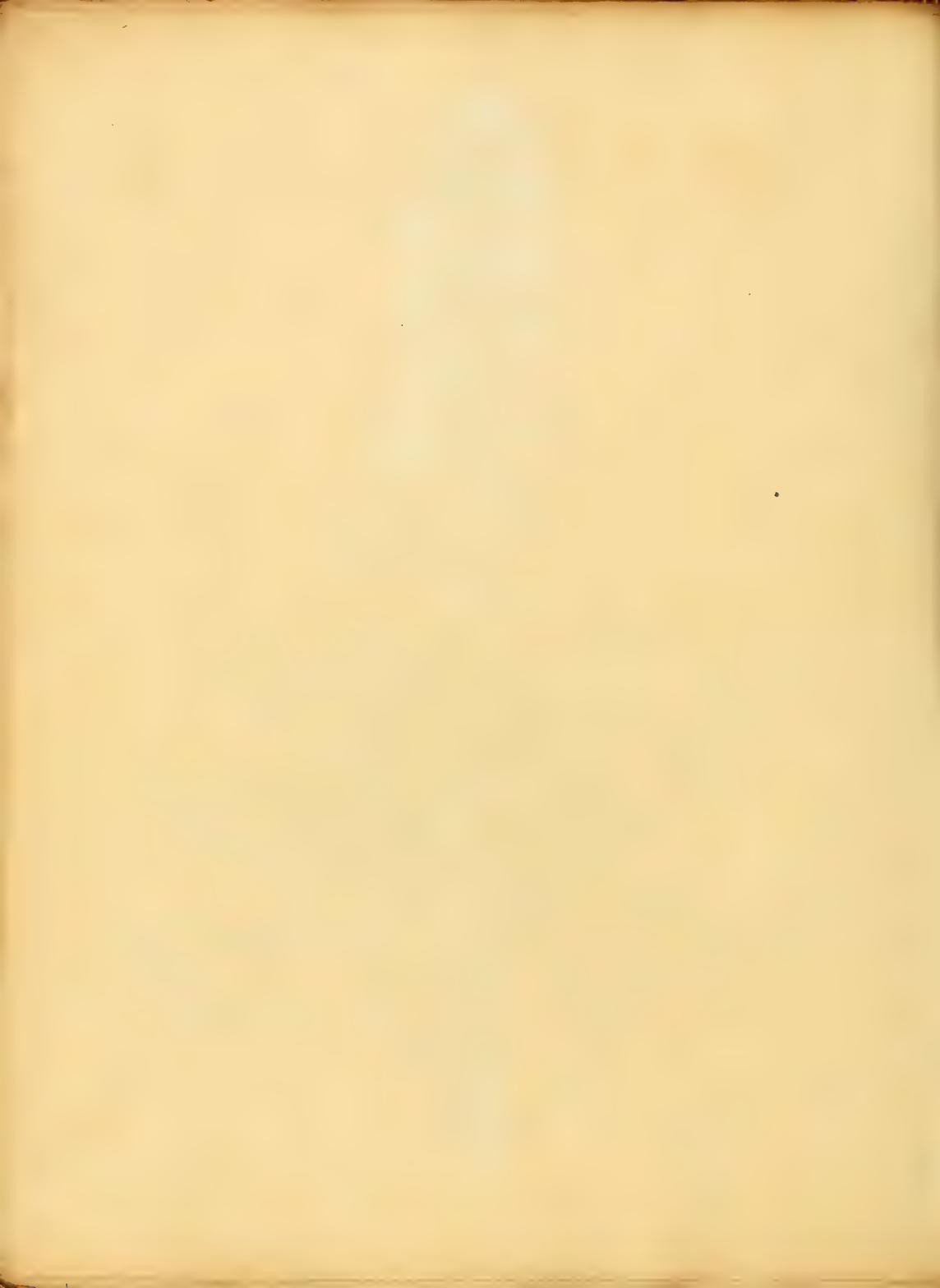
REFERENCE TO THE PLATE.

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

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



Botra spicata



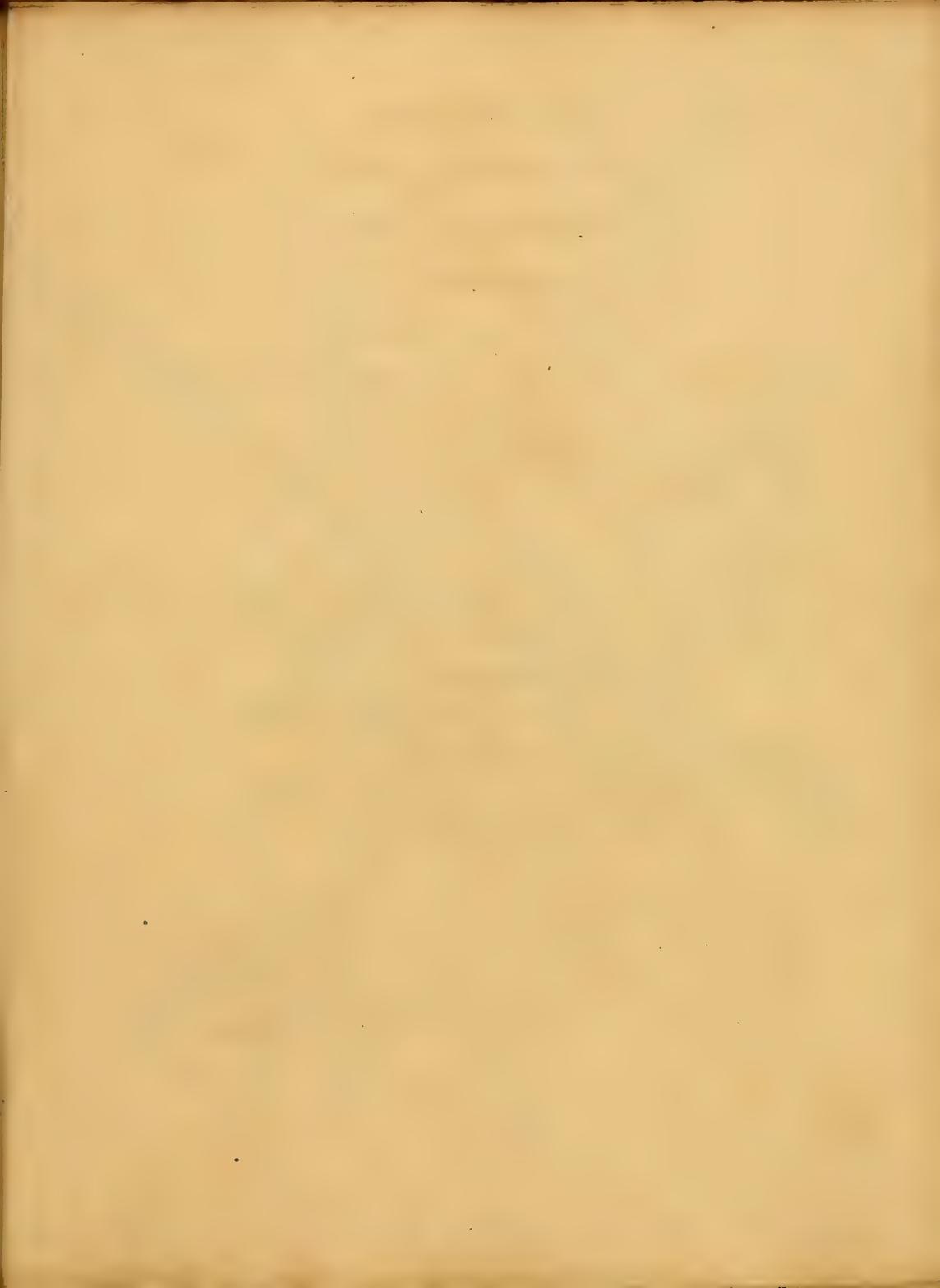


PLATE CCXXXV.

MIMOSA DISCOLOR.

Two-coloured leaved Mimosa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Various dispositions: Upon one plant.

ESSENTIAL GENERIC CHARACTER.

HERMAPH. Calyx 5-dentatus. Cor. 5-fida.
STAMINA 5 seu plura. Pist. 1. Legumen.
MASC. Calyx 5-dentatus. Cor. 5-fida.
STAMINA 5, 10, plura.

HERMAPH. Cup 5-toothed. Blossom 5-cleft.
CHIVES 5 or more. Pointal 1. A pod.
MALE, Calyx 5-toothed. Blossom 5-cleft.
CHIVES 5, 10, or more.

SPECIFIC CHARACTER.

Mimosa inermis; foliis bipinnatis, sexjugis, bicoloribus; pinnis acutis, æqualibus; spicis axillaribus; capitulis globosis; filiquis latifimis, planis.

Mimosa without spines; leaves doubly winged, in six pairs, and two coloured; wings sharp pointed and equal; spikes grow from the insertion of the leaves; small heads globular; pods very broad and flat.

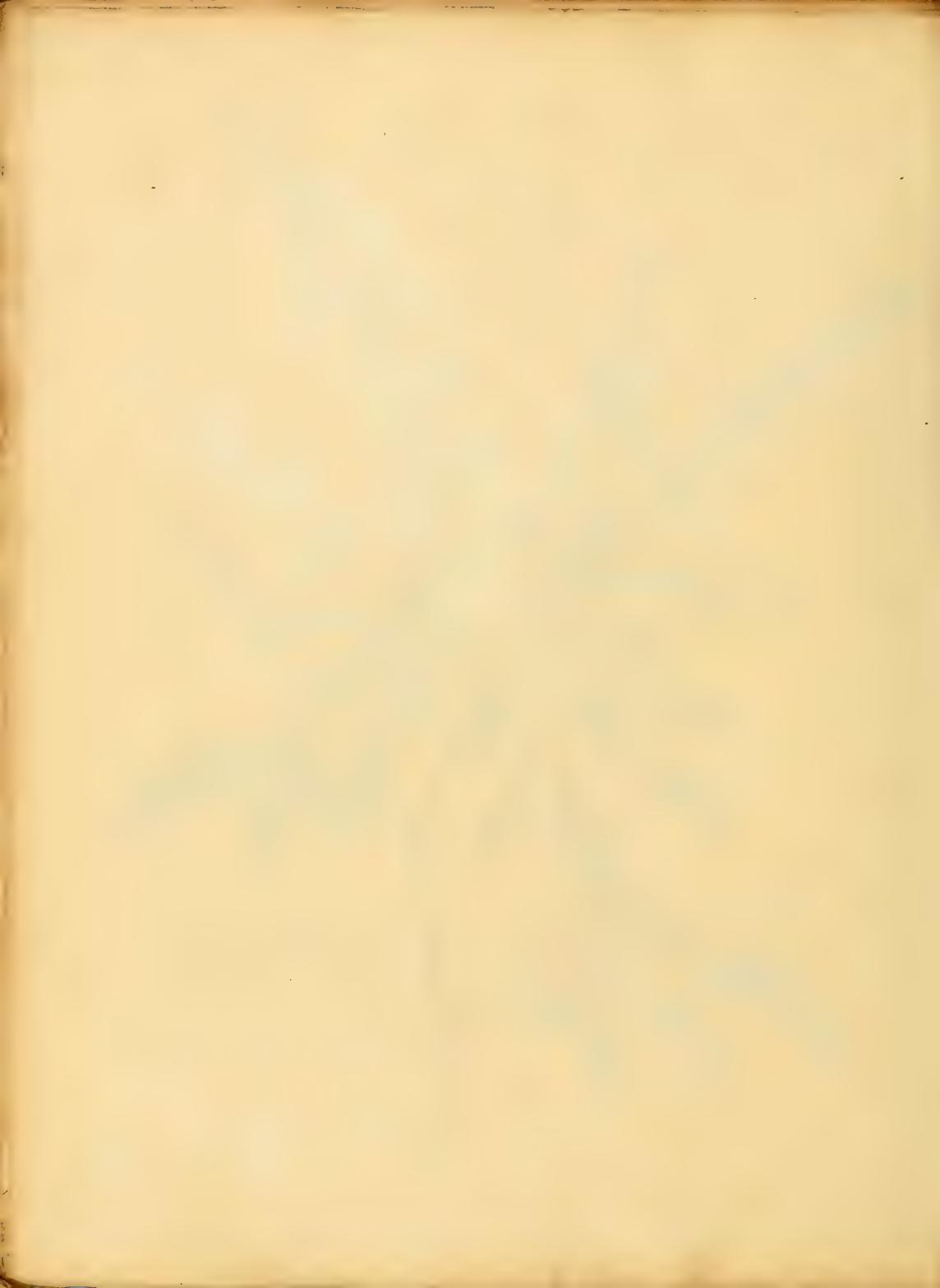
REFERENCE TO THE PLATE.

1. The Empalement, natural size.
2. The same, magnified.
3. A Blossom.
4. A Chive, magnified.
5. The Pointal natural size, from an hermaphrodite flower.
6. The same, magnified.

In the year 1788 the seeds of this plant were received, from New South Wales, by a number of persons; and were raised, the same year, by most of those who sowed the seeds. The character of the plant from whence it derives its specific title is much lost in its advanced state; but in the first two or three years of its growth, it is extremely powerful; the under part of the young leaves being of a bright purple. It is extremely difficult to propagate from cuttings; and it has not, as yet, perfected its seeds in England. It grows to the height of six or seven feet; is a hardy green-house plant; and thrives most in sandy peat earth. Our figure was made from a very fine specimen, communicated by the Hon. W. H. Irby, in September 1801, from his elegant collection at the Parsonage, Farnham Royal, near Windsor, Bucks.



Mimosa discolor



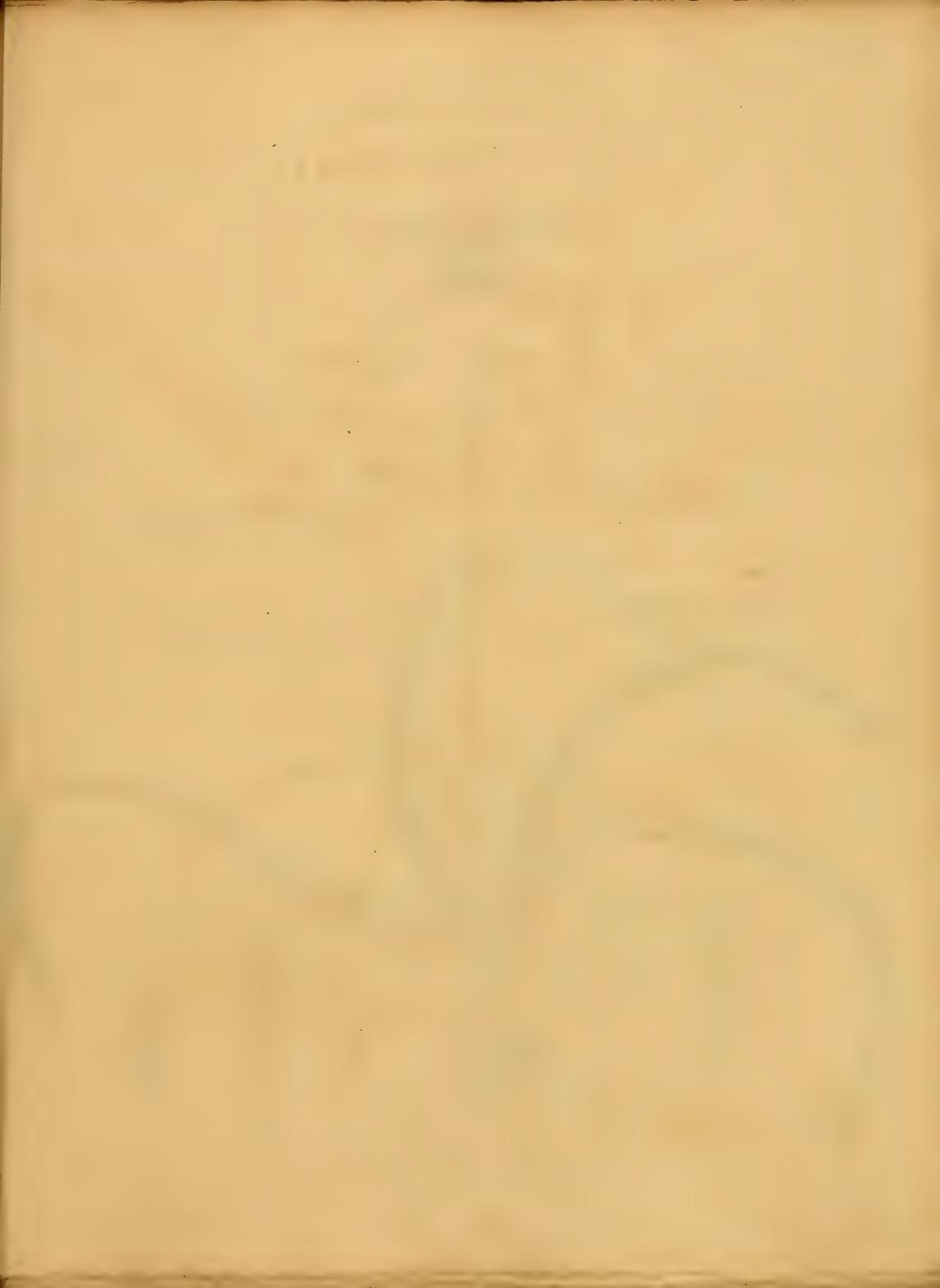


PLATE CCXXXVI.

HYPOXIS STELLATA. *Var. flore albo.*

Star-flowered Hypoxis. White Var.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, persistens, supera. Cap- fula basi angustior. Spatha 2-valvis.		BLOSSOM sixparted, remaining, above. Capsule narrower at the base. Sheath two valves. <i>See Hypoxis stellata. Pl. 101. Vol. II.</i>
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SPECIFIC CHARACTER.

Hypoxis scapo unifloro; foliis sublinearibus, laxis, striatis; petalis basi maculatis; co- rolla intus alba.		Hypoxis with but one blossom on the flower- stem; leaves nearly linear, flexible and scored; the petals spotted at the base; blossom white within.
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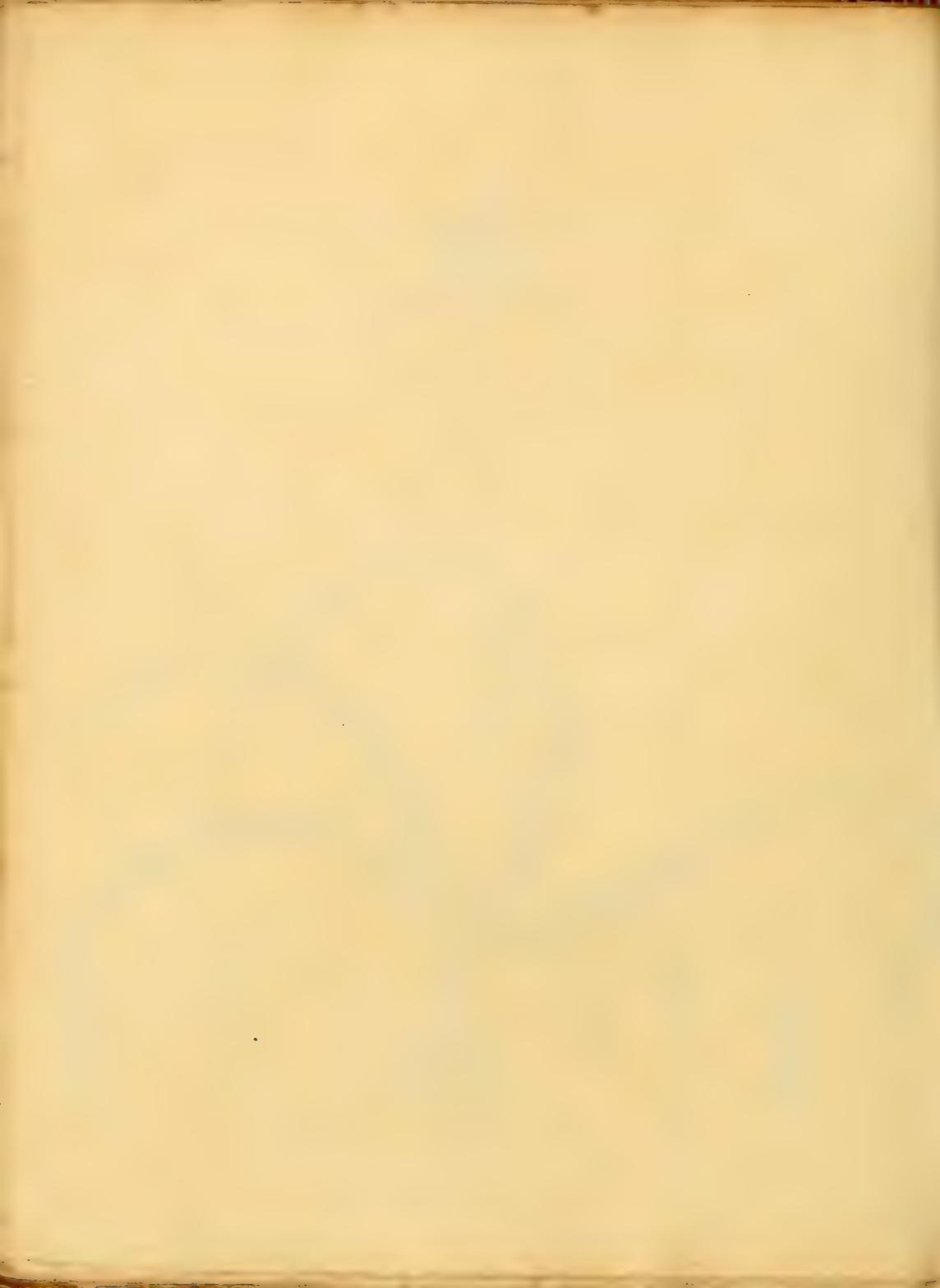
REFERENCE TO THE PLATE.

1. A Petal of the Blossom, shewn from the outside.
2. The Chives and Pointal.
3. One of the Chives.
4. The Pointal, cleared of the chives.

THIS most brilliant variety of *Hypoxis stellata*, is as old an inhabitant of our gardens as the other *Var.* figured in the 2d Vol. of the Repository, Pl. 101; it was likewise introduced by Mr. F. Masson. The roots of this plant are rather more tender, or delicate, than those of the yellow variety; which makes it scarcer, and much less known. The nursery, Hammermith, is the only place at which we have seen it; and, we believe, they have it not in Holland. The root from which our figure was taken, had been imported, from the Cape, in 1801. It flowers in April, and increases by the root; should be planted in very light sandy peat earth, and removed from the pot soon after the flowers are decayed.



Hypoxis stellata Vahl. f. var. *stellata*



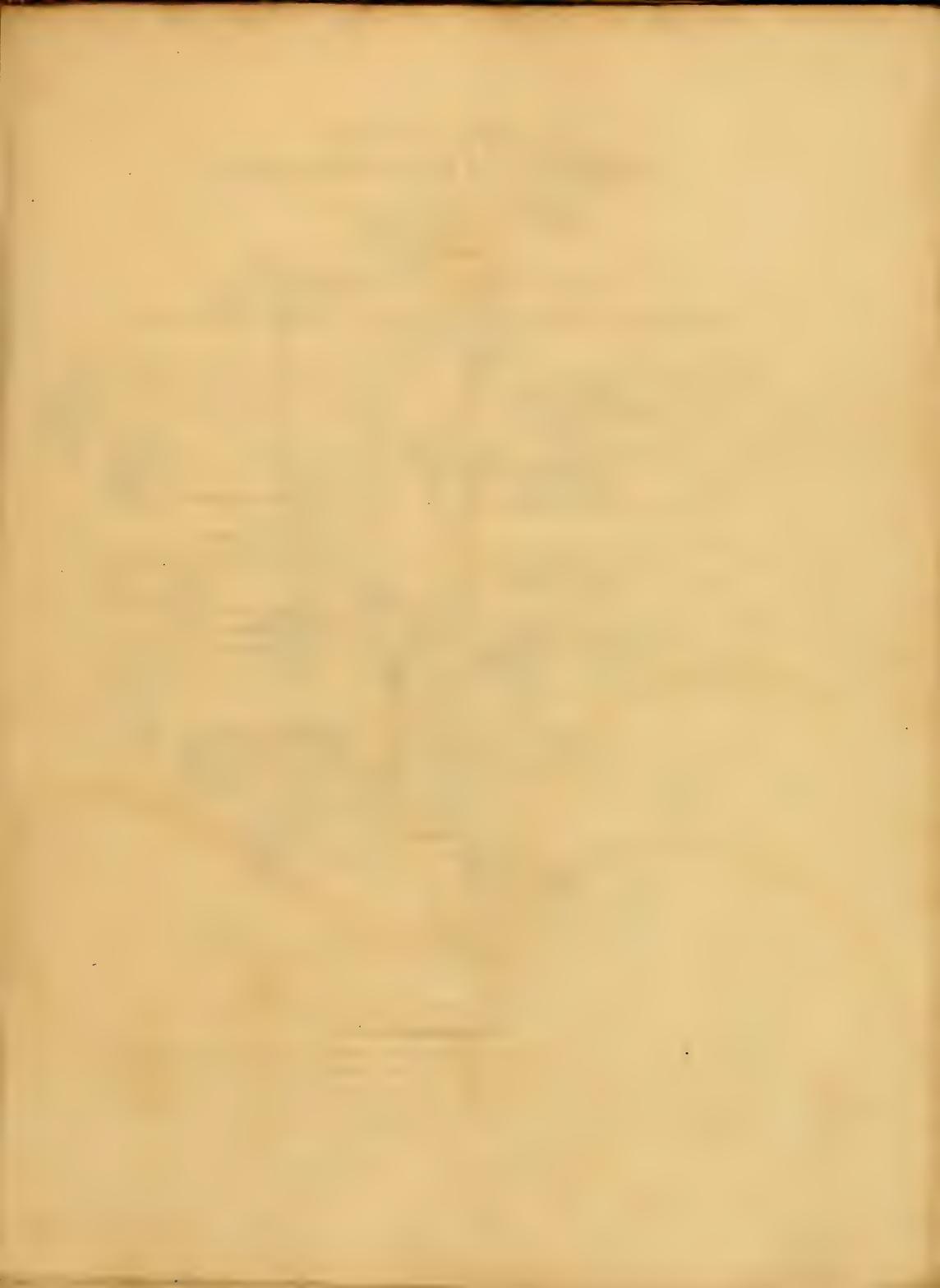


PLATE CCXXXVII.
CYTISUS TOMENTOSUS.

Downy-leaved Cytifus.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum, breve, basi obtusum; ore bilabiato; labio superiore bifido, acuminato; inferiore tridentato.

COROLLA papilionacea.
Vexillum ovatum, assurgens, laterioribus reflexis.
Alæ longitudine vexilli, rectæ, obtusæ.

Carina ventriculosa, acuminata.

STAMINA. Filamenta diadelpa (simplex et novemfidum) assurgentia. Antheræ simplices.

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

PERICARPIMUM. Legumen oblongum, obtusum, basi attenuatum, rigidum.

SEMINA nonnulla, reniformia, compressa.

EMPALEMENT. Cup one-leaved, bell-shaped, short, blunt at the base; mouth two-lipped; upper lip two-cleft, tapered; lower lip three-cleft.

BLOSSOM butterfly shaped.
Standard egg-shaped, rising upwards, turned back at the sides.

Wings the length of the standard, straight, blunt.

Keel a little bellied, tapered.

CHIVES. Threads in two sets (one single, the other nine-cleft) turned upwards. Tips simple.

POINTAL. Seed-bud oblong. Shaft simple, turned upwards. Summit obtuse.

SEED-VESSEL. Pod oblong, obtuse, tapered at the base, stiff.

SEEDS a few, kidney-shape, flattened.

SPECIFIC CHARACTER.

Cytifus racemis lateralibus, erectis; ramis teretibus, divaricatis; foliis ovatis, tomentosis; vexillo crenulato; corollis luteis.

Cytifus with the bunches of flowers growing from the sides of the branches, which are round and straddle; leaflets egg-shaped and downy; standard a little scolloped; blossoms yellow.

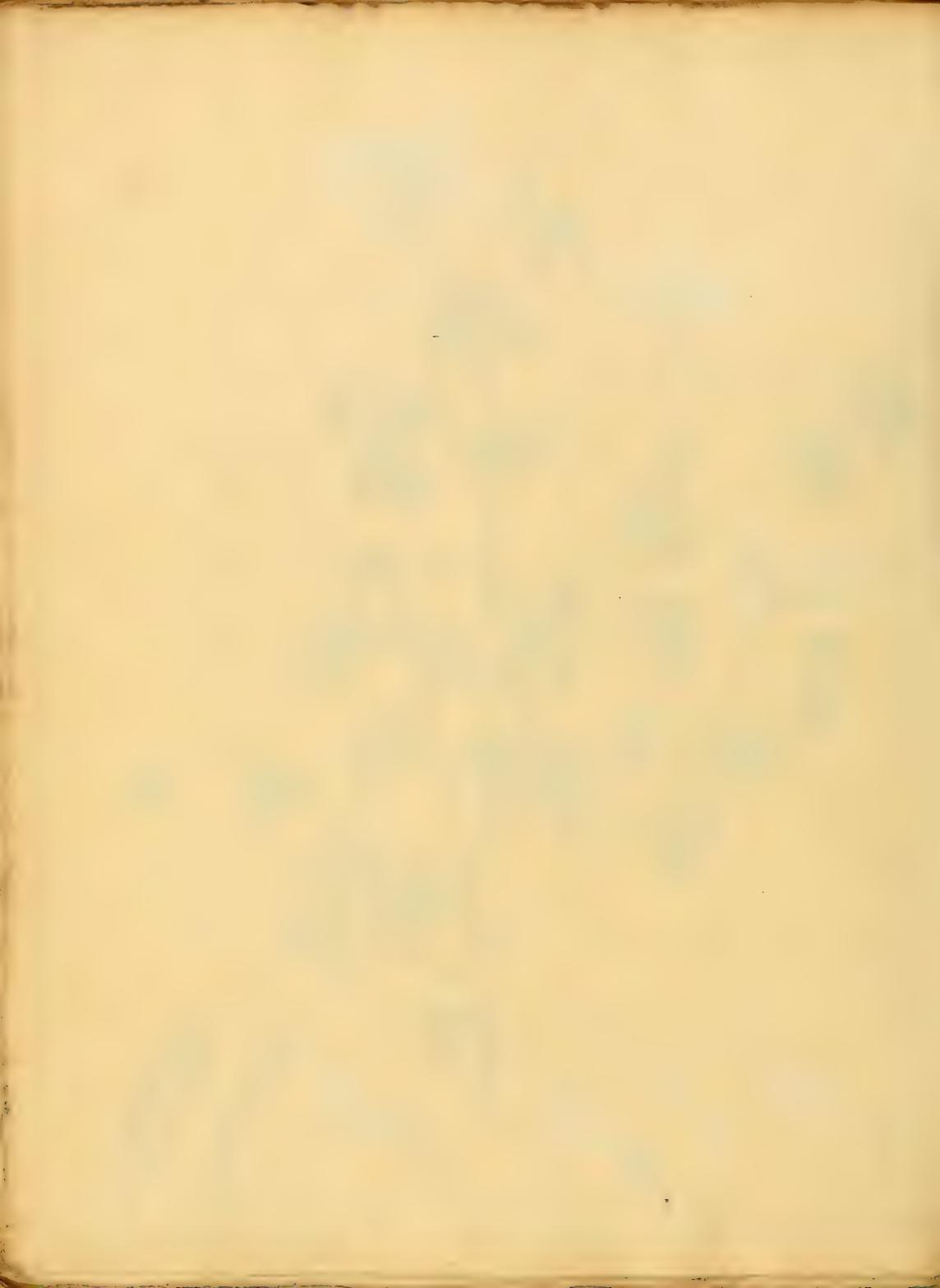
REFERENCE TO THE PLATE.

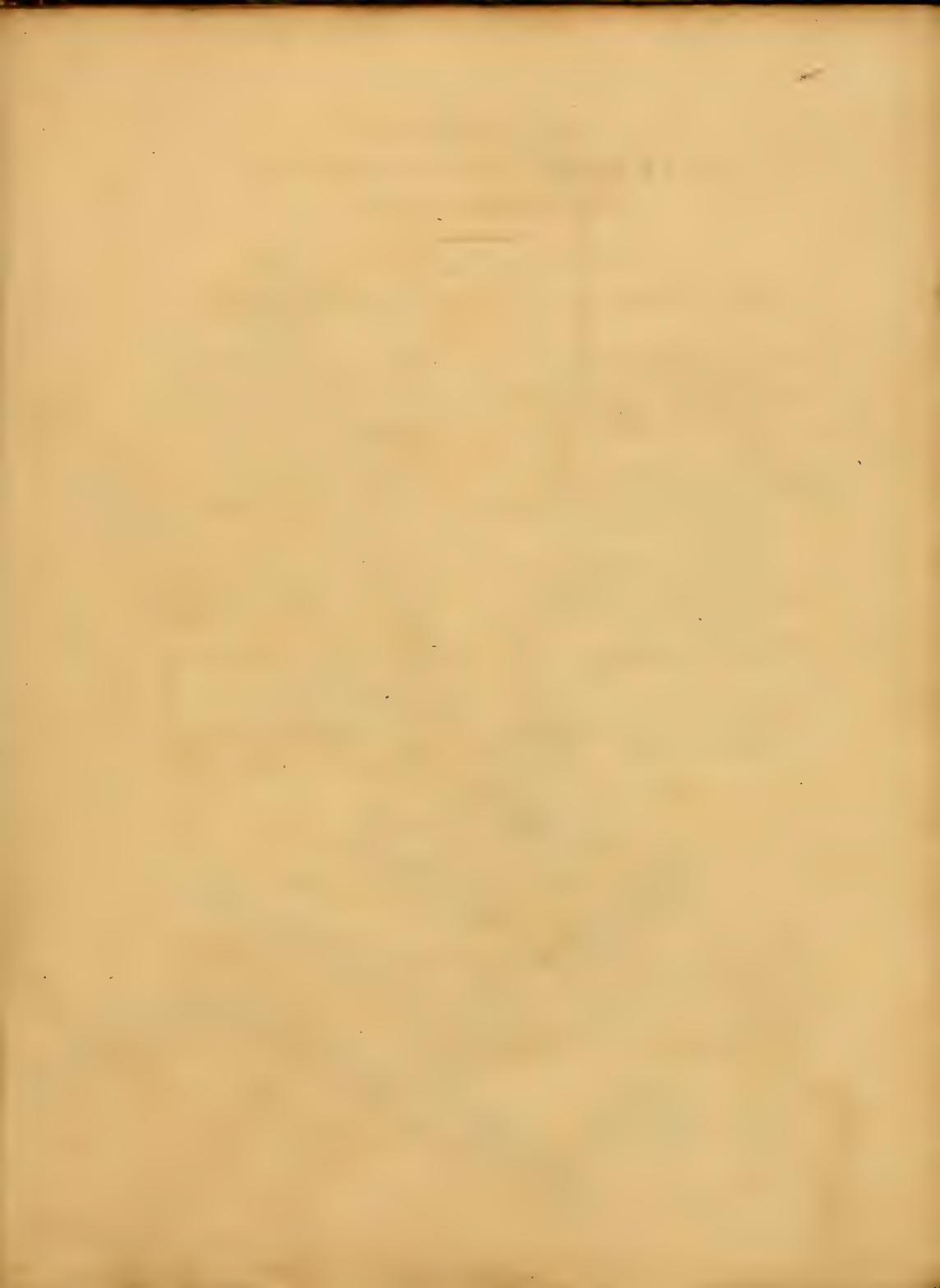
1. The Empalement.
2. The standard.
3. One of the Wings.
4. The Keel.
5. The Empalement, Chives, and Pointal, a little magnified.
6. The Seed-bud, magnified.
7. A ripe Pod.
8. The same, split open, to expose the situation of the seeds.

This pretty *Cytifus*, a native of the Cape of Good Hope, was raised from seeds at the Hammersmith nursery, in the year 1798. It is rather a weak, and loose growing shrub, attaining the height of a foot and a half, and flowering about August. It delights in a light soil, and is propagated with ease by cuttings; it likewise perfects its seeds. The whole habit of the plant much more resembles *Crotolaria* than *Cytifus*; but the seed-vessel and empalement preclude its admission to that Genus.



Cytisus lomentosus





ROËLLA DECURRENS.

Decurrent-leaved Roella.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, turbina-
tum, quinquepartitum, persistens; laciniis
lanceolatis, acutis, dentatis, magnis.
COROLLA monopetala, infundibuliformis, deci-
dua; tubus calyce paulo brevior; limbus
erecto-patens, quinquepartitus, calyce lon-
gior.
Nectarium e squamis quinque, conniven-
tibus, in fundo corollæ.
STAMINA. Filamenta quinque, subulata, nec-
tario infidentia. Antheræ subulatae; conni-
vantes, longitudine filamentorum, altitudine
calycis.
PISTILLUM. Germen oblongum, inferum. Sty-
lus filiformis, longitudine staminum. Stig-
mata duo, oblonga, depressa, patentia.
PERICARPIMUM. Capsula cylindracea, calyce bre-
vior, coronata calyce patenti majoreque facta,
bilocularis.
SEMINA plurima, angulata.
Obf. Campanulæ valde affinis.

EMPALEMENT. Cup one leaf, top-shaped, five-
divided, remaining; segments lance-shaped,
pointed, toothed, large.
BLOSSOM one petal, funnel-shaped, deciduous,
tube a little shorter than the cup; border
between upright and spreading, five-divided,
longer than the cup.
Honey-cup formed of five scales, approach-
ing, at the bottom of the blossom.
CHIVES. Five threads, awl-shaped, placed upon
the honey-cup. Tips awl-shaped, approach-
ing the length of the threads, the height of
the cup.
POINTAL. Seed-bud oblong, beneath. Shaft
thread-shaped, the length of the chives.
Summits two, oblong, flattened, spreading.
SEED-VESSEL. Capsule cylindrical, shorter than
the cup, crowned with the spreading cup
which has become larger, two celled.
SEEDS many, angled.
Obf. This Genus is very nigh affined to camp-
nula.

SPECIFIC CHARACTER.

Roëlla foliis lanceolatis, ciliatis, integerrimis,
decurrentibus; floribus solitariis, pedunculis
longissimis, axillaribus.

Roëlla with lance-shaped leaves, fringed, quite
entire, decurrent; flowers solitary, foot-
stalks very long, growing from the base of
the leaves close to the stem.

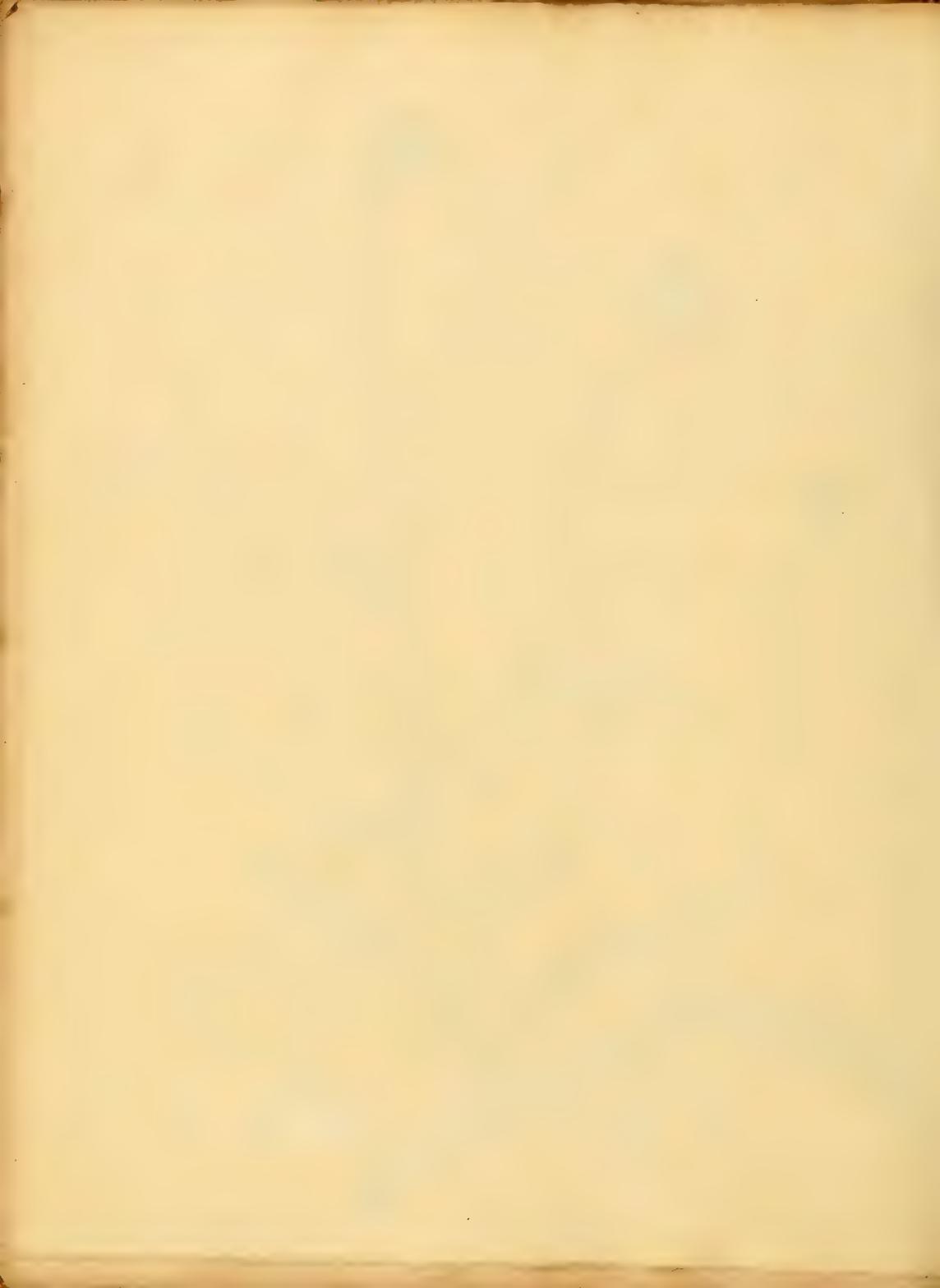
REFERENCE TO THE PLATE.

1. The Empalement, Chives, and Pointal, the blossom removed.
2. A Blossom cut on one side, and spread open.
3. One of the scales of the Honey-cup, with its Chive magnified.
4. The Pointal, cleared of the other parts of fructification.

As an annual, this is a most beautiful little plant; but, although the seeds have been received several times, from the Cape of Good Hope, where it is native; and first at the Royal Gardens, Kew, in 1787, sent by Mr. F. Masson; yet, has it never been seen the second year; owing, we suppose, to the impracticability of procuring ripe seeds in our climate. Perhaps future trials, by different treatment, may meet with a happier issue. The figure was taken at the Clapham Garden, in August 1800; when the plant had apparently attained its greatest perfection; but unfortunately, no seeds ripened; and at present, we believe, there is no vestige of the plant in Britain. It appears to delight in sandy peat, and to be kept under cover, even in the summer season.



Roella decurrens



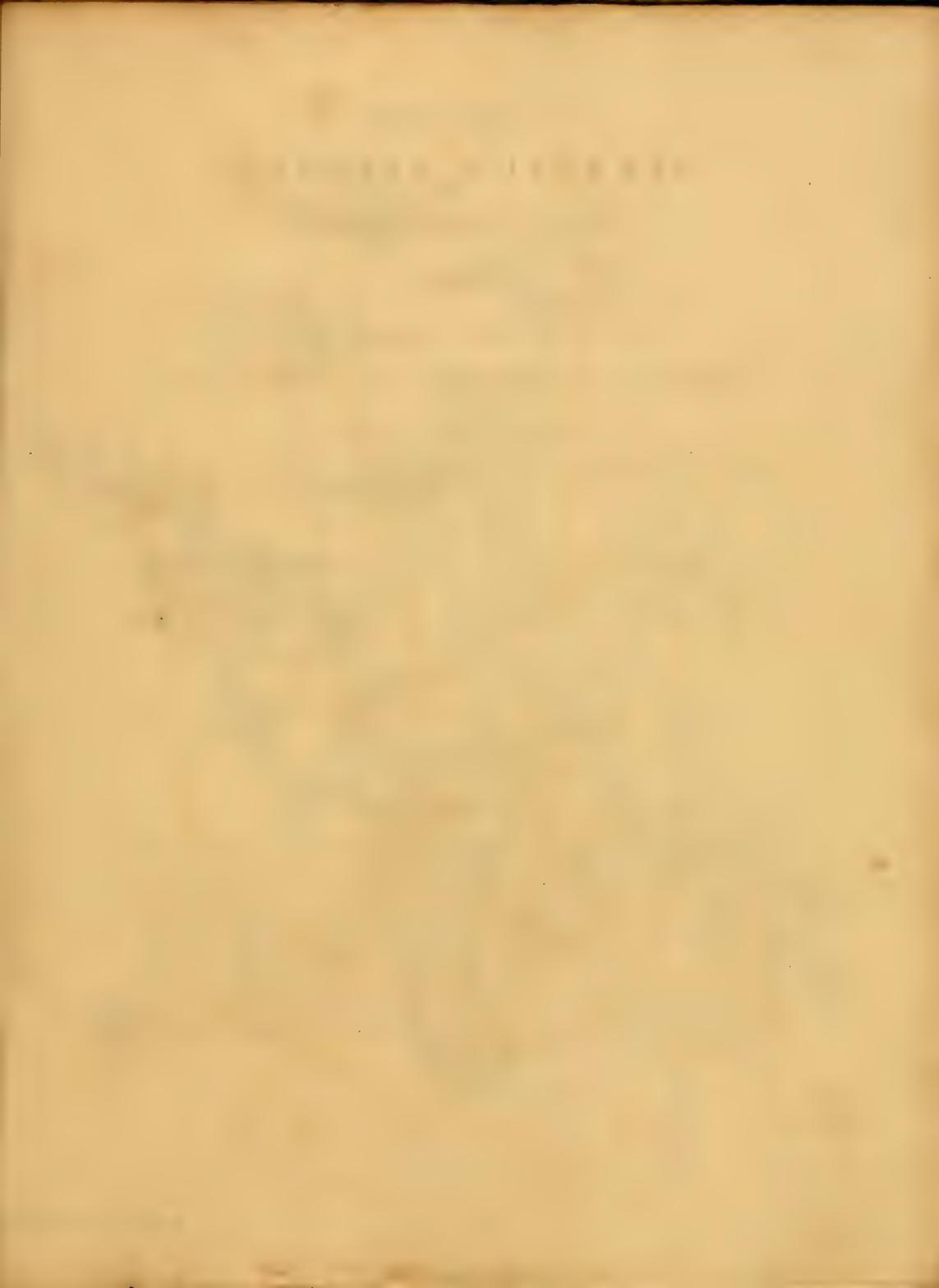


PLATE CCXXXIX.
GERANIUM SELINUM.

Rock-Parsley-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

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

ONE POINTAL. Five Summits.
FRUIT furnished with long awns, five dry berries.
See GERANIUM GRANDIFLORUM. Vol. 1. Pl. XII.

SPECIFIC CHARACTER.

Geranium foliis pinnatis, foliolis alternis, laciniatis, hirsutis; petala bina superiora refracta, 3 inferiora concava, conniventia, recta; staminibus 5 fertilibus; radice tuberosa.

Geranium with winged leaves; leaflets alternate, ragged, and hairy; the two upper petals appearing broke back, the 3 lower concave, approaching and straight; five fertile chives; root tuberos.

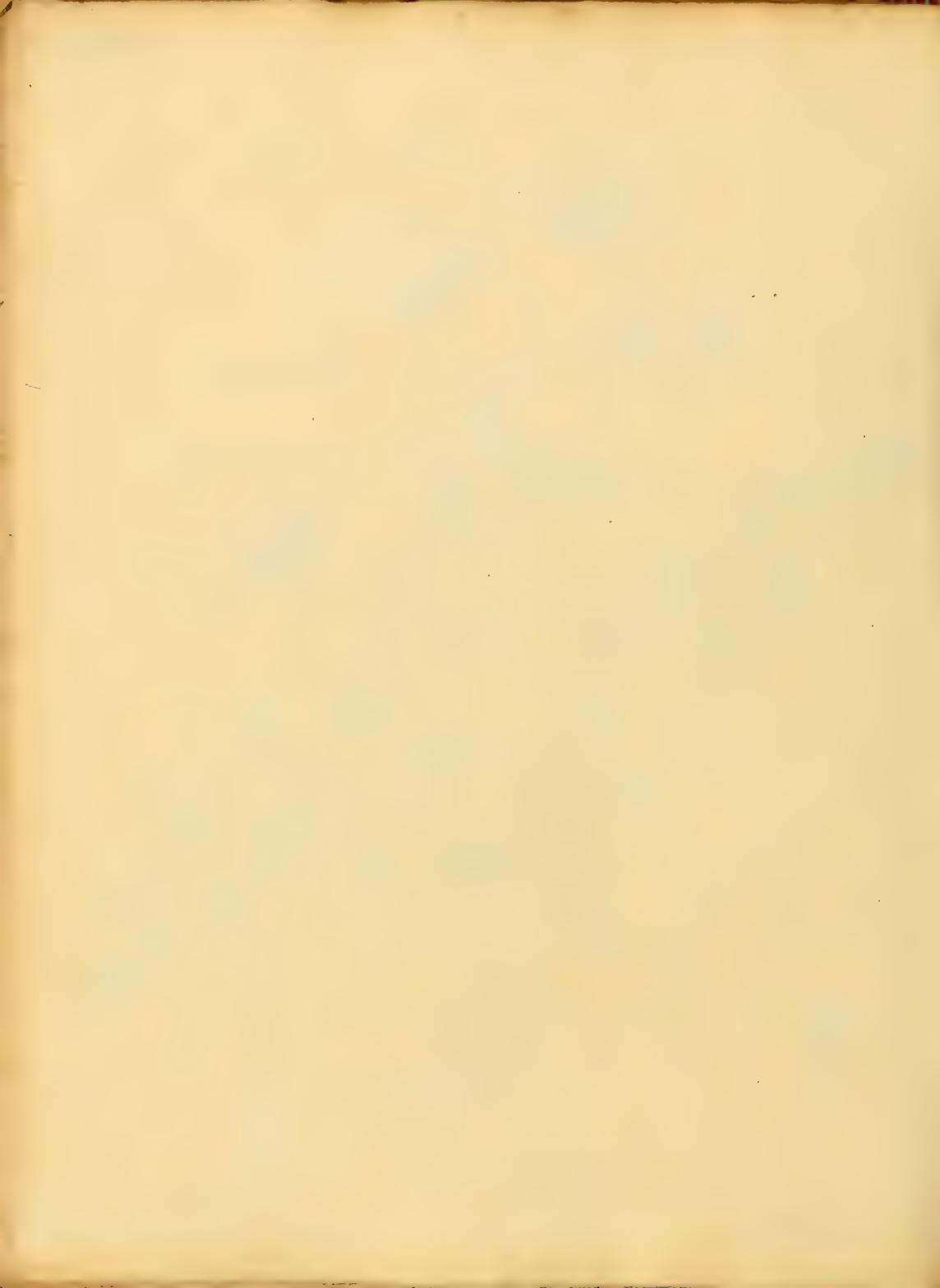
REFERENCE TO THE PLATE.

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

GERANIUM selinum claims the priority of introduction, with us, to any of that numerous division, in this large family, which are tuberous rooted and stemless, not including the *G. triste*, *G. lobatum*, or *G. prolificum*; and of which, although we have given many figures, we still possess drawings of 18 handsome species, besides numberless varieties. It was introduced in 1788 by Messrs. Lee and Kennedy; is a hardy greenhouse plant, being less subject to rot, after the decay of the leaves, than any of its congeners; flowers freely about June, and is propagated by the root; the seed (sometimes) ripens likewise. Our figure was taken from a plant, whose root had been received at the Clapham Garden, in 1800. As all the plants figured in the Botanist's Repository, are titled with the commonly accepted names, if any, in England; and, as many have been given under different names, in some other publications, whence much confusion; we shall defer all attempt at synonym, till the end of this Volume, when a copious *Index Synonymorum* will be published, of all the plants figured in the work, for the use of those who wish for such authorities.



Geranium sibiricum



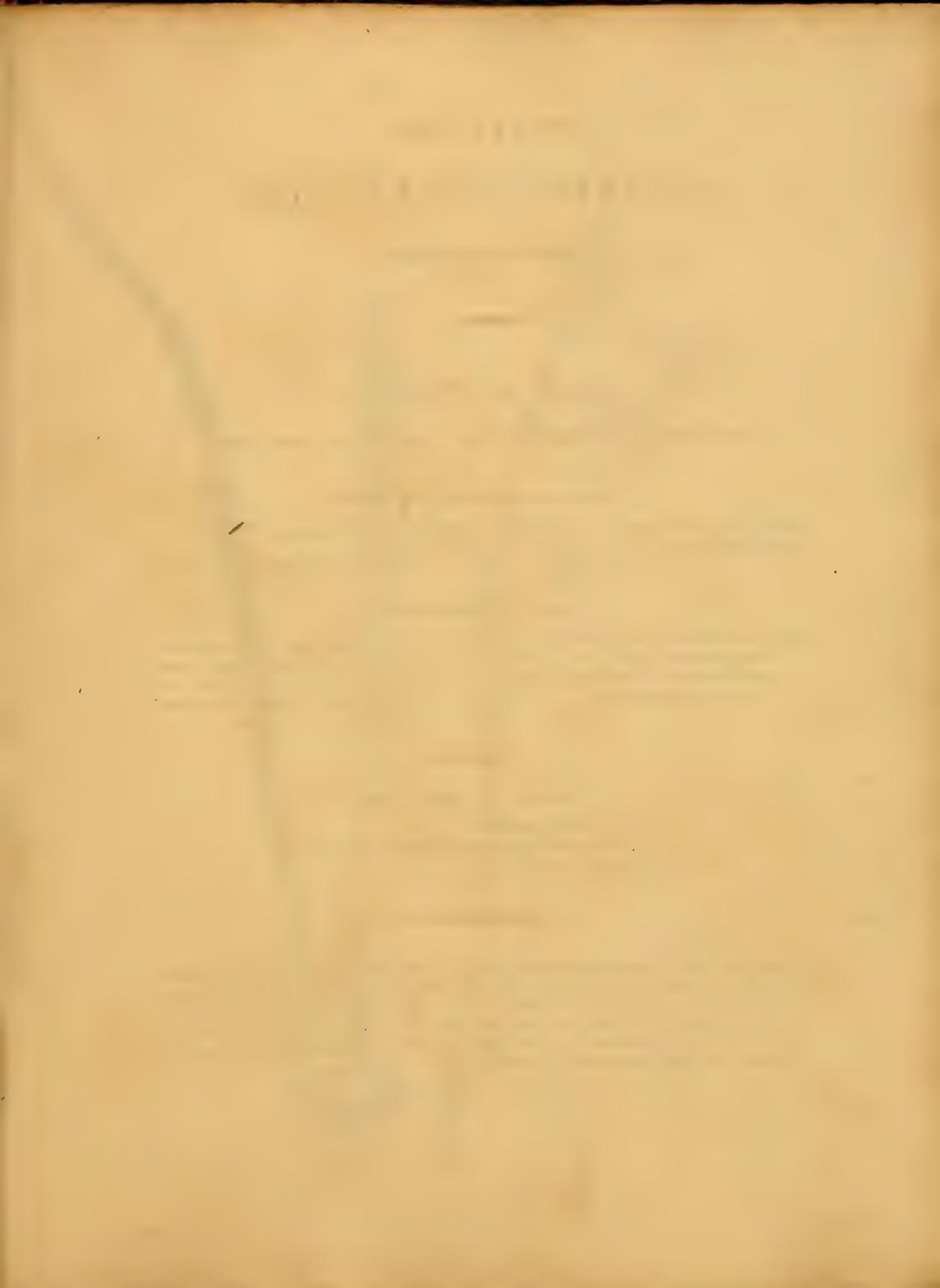


PLATE CCXL.

GLADIOLUS CARNEUS.

Flesh-coloured Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens.
STAMINA adscendentia.

BLOSSOM six divisions, gaping.
CHIVES ascending.

See GLADIOLUS ROSEUS, Pl. 11. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis ensiformibus, costatis, glabris;
floribus secundis, cernuis, carneis; petalis
tribus superioribus divergentibus, inferioribus
supra medium punctatis.

Gladiolus with sword-shaped leaves, ribbed, and
smooth; flowers pointing one way, nodding
and flesh-coloured; the three upper petals
diverge, the three lower are dotted upon
the middle.

REFERENCE TO THE PLATE.

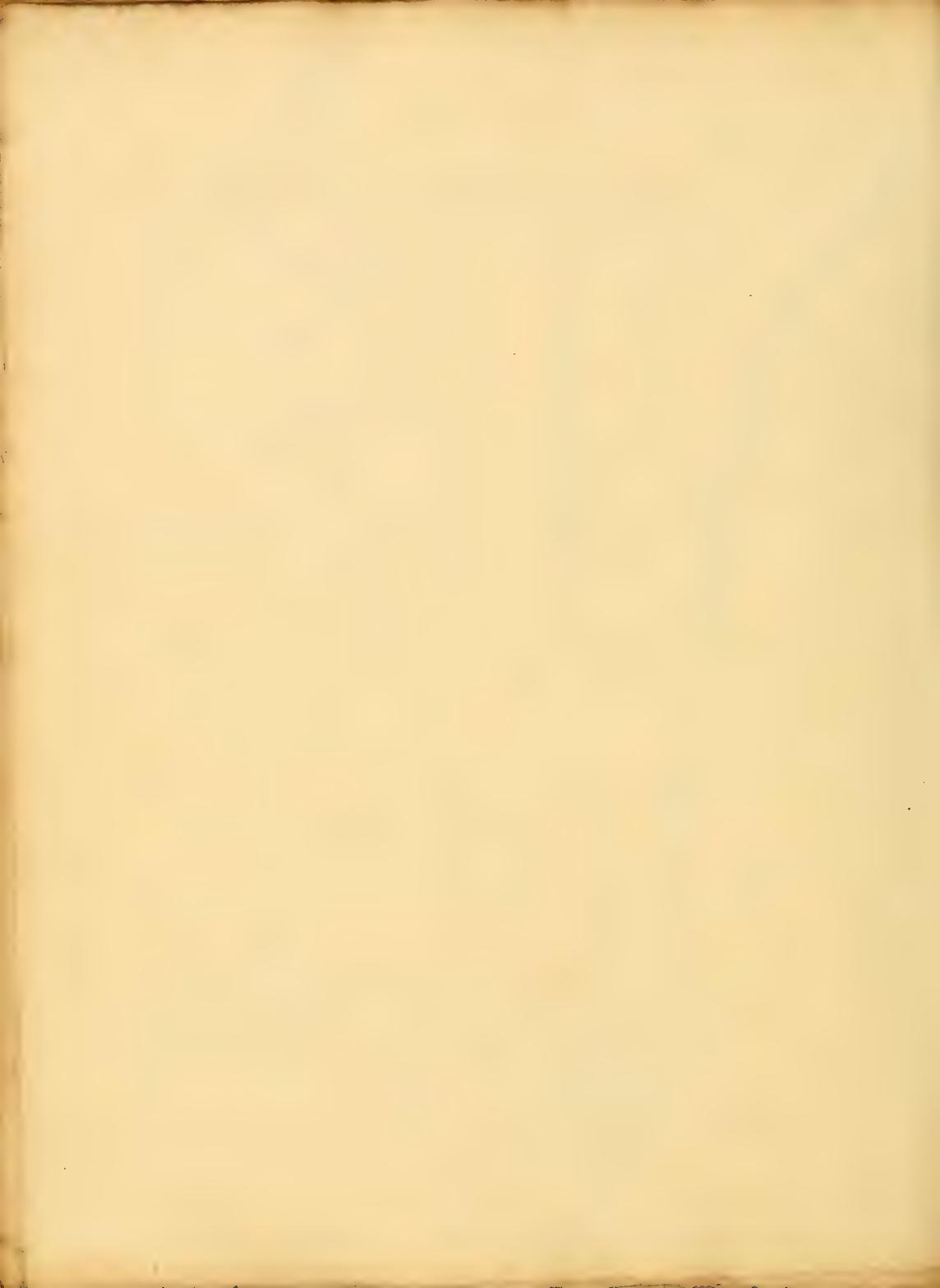
1. The two valves of the sheath.
2. The Blossom spread open, with the Chives in their place.
3. The Pointal, complete.

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



Gladiolus carneus

Gladiolus carneus



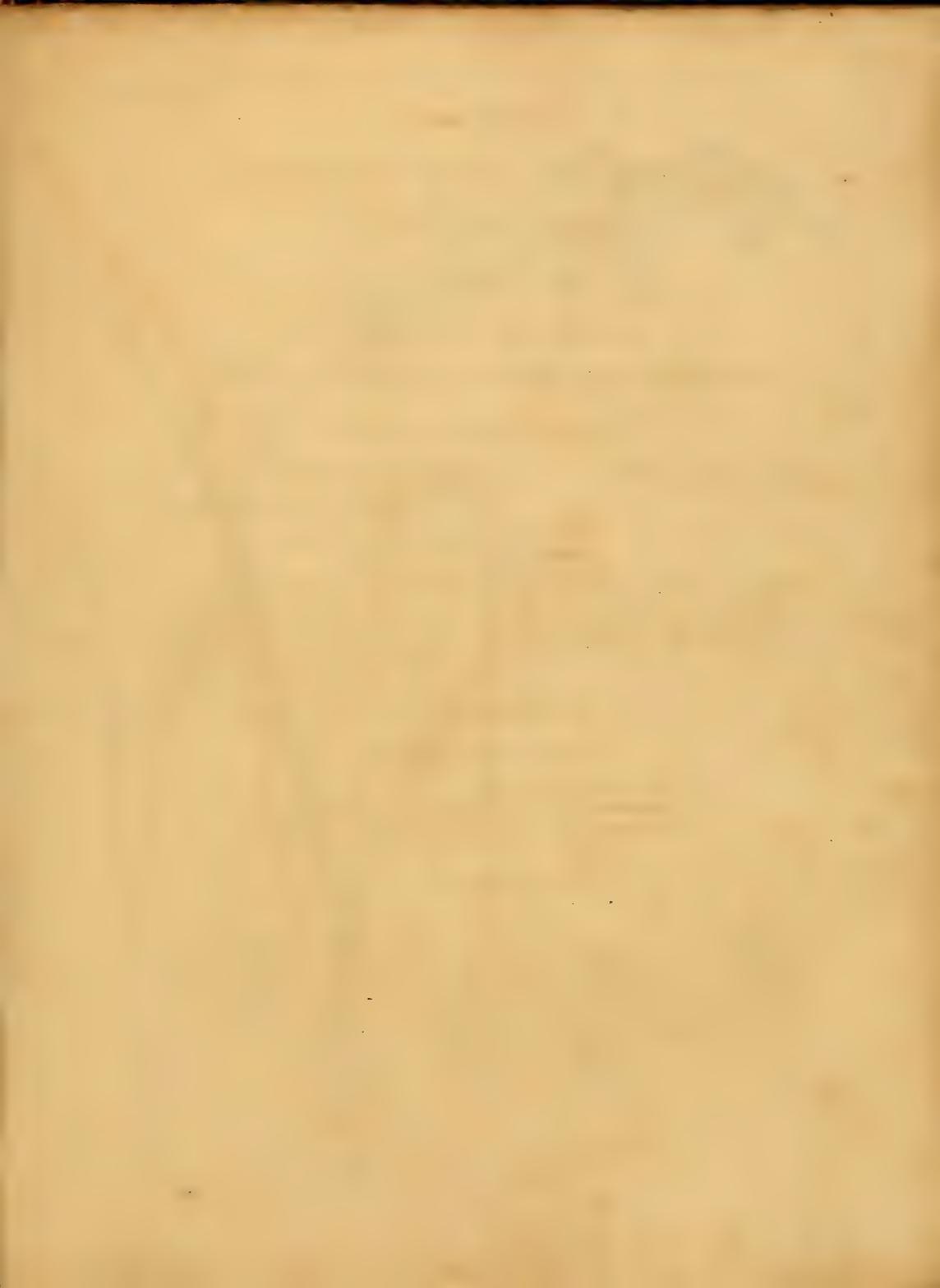


PLATE CCXLI.

GLADIOLUS ORCHIDIFLORUS.

Orchis-like-flowered Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens.
STAMINA adscendentia.

BLOSSOM six divisions, gaping.
CHIVES ascending.

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

SPECIFIC CHARACTER.

Gladiolus foliis linearibus; scapo polytachio; floribus spicatis, secundis; laciniiis binis lateralibus corollæ latissimis, summa erecta, tribus inferioribus dependentibus, maculatis.

Gladiolus with linear leaves; flower-stem branched; flowers grow in spikes, all from one side; the two side segments of the blossom are very broad, the top one upright, the three lower hang down, and are spotted.

REFERENCE TO THE PLATE.

1. The two valves of the sheath.
2. A Blossom spread open, with the Chives in their place.
3. The Pointal, one of the divisions of the summit magnified.

As a singularity among its fellows, this *Gladiolus* stands prominently distinct; and the uncommon and curious formation of its flowers will, undoubtedly, counterbalance, in the eye of the botanist, what they want in brilliancy of colour. It is a hardy bulb, and appears to require only the usual treatment of the hardier species of the genus. The Clapham collection is, we believe, the only one in which it is to be found in England; to which it was introduced, by Mr. Niven, in the spring of the year 1801, and where our drawing was made, this present year, in the month of March 1802.





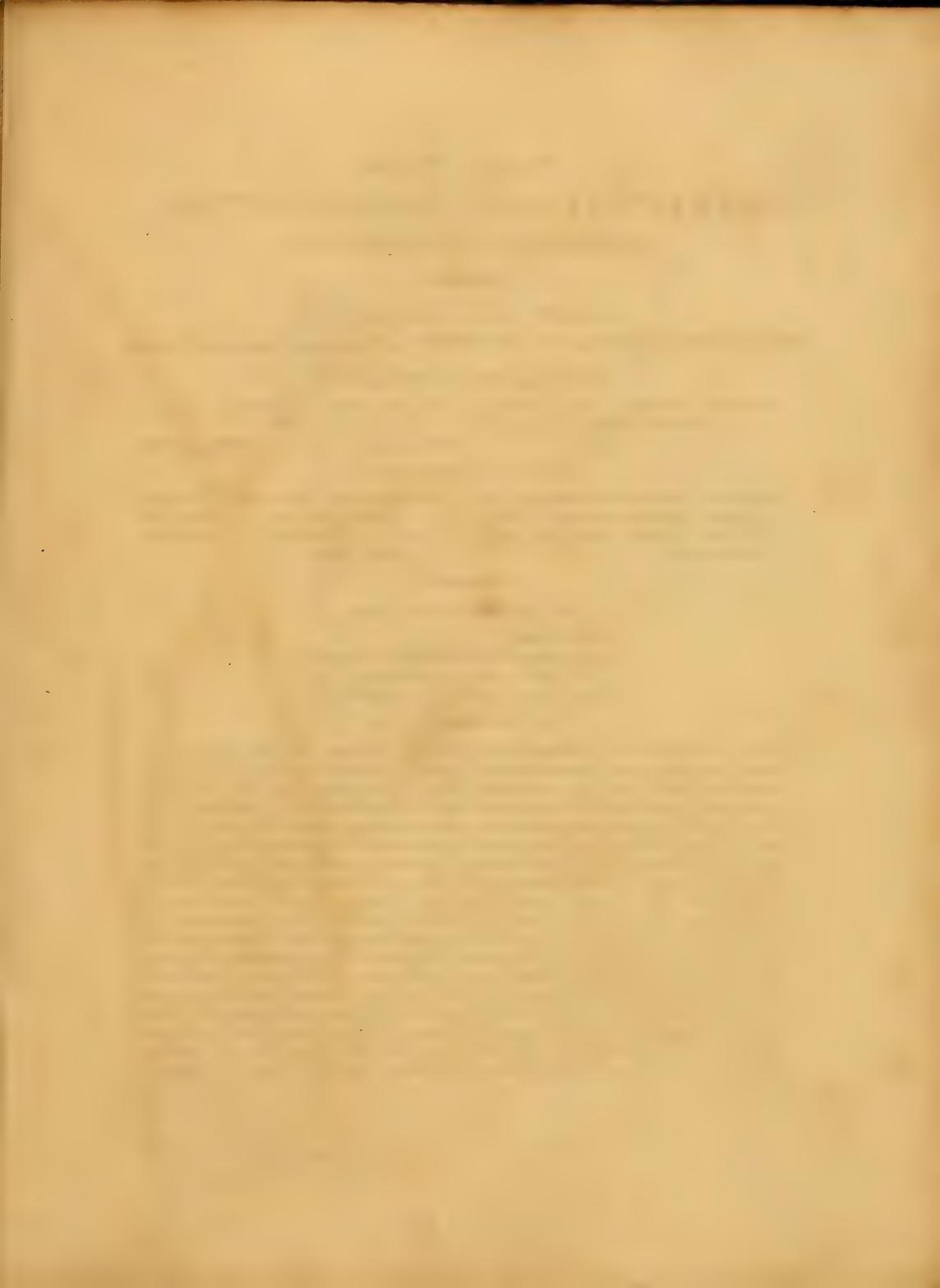


PLATE CCXLII.

XERANTHEMUM FASCICULATUM.

Bundled-leaved Everlasting-flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

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

Xeranthemum foliis caulinis linearibus sub- teretibus, fasciculatis, longissimis; floribus foliariis; squamis calycinis lanceolatis, pallide-luteis.		Everlasting-flower, with the stem leaves linear, roundish, bundled, very long; flowers foli- tary; the scales of the cup lance-shaped, and pale yellow.
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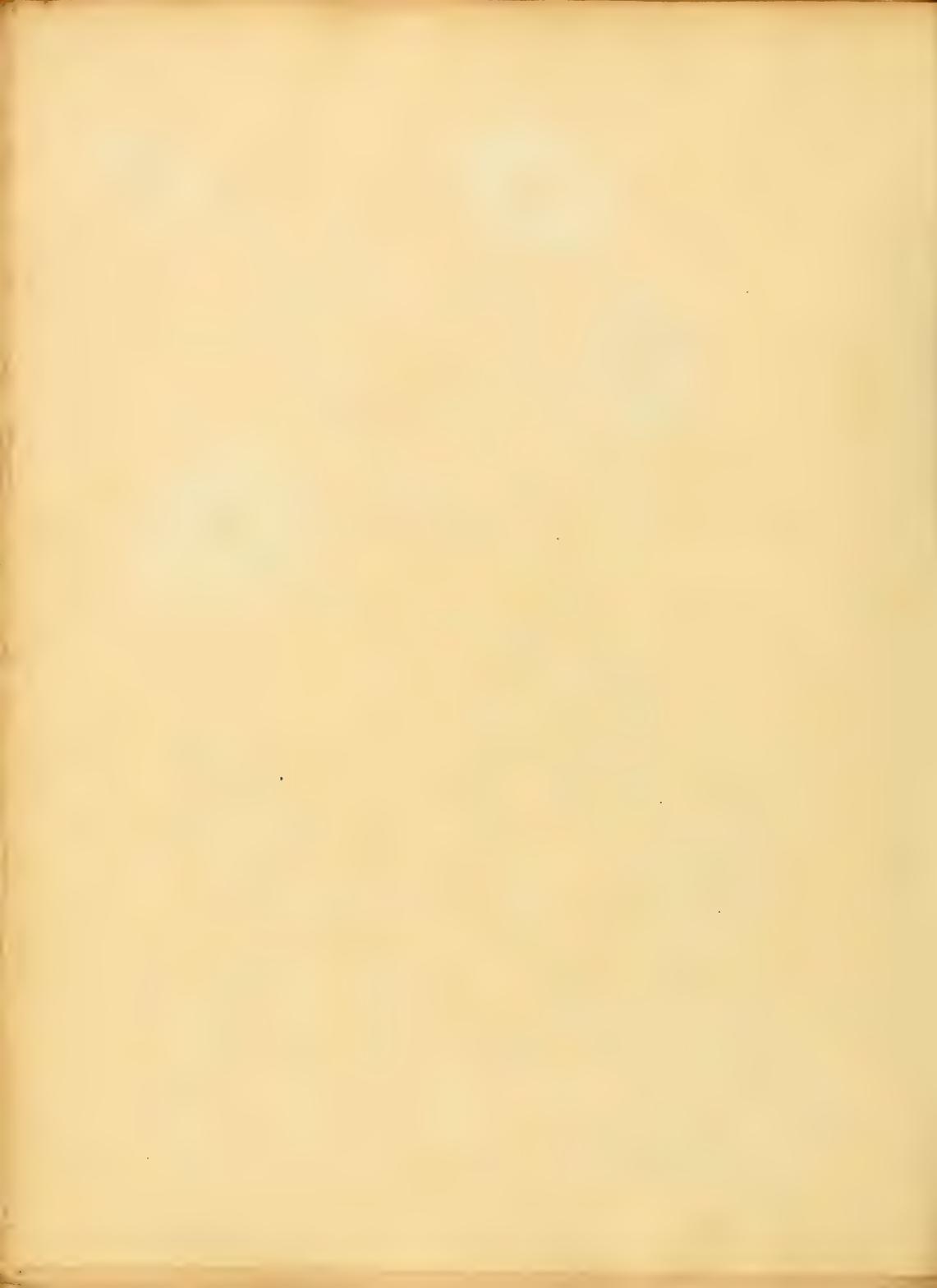
REFERENCE TO THE PLATE.

1. A scale of the cup.
2. An hermaphrodite floret, with its seed, magnified.
3. A female floret, with its seed, magnified.
4. The Pointal of a female floret, magnified.

Amongst the number of very beautiful plants introduced by Mr. Niven, and which now enrich that fund of botanical rarity, the Clapham collection, this species of Xeranthemum does not stand the least conspicuous. Twelve years since we possessed but four species of this genus, viz. *X. fulgidum*, *X. retortum*, *X. vestitum*, and *X. speciosissimum*; now they extend to fourteen. The others, as well as the foregoing, are all (but one, the *X. lucidum* of Port Jackson, New South Wales) from the Cape of Good Hope, and introduced to us from thence, by various hands, in the following order; *X. proliferum*, through Holland, by Messrs. Lee and Kennedy; *X. formosum* and *X. candidans* by the same, from Cape seeds; *X. sellanoides* by Mrs. Gosling, of Hounslow; *X. filiforme* by Mr. Donn, of Cambridge; *X. fasciculatum* and *X. truncatum* by G. Hibbert, Esq. *X. argenteum* and *X. spirale* by Montague Burgoyne, Esq. of Mark Hall, Essex. They are very subject to damp in the leaves, from a confined air; therefore, should be kept in the window, or most airy part of the greenhouse. The most sandy peat that can be procured is the best for their growth. They may be all, thus, propagated by cuttings, taken off in the early part of the month of June; put these into a pot filled with sand, and covered by a bell-glass the size of the pot; plunge it in a north or east border, and let the whole be covered with a hand glass, which must be kept quite close till the cuttings are rooted; then the inner glass must be removed, and in about a week the pot may be taken from under the outer one, when the plants may be removed into small pots in about a fortnight. Our present plant seldom grows higher than two feet, of which, at least, one is the foot-stalks of the flowers; it continues in flower from March till September.



Xanthemum fasciculatum



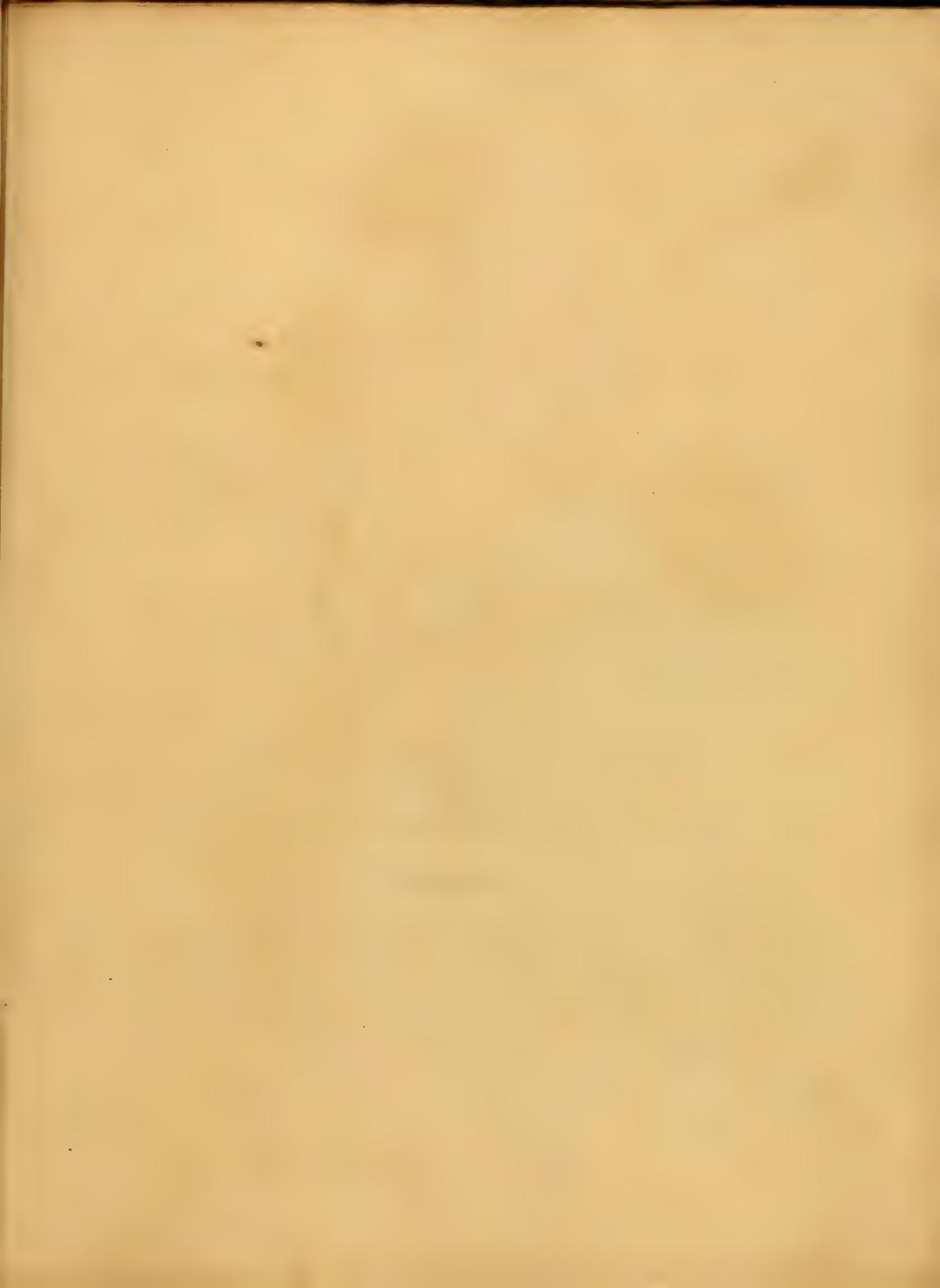


PLATE CCXLIII.

PROTEA LAGOPUS.

Woolly-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

BLOSSOM 4-cleft or 4-petalled. Tips linear, inserted into the petals below the point. Proper Cup none. Seeds solitary.

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

SPECIFIC CHARACTER.

Protea foliis bipinnatis, filiformibus; capitulis spicatis, aggregatis, quadrifloris; corollis intus purpureis.

Protea with doubly winged leaves, thread-shaped; small heads grow in spikes close together, four flowers in each; blotoms purple within.

REFERENCE TO THE PLATE.

1. The scales of the cup of one of the small heads.
2. A small head of flowers, one of the flowers open, the rest not yet expanded.
3. A floret, with the petals expanded.
4. A petal, with its chive, magnified.
5. A Pointal, natural size, with the fummit detached and magnified.

THIS handsome Protea we owe to Mr. R. Williams, of Turnham-green, nurseryman, who raised it by seeds received from the Cape of Good Hope in the year 1797. It is one of the handsomest we yet possess of the winged-leaved kind of Proteas; of which division, in this large family, there are now in the Hibbertian collection eighteen distinct species. This plant grows to the height of three feet, makes a very bushy head, and, when in flower, has a handsome appearance; as there are sometimes twenty spikes of flowers on it at one time. It is propagated by cuttings, thrives in sandy loam, and flowers in June; in which month this year, 1802, our drawing was made at Clapham.



Wolsea *Pagopus*

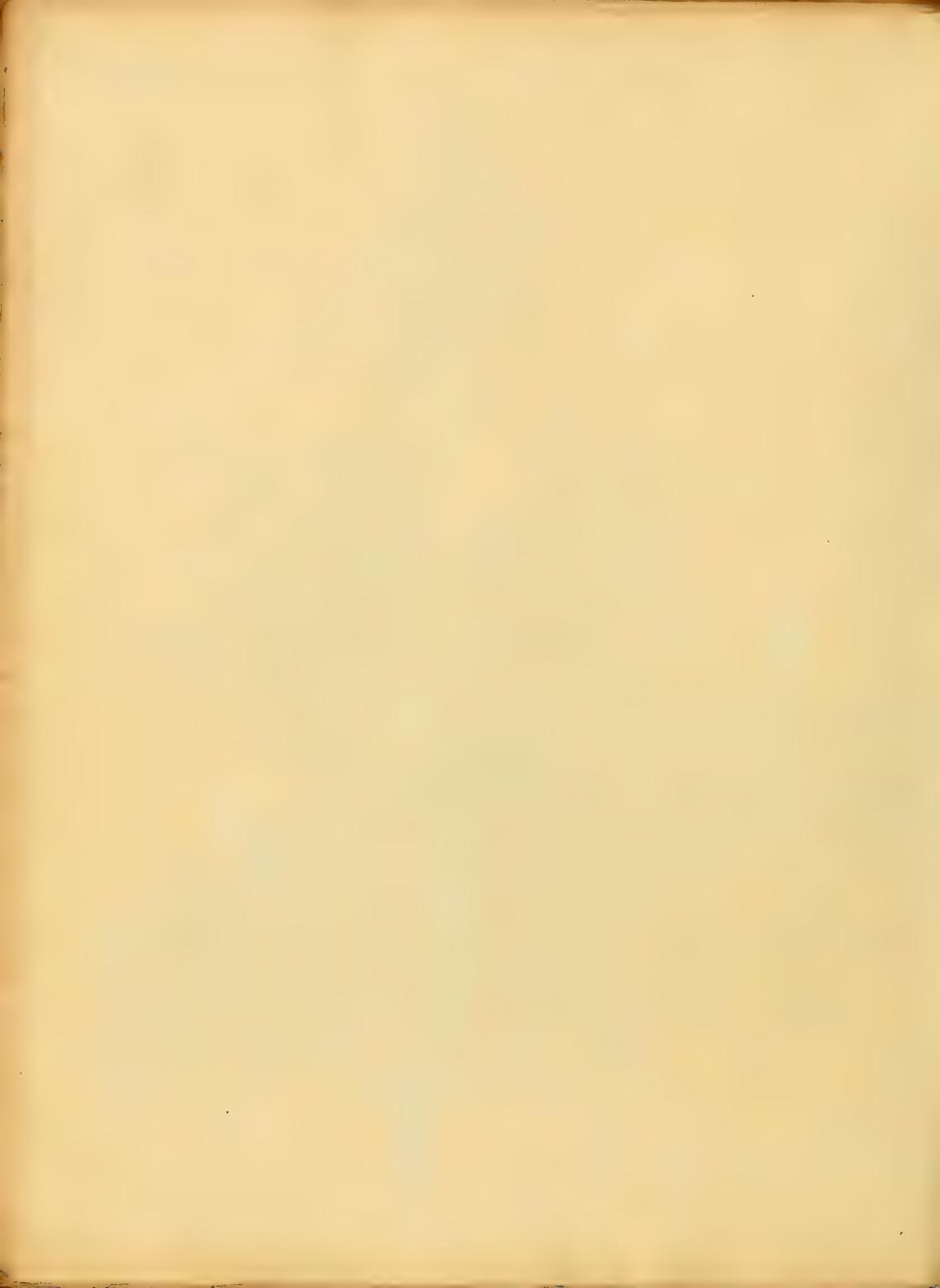




PLATE CCXLIV.

HEMEROCALLIS GRAMINEA.

Grass-leaved Day-Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA campanulata; tubo cylindrico.
STAMINA declinata.

BLOSSOM bell-shaped; tube cylindrical.
CHIVES declining.
See HEMEROCALLIS CÆRULEA, Pl. VI. Vol. I.

SPECIFIC CHARACTER.

Hemerocallis foliis linearibus, carinatis, gramineis; petalis tribus interioribus majoribus undulatis, exterioribus minoribus, extus brunceis.

Hemerocallis with linear leaves, keeled and grassy; the three inner petals larger, waved, the outer smaller, brown on the outside.

REFERENCE TO THE PLATE.

1. An outer leaf of the Blossom, shewn from the outside.
2. The Chives and Pointal.
3. The Pointal and Seed-bud, cleared of the chives.

WE have little doubt but that this is the species of Day-Lily known to botanists, since the days of Parkinson and Gerarde, under the character of a small leaved variety of the Yellow Day-Lily, although it has been many years lost to the country. It is one amongst the many plants introduced by the late Dr. Sibthorpe, to the Oxford botanic garden. As a native of the northern parts of Europe, it is as hardy as either the *H. flava* or *H. fulva*, to both which species it bears strong affinity; although, we conceive, sufficiently distinct from either, to constitute a species; which however we should not have done, but that the plant is now known in our gardens, under our specific title. The flowers of this plant last, in general, two or three days before they decay, are very sweet scented, and as large as those of the *H. fulva*. It is increased as easily as any of the genus, by parting the roots, and thrives in almost any soil.



Hemerocallis graminea

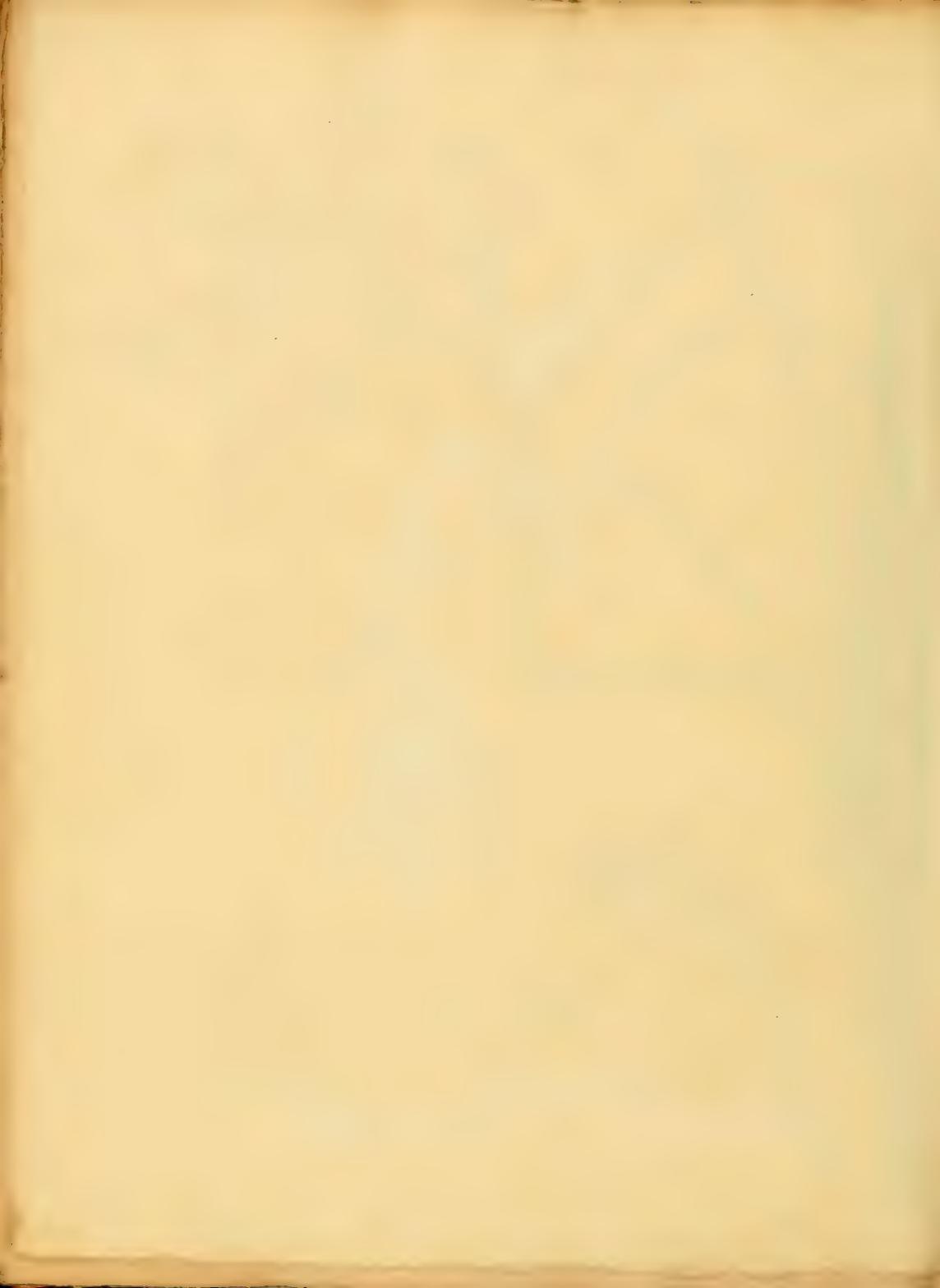




PLATE CCXLV.

IXIA PUSILLA.

Dwarf blue Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6 partita, patens, aequalis. Stigmata || BLOSSOM 6-divided, spreading, equal. Summits
tria, erectiusculo-patula. || three, between upright and spreading.
See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia foliis sublinearibus, costatis, crassis; scapo || *Ixia* with nearly linear leaves, ribbed, thick;
bifloro, longitudine, foliorum; floribus dif- || flower-stem two-flowered, the length of the
tantibus, caeruleis. || leaves; flowers grow distant, and are blue.

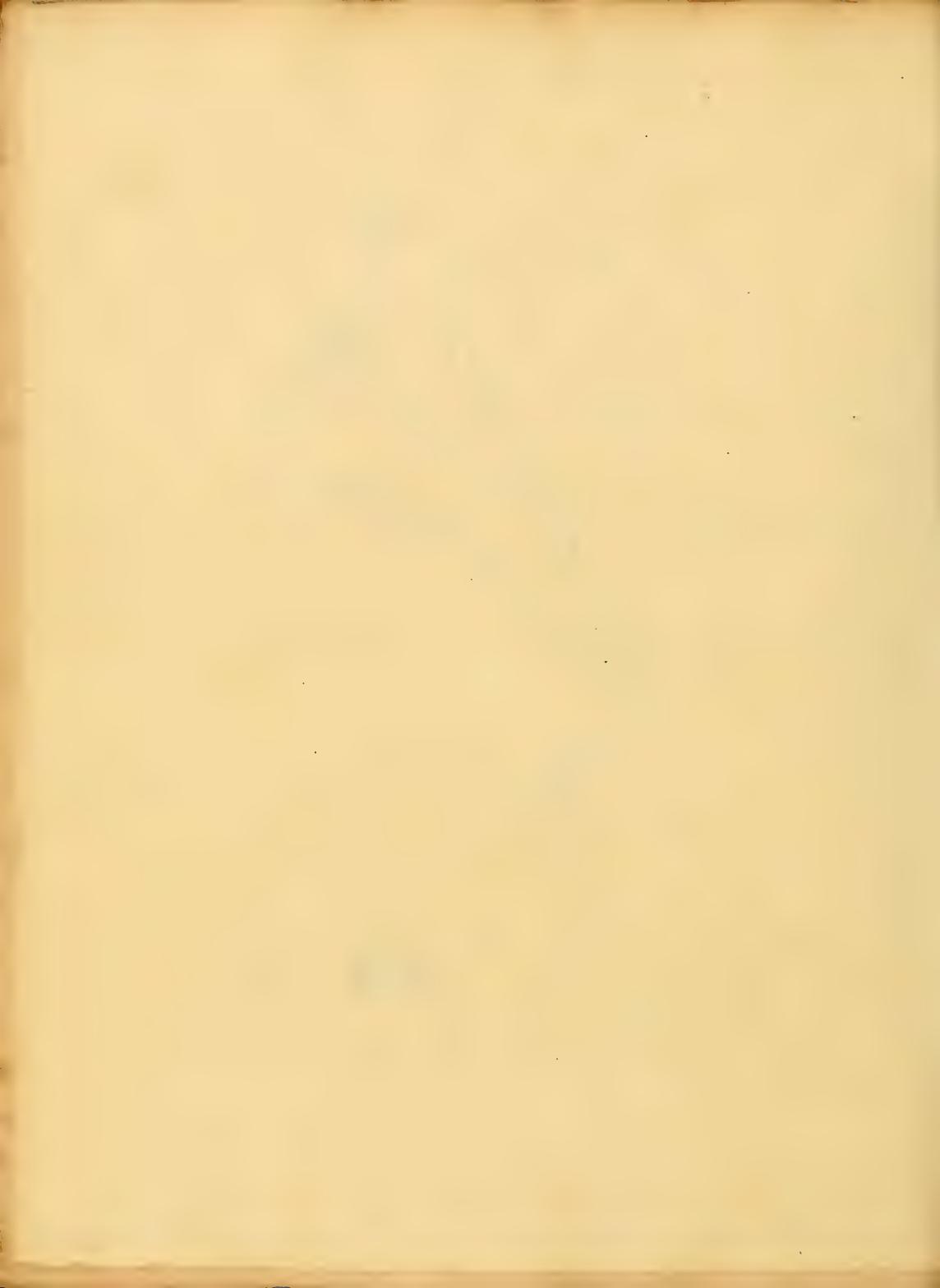
REFERENCE TO THE PLATE.

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

THIS pretty little *Ixia* is quite new to our gardens, never having, as far as we can learn, been seen to flower before this year. It is the most delicate in shape and character of any we have as yet examined; and as we could not trace it as described in any author, we have given it the trivial name it here bears. The figure exhibits a large specimen of the whole plant, which is too weak to support itself, although the leaves are thick and stiff. Our drawing was made in the month of April, from a plant in the Clapham collection, where only it is to be found; the roots having been sent from the Cape of Good Hope in the autumn of the preceding year. It appears to flourish with the treatment Mr. Allen has given it, a dry situation, planted in very sandy peat. From the construction of the root, which has a hard smooth skin, we should be led to think its increase will not be very abundant.



Sua pusilla



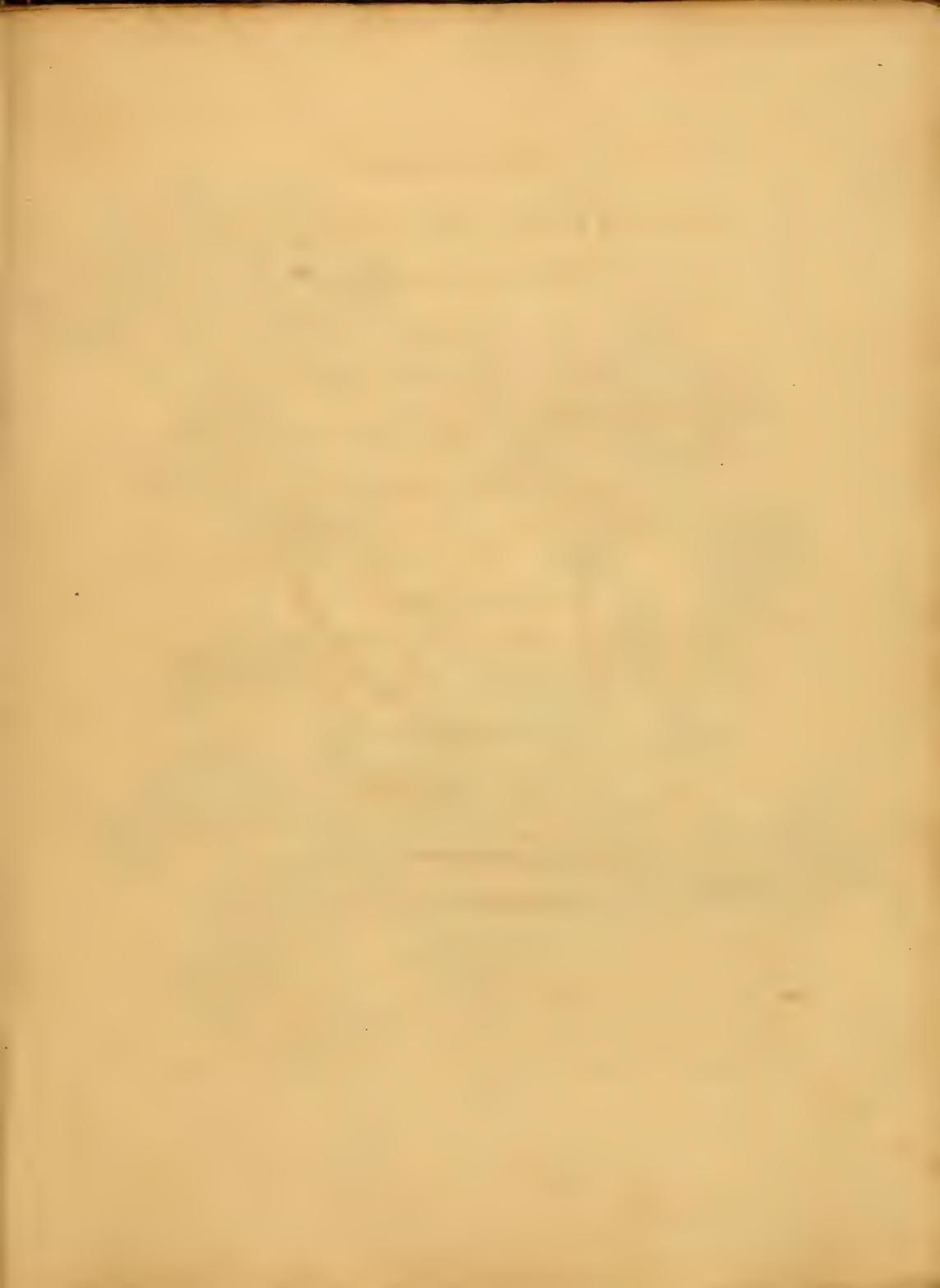


PLATE CCXLVI.

GERANIUM INCRASSATUM.

Fleshy-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOCYNA. Stigmata quinque.
FRUCTUS rostratus, penta-coccus.

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

SPECIFIC CHARACTER.

Geranium foliis carnosis, inequaliter pinnatis seu lobatis, laciniis tridentatis, obtusis; corollis faturate rubris, striatis; floribus pentandris; radice tuberosa.

|| Geranium with fleshy leaves, unequally winged or lobed, segments three-toothed, blunt; blossoms of a deep red, and streaked; flowers with five fertile tips; root tuberous.

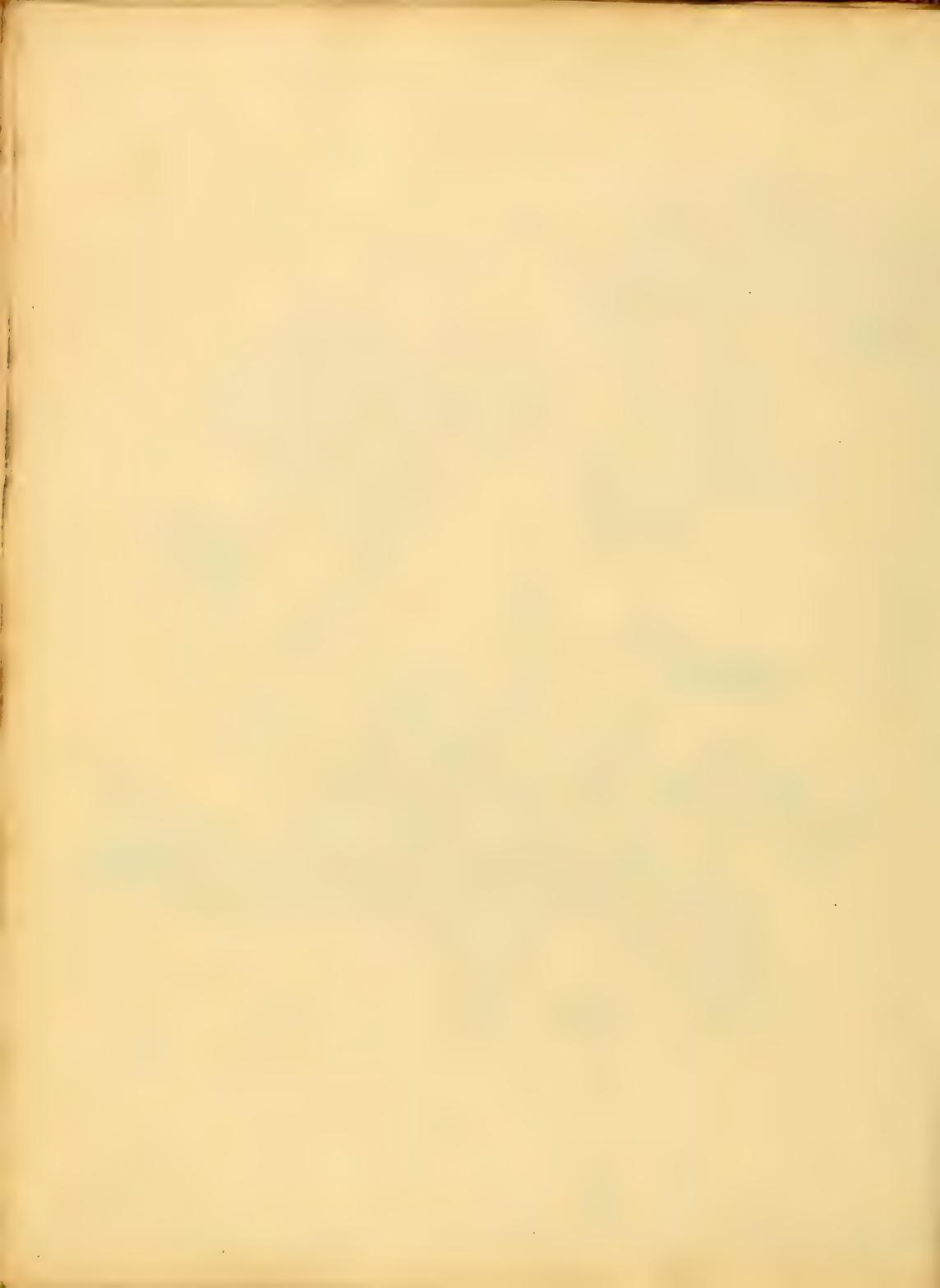
REFERENCE TO THE PLATE.

1. The Empalement cut open, to shew its tubular structure.
2. The Chives spread open.
3. The Pointal, natural size, with the summits detached, magnified.

OUR figure, which exhibits a small plant, of this superb species of tuberous Geranium, was taken in the month of June, this year, 1802, at Messrs. Colville's nursery, King's Road, Chelsea, and where it is still in high perfection, this present month of July. We have every reason to believe, from all the authorities we are masters of, that this plant has not, till now, flowered in Europe. It forms a very large tuberous root, by the dividing of which it is to be propagated; as we suspect the seeds will not ripen on this species more than most of its congeners. It has the same manner with the rest of the tuberous species, losing its leaves in winter, when they are subject to rot, if much watered. Appears to flourish in sandy peat, with a small portion of rotten dung.



Geranium encrasatum



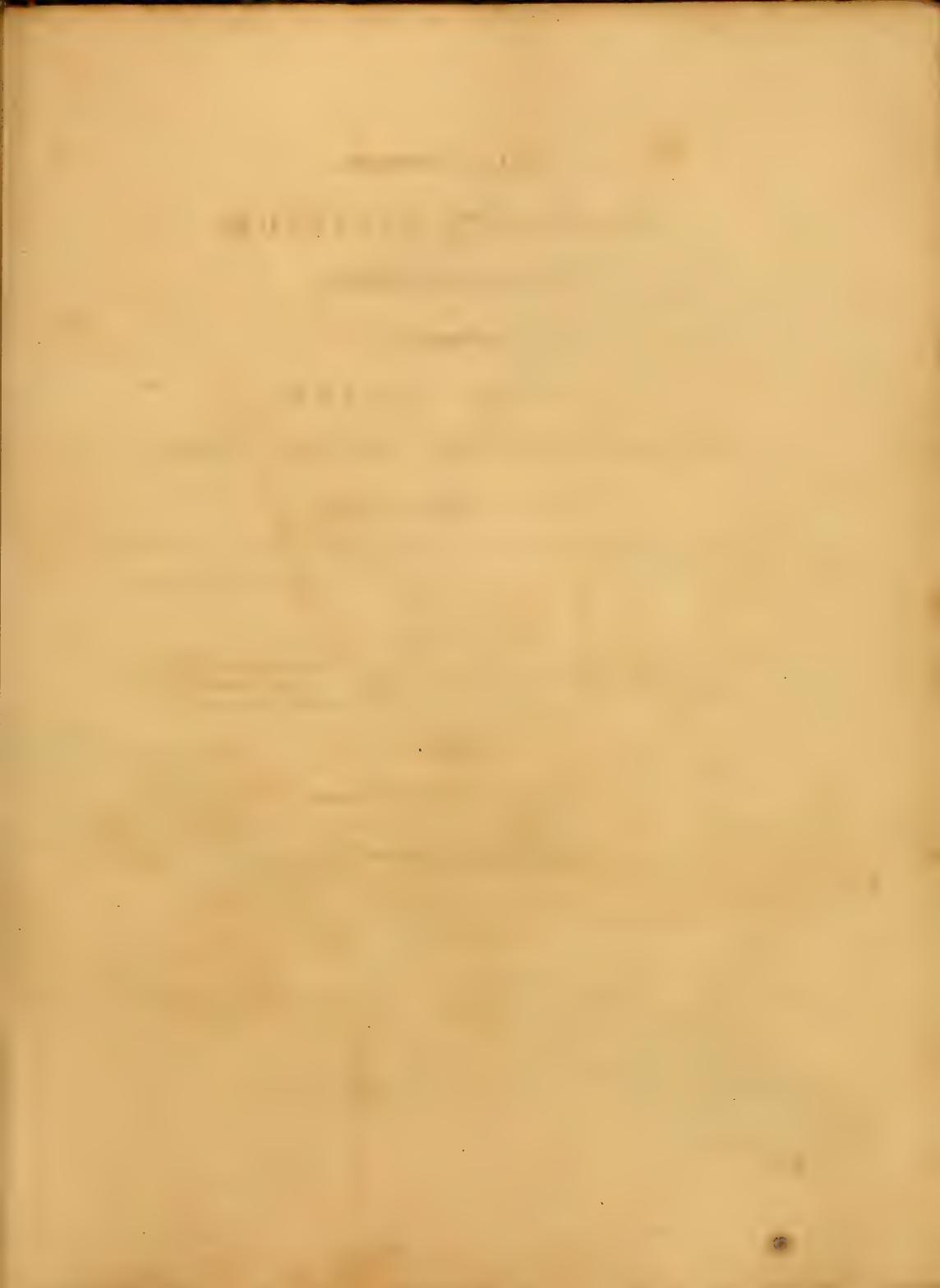


PLATE CCXLVII.

GERANIUM CILIATUM.

Fringed-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rostratus, pentacoccus.

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

SPECIFIC CHARACTER.

Geranium foliis intigerrimis, concavis, lanceo-
tis, marginibus ciliatis; floribus pentandris;
radice tuberosa.

Geranium with quite entire leaves, concave, lance-
shaped, and fringed at the edge; flowers
with five fertile chives; root tuberous.

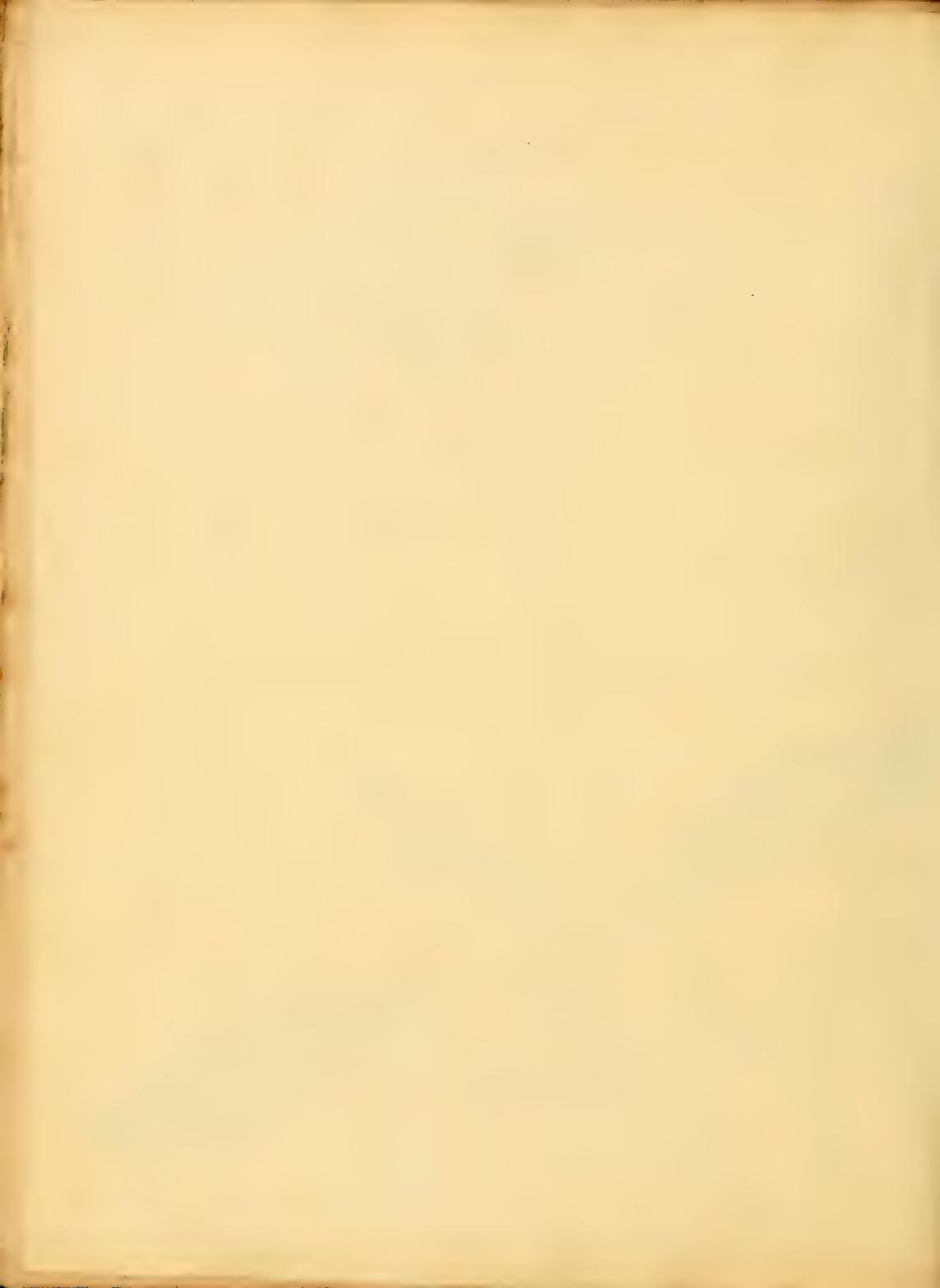
REFERENCE TO THE PLATE.

1. The Empalement.
2. The Chives spread open, magnified.
3. The Pointal, magnified.

THE singular shape and number of the leaves of this plant, which are but two, large, concave, thickish, between lance and egg-shaped, and fringed at the edge, constitute the most essential specific difference it possesses; the flowers, and other parts, much resemble many of its fellows. It is from the Cape of Good Hope, and introduced to us by Messrs. Colvills, nurserymen, of the King's Road, Chelsea; who received it, from thence, at the same time with the *Geranium incrassatum*, of our last. For the treatment, and increase, we must refer to any other of the tuberous kind of *Geranium*.



Geranium ciliatum



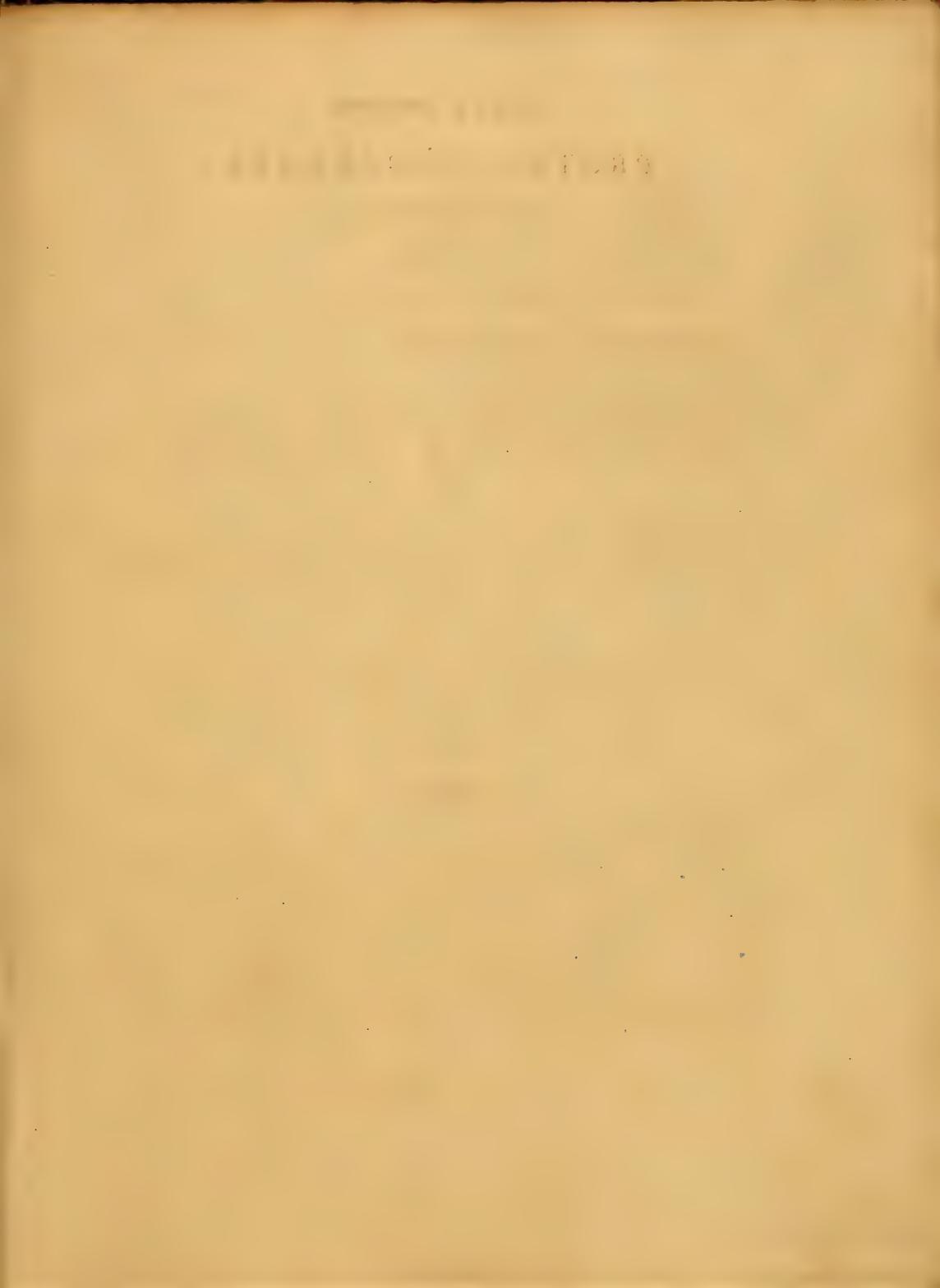


PLATE CCXLVIII.

PROTEA UMBELLATA.

Umbellated Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

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

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

SPECIFIC CHARACTER.

Protea foliis lineari-spathulatis, glabris; capitulis terminalibus; bracteis multifidis; floribus luteis.

Protea with linearly-spathulate leaves, smooth; heads of flowers terminate the branches; floral leaves many-cleft; flowers yellow.

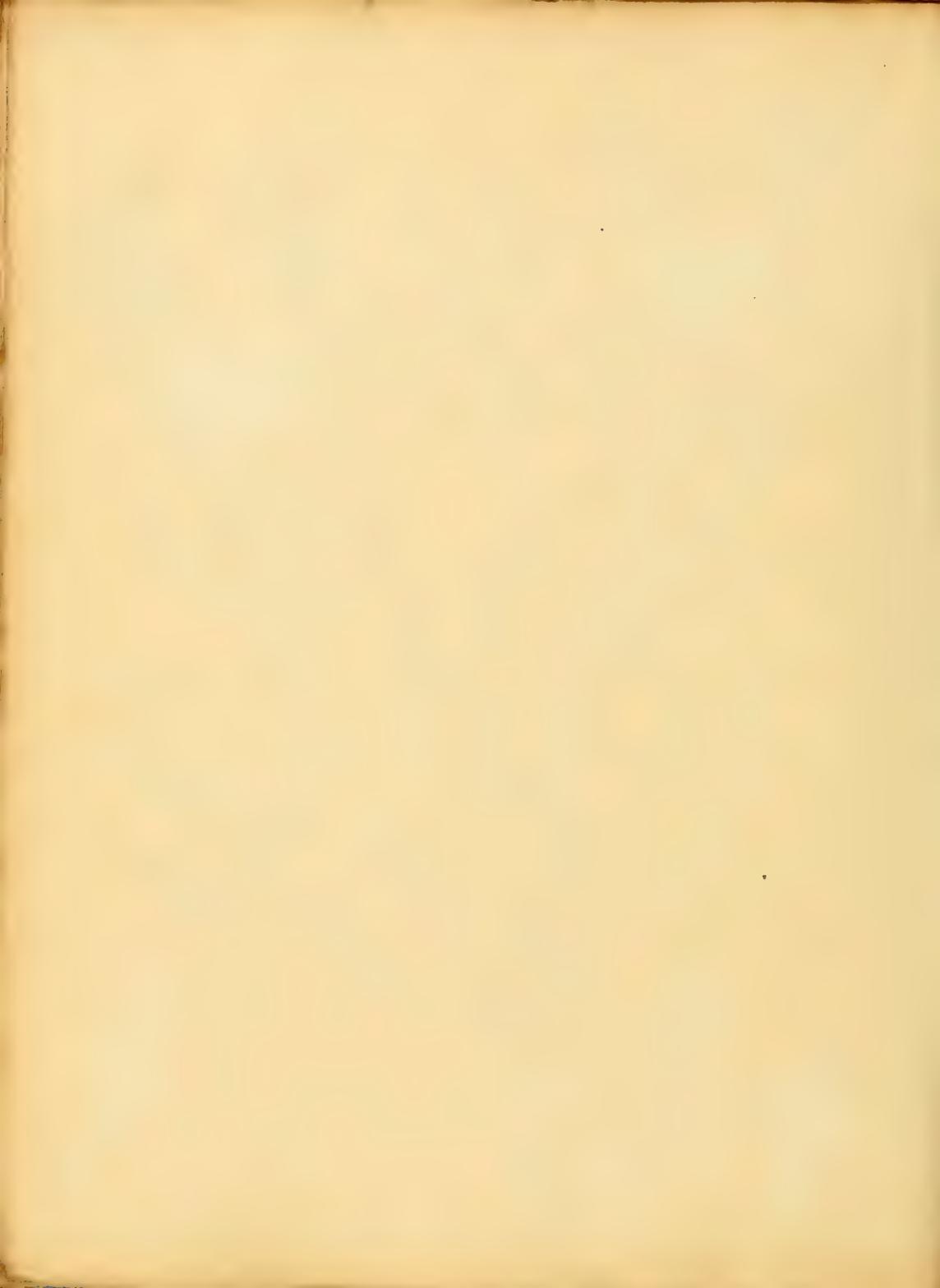
REFERENCE TO THE PLATE.

1. One of the floral leaves or scales of the general empalement, magnified.
2. A flower, magnified.
3. One of the heads of flowers, divested of the scales, or floral leaves.
4. The Pointal and seed-bud, of one of the florets, magnified.

THE *Protea umbellata* has been cultivated in England since the year 1777, at which time it was first raised from seeds; received from the Cape of Good Hope by Messrs. Lee and Kennedy, Hammer-smith, at whose nursery our figure was taken in the month of August 1800. It is a very hardy plant, and not at all subject to the very common fate of its congeners; that is, to damp in the leaves, or rot at the root in winter; is propagated by cuttings, to be made in the month of April or May, and treated as directed for the other *Proteas*. The plant seldom grows higher than three feet, and does not make many branches; but is of a lively green colour, both leaves and stem. We have, as usual, adopted the name this plant is generally known by, it having been so named by the younger Linnæus in his *Suppl. Plant.* 118, and by Thunberg in his *Dissertatio de Protea*, n. 34, and his *Prodromus* 26. But why or how a small, close head of flowers may be denominated an umbel we must confess our ignorance in this application of terms.



Protea nana



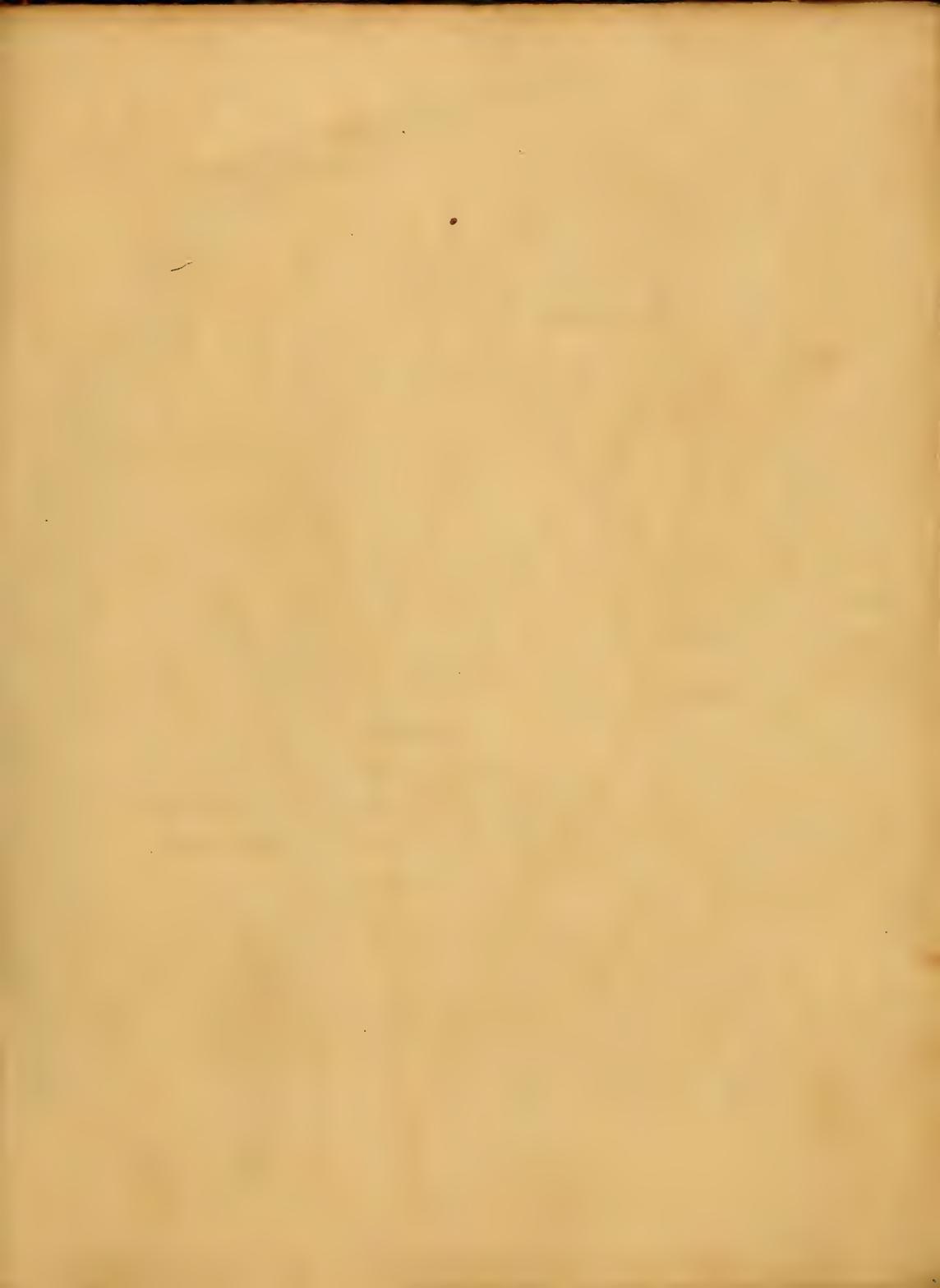


PLATE CCXLIX.
PITCAIRNIA SULPHUREA.

Sulphur-coloured Pitcairnia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, semi-superum, tubulosum, basi ventricosum, trifidum, persistens; laciniis lanceolatis, erectis.
COROLLA tubulata, calyce duplo longior, marcescens, trifida, demum tripetala; laciniae lineari-oblongae, suberectae.
STAMINA. Filamenta sex, filiformia. Antherae oblongae, erectae.
PISTILLUM Germen superum, ovato-triquetrum. Stylus filiformis longitudine staminum. Stigmata tria, contorta.
PERICARPIUM. Capsula ovatis, obtuse triquetra, trilocularis; loculis sub-cylindraccis, sub-distinctis.
SEMINA numerosa, alata, linearia.

EMPALEMENT. Cup one leaved, half superior, tubular, swelling at the base, three-cleft; segments lance-shaped, erect.
BLOSSOM tubular, twice the length of the cup, withering, three-cleft, at last three petalled; segments linearly-oblong, nearly upright.
CHIVES. Threads six, thread-shaped. Tips oblong, erect.
POINTAL. Seed-bud above, three-sided-egg-shaped. Shaft thread-shaped the length of the chives. Summits three, twisted.
SEED-VESSEL. Capsule egg-shaped, bluntly three cornered, three valved; cells nearly cylindrical, not very distinct.
SEEDS numerous, winged, linear.

SPECIFIC CHARACTER.

Pitcairnia foliis non spinosis, flaccidis, longissimis; corollis sulphureis.

Pitcairnia with leaves without spines, weak and very long; blossoms sulphur coloured.

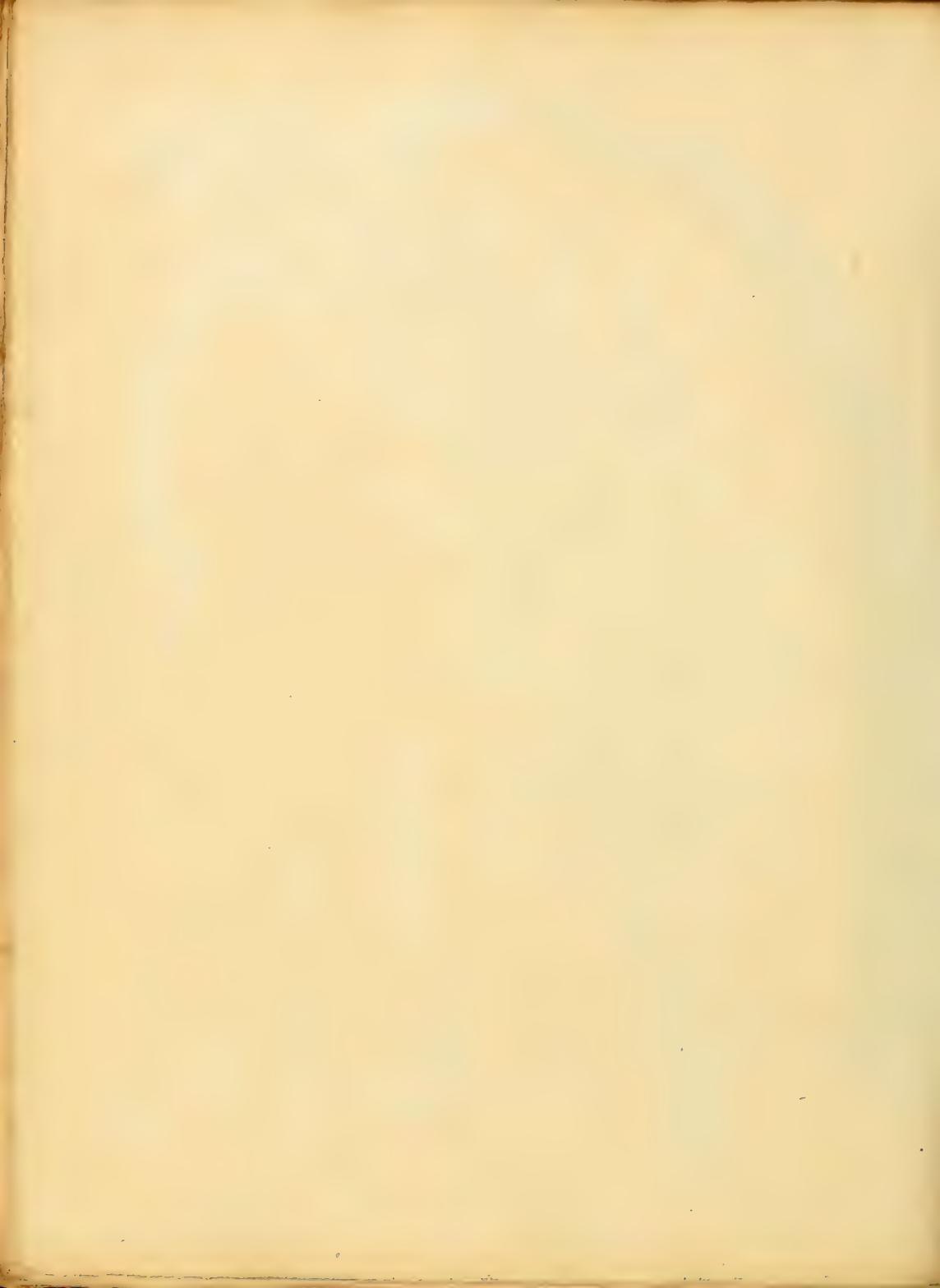
REFERENCE TO THE PLATE.

1. The Empalement and floral leaf.
2. One of the Petals shewn from the inside to expose the Honey-cup at its base.
3. The Chives and Pointal.
4. The Pointal and Seed-bud, the three summits detached and untwisted.
5. The Seed-vessel cut across.

THIS species of Pitcairnia was sent in the year 1799, from the island of St. Vincent, by Mr. Anderson, to T. Evans, Esq. Stepney; at whose gardens the plant has flowered, for the first time, in England this year, in the month of April, and at which time our figure was taken. The Pitcairniae are all natives of West India Islands, and stand, as the link, between the Bromelia or Pine-apple plant, and the Tillandsia; to either of which Genera the first sight of the leaves, only, would consign them. Five species are now in Britain, and we do not doubt, but the species are as numerous, as those of Tillandsia. The cultivation of all the species is perfectly easy, as they require no particular soil, or management, if kept in the hot-house; where they grow luxuriantly and throw out, from the roots, abundance of suckers; which should be taken off, to encourage the flowering of the central shoot.



Pitcairnia sulphurea



THE HISTORY OF THE
CITY OF BOSTON
FROM THE FIRST SETTLEMENT
TO THE PRESENT TIME
BY NATHANIEL BENTLEY
VOLUME I
PUBLISHED BY W. BENTLEY
1822

PLATE CCL.

IXIA COLUMNARIS. *Var. grandiflora.*

Columnar-chived Ixia. *Large flowered Var.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sex-petala, patens, æqualis. Stigmata
tria, erectiusculo-patula.

BLOSSOM six petals, spreading, equal. Summits
three, upright-spreading.

See IXIA REFLEXA, Pl. XIV. Vol. I.

SPECIFIC CHARACTER.

Ixia filamentis basi cohærentibus; floribus sub-
capitatis corollis purpureo-violaceis, maxi-
mis.

Ixia with threads united at the base; flowers
grow nearly headed; blossoms purple violet,
very large.

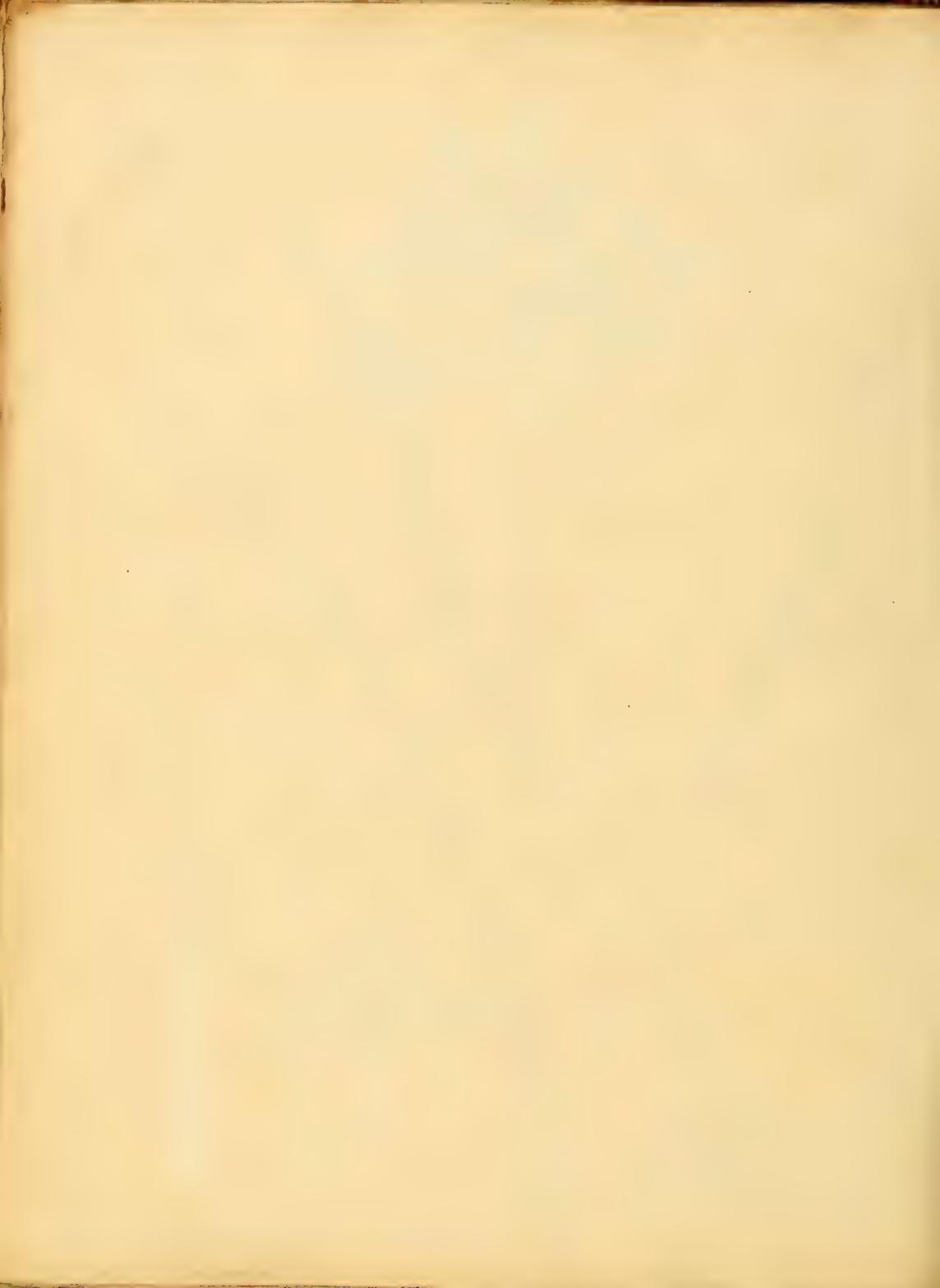
REFERENCE TO THE PLATE.

1. The two valves of the sheath.
2. An entire flower cut open in the tube only, which is extended nearly to the end of the threads.
3. The Chives cut open, magnified.
4. The Pointal complete, one of the Summits detached and magnified.
5. The Seed-vessel cut across.

We have nothing farther to say upon this fine variety of the Columnar-chived *Ixia* than what has been said on the other varieties of this species; but, that it was introduced from Holland with the changeable coloured variety in 1799; and that it flowers the end of June; in which month our drawing was made, this year, at the Hammermith Nursery.



Iris Columnaris
var. grandiflora



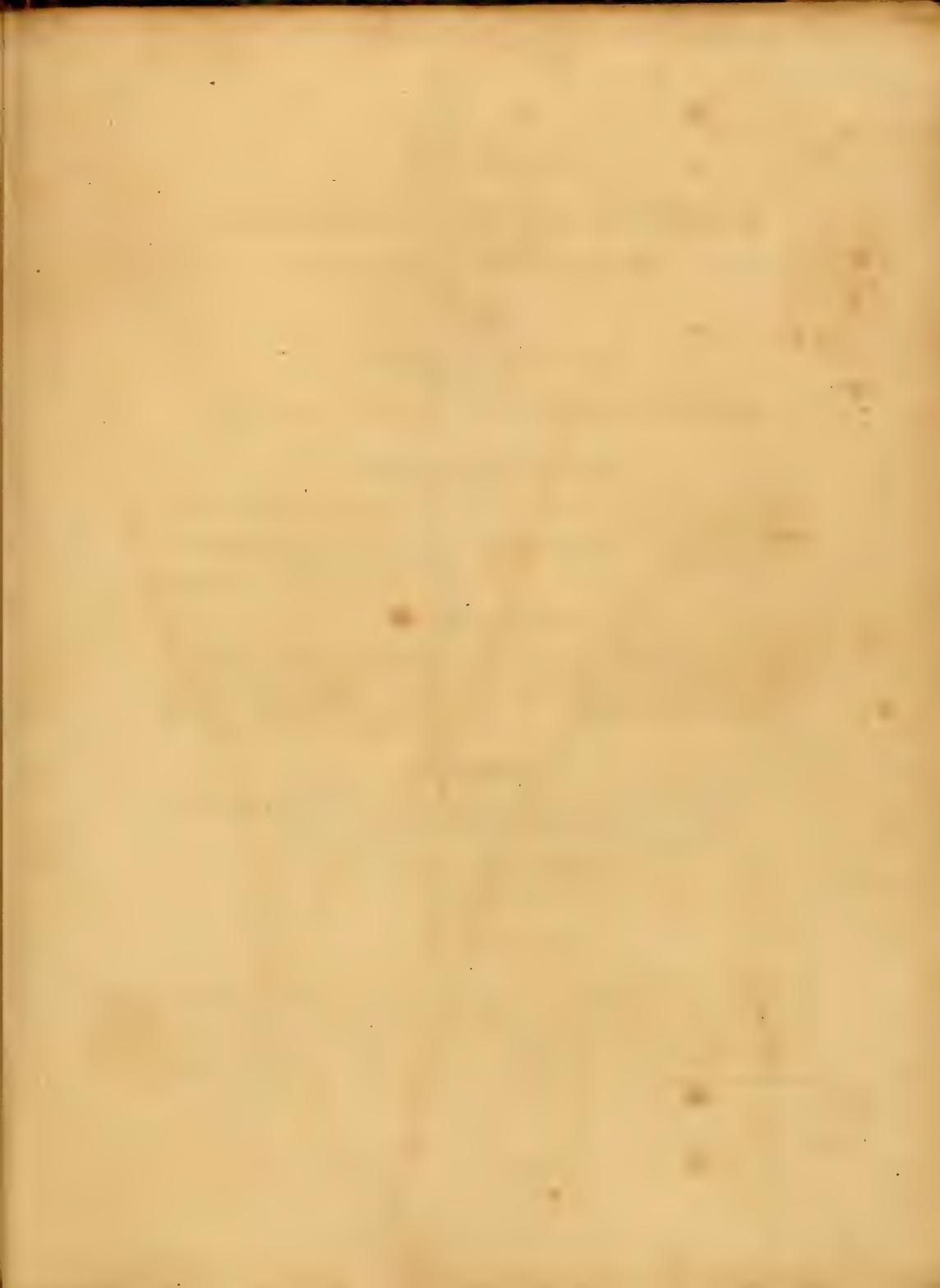


PLATE CCLI.

LACHENALIA PURPUREO-CÆRULEO.

Sweet violet-colour'd Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

STAMINA erecta. Capsula fubovata, trialata. Semina globosa.

BLOSSOM 6-petals, beneath; the three inner petals the longest.

CHIVES erect. Capsule nearly egg-shaped, three winged. Seeds globular.

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

SPECIFIC CHARACTER.

Lachenalia corollis campanulatis, pedunculatis; petalis obtusis, revolutis; staminibus corolla longioribus; foliis lanceolatis; floribus purpureo-cæruleis, odoratissimis.

Lachenalia with the blossoms bell-shaped, and with foot-stalks; petals obtuse and rolled back; chives longer than the blossom; leaves lance-shaped; flowers of a purplish blue colour, and very sweet-scented.

REFERENCE TO THE PLATE.

1. A flower shewn from the outside.
2. The same shewn from the inside.
3. The Pointal and feed-bud.

THIS very fine species of Lachenalia, with its variety, have been figured by Prof. Jacquin in his *Icones*, and *Collectanea*; but whether from dried specimens or not we cannot determine. As yet there is no figure, of either, in any British publication. Mr. Williams, of Turnham Green, nurseryman, was the first who had it to flower in this kingdom, and to his kindness in sending us a fine specimen, this year, in April, we are indebted for our present figure. It is equally hardy with the rest of the species of the Genus, and propagates abundantly by the root; delights most in a sandy peat soil.



Pachenalia purpurea carulea

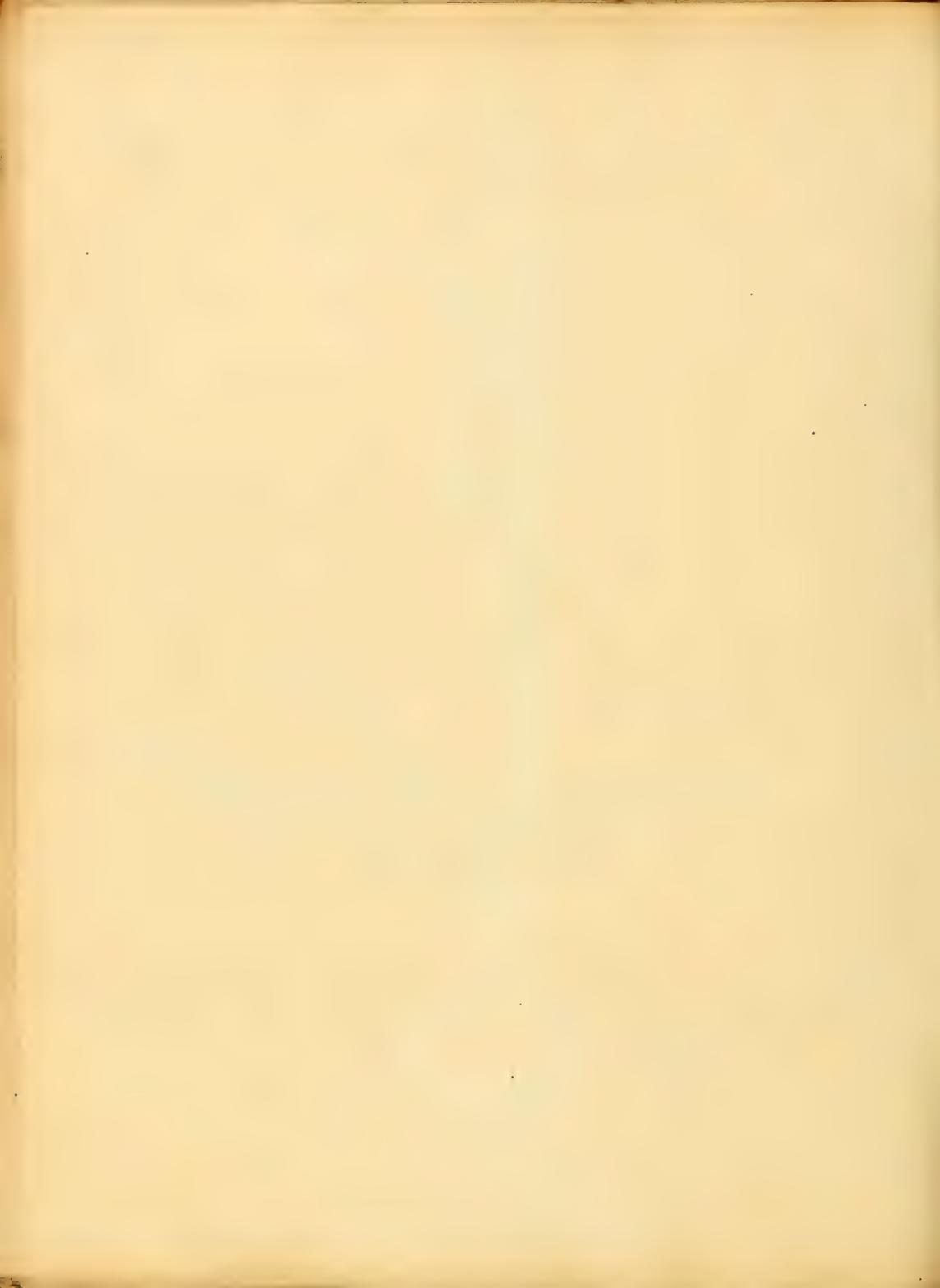




PLATE CCLII.

HEBENSTREITIA AUREA.

Golden-flowered Hebenstreitia.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulosum, membranaceum, emarginatum, subtus longitudinaliter dehiscens.

COROLLA monopetala, unilabiata; tubus cylindricus, calyce longior, latere inferiore ad dimidium dehiscens; limbus unilabiatus, ascendens, planiusculus, quadrifidus, subæqualis.

STAMINA. Filamenta quatuor, horum duo priora sub fauce margini corollæ inserta, extantia; duo posteriora, interiora, inferiora, reflexa ad latera. Antheræ lunares, compressæ, extrorsum truncate.

PISTILLUM. Germen minimum. Stylus filiformis, per fissuram corollæ reflexus. Stigma simplex.

PERICARPIMUM. Capsula oblonga, unilocularis, bivalvis.

SEMINA duo, oblonga, hinc convexa, trifurca, inde plana.

EMPALEMENT. Cup one-leaved, tubular, membranaceous, notched at the end, splitting lengthways from beneath.

BLOSSOM one-petalled, one-lipped; tube cylindrical, longer than the cup, splitting from the lower side half way; border one-lipped, ascending, flattish, four-cleft, the clefts nearly equal.

CHIVES. Threads four, of which the upper pair is inserted into the edge of the blossom under the throat, standing out; the lower anterior pair is bent back to the sides. Tips crescent-shaped, flattish, appearing cut off on the outside.

POINTAL. Seed-bud very small. Shaft thread-shaped, bent back through the fissure of the blossom. Summit simple.

SEED-VESSEL. Capsule oblong, one-celled, two-valved.

SEEDS two, oblong, convex on one side, three-furrowed and flat on the other.

SPECIFIC CHARACTER.

Hebenstreitia foliis linearibus, integris, subteretibus, obtusis, glabris; floribus congestis, racemosis, aurantiis.

Hebenstreitia with linear leaves entire, roundish, blunt, smooth; flowers grow crowded together in long bunches, of a gold colour.

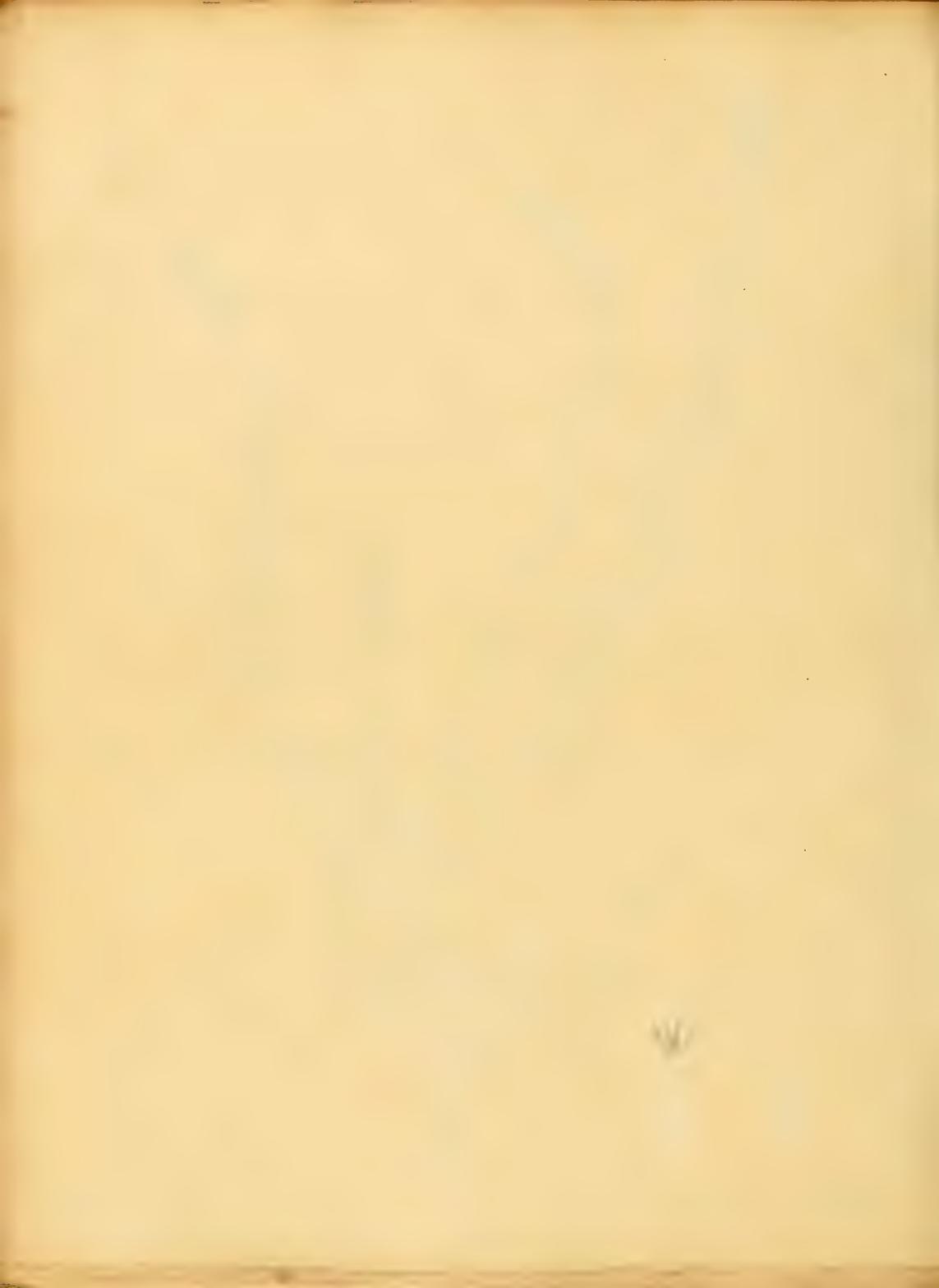
REFERENCE TO THE PLATE.

1. A flower.
2. The Empalement magnified.
3. A Blossom cut open with the chives remaining attached, magnified.
4. The Pointal natural size.
5. The same, magnified.

The *Hebenstreitias* may all be reckoned as rather biennial plants than perennial shrubs; they must be increased every year to keep up a succession, which is a matter of no difficulty; as, if cuttings of any of the species are put into separate small pots, and kept from the air by a hand-glass, for about a month, they will become flowering plants by September, if the cuttings are made in May. Our present plant was introduced in 1796 by Messrs. Lee and Kennedy, Hammermith, at whose nursery the drawing was made this year in the month of March. They mostly flower in spring, and autumn; the flowers are very fragrant at night. They are natives of the Cape of Good Hope.



Helianthella aurea



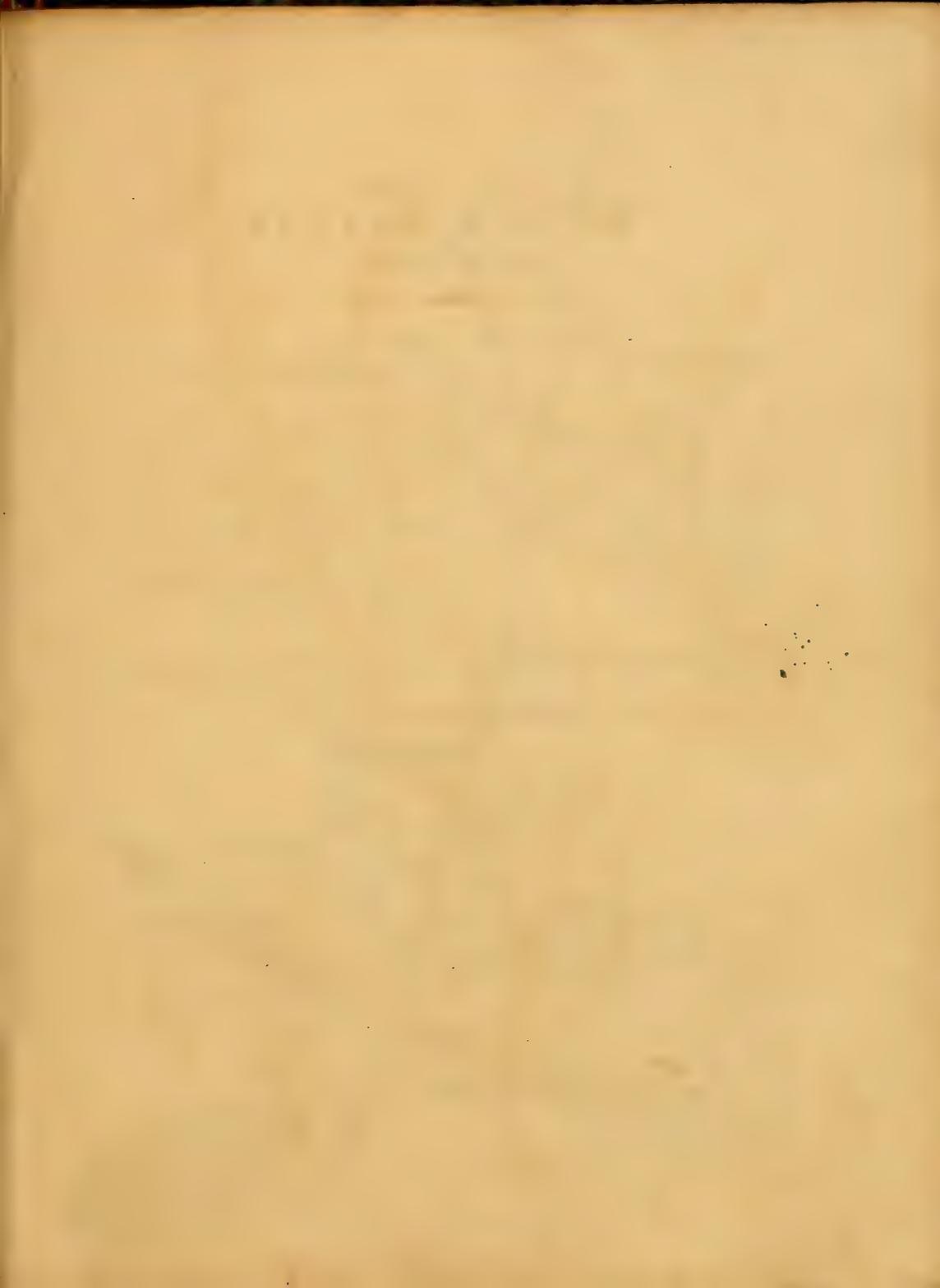


PLATE CCLIII.
 TALINUM PATENS.

Panicled Purslane.

CLASS XI. ORDER I.

DODECANDRIA MONOGYNIA. Twelve Chives. One Pointal.

GENERIC CHARACTER.

<p>CALYX. Perianthium diphyllum, parvum, superum, apice compressum, persistens.</p> <p>COROLLA. Petala quinque, plana, erecta, obtusa, calyce majora.</p> <p>STAMINA. Filamenta multa, capillaria, corolla dimidio breviora. Antheræ simplices.</p> <p>PISTILLUM. Germen subrotundum. Stylus simplex, brevis. Stigmata quinque, oblonga, longitudine styli.</p> <p>PERICARPIUM. Capsula tecta, ovata, trivalvis. Receptaculum liberum.</p> <p>SEMINA plurima, parva.</p>	<p>EMPALEMENT. Cup two-leaved, small, above, compressed at the tip, remaining.</p> <p>BLOSSOM. Five petals, flat, smooth, upright, blunt, larger than the empalement.</p> <p>CHIVES. Threads many, hair-like, shorter by half than the blossom. Tips simple.</p> <p>POINTAL. Germ roundish. Shaft simple, short. Summits five, oblong, the length of the shaft.</p> <p>SEED-VESSEL. Capsule covered, egg-shaped, three-valved. Receptacle free.</p> <p>SEEDS numerous, small.</p>
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SPECIFIC CHARACTER.

<p><i>Talinum</i> foliis lanceolato ovatis, sessilibus, planis; panicula ramosa, terminali; floribus rubris.</p>	<p>Purslane with leaves between lance and egg-shaped, without foot-stalks, flat; panicle branching and terminal; flowers red.</p>
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REFERENCE TO THE PLATE.

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

WE now exhibit a plant which may, perhaps, be known by many, under the name of *Portulaca*, rather than that of *Talinum*. But, as the adoption of this new formed genus, upon a division of the species which have capsules of a different construction, from the old generic character of *Portulaca*, seems generally to obtain, amongst modern botanists; such as Jussieu, Cavanilles, Willdenow, &c. we shall not dissent; although we, at the same time, take the liberty to say, from the particular tendency of the old genus *Portulaca*, to vary in most parts of the flower, both as to number and character, we have taken up the present genus, but reluctantly. This plant is a native of the West Indies, and is, by some, considered as an annual; whilst by others it is treated of as a shrub; but, indeed, it partakes of both characters, in some measure; for the stem generally decays down, near to the earth, and often the whole plant dies, after flowering. It grows to the height of two feet, half of which is formed of the flower-stem. It makes a very gay appearance about August, and seeds abundantly. Our figure was taken from a plant in the collection of J. Vere, Esq. Kensington Gore; where it flowers, annually, in the highest perfection. Introduced, says the Kew Catalogue, by Chevalier Murray, in the year 1776.



Talinum patens

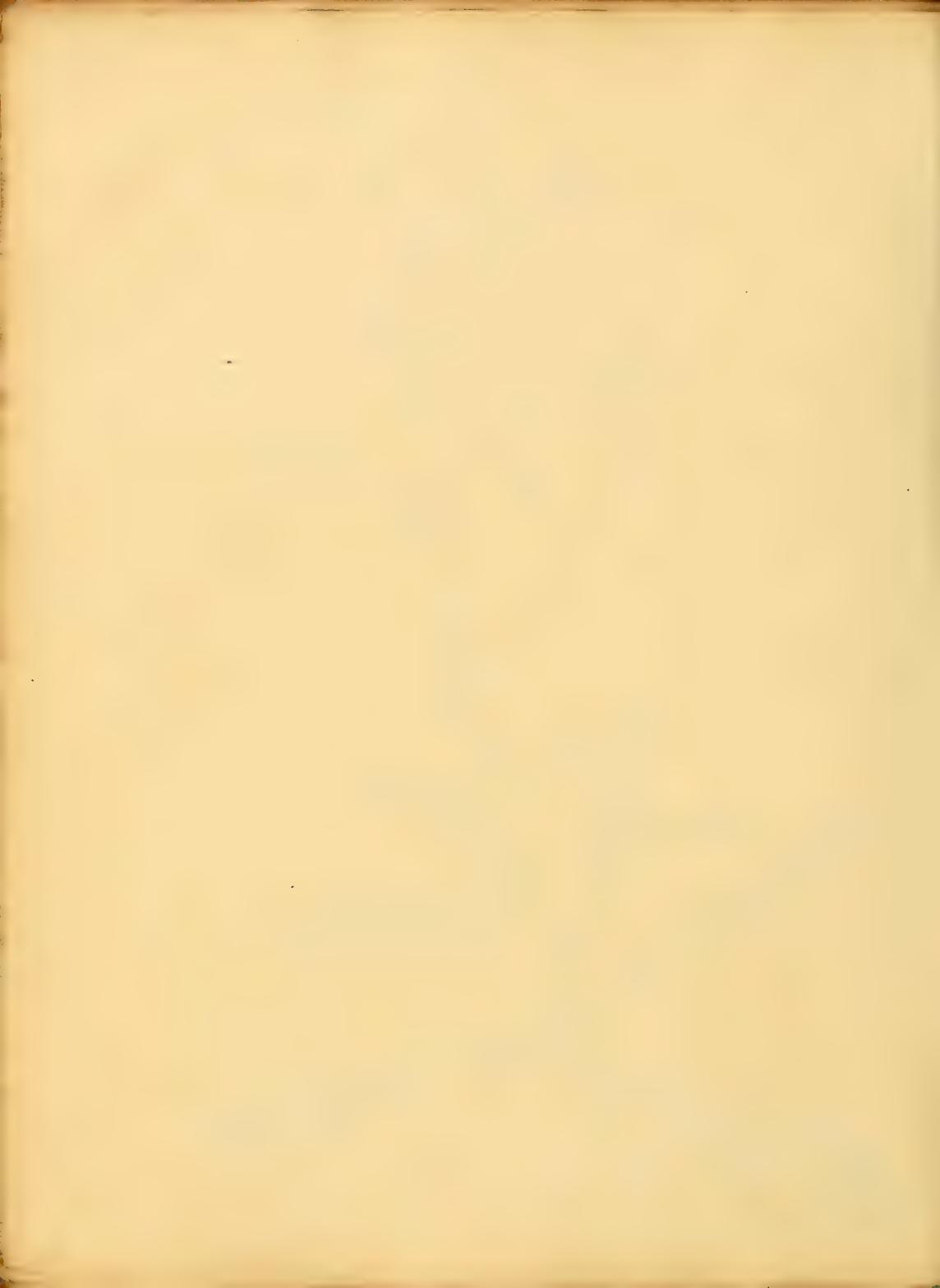




PLATE CCLIV.

GERANIUM PROCUMBENS.

Procumbent Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rotatus, 5-coccus. || ONE POINTAL. Five summits. Fruit furnished with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium caule subcarneo, prostrato; foliis cordatis, lobatis, crenato-dentatis; calycibus pentaphyllis; floribus tetrandris, corollis irregularibus. || Geranium with the stem rather fleshy, and prostrate; leaves heart-shaped, lobed, between scolloped and toothed; cups with five leaves; flowers with four fertile chives; blossoms irregular.

REFERENCE TO THE PLATE.

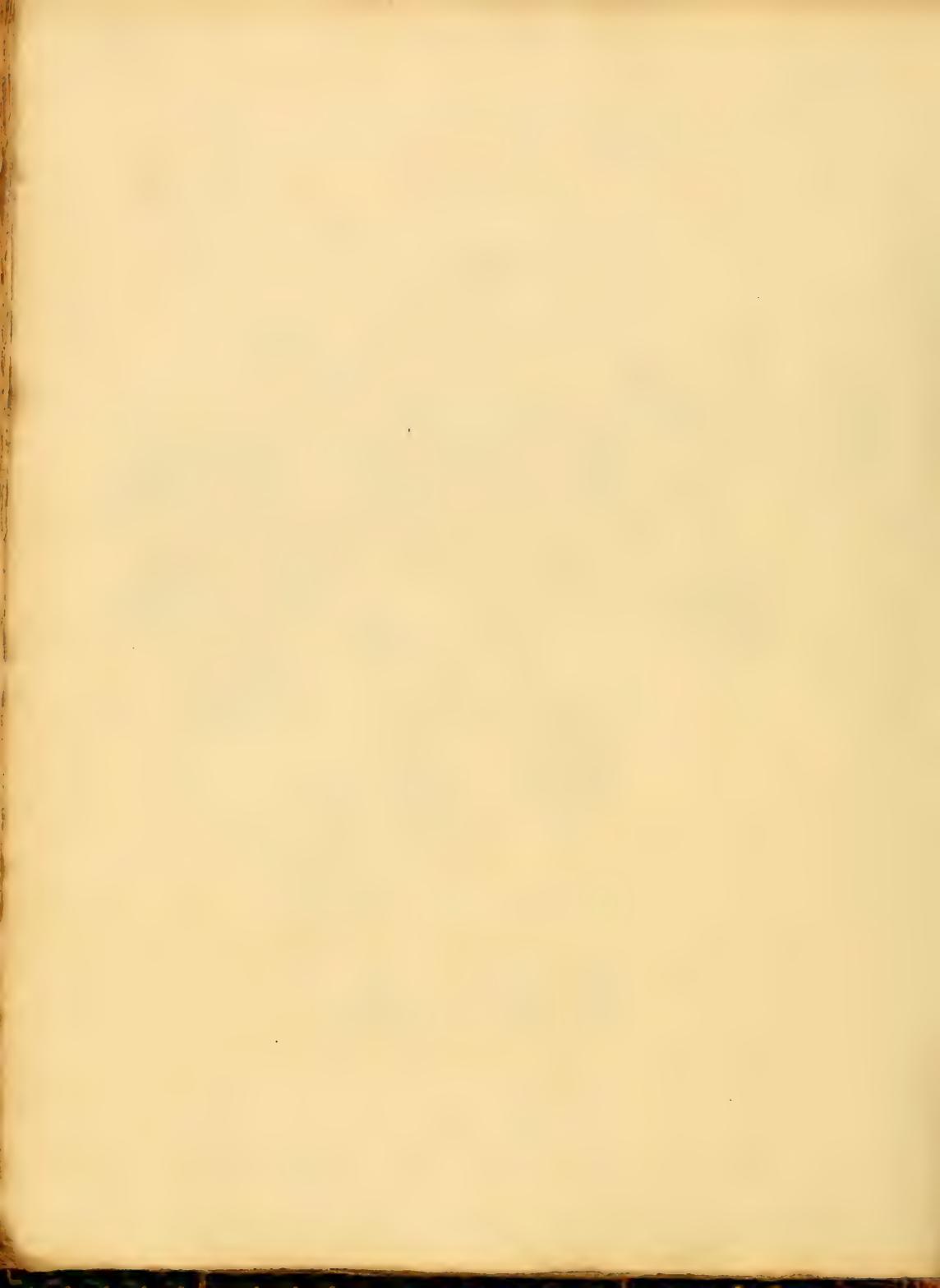
1. The Empalement.
2. The Chives spread open, and magnified.
3. The Pointal, and Seed buds, magnified.

THIS pretty Geranium is rather a delicate plant, and must be kept very dry in the winter; as, from the situation of its branches, which are pressed to the earth, and rather fleshy, they will be very apt to rot, if too often watered, or placed in a damp part of the green house. It was introduced in the year 1781, by G. Hibbert, Esq. in whose collection, only, we have as yet seen it. Mr. Allen informs us, that it is to be propagated as well by cuttings, as from the seeds, which it does not produce plentifully. It has the appearance, if we may judge by analogy, to be but a biennial, and not an abiding plant. It flowers in April and May, and should be planted in light rich earth.

Here we have a botanical treat for the learned, who have adopted the new arrangement of this very vagarious tribe; for in this one plant are united some of the most essential characters of the three L'Heritierian Genera, which, justly, formed but divisions of Linnæus's original genus; agreeing with Geranium and Erodium in the nectariferous cup; with Pelargonium in the blossom and seed; but differing from all three, in having but four fertile chives, with six abortive ones. A fact ascertained by the examination of above fifty flowers, taken from four different plants.



Geranium procremense



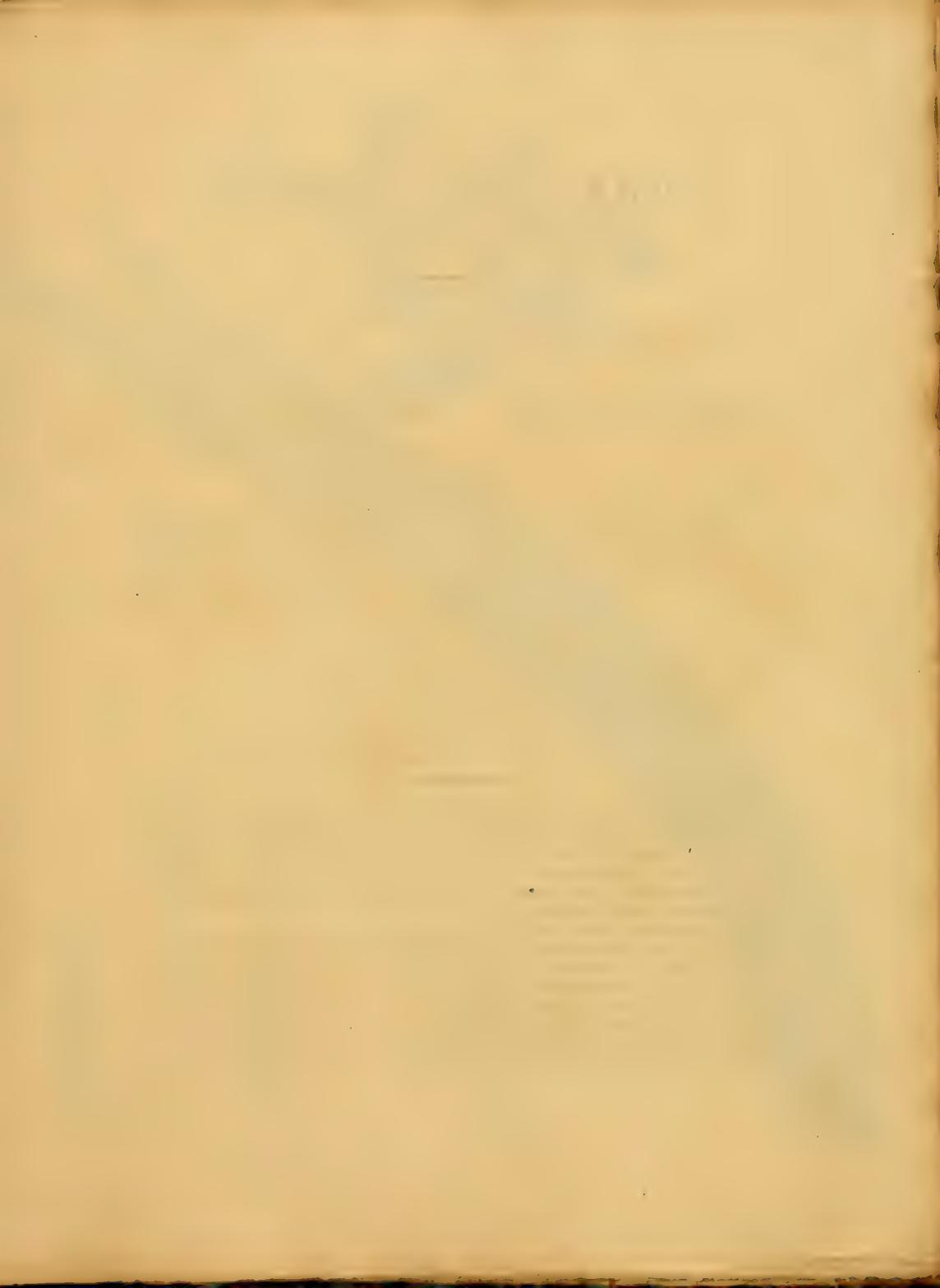


PLATE CCLV.
MORÆA NORTHIANA.
Northian Moræa.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

<p><i>COROLLA</i> hexapetala; petala tria interiora patentia, angustiora. Stigma trifidum.</p>		<p>BLOSSOM six petals; the three inner petals spreading, narrower. Summit three-cleft. See <i>MORÆA TRICOLOR.</i> Pl. LXXXIII. Vol. II.</p>
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SPECIFIC CHARACTER.

<p><i>MORÆA</i> scapo foliisque falcatis, glaberrimis, ditichis; floribus terminalibus; petalis tribus exterioribus ovatis, concavis, pendulis, tribus interioribus sub-erectis, medio retrofractis, apicibus revolutis.</p>		<p><i>MORÆA</i> with the flower-stem and leaves scymitar-shaped, very smooth, pointing different ways; flowers terminal; the three outer petals egg shaped, concave, hanging down, the three inner ones nearly erect, broke back about the middle, and rolled back at the ends.</p>
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REFERENCE TO THE PLATE.

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

ABOUT the year 1789 this very fine species of *Moræa* was introduced to our gardens by the late, elegantly tasted Mrs. North, lady to the Right Hon. the Lord Bishop of Winchester; to whose fervor and liberality in botanical pursuits we owe much of the present prevailing taste for the science. The plant was brought to England by the Hon. Mr. F. North, on his return from Portugal; the only remnant of a number, which he had procured from the gardens of the late Queen of Portugal; immediately on its arrival it was configned, in a very sickly state, to the care of Messrs. Lee and Kennedy, Hammer-smith, who had the good fortune to recover it.

It is a native of the Brazils, flowers about July or August, propagates itself by suckers, which it makes from the root, should be planted in light rich earth, and should be treated as a tender hot-house plant. The leaves grow frequently to the length of two feet, or more; forming the appearance of a large fan; the flower-stem proceeding from nearly the centre. The flowers surpass, in delicacy and beauty of pencilling, any of this very handsome tribe, and are as transitory as beautiful, their duration being but of six hours, at most. It seldom happens that more than one flower is open at a time; but the plant from which our drawing was made, in 1797, at the Right Hon. the Marquis of Blandford's, then resident at Bill Hill, Berks, was in the highest perfection we have ever hitherto seen it.



Iris sibirica





PLATE CCLVI.

IXIA MACULATA. *Var. minor, flore
purpureo.*

Spotted-flowered Ixia. *Small Var. with a purple
flower.*

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, patens, æqualis. Stigmata || Blossom six divisions, spreading, equal. Summits three, between upright and spreading.
tria, erectiufulco-patula.

SPECIFIC CHARACTER.

Ixia foliis ensiformibus, glabris, scapo duplo || *Ixia* with sword-shaped leaves, smooth, twice as
brevioribus; floribus alternis, sub-spicatis, || short as the flower-stem; flowers alternate,
minoribus, purpureis; petalis basi obscuris, || rather spiked, smaller, and purple; petals
ovatis, concavis; stigmatibus bifidis. || dark at the base, egg-shaped, concave;
summits two-cleft.

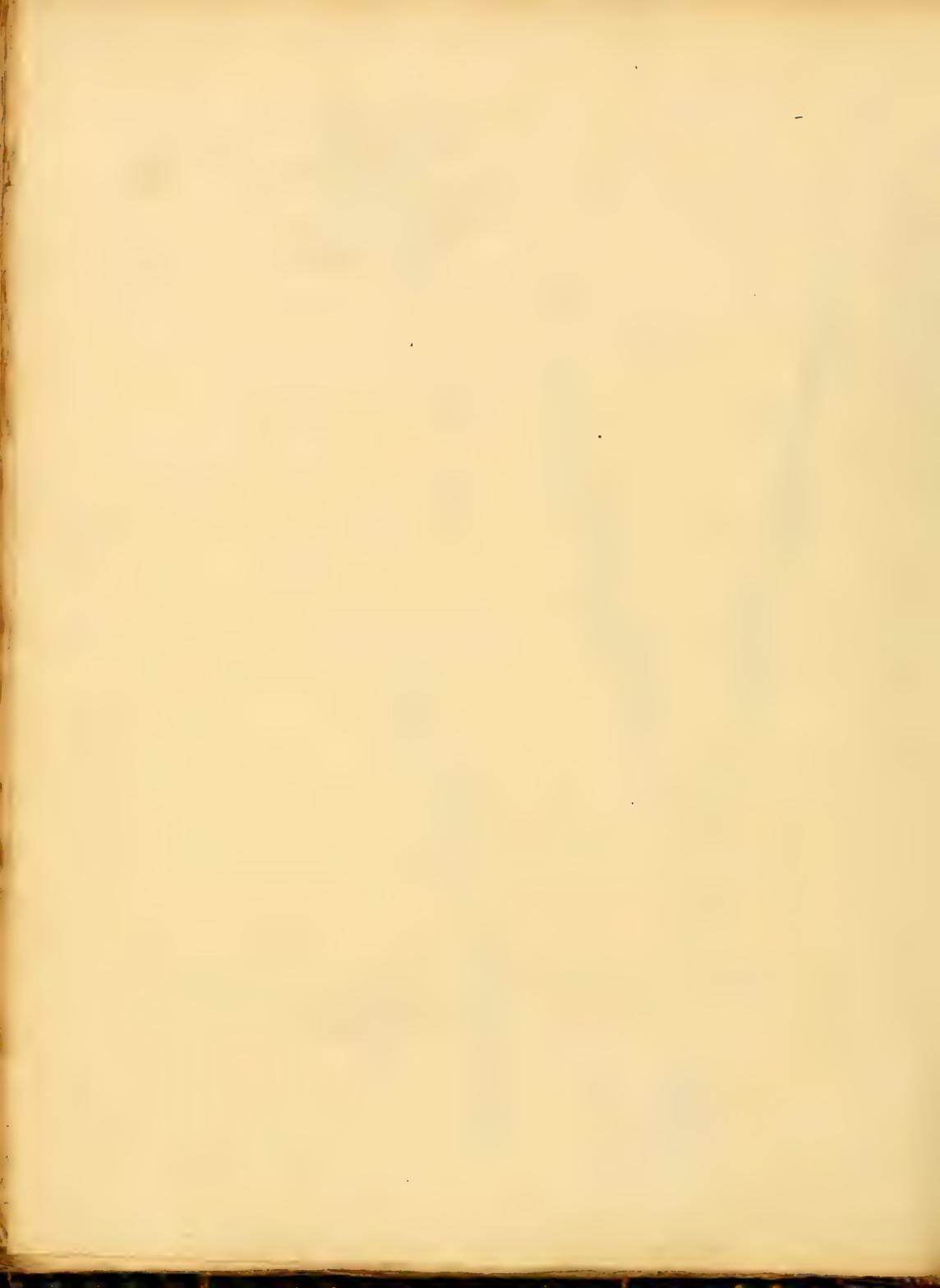
REFERENCE TO THE PLATE.

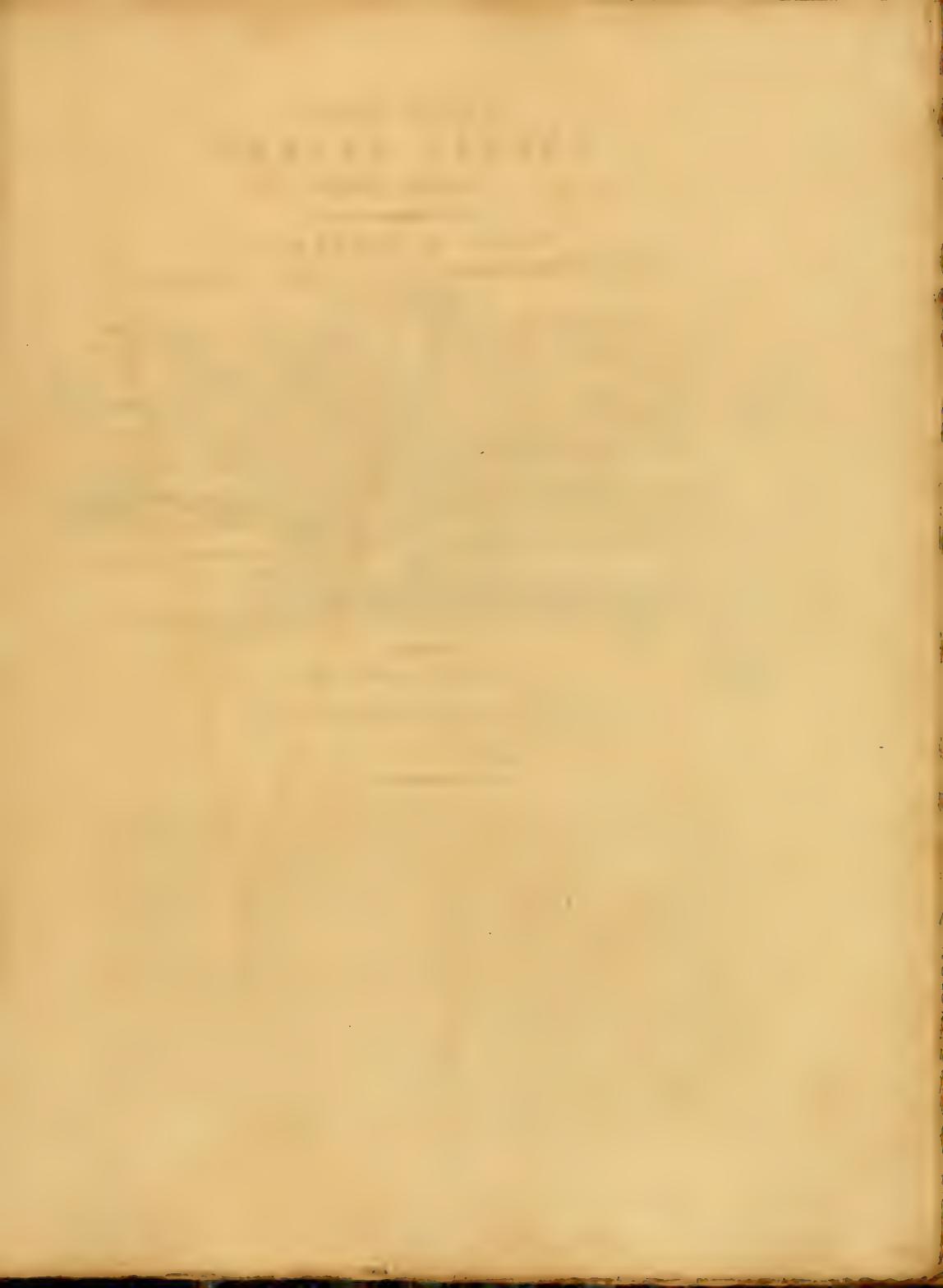
1. The Empalement.
2. A Flower cut and spread open.
3. The Seed-bud, Chives, and Summits, one summit magnified.

This variety of *Ixia* blossoms about June; and, like the rest of this species, continues in flower near a month. It is one of the hardiest, and certainly blows, amongst the whole genus, and propagates freely; no particular treatment is necessary for it, but what has been often repeated for the management of these plants.



Aca maculata
var. minor, flos purpurea





FALKIA REPENS.

Creeping Falkia.

CLASS V. ORDER II.

PENTANDRIA DIGYNIA. Five Chives. Two Pointals.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, sub-inflatum, corolla duplo brevius, quinquangulatum, quinquepartitum; angulis medio dilatatis, compressis extantibus; laciniis ovatis, acutis.

COROLLA monopetala, campanulata, crenato-decem-partita; limbo patente.

STAMINA. Filamenta quinque, filiformia, tubo corollæ inferta, erecta, inæqualia, corolla breviora. Antheræ ovatæ, compressæ.

PISTILLA. Germen quatuor, supera, glabra. Styli duo, capillares, divaricati, longitudine corollæ. Stigmata orbiculata, lanata.

PERICARPIUM nullum.

SEMINA quatuor, globosa, arillata, in fundo calycis.

EMPALEMENT. Cup one leaf, a little inflated, shorter by half than the blossom, five-cornered, five-parted; the angles widened in the middle, flattened, standing out; segments egg-shaped, pointed.

BLOSSOM one-petal, bell-shaped, ten-parted by fcollops; border spreading.

CHIVES. Threads five, hair like, inserted into the tube of the blossom, erect, unequal, shorter than the blossom. Tips egg-shaped, flattened.

POINTALS. Seed-buds four, above, smooth. Shafts two, hair-like, straddling, the length of the blossom. Summits orbicular, woolly.

SEED-VESSEL none.

SEEDS four, globular, covered by a coat, at the bottom of the cup.

SPECIFIC CHARACTER.

Falkia foliis cordatis, petiolis longissimis; caule repente.

Falkia with heart-shaped leaves, and very long foot-stalks; creeping stem.

REFERENCE TO THE PLATE.

1. The Cup.
2. A Blossom spread open, with the chives in their place.
3. A Chive magnified.
4. The Pointals, natural size.
5. The same, magnified.

THIS pretty little plant was first found by Masson and Thunberg, when on their journey together in the interior of the country of the Cape of Good Hope, and was named by Thunberg after Professor Falk of Petersburg. It was introduced to the Kew gardens in the year 1774. Much as it resembles *Convolvulus*, it still has a greater affinity to *Nolana* in all its outward parts, but especially in the cup of the flower, and the situation and character of the seeds. Although the plant is not shrubby, the stems, which are wiry, do not die down in winter, but take root, if laid close to the earth. It is increased by parting the roots in May; should be planted in sandy loam, and kept in the green-house, where it will blossom in July or August. Our figure is from a plant which flowered in the collection of J. Vere, Esq. Kennington Gore.

It is rather singular that the indefatigable, and generally accurate, Willdenow, should have continued this plant in the sixth class, when he had such authority, as may be found, page 325, Vol. I, in the Catalogue of the Kew Garden (where it unquestionably has flowered) for the removal of it to its proper one, the fifth. It is true, he had reason to suppose, that no man would be rash enough to form a new Genus, without a due examination of the plant, on which he grounds his authority; and that, as Thunberg had discovered and named it, his authority was sufficient, and of greater weight than any other. But, unfortunately, in this instance, for the transcriber, the describer has been mistaken, and has led his followers into error. Indeed, the whole plant in its habit and character has so little affinity to any hexandrous genus, that, although Thunberg might have found a single flower, or even a whole plant, whose flowers had six chives (a circumstance we have not been able to discover, upon an examination of the flowers from four different plants), in such a case, as a botanist, he ought to have looked farther, before he made so violent a decision; and Willdenow ought to have taken it for granted the alteration would not have been made, but upon due consideration.



Falua repens

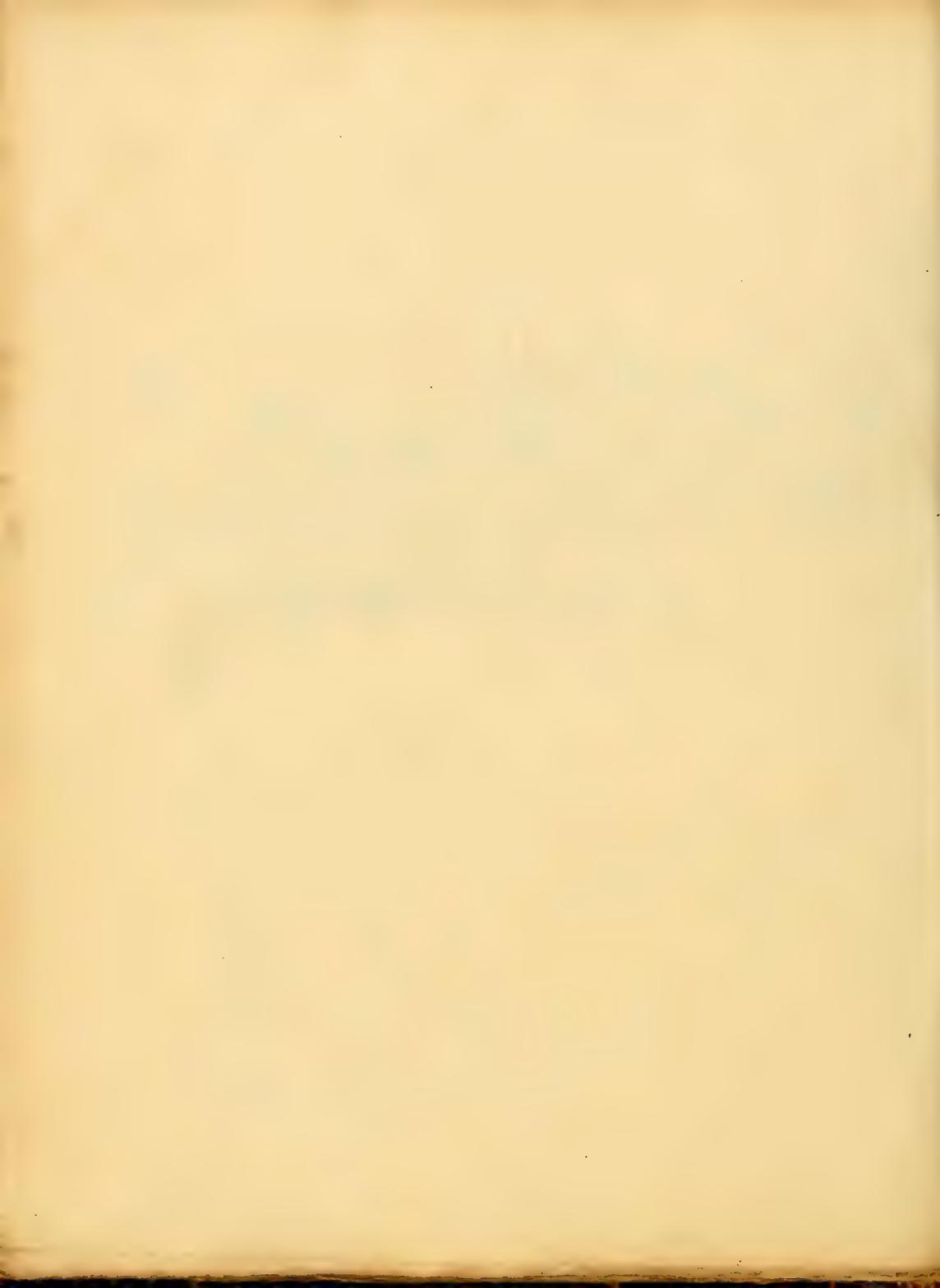




PLATE CCLVIII.

BANKSIA PRÆMORSA.

Bitten-ended-leaved Banksia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Receptaculum commune elongatum, squamosum.
Corolla tetra-petala. Stamina limbo inferta. Capsula bivalvis, disperma, interjecto feminibus dissepimento mobili. Semina alata.

Common Receptacle elongated, scaly. Blossom of four petals. Chives inserted into the limb of the blossom. Capsule two valves, two seeds, and a moveable partition between them. Seeds winged.

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

SPECIFIC CHARACTER.

Banksia foliis cuneatis præmorsis, ferratis, subtus albo-punctatis, supra glabris; floribus externè purpureis.

Banksia with wedge-shaped leaves, appearing bitten at the ends, sawed, dotted with white on the under part, smooth on the upper; flowers purple on the outside.

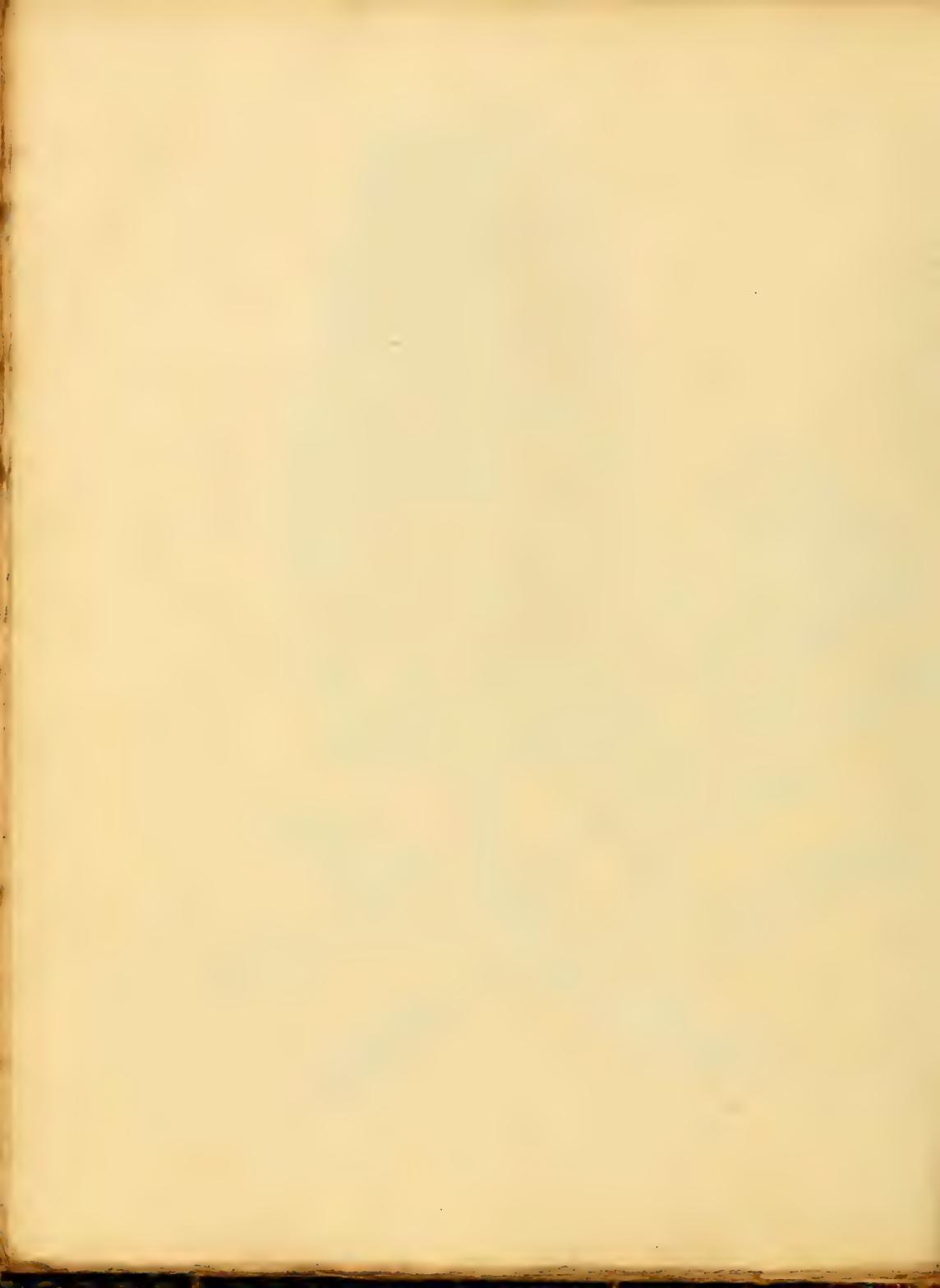
REFERENCE TO THE PLATE.

1. A Flower not yet expanded, with the germ at the base.
2. The same open, the extremities of one of the petals magnified, to shew the situation of the Chive in its place.
3. The Pointal complete, the summit magnified.

THE first plants which were seen of this plant in England, were raised from seeds, at the Royal Gardens, Kew, in 1788. It is a handsome growing shrub, and the plant from which our figure was made had grown to the height of seven feet; it having been planted in the conservatory of the Clapham collection, where it flowered, for the first time, this year, in July, continuing in high beauty near two months. It is a plant of most difficult increase, rarely that it is to be propagated by cuttings; and the wood rots, if laid into the earth. A light soil, of sandy peat, and a small portion of sandy loam, appears most congenial to its growth. There are hopes, from the perfect state of the cones, that ripe seeds may be procured in this country.



Banksia praemorsa



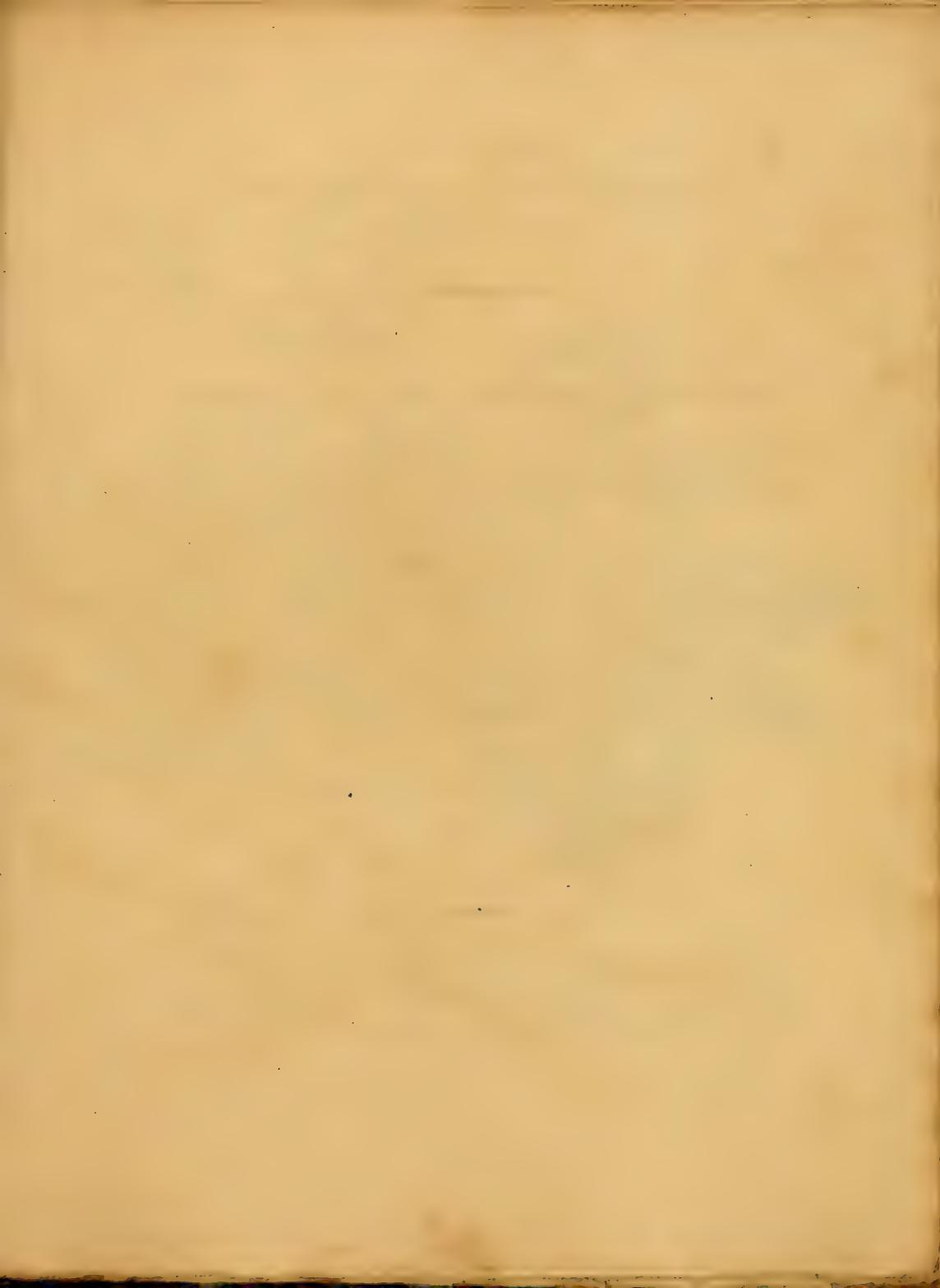


PLATE CCLIX.
GERANIUM PILOSUM.
Hairy Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA 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. Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis pilosis, pinnatis; foliolis profundè laciniatis, acutis; umbella 4-6 flora; pedunculis calycibusque pilosis; floribus pentandris; radice tuberosa.

Geranium with hairy winged leaves; leaflets deeply torn, and sharp pointed; umbel from 4 to 6 flowers; foot-stalks of the flowers and cups hairy; flowers with five fertile chives; root tuberous.

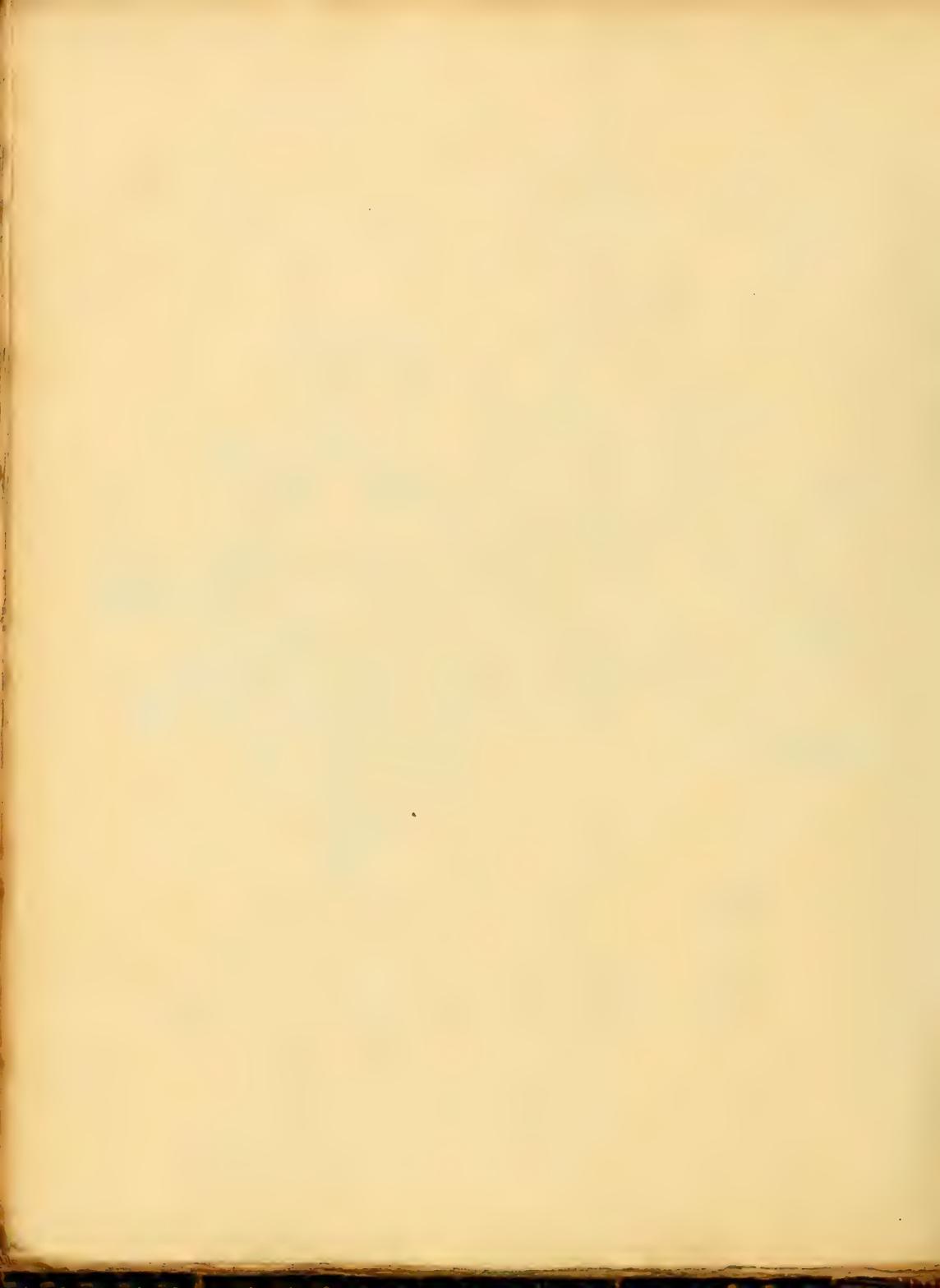
REFERENCE TO THE PLATE.

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

THIS very pretty Geranium was introduced to the Clapham collection, in the year 1801, by Mr. Niven, from the Cape of Good Hope. It is as hardy as any of the family, which have tuberous roots; may be increased by cutting a portion off the old root, in spring, and giving it the heat of the hot house, at that season of the year. It rarely produces ripe seed; so says Mr. Allen the manager of the collection; and he recommends the planting of it in sandy peat earth.



Geranium pulosum



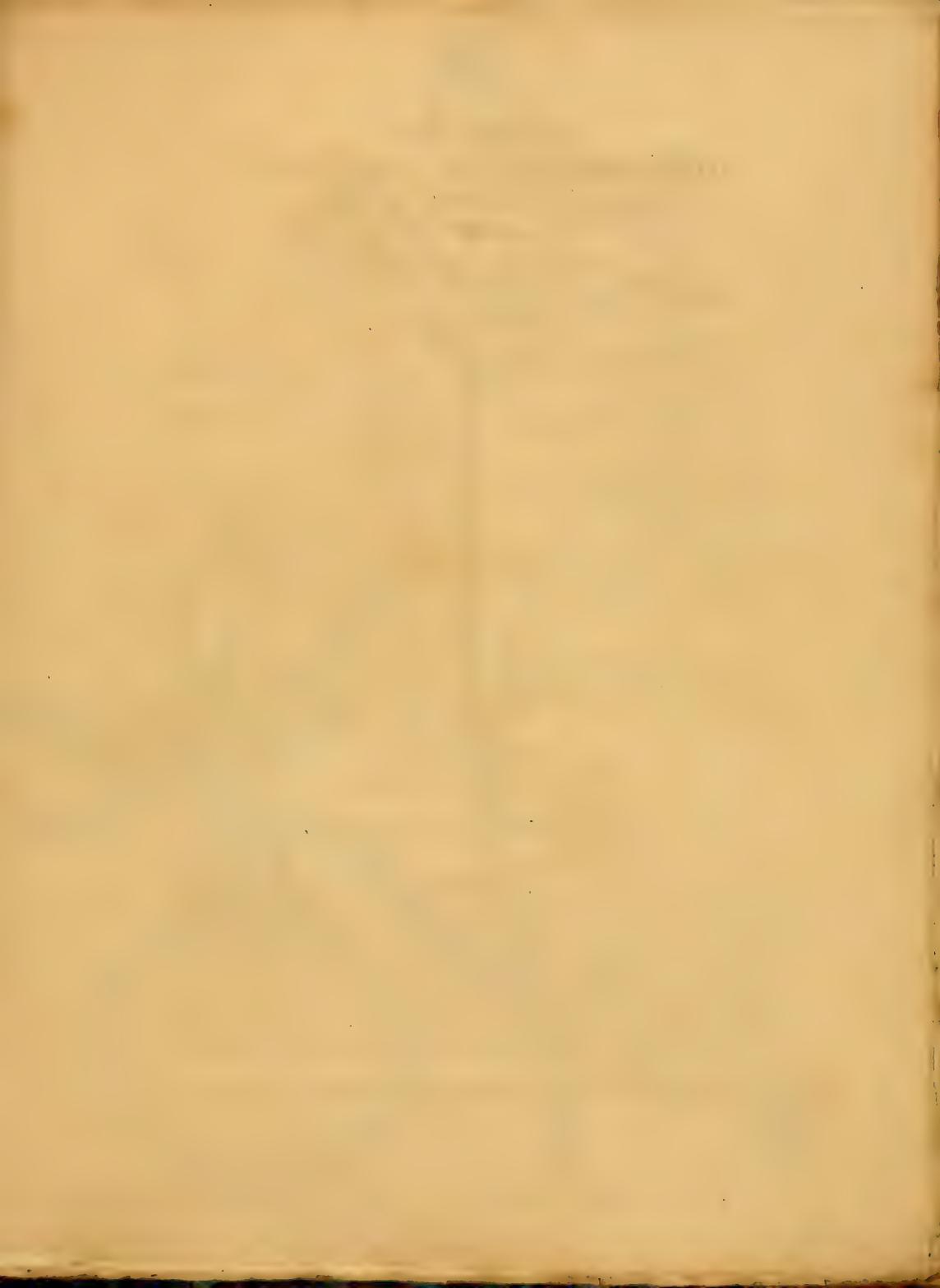


PLATE CCLX.
ORNITHOGALUM ODORATUM.
Sweet-scented Star of Bethlehem.

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

GENERIC CHARACTER.

CALYX nullus.

COROLLA. Petala sex, lanceolata, infra medium erecta, supra medium patentia, persistens, colorem demittentia.

STAMINA. Filamenta sex, erecta, alterna basi dilatata, corolla breviora. Antheræ simplices.

PISTILLUM. Germen angulatum. Stylus subulatus, persistens. Stigma obtusum.

PERICARPIMUM. Capfula subrotunda, angulata, trilocularis, trivalvis.

SEMINA plura, subrotunda.

OBS. Filamenta in aliis plana, erecta, alterna apice trifido, media lacinia antherarum sustinente; in aliis alterna, simplicia.

EMPALEMENT none.

BLOSSOM. Petals six, lance-shaped, below the middle upright, above the middle spreading, remaining, losing their colour.

CHIVES. Six threads upright, each alternate one widening at the base, shorter than the blossom. Tips simple.

POINTAL. Seed-bud angular. Shaft awl-shaped, remaining. Summit roundish.

SEED-VESSEL. Capfulæ roundish, angular, three-celled, three-valved.

SEEDS many, roundish.

OBS. The threads in some are flat and upright, the alternate ones trifid at top, the middle segment supporting the tip; in others the alternate ones are simple.

SPECIFIC CHARACTER.

Ornithogalum racemum elongato; filamentis subulatis; petalis lanceolatis, obtusis, apice calloso-inflexis; foliis depressis, linearibus, planis.

Star of Bethlehem with the bunch of flowers lengthened; threads awl-shaped; petals lance-shaped, blunt, thick, and turned inwards at the point; leaves bent downward, linear, and smooth.

REFERENCE TO THE PLATE.

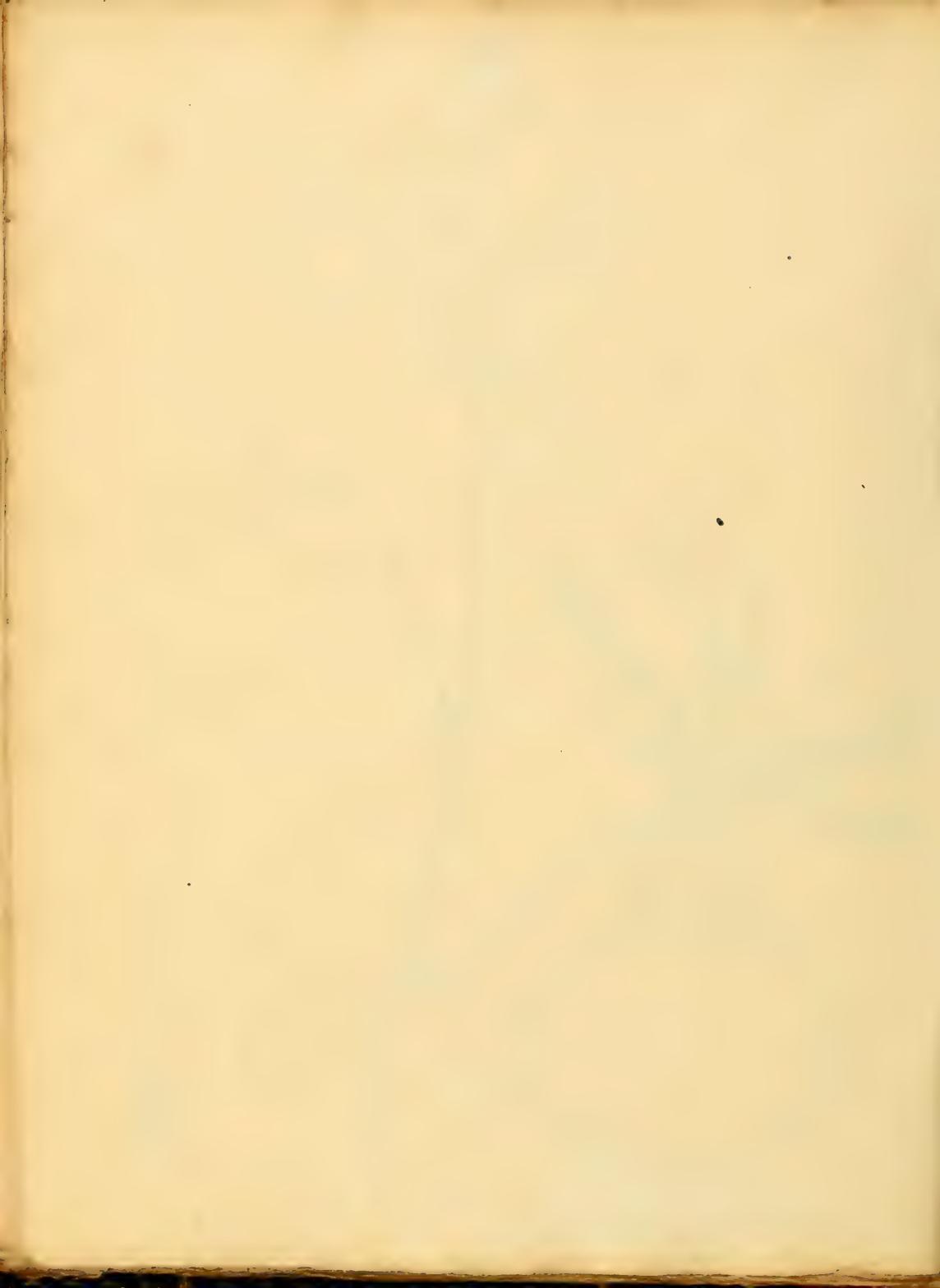
1. A Flower prop.
2. The Chives and Pointal, the petals being removed.
3. The Pointal.
4. The same, magnified.

This species of Star of Bethlehem, from the Cape of Good Hope, is a rival in fragrance to the great-flowered, or Arabian species, to which it is much allied in every part but the colour of the blossom; which, in this, is yellowish, and in that, it is white with a dark eye. It is rather a delicate bulb; and to make it flower, should be kept in the hot-house, where, it will blossom about May or June. Our drawing was made from a plant which had been received, from the Cape, by Mr. Hibbert, the preceding year, 1800; and we much fear, what has been said of the great-flowered species, may be considered as referential also to this; viz. that the bulbs never flower, but the first year after importation. We have not been able to trace the appearance of a flower, from any of the bulbs, this year, which has led us to this conjecture; indeed, many of the species of this genus have this character; more particularly, those from Africa.

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



Ornithogalum odoratum



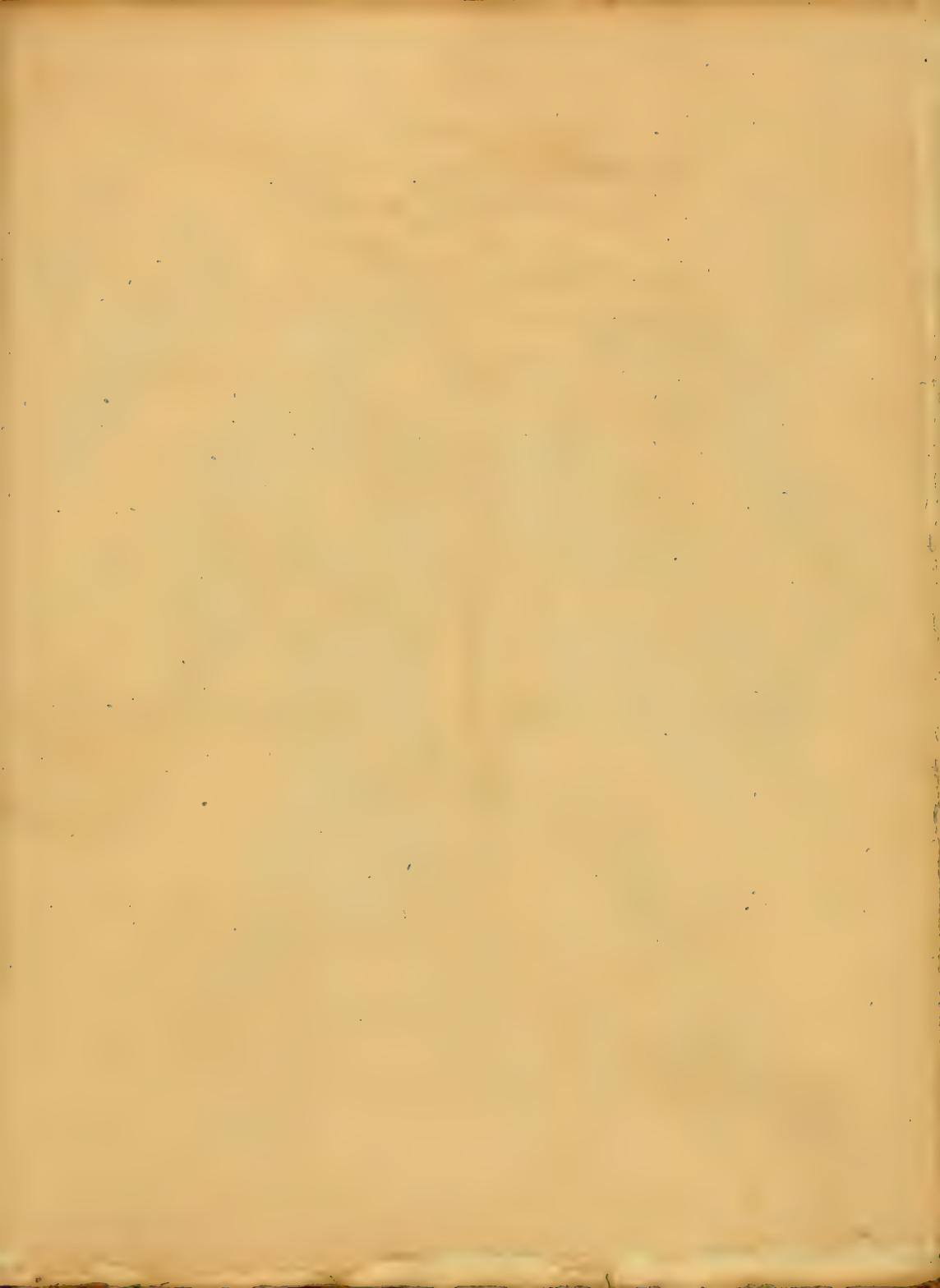


PLATE CCLXI.
CAMERARIA LATIFOLIA.
Bastard Mangeneel.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

<p>CALYX. Perianthium quinquefidum, acutum, connivens, minimum.</p> <p>COROLLA monopetala, infundibuliformis; tubus cylindricus, longus, basi apiceque ventricosus; limbus quinquepartitus, planus; laciniis lanceolatis, obliquis.</p> <p>STAMINA. Filamenta quinque, minima, e medio tubi. Antheræ conniventes, filo longo terminatæ.</p> <p>PISTILLUM. Germina duo, cum appendicibus ad latera. Stylus cylindricus. Stigma capitatum, apice acutum, bifidum.</p> <p>PERICARPIUM. Folliculi duo, horizontaliter reflexi, oblongi, juxta latera basæ utrinque lobum emittentes, uniloculares, univalves.</p> <p>SEMINA numerosa, ovata, membranæ majori ovatæ ad basin insertæ, imbricata.</p>	<p>EMPALEMENT. Cup five-cleft, pointed, converging, very small.</p> <p>BLOSSOM one-petal, funnel-shaped; tube cylindrical, long, bellied out at the base and top, border five-parted, flat; segments lance-shaped, oblique.</p> <p>CHIVES. Threads five, very small from the middle of the tube. Tips converging, terminated by a long thread.</p> <p>POINTAL. Seed-buds two, with lateral appendages. Shaft cylindrical. Summit headed, pointed at top, and two-cleft.</p> <p>SEED-VESSEL. Seed-pods two, horizontally reflexed, oblong, sending forth a lobe each way near the side of the base, one-celled, one-valved.</p> <p>SEEDS numerous, egg-shaped, inserted on the larger egg-shaped membrane at the base, tiled.</p>
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SPECIFIC CHARACTER.

<p><i>Cameraria</i> foliis ovatis, nitidis, acuminatis, parallelo-costatis; floribus corymbosis, terminalibus.</p>	<p><i>Bastard Mangeneel</i> with egg-shaped leaves, shining, tapered, and ribbed transversely; flowers grow in broad-topped spikes, terminal.</p>
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REFERENCE TO THE PLATE.

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

THE genus *Cameraria*, seems to have been rather hastily taken up by Plumier, as a distinct genus from *Nerium*; for certainly, the small difference in the shape of the seed-pod, in which consists the whole distinctive character of this genus, can hardly be thought of sufficient moment to that end. As we have found it, we leave it; but could not refrain from the foregoing remark, as it appears so singular, that amongst so many who have published the plant, not one should have discovered the surrounding nectary, or honey-cup, to the mouth of the blossom, and the long threads at the end of the tips; two such very powerful features, which distinguish *Nerium*, from all the rest of this natural order.

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

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



Camomaria latifolia

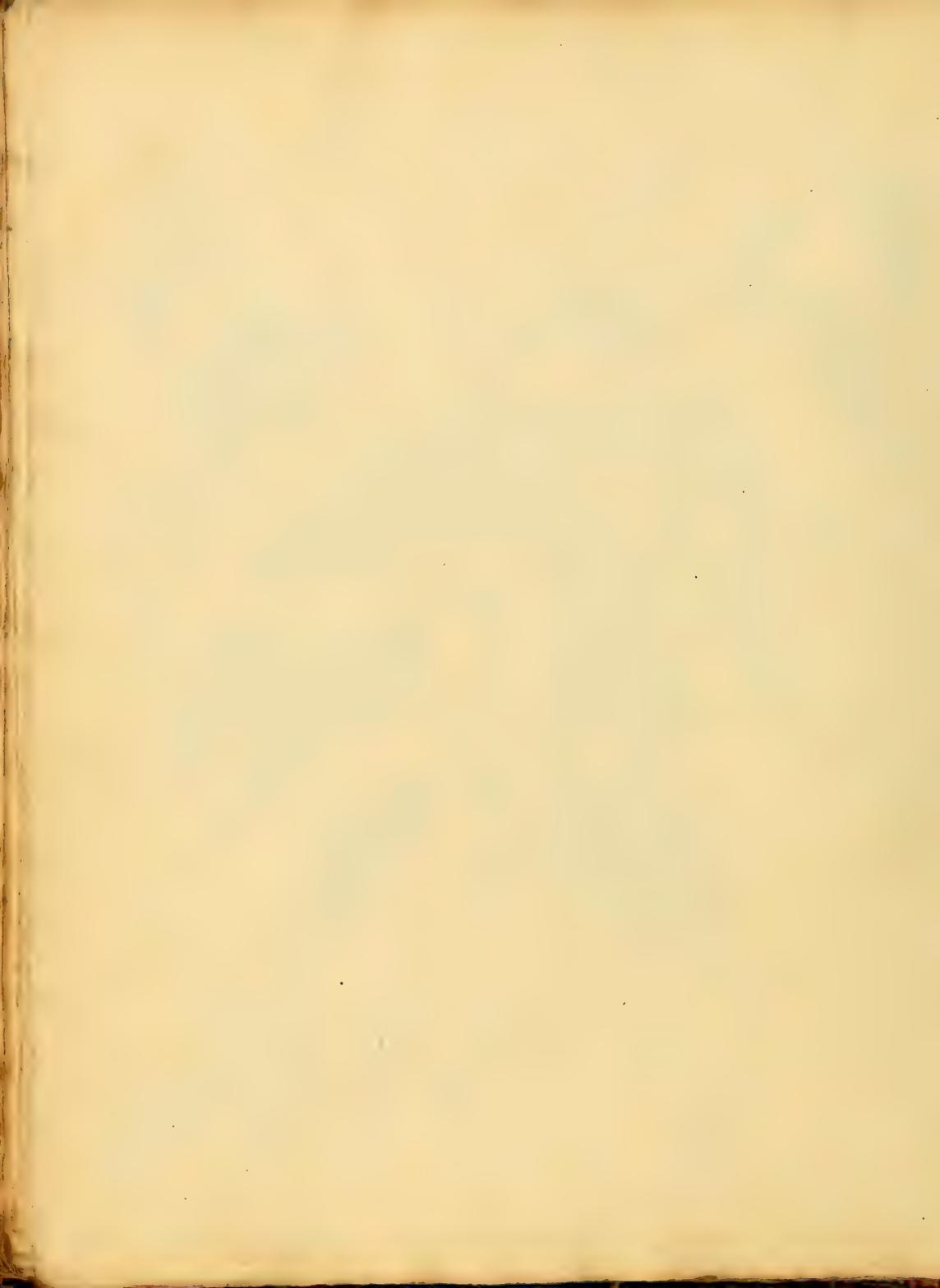




PLATE CCLXII.

XERANTHEMUM SPIRALE.

Spiral-leaved Everlasting-Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals:

ESSENTIAL GENERIC CHARACTER.

Receptaculum paleaceum Pappus setaceus Calyx imbricatus, radiatus; nullo colorato. // Loepracle chaffy. Feather vastly. Empale-ment tiled, rayed; the ray coloured
See XERANTHEMUM SPECTABILIMUM, Vol. I. Pl. L.

SPECIFIC CHARACTER.

Xeranthemum foliis spiriter-imbricatis, carinatis, sub-obliquis; floribus solitariis, maxi- // Everlasting Flower with spirally-tiled leaves, keeled, rather oblique; flowers solitary, very large.

REFERENCE TO THE PLATE.

1. An outer scale of the Empalement.
2. An Herinaphrodite Floret, with the Feather of the Seed.
3. A Female Floret, a little magnified.
4. The Pointal, magnified.

This species of Everlasting Flower is very common near Cape Town; yet, 'till the year 1800, it has never been introduced to Britain. Montague Burgoyne, Esq. of Mark Hall, Essex, was the first to procure seeds of it, and it has flowered with him, this year 1802. Our drawing was made in July, but the flower lasts near three months; it is the largest of the genus we have as yet seen, and certainly one of the most beautiful. All the species, from the Cape, are very liable to rot from damps, in the winter; they should be kept on an airy, dry shelf, as near the glass as possible, during the foggy months. They, in general, ripen seeds with us, but are with difficulty increased by cuttings; which should be made early in spring, planted in pots of sand, and kept quite dry for some time after they are planted. The grown plants thrive best in a very sandy peat earth.



Xeranthemum spodioides





PLATE CCLXIII.

VACCINIUM STAMINIUM.

Green-wooded Whortle-berry.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX superus. Corolla monopetala. Filamenta receptaculo inferta. Bacca quadrilocularis, polysperma.

CUP superior. Blossom of one petal. Threads fixed to the receptacle. A berry with four cells and many seeds.

|| See VACCINIUM ARETOSTAPHYLLOS, Vol. I. Pl. XXX.

SPECIFIC CHARACTER.

Vaccinium foliis oblongo-ovatis, acutis, integerrimis, subtus subglaucis; pedunculis nudis; antheris exsertis; floribus solitariis; stamina decem.

|| Whortle-berry with oblong-oval leaves, pointed, quite entire, and rather sea-green underneath; fruit-stalks naked; tips without the blossom; flowers solitary; ten chives.

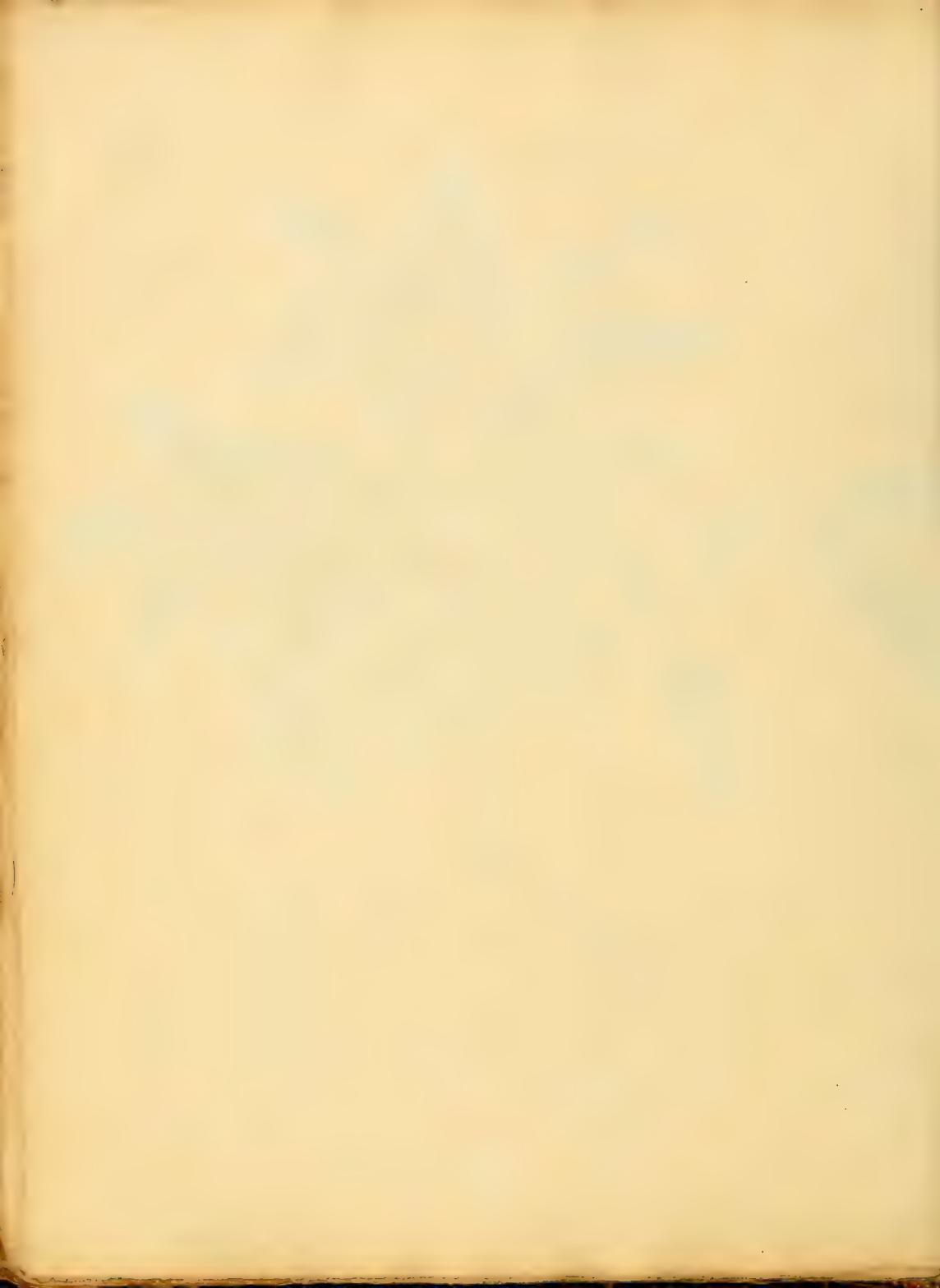
REFERENCE TO THE PLATE.

1. A Flower complete.
2. The Chives and Pointal.
3. The Chives, Pointal, and Seed-bud, magnified.

THE species here figured of Whortle-berry, according to the Kew catalogue, was introduced, first, from North America, to us, by Mr. William Young, in the year 1770. It is a hardy, deciduous shrub; grows to the height of three feet; very bushy, with the flowers but thinly scattered over it; they are white, and deeply cut in the border, which is rather inclined to spread. It is increased by layers; the berries seldom ripening in England. A light, sandy peat soil, with a small portion of loam, is the fittest for its growth; and it acquires a higher degree of beauty, when sheltered from the scorching rays of the sun, in summer. Our figure was taken in June, 1801, at the nursery of Messrs. Lee and Kennedy, from a plant which had been imported in February, the same year, from Pennsylvania, North America.



Vaccinium stamineum



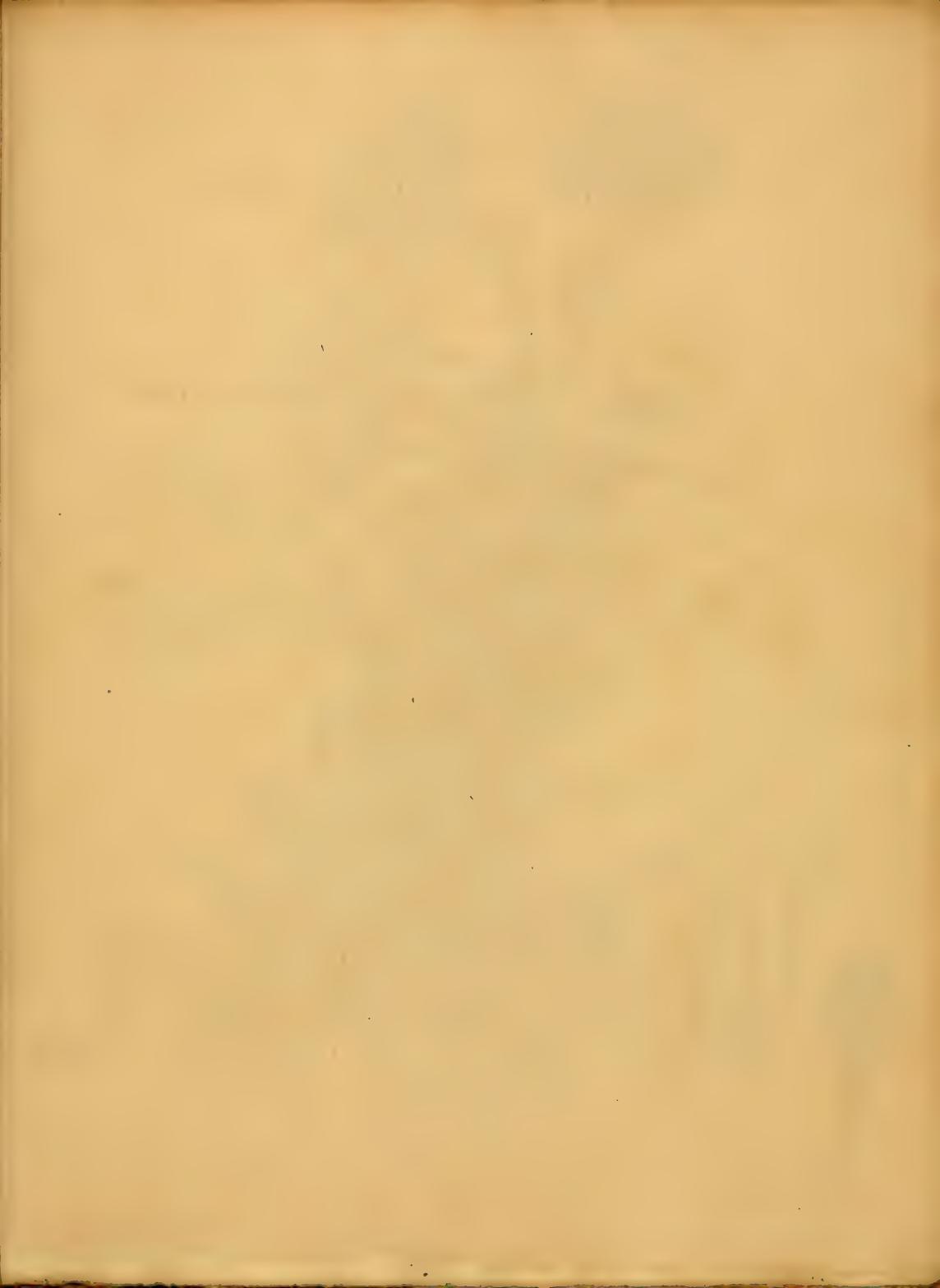


PLATE CCLXIV.

PROTEA GLOMERATA.

Woolly-headed Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

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

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

SPECIFIC CHARACTER.

Protea foliis bipinnatis, filiformibus; pedunculo communi elongato, nudo, pedicellis capitulis longioribus; corollis extus lanatis.

Protea with doubly winged leaves, thread-shaped; common foot-stalk lengthened, naked, partial foot-stalks longer than the heads of flowers; blossoms woolly without.

REFERENCE TO THE PLATE.

1. A Floret, natural size.
2. The Blossom, magnified.
3. The Pointal, natural size, with the summit detached, magnified.
4. A Cone, after the flowers have all fallen off.

IN the year 1789, this species of Protea was first raised from seeds; received at the HammerSmith nursery from Vienna; they having been collected for the Emperor's gardens at Schonbrun, and from thence transmitted to Messrs. Lec and Kennedy. Many plants have since been raised, in different collections; and our present figure was made, from a fine specimen, in the Hibbertian collection. It is rather delicate when young, but not easily destroyed when grown to a foot in height. It will attain to five or six feet, and makes a very pretty appearance, when in full flower. It may be propagated by cuttings, but with difficulty, and must be planted in light yellow loam.



Walteria glomerata

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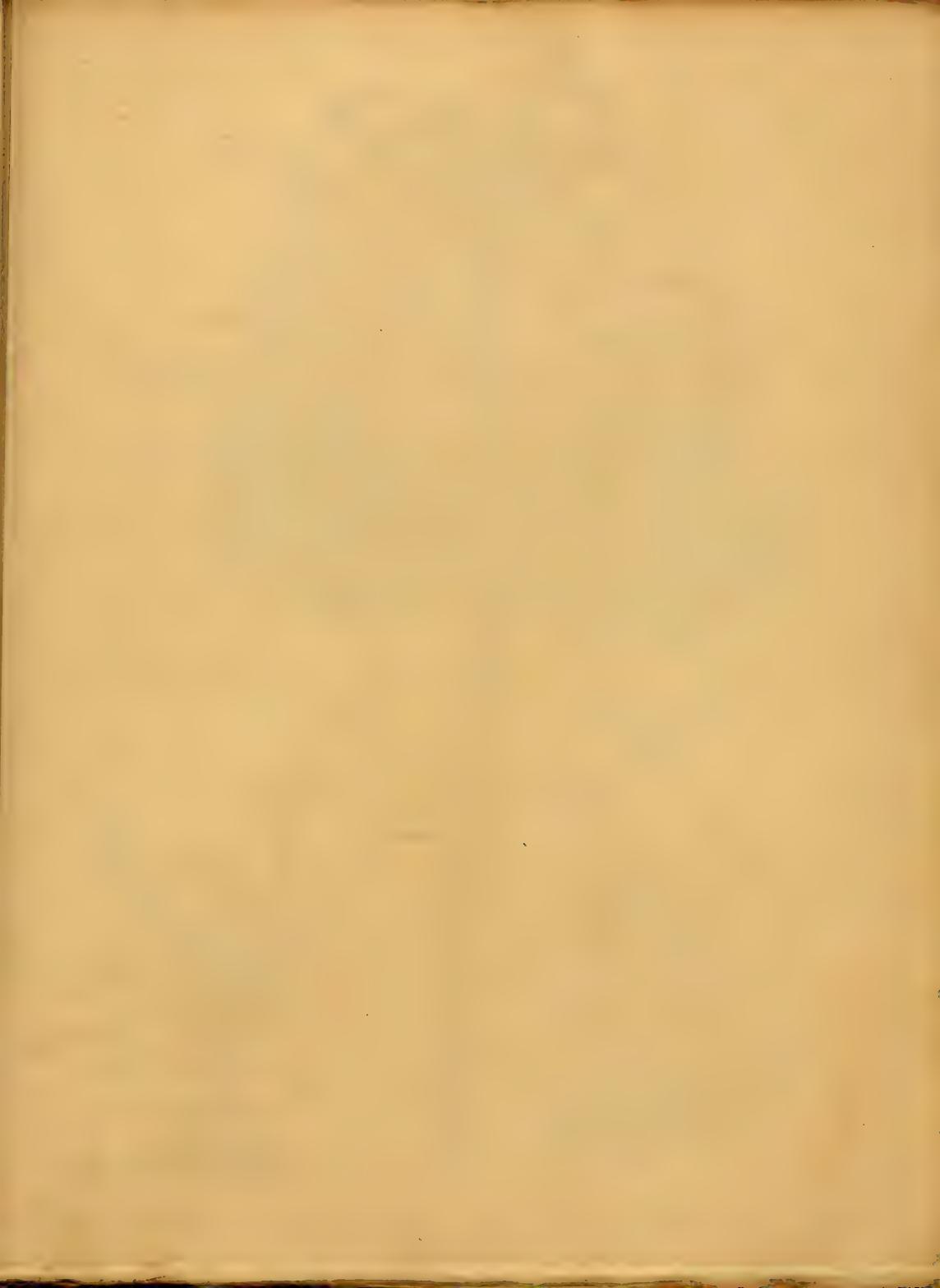


PLATE CCLXV.
 CYRTANTHUS OBLIQUUS.
Oblique-leaved Cyrtanthus.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum polyphyllum; foliolis lanceolatis, persistentibus.

COROLLA monopetala, clavata, curva, apice sex-fida; laciniis ovato-oblongis, incurvis, concavis, tribus alternis apice glandulosis.

STAMINA. Filamenta sex, tubo corollæ inserta, erecta, subulata, corolla dimidio breviora. Antheræ sagittatæ, erectæ, inclusæ.

PISTILLUM. Germen inferum, obtuse-trigonum. Stylus filiformis, longitudine floris. Stigma obsolete-trifidum.

PERICARPIUM. Capsula subovata, trilocularis, trivalvis.

SEMINA plura, plana, oblonga, incumbentia.

EMPALEMENT. Fence many-leaved; leaflets lance-shaped, remaining.

BLOSSOM one petal, club-shaped, bent, six-cleft at top; segments oblong egg-shaped, turned inwards and concave, the three outer ones glandular at the end.

CHIVES. Six threads inserted into the tube of the blossom, upright, awl-shaped, half the length of the blossom. Tips arrow-shaped, upright, within the blossom.

POINTAL. Seed-bud beneath, obtusely three-cornered. Shaft thread-shaped, the length of the flower. Summit obscurely three-cleft.

SEED-VESSEL. Capsule nearly egg-shaped, three-celled, three-valved.

SEEDS many, flat, oblong, lying upon one another.

SPECIFIC CHARACTER.

Cyrtanthus foliis linearibus, obtusis planis, oblique flexis, floribus pendulis, tricoloratis.

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

REFERENCE TO THE PLATE.

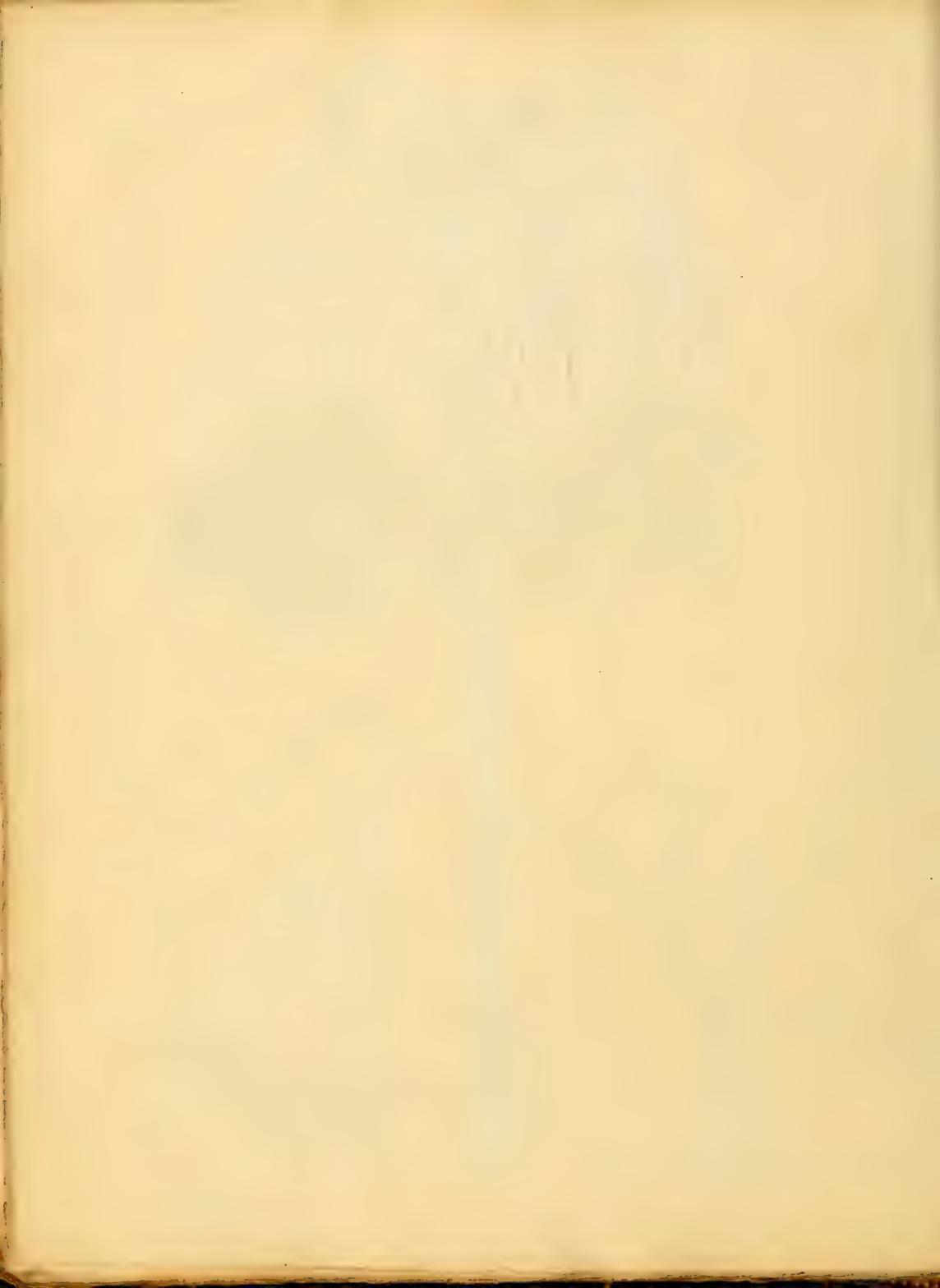
1. Part of the Bulb, and the leaves of the plant in miniature.
2. A Flower, cut and spread open, with the Chives in their place.
3. The Pointal and Seed-bud, natural size, Summit magnified.

THIS most beautiful, and rare plant, together with *C. angustifolius*, (the other species) were introduced, in the year 1774, to the Kew Gardens, by Mr. F. Masson, from the Cape of Good Hope. Monf. L'Heritier, when in England, procured drawings of both species, and figured them in his *Sertum Anglicum*, tab. 15 and 16, under the names of *Amaryllis cylindracea*, and *A. umbrella*: but, as we have had formerly occasion to mention our objections, in following that gentleman in his alterations of accepted Genera, in this country; we have, in the present instance, chose rather the authority of Martyn, Curtis, Willdenow, &c. in preference; who all have followed the Kew Catalogue in the name of this Genus. It is true, Thunberg, in his *Prodromus Plantarum Capensium*, P. 1. p. 59, has it still under the Genus, *Crinum*; and, as *Crinum pendulum*, our present subject, was known for many years. It is a very scarce plant, and is to be found but in few collections; the increase being only from the root, and the importation of the bulbs has been but seldom. The seeds do not come to maturity with us, of this species; although those of the *C. angustifolius* are constantly perfected. It must be treated as a dry stove plant, or kept on a shelf in the hot-house; should be planted in sandy loam, and have plenty of room in the pot. Flowers in July and August.

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



Cyrtanthus alliquus



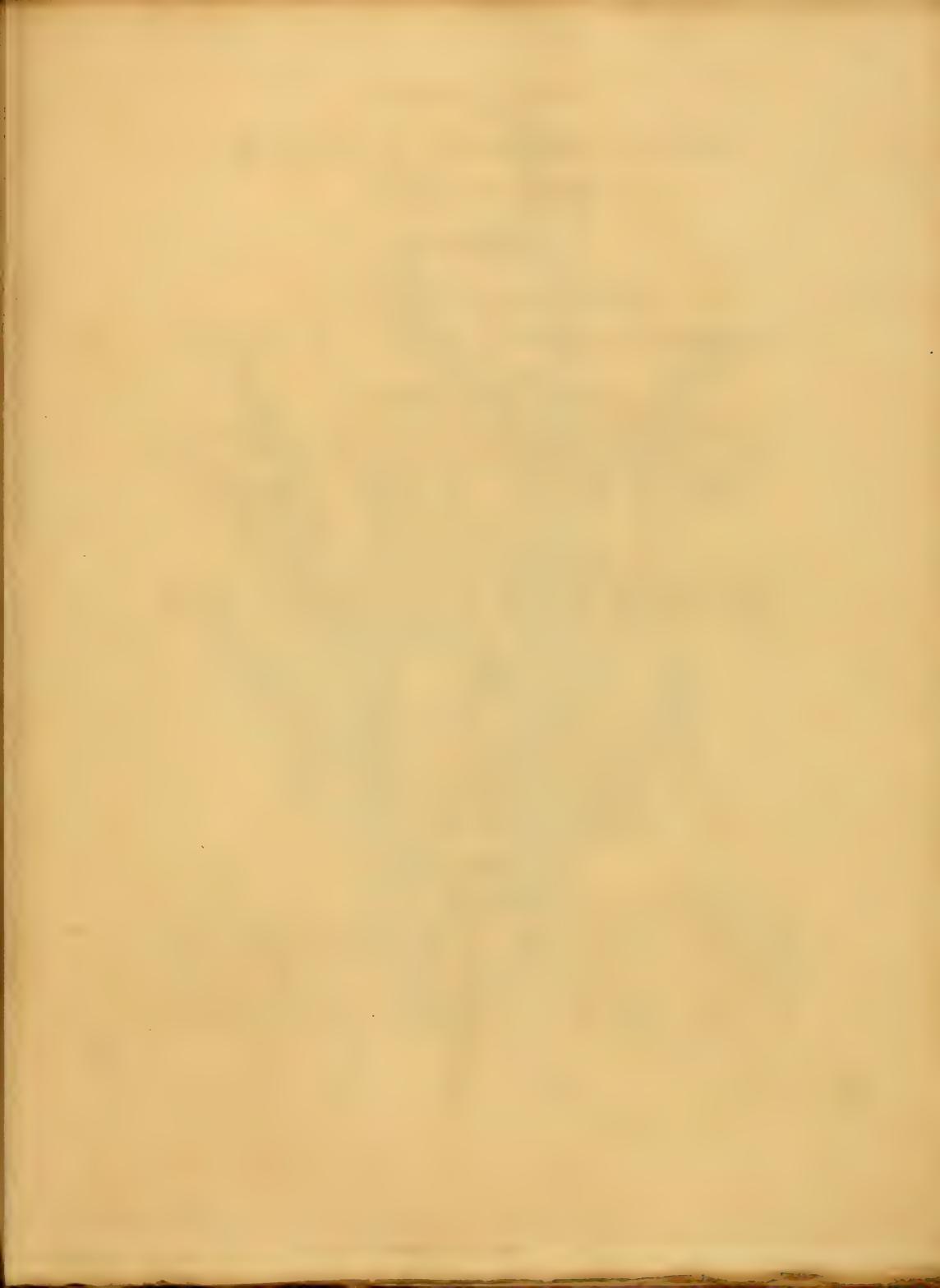


PLATE CCLXVI.
PLATYLOBIUM OVATUM.

Oval-leaved Flat-Pea.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two Sets. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX campanulatus, quinquefidus; laciniis duabus supremis maximis, obtusis. Stamina omnia coalita. Legumen pedicellatum, compressum, dorso alatum, polyispermum.

CUP bell-shaped, five-cleft; the two upper segments very large and obtuse. The Chives all united. Pod on a foot-stalk, compressed, winged along the back, many seeded.

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

SPECIFIC CHARACTER.

Platylobium foliis ovatis, glaberrimis, distichis; floribus solitariis, axillaribus; ramis teretibus.

Flat-Pea with egg-shaped leaves, very smooth and pointing opposite ways; flowers grow solitary from the insertion of the leaves; branches cylinder-shaped.

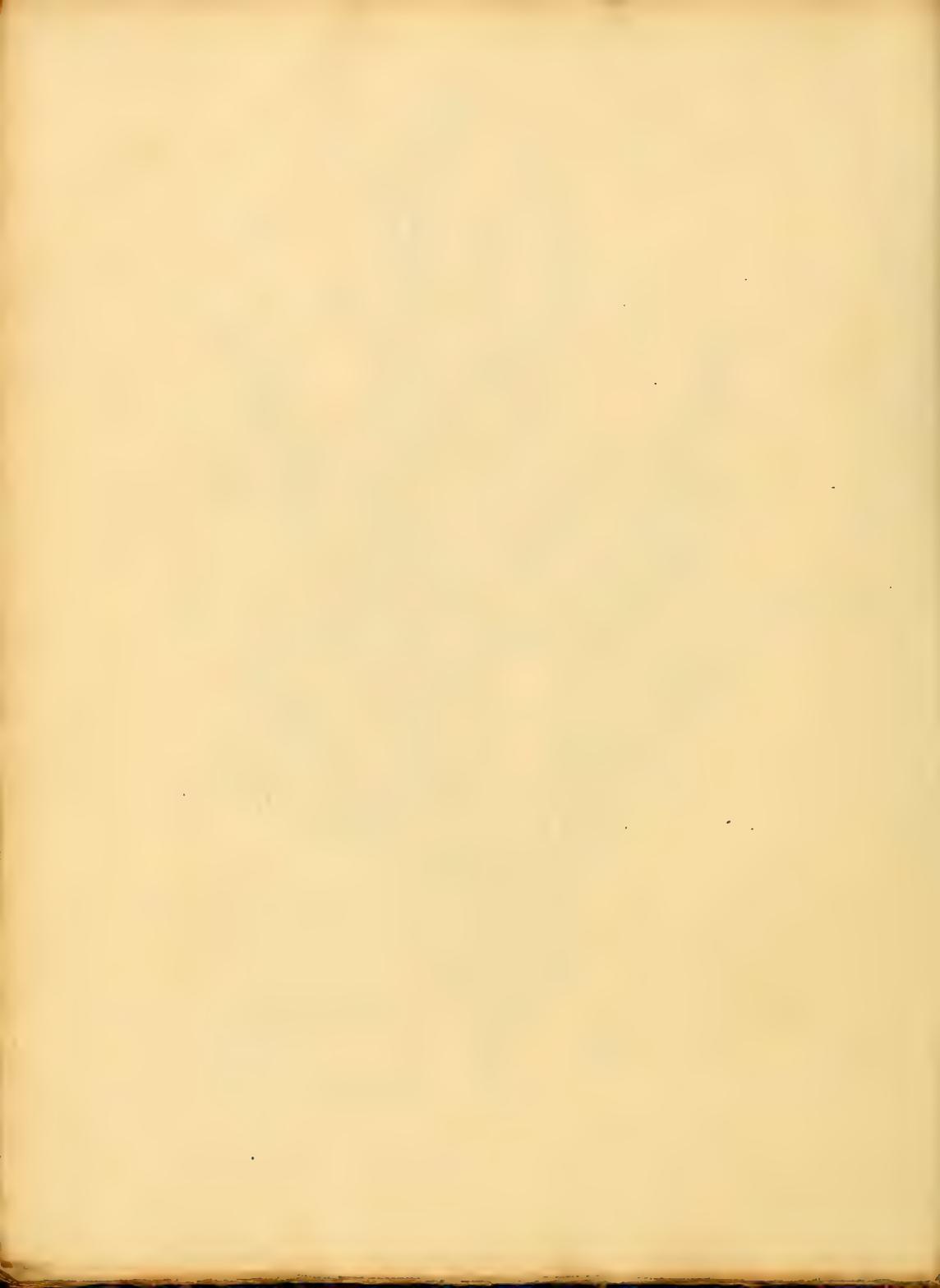
REFERENCE TO THE PLATE.

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

THIS species of Flat-Pea was brought from New South Wales, at the same time as *P. scolopendrum*, and *P. lanceolatum*, to which last it has much affinity; but, we think, possesses a sufficient number of differing characters to constitute a distinct species. It has not as yet been increased, we believe, in Britain; any attempt, to that end, has hitherto proved abortive; from which circumstance the plants are at present scarce, and are to be found in few collections. The same treatment to preserve, and render the plant flourishing, is required for this, as for the other species. Our Drawing was made in 1801, at the Nursery of Messrs. Lee and Kennedy, Hammer-smith, who first introduced it.



Mimulus ovalis



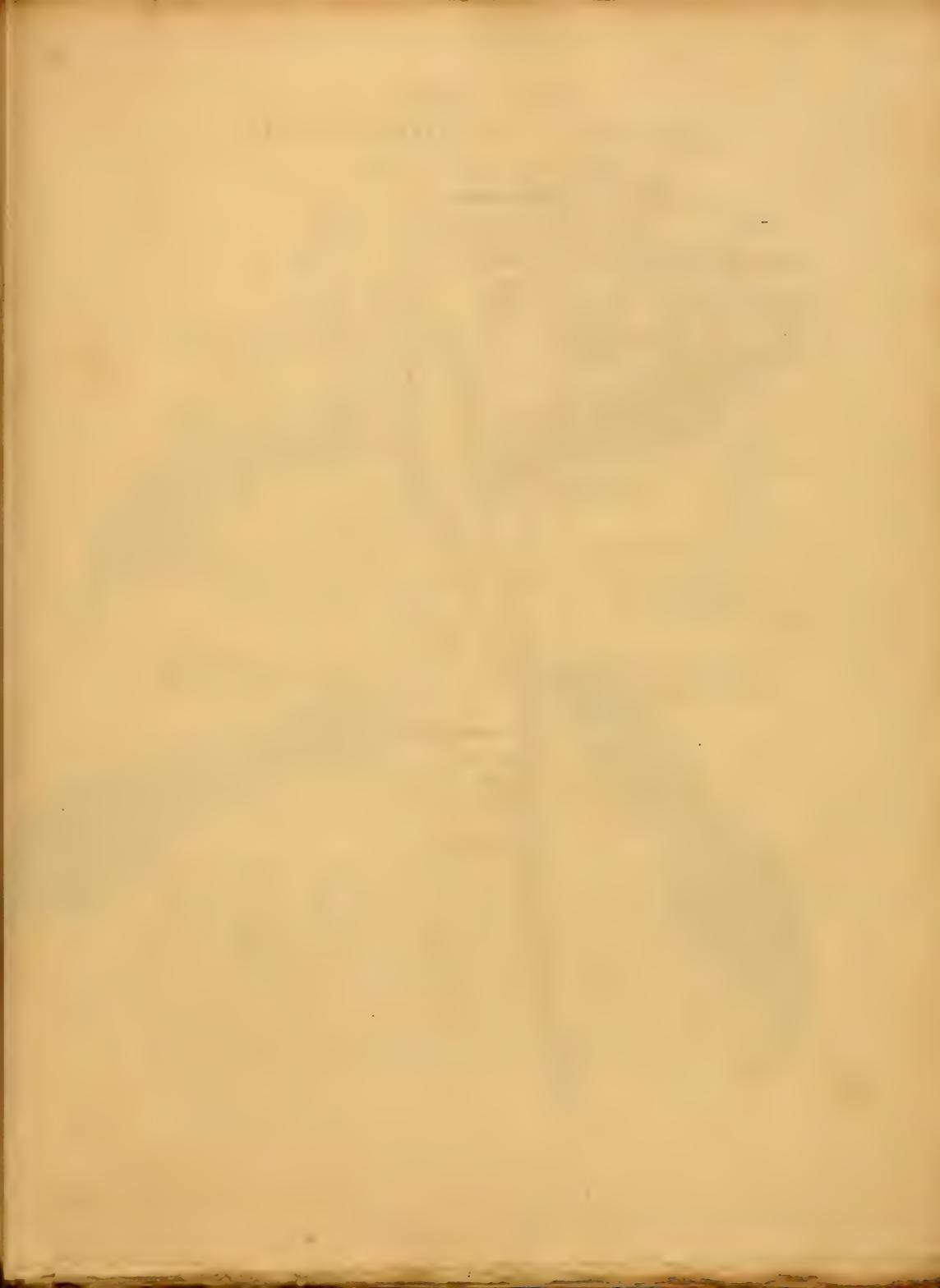


PLATE CCLXVII.
JATROPHA PANDURÆFOLIA.
Fiddle-leaved Physic-Nut.

CLASS XXI. ORDER VIII.

MONOECIA MONADELPHIA. Chives and Pointals separate. Threads united.

GENERIC CHARACTER.

Masculi flores.

CALYX. Perianthium vix manifestum.
COROLLA monopetala infundibuliformis; tubus brevissimus; limbus quinquepartitus, laciniis subrotundis, patentibus, convexis, subtus concavis.
STAMINA. Filamenta decem, fubulata, in medio approximata, quinque alterna breviora, erecta, basi connexa. Antheræ subrotundæ, versatiles.
PISTILLUM. Rudimentum debile in fundo floris latet.
Feminei flores in eadem umbella cum Masculis.
CALYX nullus.
COROLLA pentapetala, rosacea.
PISTILLUM. Germen subrotundum, trifidum. Styli tres, bifidi. Stigmata simplicia.
PERICARPIUM. Capsula subrotunda, tricocca, trilocularis; loculis bivalvibus.
SEMINA solitaria, subrotunda.

Male flores.

EMPALEMENT. Cup scarcely perceptible.
BLOSSOM one petal, funnel-shaped; tube very short; border five-parted; segments roundish, spreading, convex, concave beneath.
CHIVES. Ten threads awl-shaped, close together in the middle, the five alternate ones shorter, upright, connected at the base. Tips roundish, versatile.
POINTAL. A weak rudiment lies hid in the bottom of the flower.
Female flores in the same umbel with the males.
EMPALEMENT none.
BLOSSOM five-petalled, rosaceous.
POINTAL. Seed-bud roundish, three furrowed. Three shafts, two-cleft. Summits simple.
SEED-VESSEL. Capsule roundish, three-seeded, three celled; cells with two valves.
SEEDS solitary, roundish.

SPECIFIC CHARACTER.

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

Physic-Nut with a flower cup; fiddle-shaped leaves, sharp-pointed at the end, and unequally sharp-lobed at the base; flowers deep crimson.

REFERENCE TO THE PLATE.

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

This plant, a native of the Island of Cuba, was imported from thence, by Mr. J. Frazer, King's Road, Chelsea, in the year 1801. It is, unquestionably, as handsome a plant as any at present cultivated in our hot-houses, and its continuing to produce fresh umbels of flowers, during at least nine months of the year, renders it, perhaps, the most desirable. It grows to the height of near three feet, producing but few branches. The leaves are extremely irregular in their form, and, when the plant is in a sickly state, the older ones are subject to be slightly blotched, on the under side. Few tropical plants that thrive with so little heat, or care; nevertheless, we have not any hopes, of its ever becoming a proper subject for the green-house; but as yet our experience on that point will not permit us to decide upon it. It should be planted in a mixture of leaf mould, rotten dung, and loam; and may be propagated by cuttings. From a plant at the Hammer-smith nursery, ripe seeds have been procured this year; they have the exact appearance of the seeds of the lesser Palma Christi, but rather smaller in size and have the same oily character. Indeed, there is so little difference between some species of the Genus Ricinus, and *Jatropha*, that botanists have been puzzled where to place them. Our drawing was made from a plant in the collection of the Right Hon. the Marquis of Blandford, White Knights, Berkshire.



Saltopha pandurifolia



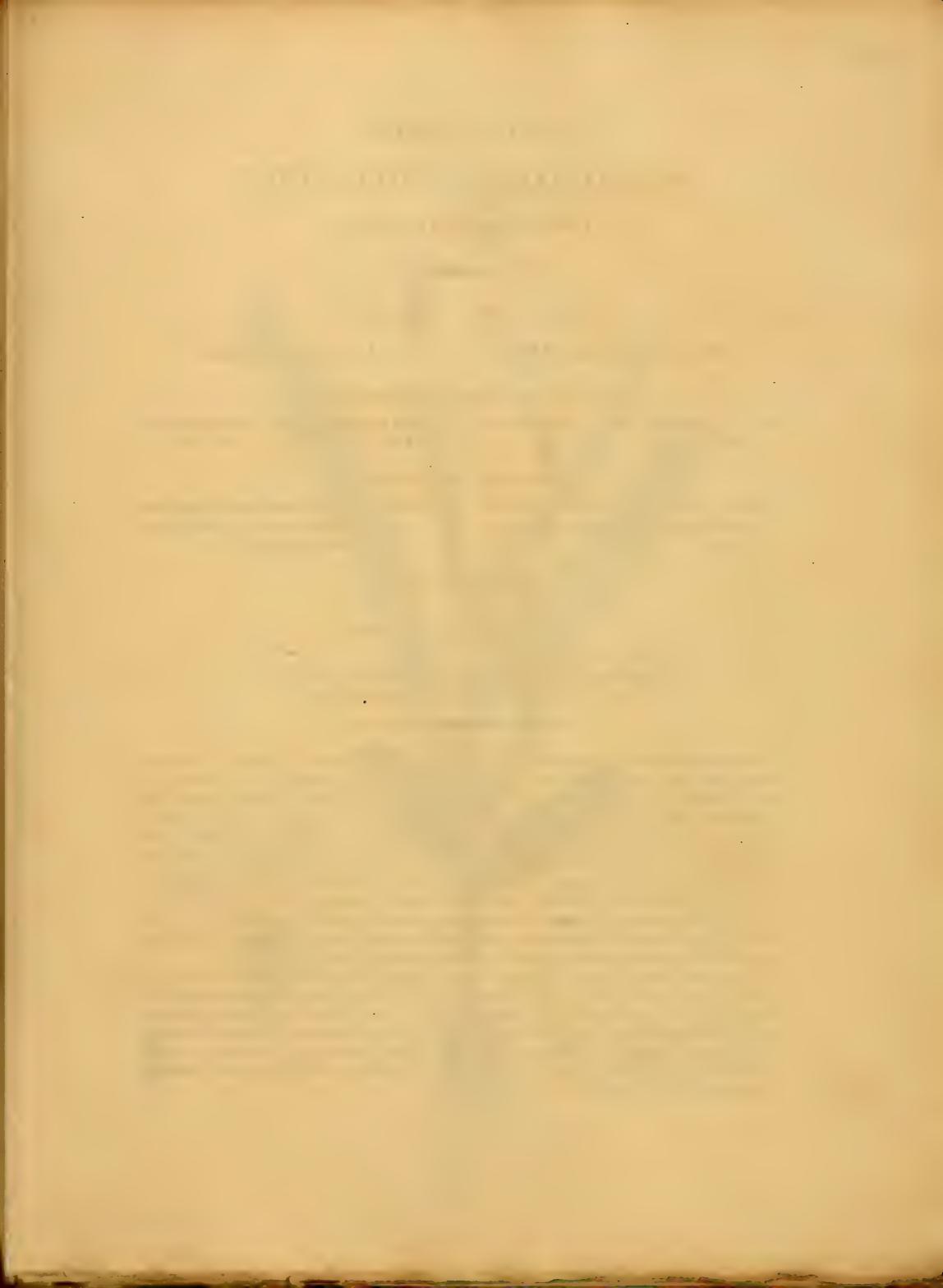


PLATE CCLXVIII.

GLADIOLUS PLICATUS.

Plaited-leaved Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens. Stamina adscen- || Blossom fixdivided, gaping. Chives ascending.
dentia. || See GLADIOLUS ROSEUS, Pl. XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis ensiformibus, plicatis, villosis; || Gladiolus with sword-shaped leaves, plaited and
corollis regularibus; spathe trivalvi; scapo || hairy; blossoms regular; sheath three-
laterali. || valved; flower-stem lateral.

REFERENCE TO THE PLATE.

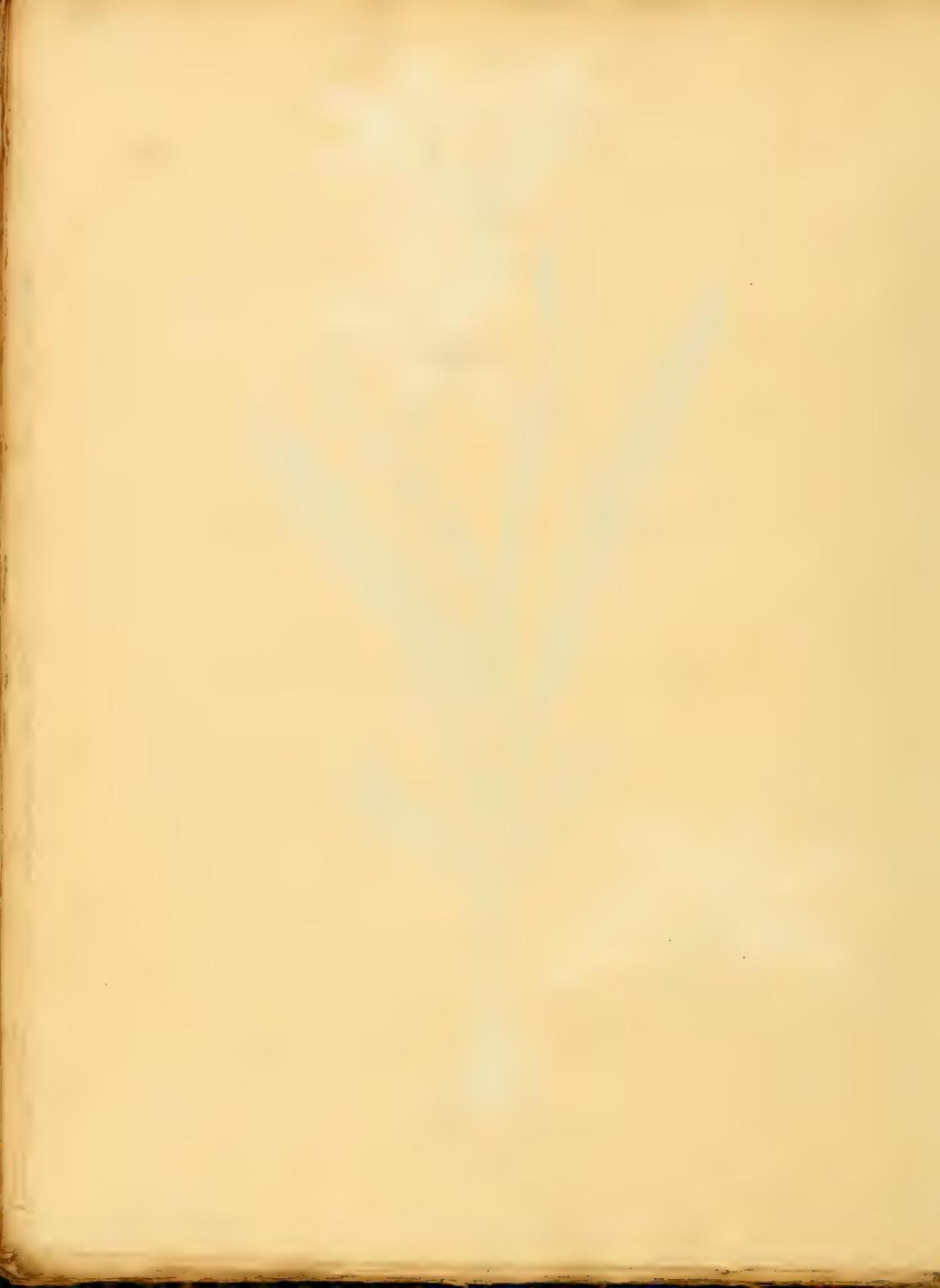
1. The three-valved Sheath.
2. A Blossom spread open, to shew the situation and direction of Tips.
3. The Pointal; and Seed-bud, one of the Summits magnified.

THE varieties, generally comprehended as such, of this species of Gladiolus, are extended, in number, beyond any others with which we are, as yet, acquainted, of this extensive genus. Already, we have drawings of 22; and many more, certainly, there are, even in this kingdom; but we shall content ourselves with figuring, in the Bot. Rep. 3 or 4, of the most curious. One of the varieties of this plant, has been in cultivation with us since the year 1757, when it was raised by Mr. Miller from Cape seeds. The one represented in our present figure, was received, from Holland, in the year 1794, by Messrs. Lee and Kennedy, Hammer-smith; it is one of the hardiest, and surest flowering varieties of the species; for there are but few of them which blossom freely. The bulbs should be planted in sandy peat, about October, and taken into the hot-house, or placed on a hot-bed, in January, to encourage a rapid and early growth; by which means, they are more frequently induced to throw out their flower stems the beginning of April, which otherwise, often prove abortive. The roots should not be removed from the pots, till the leaves are somewhat decayed.

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



Gladiolus plicatus



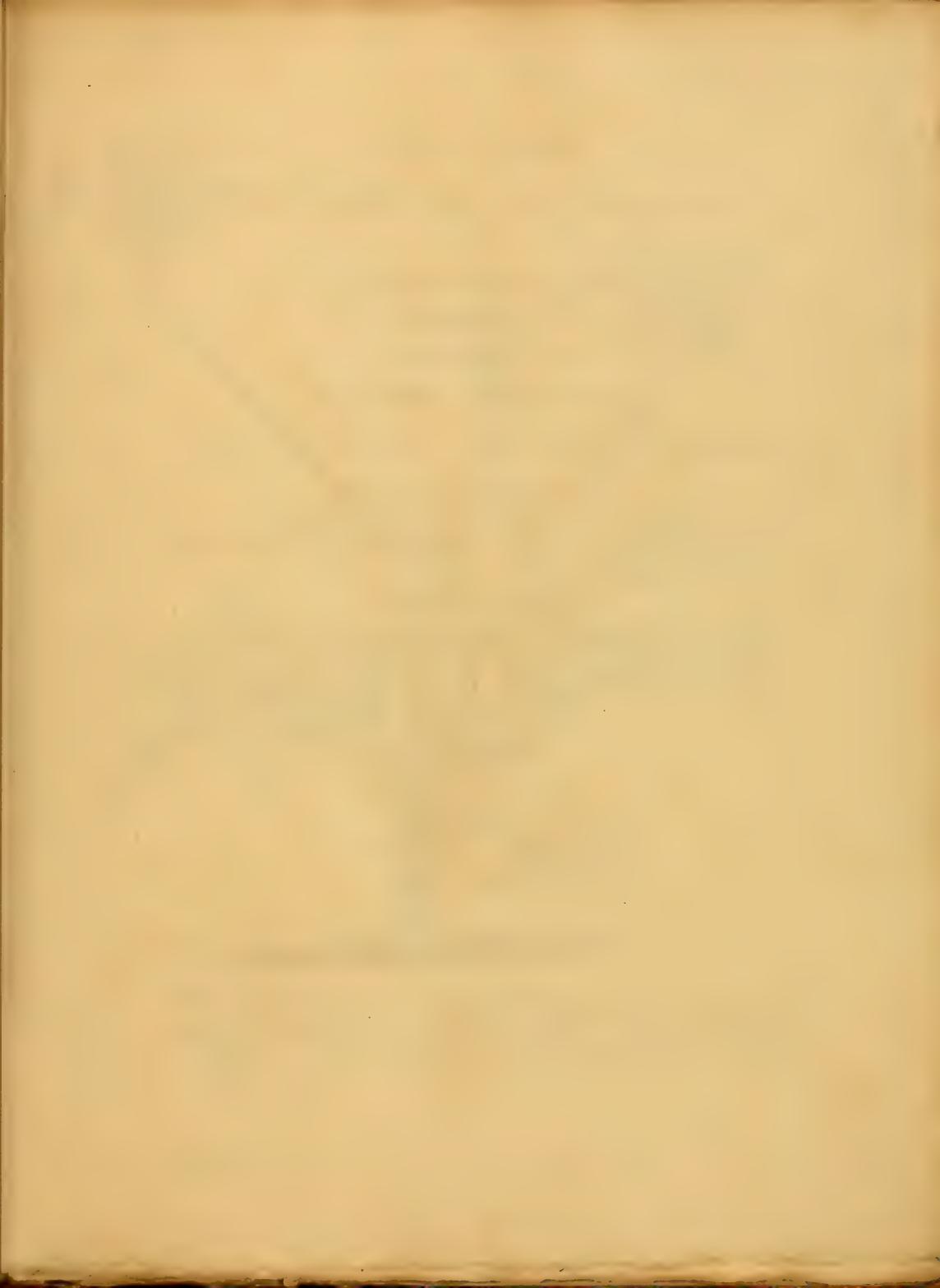


PLATE CCLXIX.

GERANIUM LACINIATUM.

Var. bicolor.

Ragged-leaved Geranium.

Two coloured-flower Var.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque.
Fructus rostratus; pentacoccus.

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

SPECIFIC CHARACTER.

Geranium foliis radicalibus integris laciniatisque;
laciniis acutis; petiolis filiformibus; caly-
cibus monophyllis; staminibus quinque fer-
tilibus; radice tuberosa; floribus bicolo-
ribus.

Geranium with the leaves growing from the
root entire and jagged; segments pointed;
foot stalks thread-shaped; cups one-leaved;
five fertile chives; root tuberous; flowers
two-coloured.

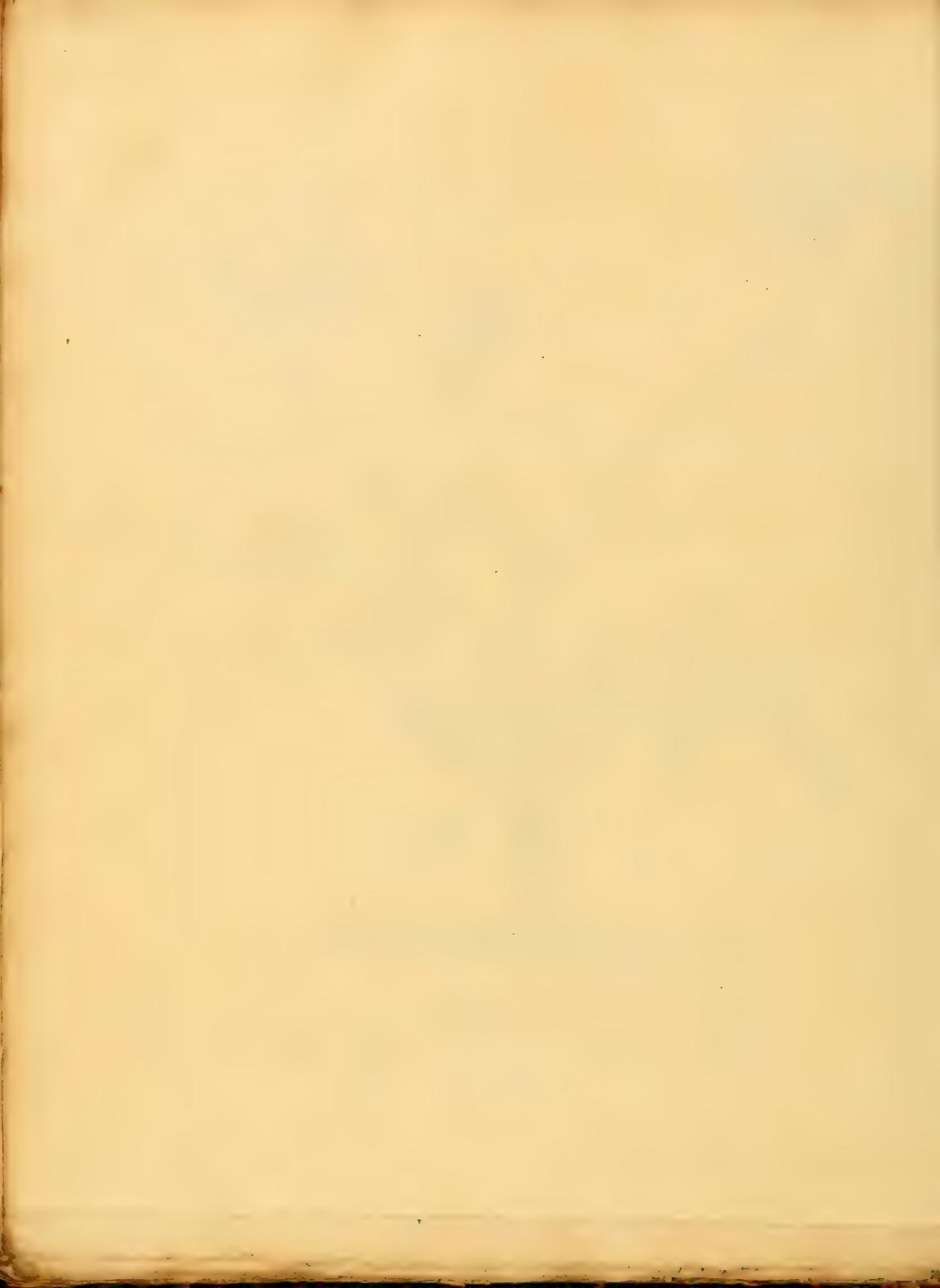
REFERENCE TO THE PLATE.

1. The Empalement, a little magnified.
2. Chives, natural size.
3. The same, magnified and spread open.
4. The Pointal and seed-bud, magnified.

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



Geranium laciniatum V. L.



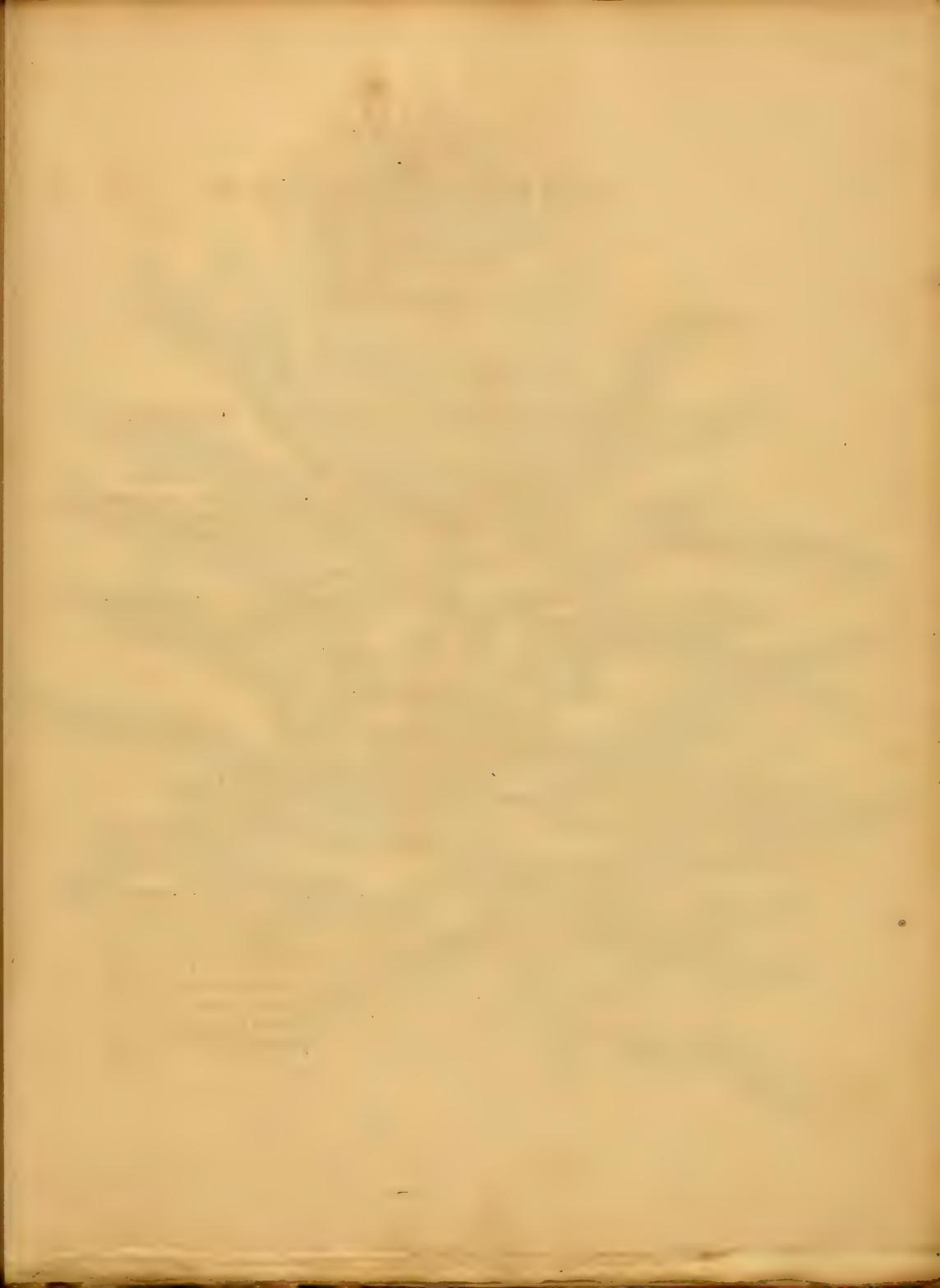


PLATE CCLXX.

PROTEA PULCHELLA.

Waved-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

Protea foliis lanceolatis, undulatis, rubro marginatis, pilosis; squamis calycis tricoloratis; capitulo erecto, terminali.		Protea with lance-shaped leaves, waved, margined with red and hairy; scales of the cup three-coloured; flower head upright, and terminal.
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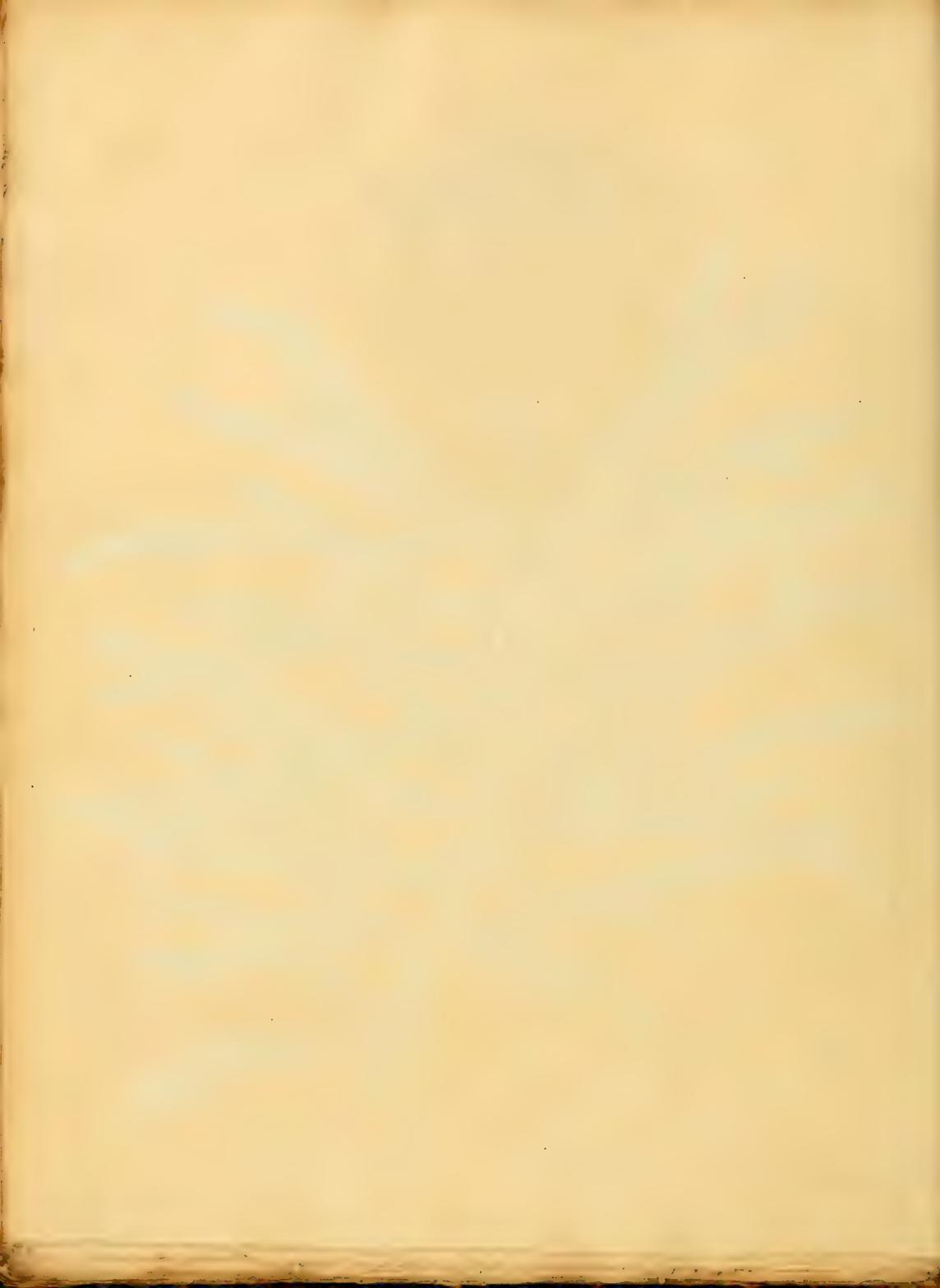
REFERENCE TO THE PLATE.

1. A Floret complete with the seed-bud.
2. The four Petals of the same, with the Tips shewn at their ends.
3. Pointal and Seed-bud.

THIS *Protea*, from the Cape of Good Hope, merits the attention of those who wish to beautify their collections, with distinguished objects; as, it flowers the third year from the seed, and is equally handsome with *Protea mellifera*. The cone for two months before it opens is extremely beautiful, and it is in flower nearly one more; and this, at a time when the plant has, scarcely, attained a foot in height. It is not inclined to branch till it has flowered, but from the lower part of the cone the branches begin to extend. The leaves from their hairiness have a whitish appearance, are finely edged with a light pink, and are slightly waved. It is propagated by cuttings, should be planted in light sandy loam, and flowers in September. Our drawing was made from a plant in the Hibbertian collection; to which it was introduced by Mr. Niven, in the year 1799, amongst the first seeds which were sent, by him, from the Cape.



Protea pulchella



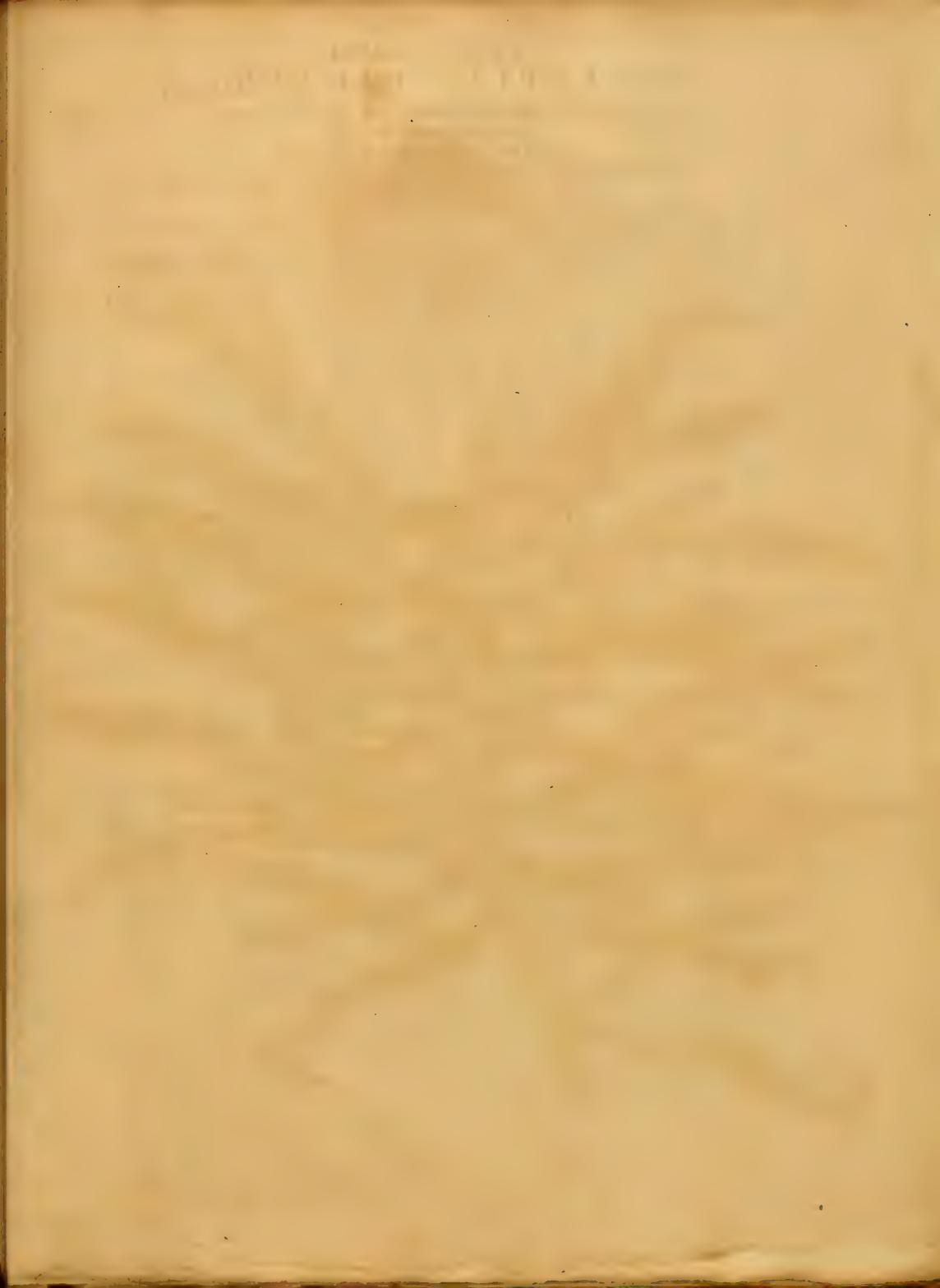


PLATE CCLXXI.
ASCLEPIAS GIGANTEA.
Gigantic Swallow-wort, or Auricula tree.

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

GENERIC CHARACTER.

CALYX. Perianthium quinquefidum, acutum, parvum, persiftens.
COROLLA. Monopetala, plana vel reflexa, quinquepartita; laciniis ovato-acuminatis, leviter cum sole flexis.
Nectaria quinque, tubo filamentorum infra antheras adnata, carnosa seu cucullata, e fundo corniculum acutum introforum flexum exferentia.
STAMINA. Filamenta quinque, in tubum, basi ventricosum, connata. Antheræ oblongæ, erectæ, biloculares, membrana inflexa, stigmati incumbente terminata, utrinque ala reverfa deorsum latefcente. Pollen connatus in corpuicula decem, obverfe-lanceolata, plana, in loculis antheræ dependentia e filis brevibus, saepe flexuosis; quæ per paria annexa sunt tuberculis quinque, cartilagineis, didymis, angulis stigmati, inter antheras, adherentibus.
PISTILLA. Germina duo, oblonga, acuminata. Styli duo, subulati. Stigma utrifque commune, magnum, crassum, pentagonum, supra apicibus antherarum tectum, medio umbilicatum.
PERICARPIMUM. Folliculi duo, magni, oblongi, acuminati, ventricosi, uniloculares, univalves.
SEMINA numerosa, imbricata, pappo coronata. Receptaculum membranaceum, liberum.

EMPALEMENT. Cup five-cleft, sharp, small, remaining.
BLOSSOM one petal flat or reflexed, five-parted; divisions pointedly egg-shaped, slightly bending with the fun.
Honey-cups five, growing to the tube of the threads below the tips, fleshy or hooded, protruding a sharp horn from the bottom which bends inwards.
CHIVES. Five threads collected into a tube swelling at the base. Tips oblong, upright, two-celled, terminated by an inflex membrane laying on the summit, having a reversed wing on each side, growing broader downwards. The pollen is collected into ten small bodies inverfely lance-shaped, flat, hanging down into the cells of the tips by short threads, often flexible, which are fixed by pairs to five skinny twin tubercules, adhering to the angles of the summit, between the tips.
POINTALS. Seed-buds two, oblong, tapered. Shafts two, awl-shaped. Summit common to both, large, thick, five-cornered, covered at top by the ends of the tips, umbilicate in the middle.
SEED-VESSEL. Two pods, large, oblong, tapered, bellied, one celled, one valved.
SEEDS numerous, tiled, crowned with a feather. Receptacle skinny, free.

SPECIFIC CHARACTER.

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

Swallow-wort with whitened leaves, between inverfely egg-shaped and oblong; foot-stalks very short; segments of the blossom reflexed.

REFERENCE TO THE PLATE.

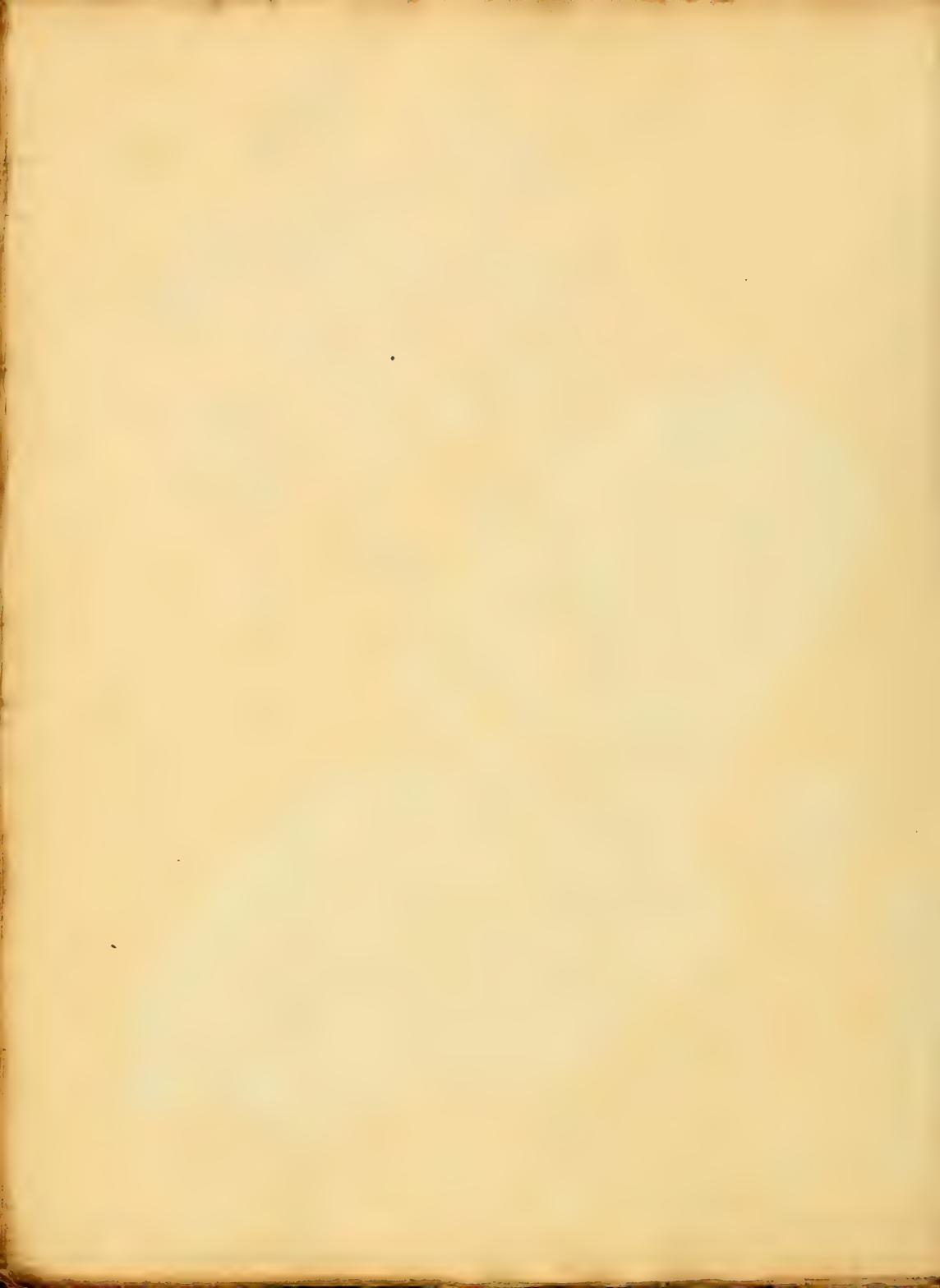
1. The Empalement.
2. The Chives and Pointal, natural size.
3. The Chives and Pointal, without the five outer scales or honey-cups, magnified.
4. One of the outer scales, magnified.
5. One of the inner, upright scales, which furround the seed-buds, magnified.
6. The Seed-buds, Shafts and Summit, with the chives attached to the summit, magnified.

THE Gigantic Swallow-wort, a native of the East Indies, is a very tender hot-house plant; is very subject to lose its leaves in winter, and requires the assistance of the bark-bed to keep it in perfection. In the Kew Catalogue, it is said to have been cultivated so long ago as the year 1690, at the Royal Gardens, Hampton Court. To render it vigorous and flourishing, it should be planted in rich earth; composed of, one half rotten dung, and the other leaf mould and loam; and watered but sparingly in winter. It is seldom propagated but from seeds, which are frequently procured from the East, and as often from the West Indies. In the island of Jamaica, it is known by the name of the Auricula tree, where it attains to the height of six or seven feet. Our drawing was taken from a most magnificent specimen, obligingly sent us by Mrs. Methuen, (of which our figure represents but a small side bunch), measuring above a foot in diameter. The plant, we believe the finest in England, is in the collection of Paul Methuen, Esq. Cortham, Wilts.

Much as we are inclined to tread in the beaten path of our predecessors, and, more particularly, that of the greatest luminary of this intricate science, Linnæus, yet can we, but with regret, forbear an alteration we think so necessary, in the classification of this genus. That the class Gynandria may, or ought to be excluded from the twenty-four, we shall not be forward to give our suffrage, in conjunction with some modern reformers; and, as they term themselves, improvers upon the Linnæan system; but, whilst it is retained, this genus has stronger claims, in our opinion, upon it, than any which has hitherto been thrown to it. Indeed we had so classed it, upon such grounds had formed its generic character; and had hopes, no one would have disputed our position as just, upon an inspection of the distinctions annexed to the figure. Yet fearing, by some, it might be considered as a perplexing innovation; for innovation in all cases is certainly more or less so, the genus having passed the scrutinising ordeal of so many botanists; we have, reluctantly, for the present, given up what, nevertheless, we shall consider as necessary for some bolder hand than ourselves to undertake.



Asclepias gigantea



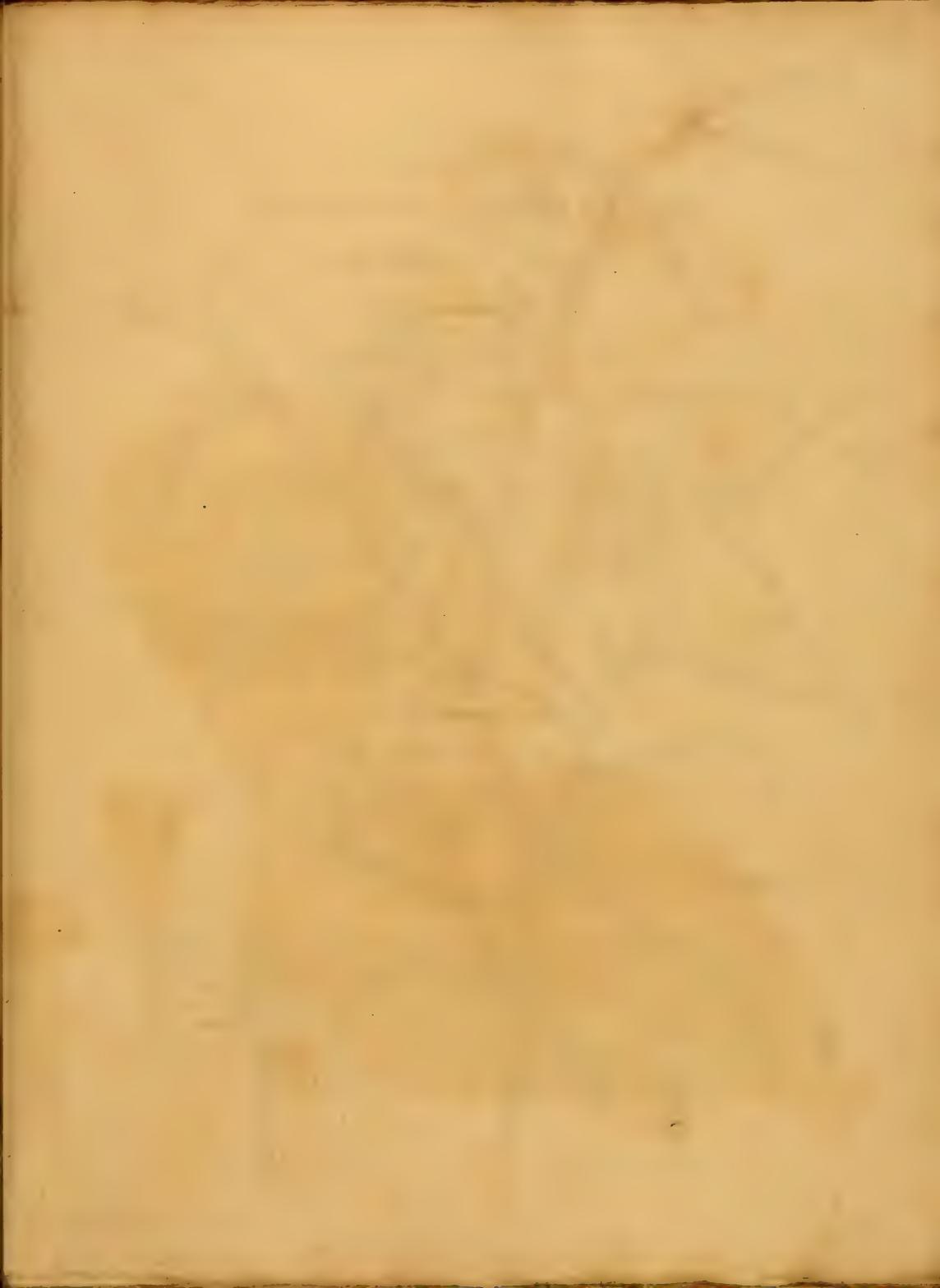


PLATE CCLXXII.
EMBOTHRIUM LINEARE.

Narrow-leaved Embothrium.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Corolla tetrapetala. Stamina
limbo petalorum inserta. Folliculus poly-
spermus. Semina alata.

EMPALEMENT none. Blossom four-petalled.
Chives inserted into the limb of the petals.
A one-celled pod many seeded. Seeds
winged.
See EMBOTHRIUM SERICEUM, Pl. C. Vol. II.

SPECIFIC CHARACTER.

Embothrium foliis linearibus, subtomentosis,
uninerviis; florum racemis axillaribus; co-
rollis albis. Semina nuda.

Embothrium with linear leaves rather downy,
one-nerved; the small heads of flowers
grow from the insertion of the leaves; the
blossoms white. Seeds naked.

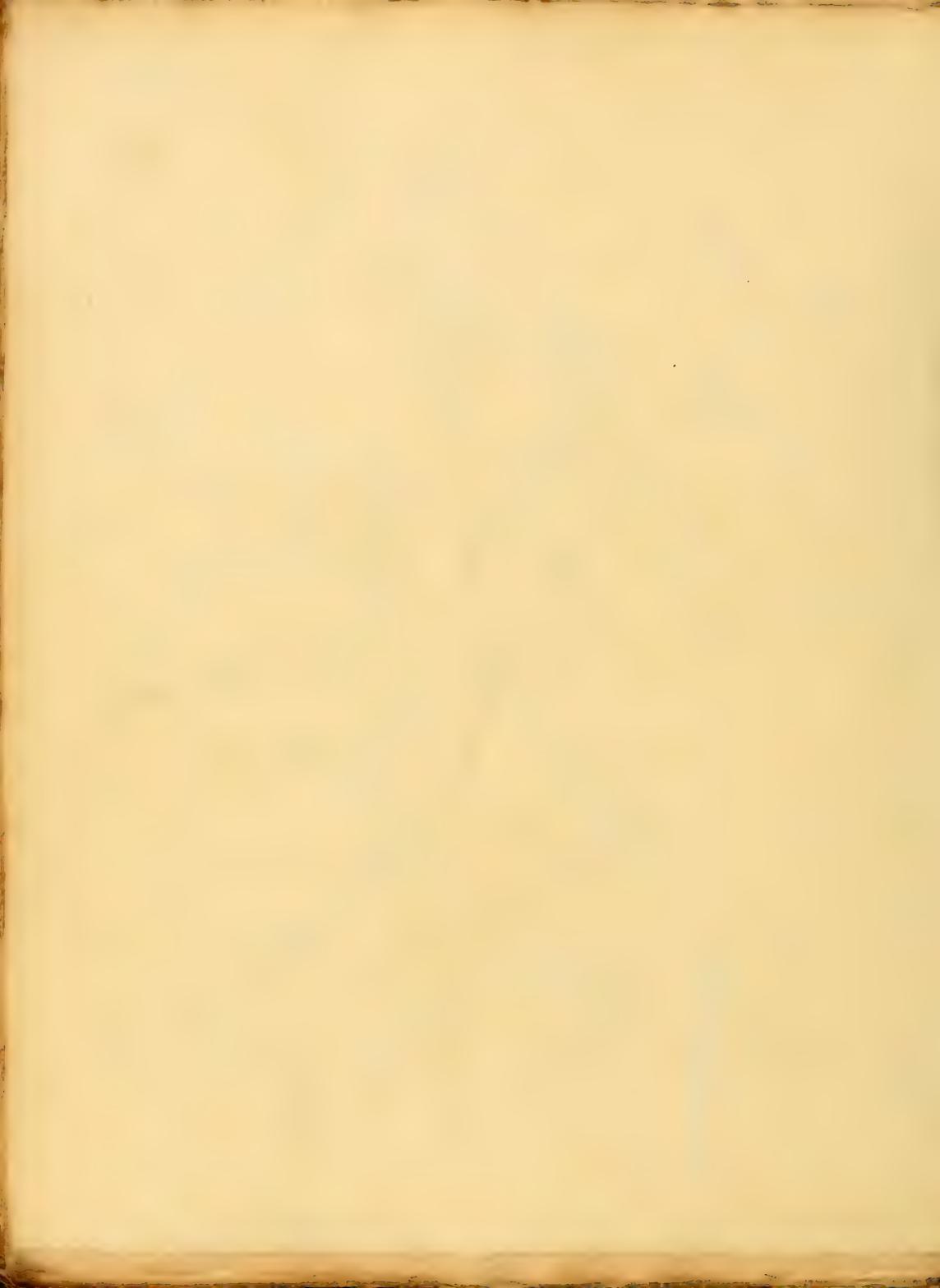
REFERENCE TO THE PLATE.

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

THIS species of Embothrium was introduced to Britain at the same time as the Silky Embothrium, of our second volume, plate 100; and has been considered but as a third variety of it, by Dr. Smith, in his First Number of New Holland Botany, page 23. But the total difference in the habit of the plant, except in the shape of the petals, has induced us to give it a specific title. It grows to the height of five or six feet, not very bushy; abounding through the whole year in a succession of flowers, which proceed from the young branches; ripe seed being produced upon the plant at the same time. It should be planted in light sandy peat, and kept in a dry part of the green-house, as the younger branches are apt to suffer from damps in the months of December and January. Our drawing was made at the Hammermith nursery, in the year 1800, about the month of July.



Embellium canescens



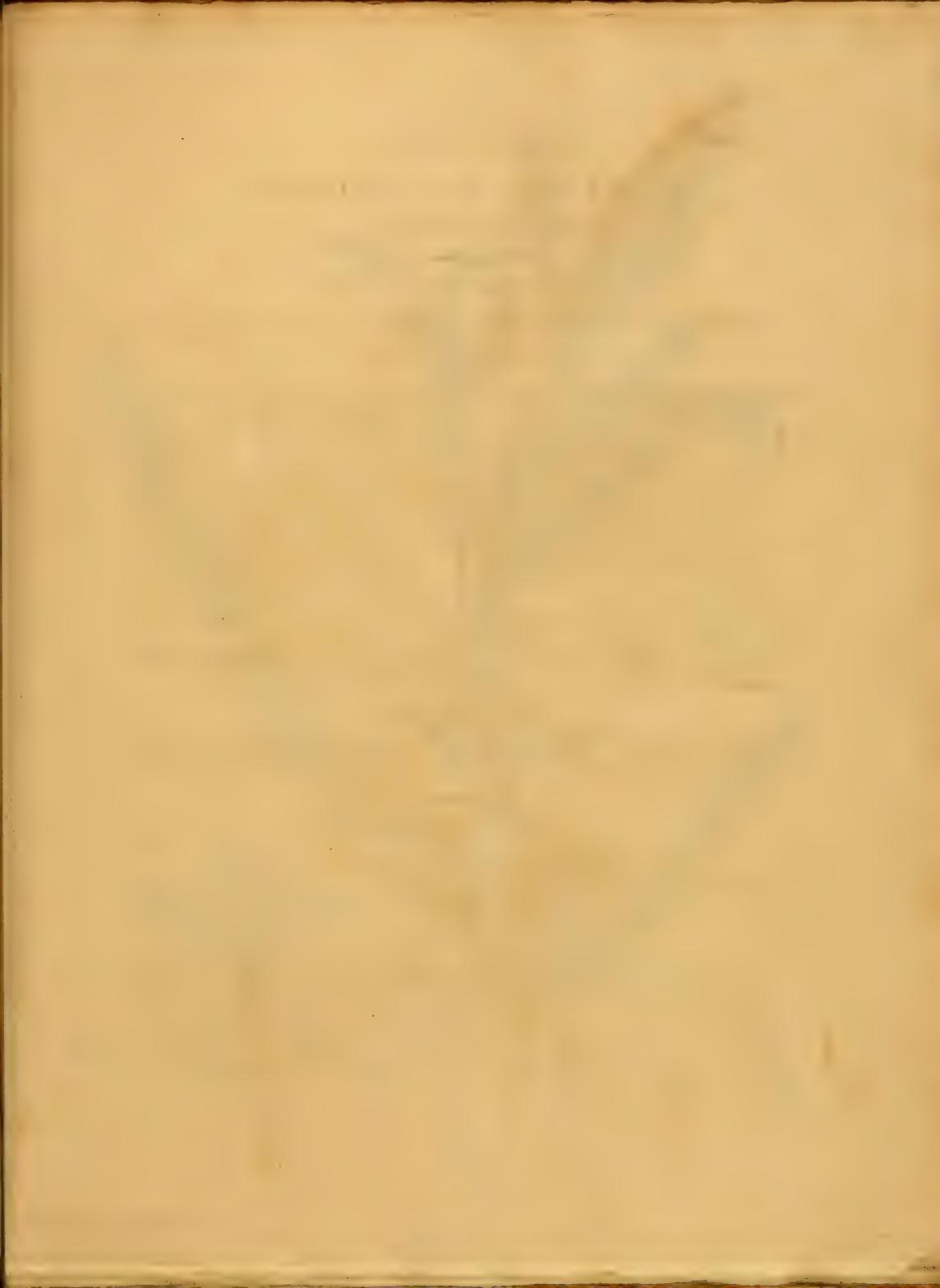


PLATE CCLXXIII.

LOBELIA PINIFOLIA.

Pine-leaved Lobelia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers simple.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinque-dentatum, minimum, germi circumnatum, marcescens; denticulis subæqualibus.
COROLLA monopetala, irregularis; tubus cylindraceus, calyce longior, superne longitudinaliter divisus; limbus quinquepartitus; laciniis lanceolatis, quarum superiores duæ minores, magis reflexæ, profundius divisæ, constituentis labium superius; tres reliquæ inferiores magis patentes, sæpius majores.
STAMINA. Filamenta quinque, subulata, longitudine tubi petali. Antheræ connatæ in cylindrum oblongum, basi quinquefariam dehiscentem.
PISTILLUM. Germen acuminatum, inferum. Stylus cylindraceus, longitudine staminum. Stigma obtusum, hispidum.
PERICARPIMUM. Capsula ovata, biloculariis, apice dehiscens, cincta calyce.
SEMINA plurima, minima.

EMPALEMENT. Cup one leaf, five-toothed, very small, growing round the seed-bud, withering; toothlets nearly equal.
BLOSSOM one petal, irregular; tube cylindrical longer than the cup, divided longitudinally above; border five-parted; segments lance-shaped, of which the two upper ones are smaller, more reflexed, deeper divided and form the upper lip; the three other lower ones spread more, and often are larger.
CHIVES. Five threads, awl-shaped, the length of the tube of the petal. Tips joined together forming an oblong cylinder, splitting into five divisions at the base.
POINTAL. Seed-bud tapered, beneath. Shaft cylindrical the length of the chives. Summit blunt, hairy.
SEED-VESSEL. Capsule egg-shaped, two-celled, splitting at top, girt by the cup.
SEEDS numerous, small.

SPECIFIC CHARACTER.

Lobelia foliis lanceolato-linearibus, confertis, integerrimis; denticulis calycinis longissimis; floribus cæruleis.

Lobelia with leaves between lance and linear-shaped, crowded together, and quite entire; toothlets of the cup very long; flowers blue.

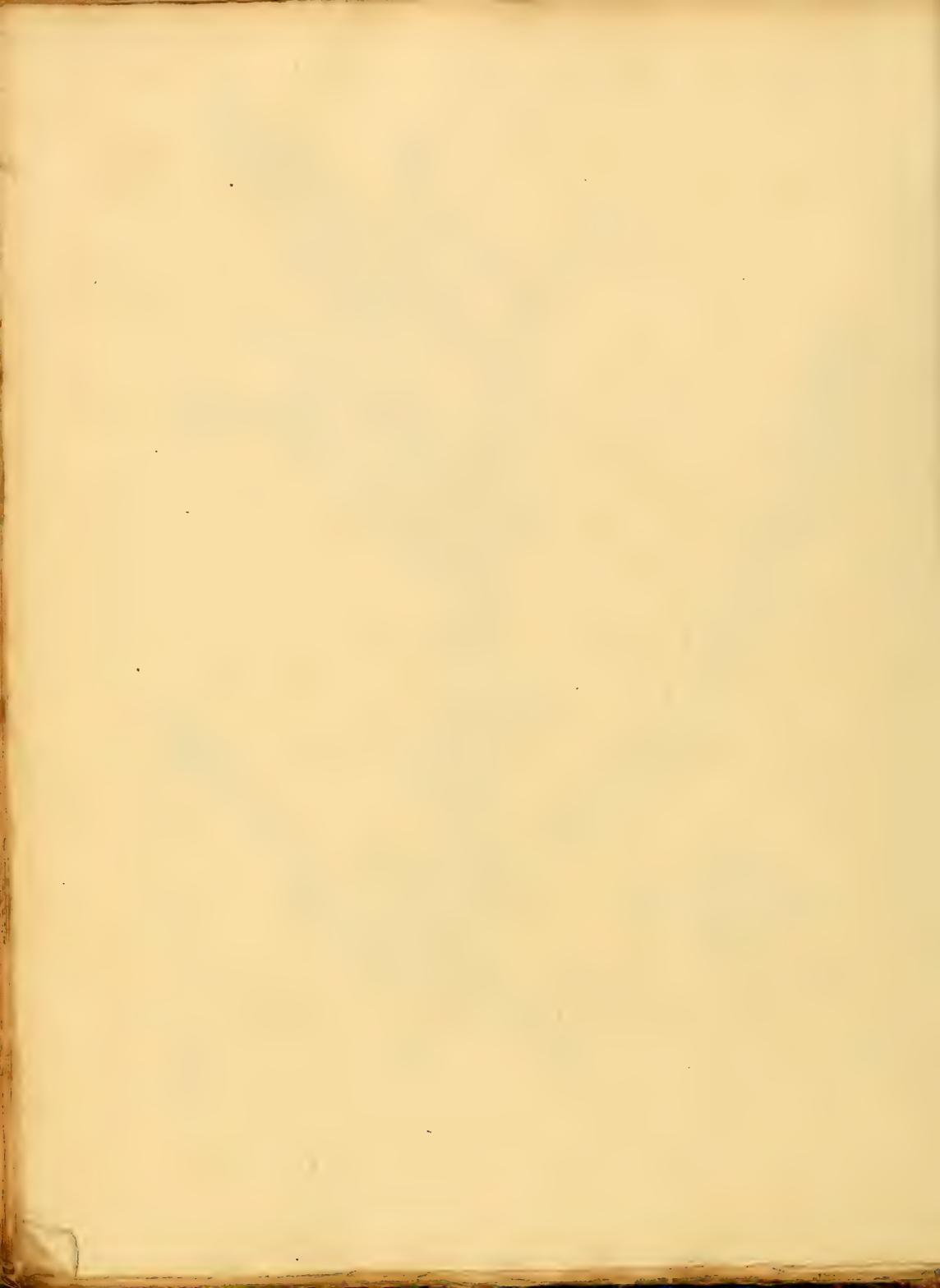
REFERENCE TO THE PLATE.

1. The Empalement.
2. A Blossom spread open, with the chives in their place.
3. A half ripe seed-pod.
4. The Pointal, with the summit detached and magnified.
5. A ripe seed-vessel, cut transversely.

ABOUT the year 1786, this plant was sent by Mr. F. Maffon, to the royal gardens at Kew; as we find it in the catalogue of that collection. Nevertheless a single plant of it was not to be found in any of our botanic gardens, for these few years back; until the recent introduction of it, by Mr. Niven, to the Hibbertian Collection in 1789. It is a very delicate shrub; grows to the height of eighteen inches; branching but little, and producing mostly two flowers at the termination of each branch. It may be increased by cuttings, or from the seed, which ripens in this country; but, like most of the species of this genus, it is not a long lived plant. It approves most of a light sandy peat, with a small mixture of loam; and to be kept in rather a small pot, in proportion to the general size used for plants of the same bigness. Flowers in July.



Lobelia penifolia



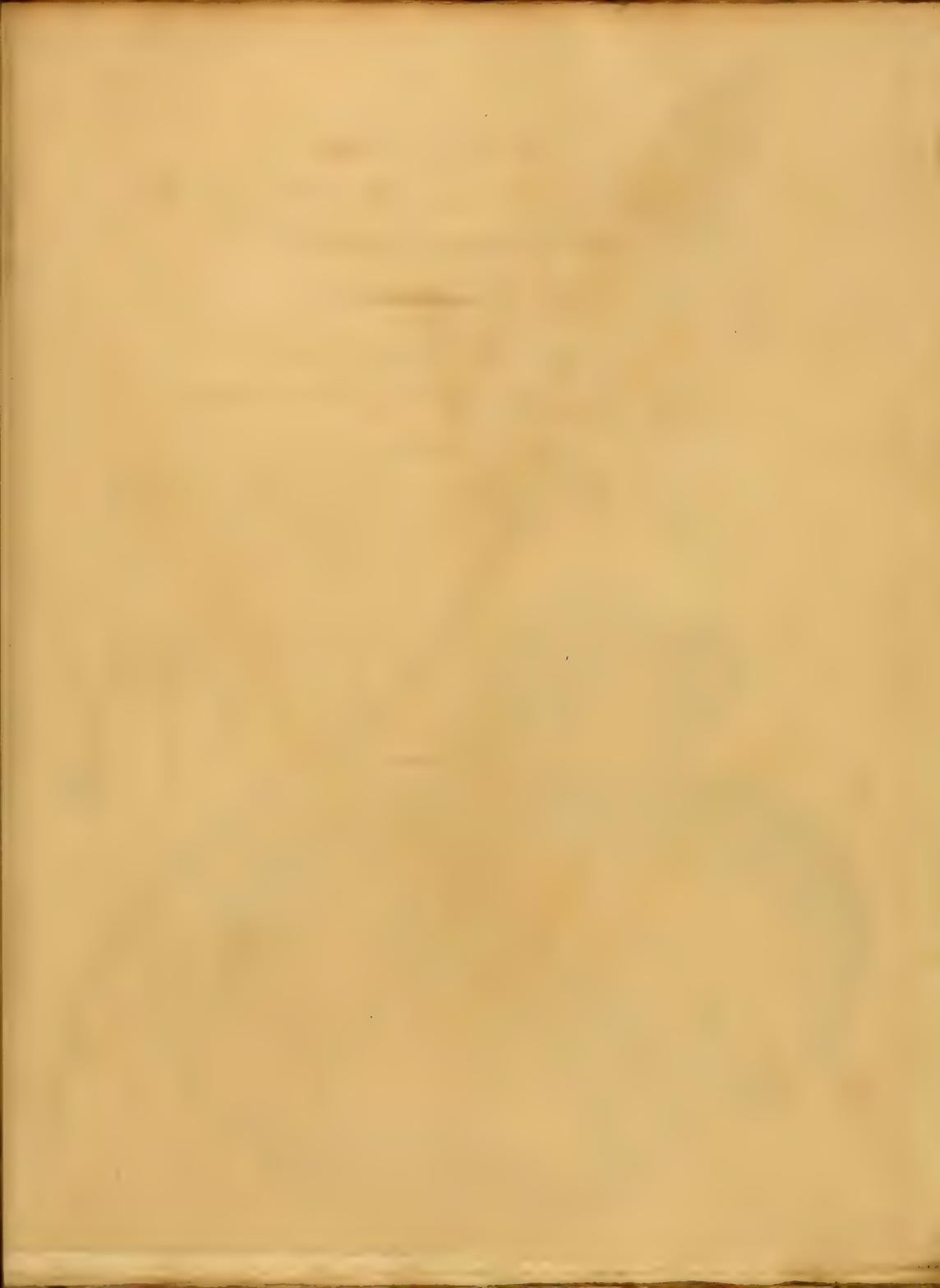


PLATE CCLXXIV.
ORNITHOGALUM LACTEUM.
Large White-flowered Star of Bethlehem.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, erecta, persistens, supra medium patens. Filamenta basi dilatata. Capsula 3-locularis. Semina subrotunda, nuda.

BLOSSOM 6-petals, upright, remaining, spreading above the middle. Threads widened at the base. Capsule 3-celled. Seeds roundish, naked.

See ORNITHOGALUM ODORATUM. Pl. CCLX. Vol. IV.

SPECIFIC CHARACTER.

Ornithogalum racemo longo; filamentis subulatis, alternis sub-lanceolatis; bracteis membranaceis, ovatis, pedunculo duplo brevioribus; foliis lanceolatis, acutis, ad oras villosis; floribus albidis.

Star of Bethlehem with a long flower spike; threads awl-shaped, alternate ones nearly lance-shaped; flower props skinny, egg-shaped, twice as short as the fruit-stalk; leaves lance-shaped, acute, finely haired at the edges; flowers white.

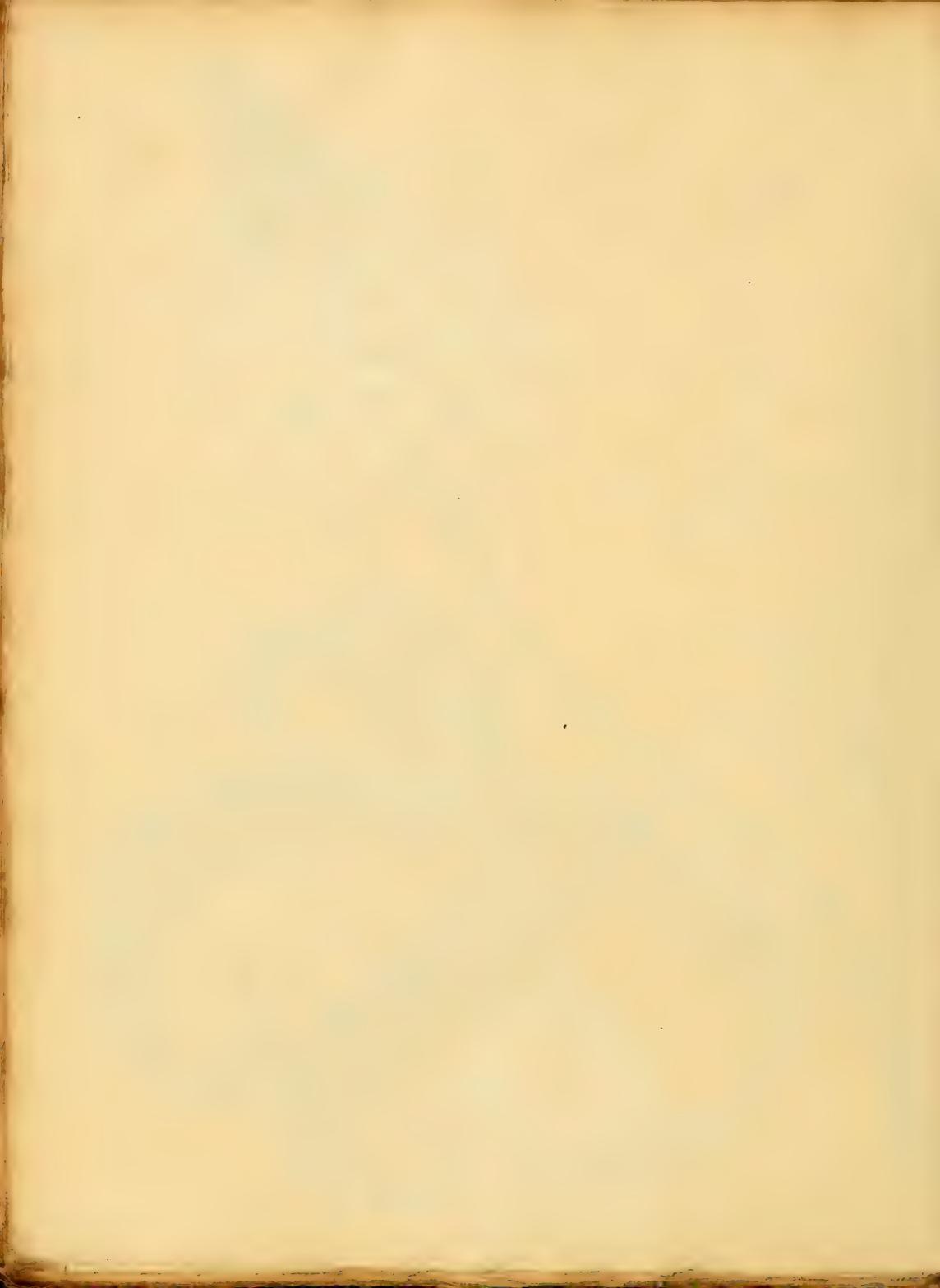
REFERENCE TO THE PLATE.

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

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



Ornithogalum lacteum



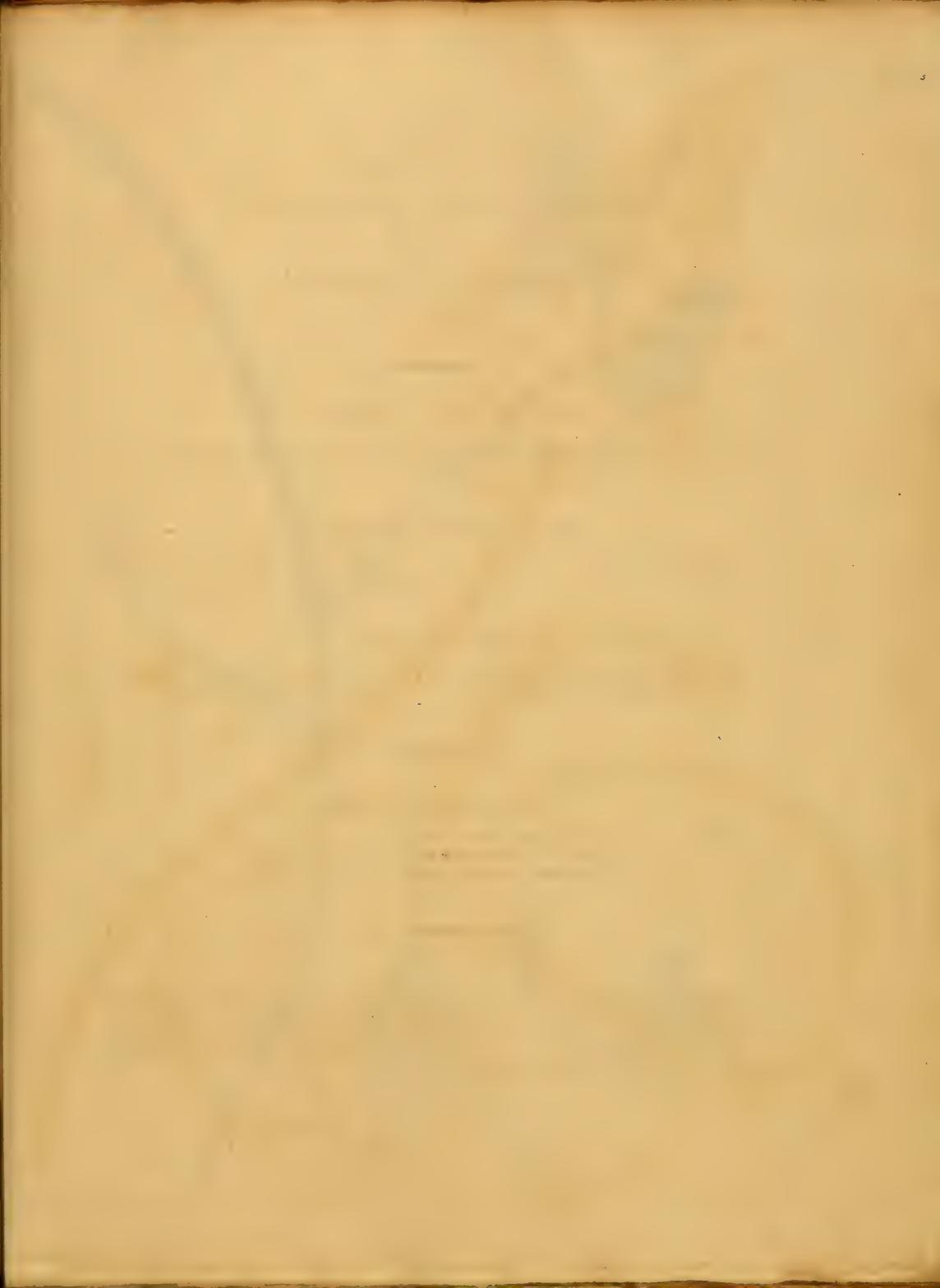


PLATE CCLXXV.
GLADIOLUS RINGENS.

Var. undulatus.

Gaping-flowered Gladiolus.

Waved-flowered Var.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA sexpartita, ringens. Stamina adscendentia.		BLOSSOM six divisions, gaping. Chives ascending. See GLADIOLUS ROSEUS, Pl. XI. Vol. I.
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SPECIFIC CHARACTER.

Gladiolus foliis linearibus, costatis; floribus ringentibus, cineris; petalis undulatis.		Gladiolus with linear leaves, ribbed; flowers gaping, ash coloured; petals waved.
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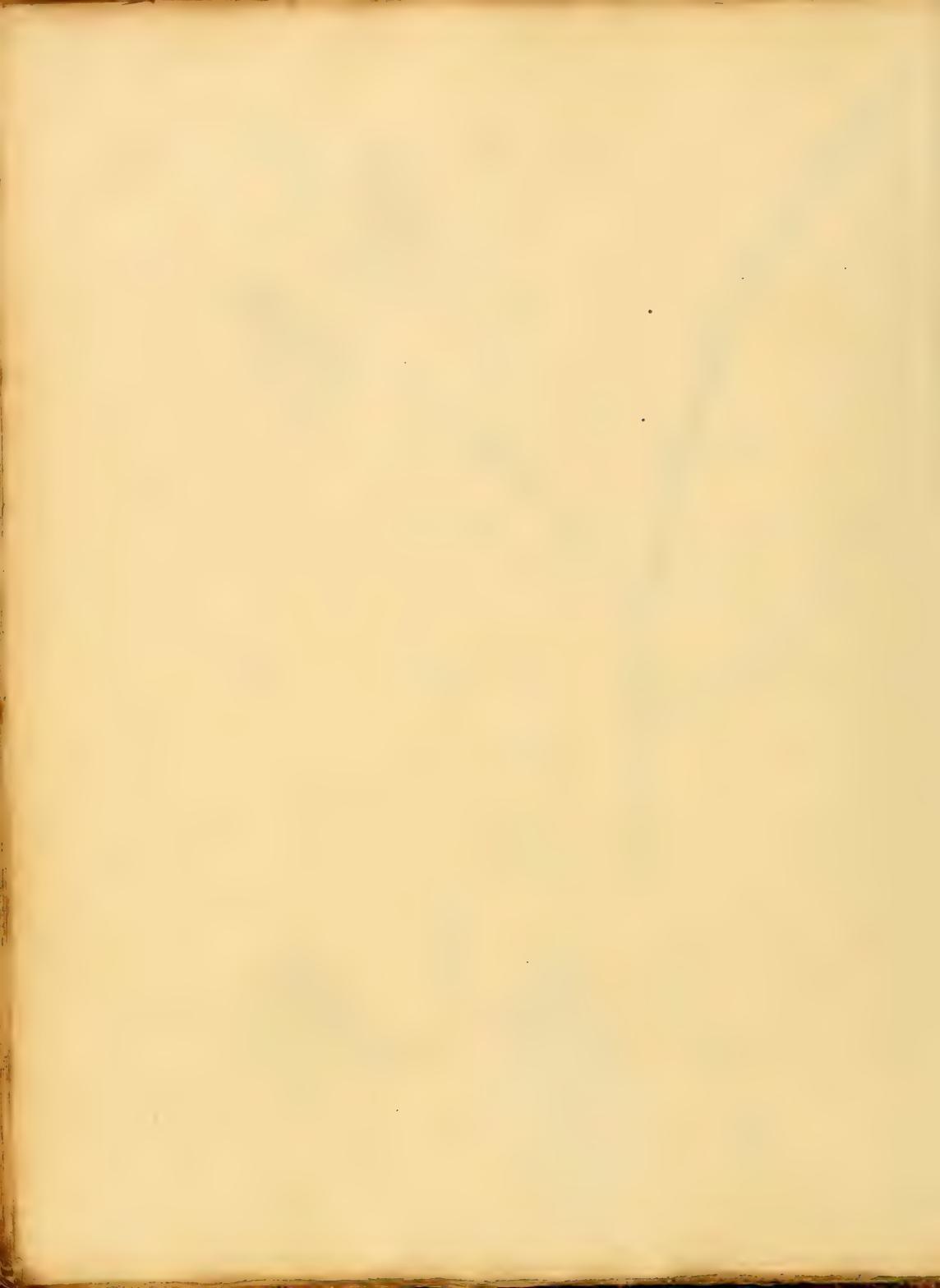
REFERENCE TO THE PLATE.

1. The two valves of the Empalement.
2. A Blossom spread open, with the chives in their place.
3. The Pointal, one of the divisions of the summit magnified.

THE Clapham collection we believe to be the only one which, at present, possesses this handsome variety of the Gaping Gladiolus. It was introduced, from the Cape, by Mr. Niven in 1800. Our drawing was made in August of the above year, but its natural season of flowering, if we may judge by analogy, should be about May or June, at latest. It increases by the root, and should be treated as a tender Gladiolus. The flower is without smell.



Cystopteris reniformis
L. var. *undulata*



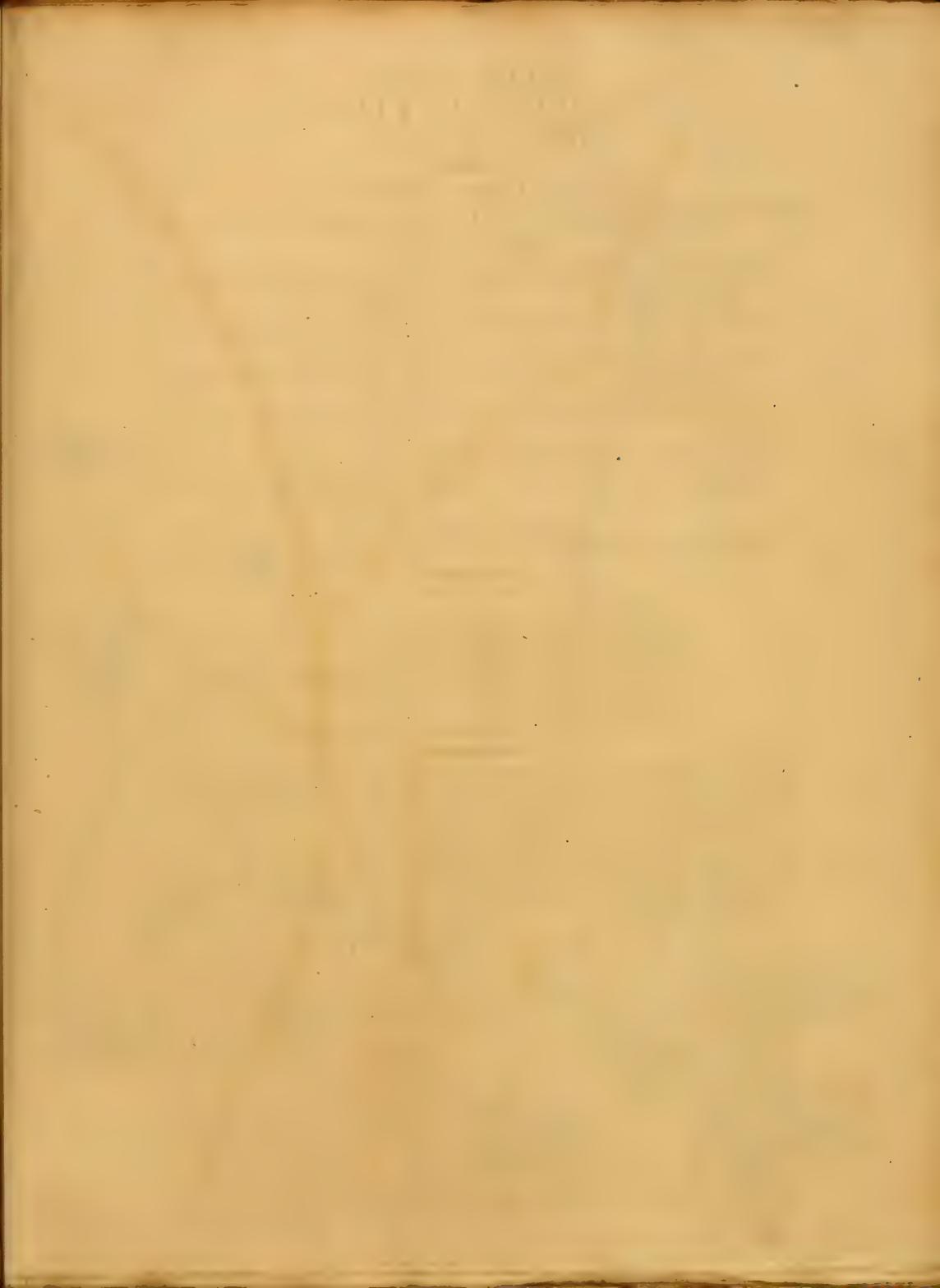


PLATE CCLXXVI.
MONSONIA FILIA.

Hairy-leaved Monsonia.

CLASS XVIII. ORDER II.

POLYADELPHIA DODECANDRIA. Threads in many Sets. Twelve Chives.

GENERIC CHARACTER.

<p>CALYX. Perianthium pentaphyllum erectum; foliolis lanceolatis, sub apice mucronatis, æqualibus, persistentibus.</p> <p>COROLLA. Petala quinque, obovata æqualia, flaccida, plicata, margine inequaliter dentata.</p> <p>STAMINA. Filamenta quindecim, erecta, connata in quinque corpora, c 3 singula. Antheræ oblongæ, versatiles.</p> <p>PISTILLUM. Germen pentagonum, breve. Stylus columnaris. Stigmata quinque, recurva, oblonga.</p> <p>PERICARPIMUM nullum. Fructus rostratus, pentacoccus.</p> <p>SEMINA folitaria, arillata; arista longissima demum spiralis.</p>	<p>EMPALEMENT. Cup five-leaved upright; leaflets lance-shaped, pointed at the end, equal, and remaining.</p> <p>BLOSSOM. Five petals, inversely egg-shaped, equal, flaccid, plaited, unequally toothed at the margin.</p> <p>CHIVES. Fifteen threads, upright, formed into five bodies, three to each. Tips oblong, versatile.</p> <p>POINTAL. Seed-bud five-sided, short. Shaft columnar. Five summits, recurved and oblong.</p> <p>SEED-VESSEL none. Fruit furnished with long awns, five dry berries.</p> <p>SEEDS folitary, in a seed-coat with a very long awn, becoming spiral.</p>
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SPECIFIC CHARACTER.

<p><i>Monsonia foliis inciso-lobatis, hirsutis; lobis inequaliter dentatis.</i></p>	<p><i>Monsonia</i> with deeply-cut lobes, hairy; lobes unequally toothed.</p>
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REFERENCE TO THE PLATE.

1. The Empalement.
2. A Petal of the flower, shewn from the backside.
3. A Petal of the flower, shewn from the inside.
4. The Chives and Pointal divested of the petals.
5. The Chives spread open, to shew the number of distinct bodies into which they are divided.
6. The Seed-bud, Shaft, and Summits.
7. A Seed-bud cut transversely.
8. One of the berries, taken from its coat, a little advanced to maturity.

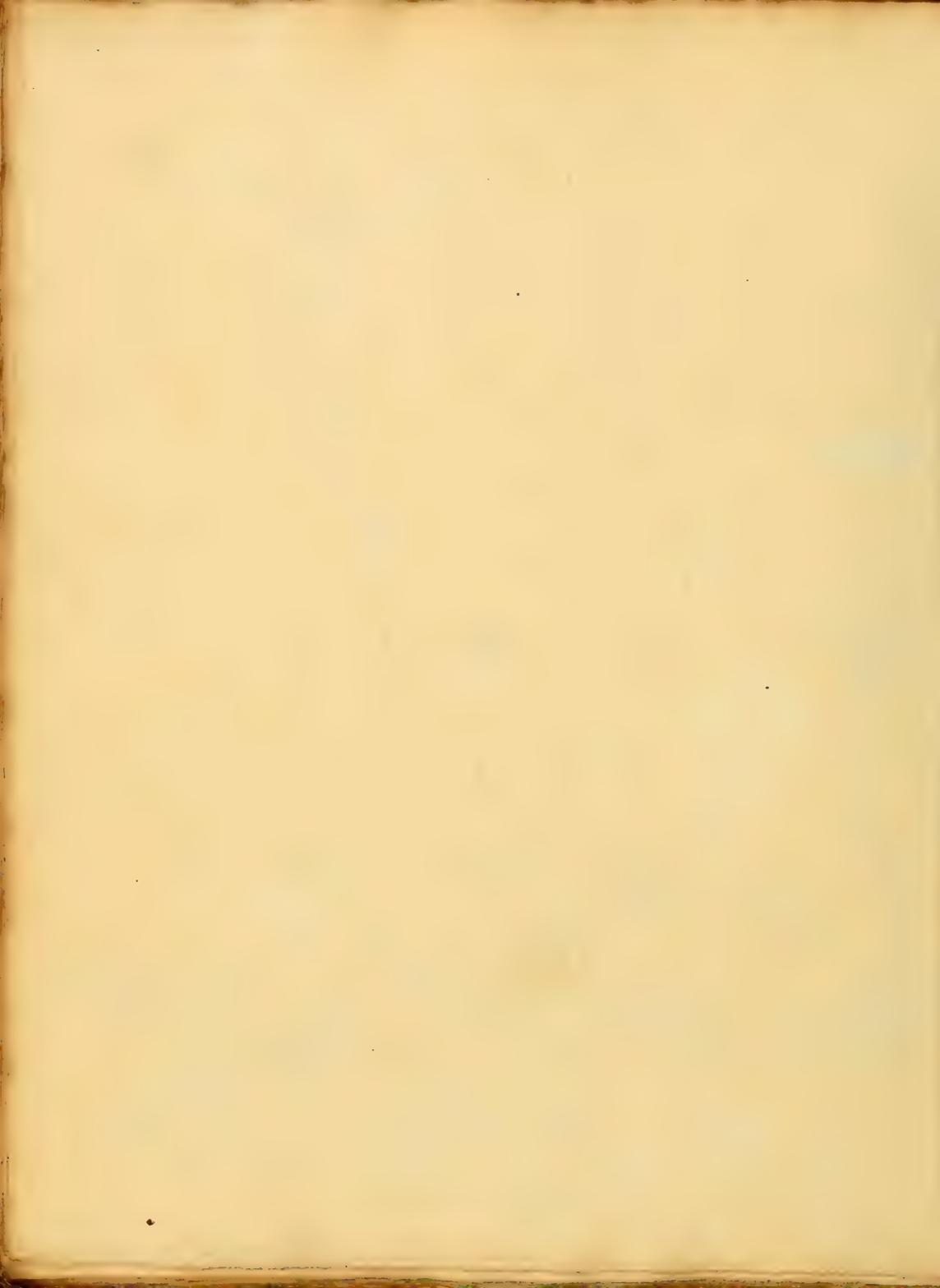
THE Genus *Monsonia* was formed by Linnæus, in honour of the Right Hon. Lady Ann Monson, whose enthusiasm, in pursuing the study of natural history, knew no bounds; and whose liberal and fostering hand contributed more, perhaps, than any of her cotemporaries, by her encouragement and example, to the then incipient, but now so prevailing taste for the study of Botany.

The *Monsonias* are all natives of the Cape of Good Hope; are rather herbaceous plants than shrubs, at least, those generally denominated such; for although the *Geranium spinosum* has been given to this genus, we have our doubts whether it ought not to remain with *Geranium*. They are hardy green-house plants, flower in the months of July and August; are propagated by the cutting small portions from the roots; and should be planted in a mixture of sandy peat and loam. This species was introduced by Messrs. Lee and Kennedy in the year 1788. Our drawing was made from a plant in the Hibbertian collection.

It is rather strange that Thunberg in the second part of his *Prod. Plant. Cap.* published in 1800; and Willdenow in his *Spec. Plant.* volume the third, part 1, published the same year, should both, in the classification of this genus rather wish to alter its class, as Schreber and Cavanilles had done before them, than give it, in their works, under the class and title where it was originally placed, by the founder of the genus; or take it up on the authority of the catalogue of the plants in the Kew gardens; where, unquestionably, two species, at least, had flowered antecedent to the publication of that work. But indeed both of them, have so jumbled the different synonyms which they have adapted to the three species known at present in our gardens under the names of *M. speciosa*, *M. lobata*, and *M. filia*, that it is nearly impossible to recognize in either publication the different plants under the characterized titles they bear with us. As for Thunberg, he has thrown them all to *Geranium*, under new specific names: and thus, has made his alteration complete. Willdenow indeed has but changed the class, and altered one specific title; but by new naming that which is our *M. speciosa* he has been obliged to give the name of *speciosa* to our present plant, and place the specific *filia*, as given by Linnæus to this, as a synonym to *M. lobata*, upon the authority of Cavanilles; who, we must presume, had never seen more than dried specimens of any species of this genus. But however, we shall not pretend to clear up the bewildered state, in which we there find this tribe of plants; or attempt to throw any farther light on a subject that seems to have been, short as it is, a complete puzzle to two such eminent botanists; but merely state our ideas, that we think these plants were sufficiently well arranged under the first assumed class, and equally readily to be known by their old specific titles.



Monarda filia



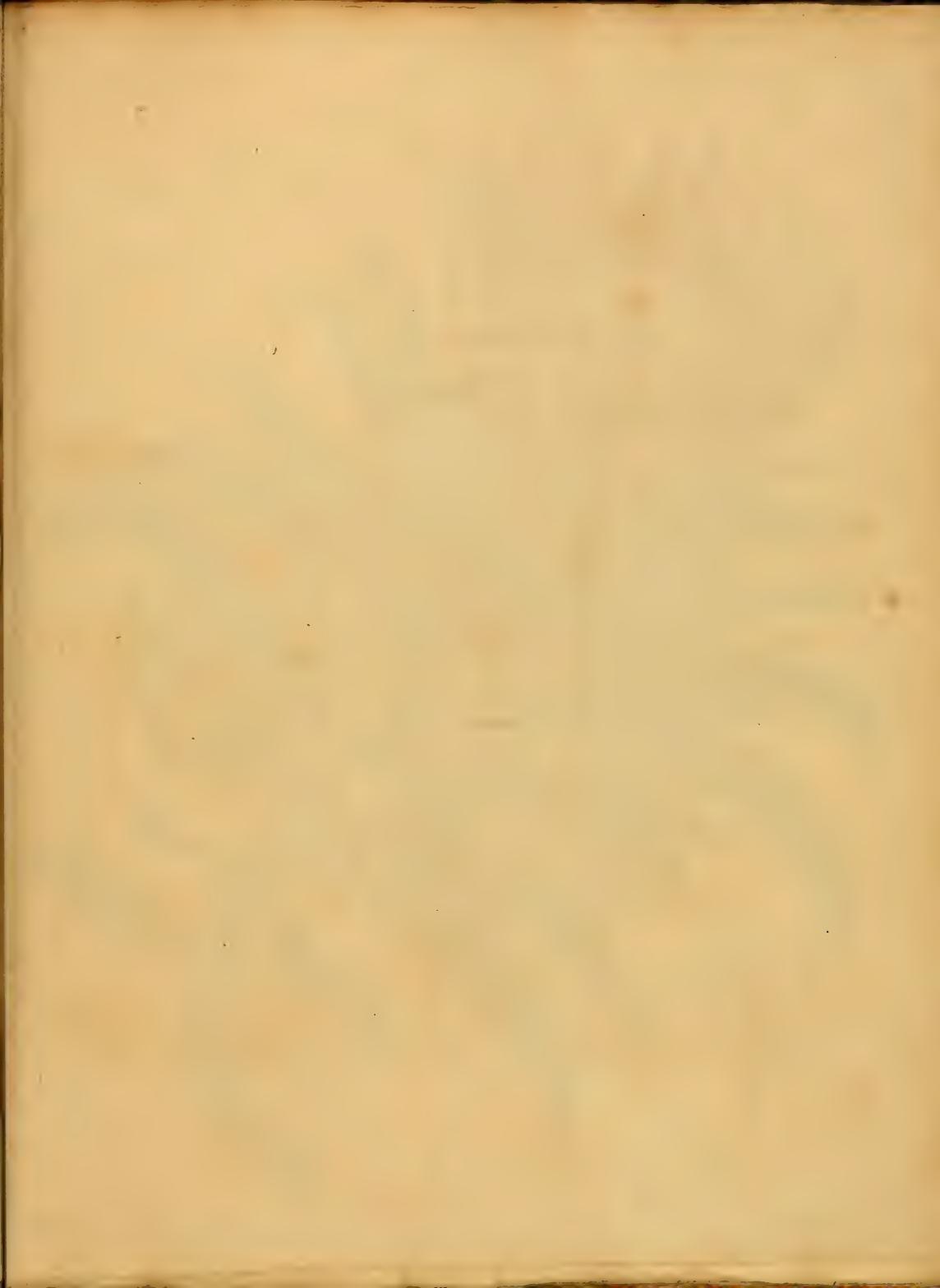


PLATE CCLXXVII.
PROTEA SPECIOSA.

Var. foliis glabris.

Smooth-leaved Shewy Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

SPECIFIC CHARACTER.

Protea foliis lanceolatis, glabris; squamæ calycinæ interiores barbatae, apice incurvatæ, fulcæ.		Protea with lance-shaped smooth leaves; the inner scales of the empalement are bearded, turned inward at the point and brown.
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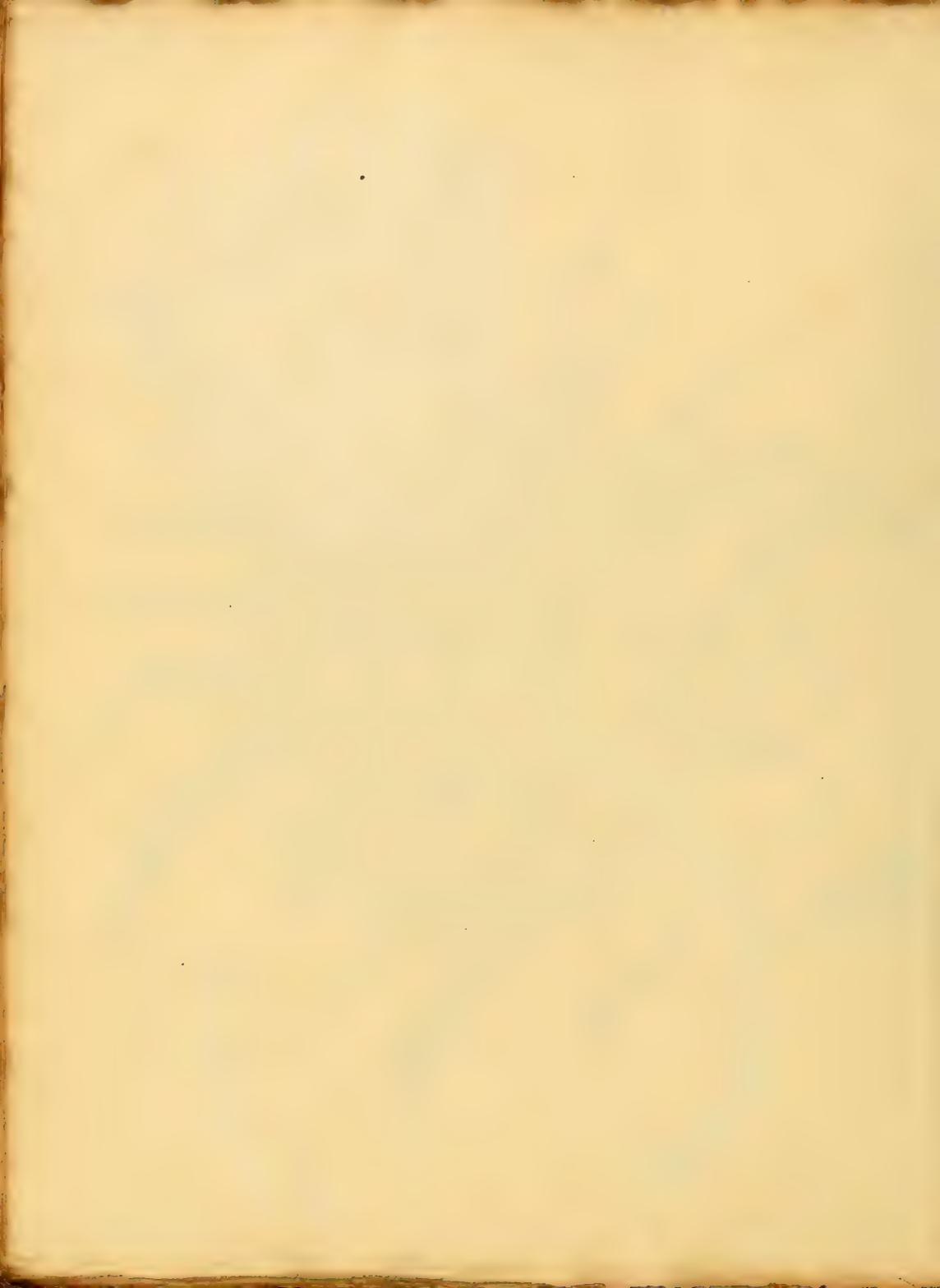
REFERENCE TO THE PLATE.

1. The Seed-bud and Pointal.
2. A Flower spread open, with the tips in their places.

THIS fine variety of the Shewy Protea might, indeed, almost pass for a distinct species. It was introduced, to Britain, in the year 1794, by Mr. Williams, Nurseryman, of Turnham Green. The only living specimen in Britain, we believe, of this plant, is at present in the Hammer-smith collection. As yet no increase has been produced from it, either by cuttings, or seeds; for although the plant flowers every year, and the seeds in the cone, or rather flower-cup, seem perfect, they never vegetate. It is a hardy, and handsome growing Protea, requiring little attention, and may be placed in any part of the green-house; grows about three feet high, very bushy, and flowers near the month of October.



Protea sparsa L.



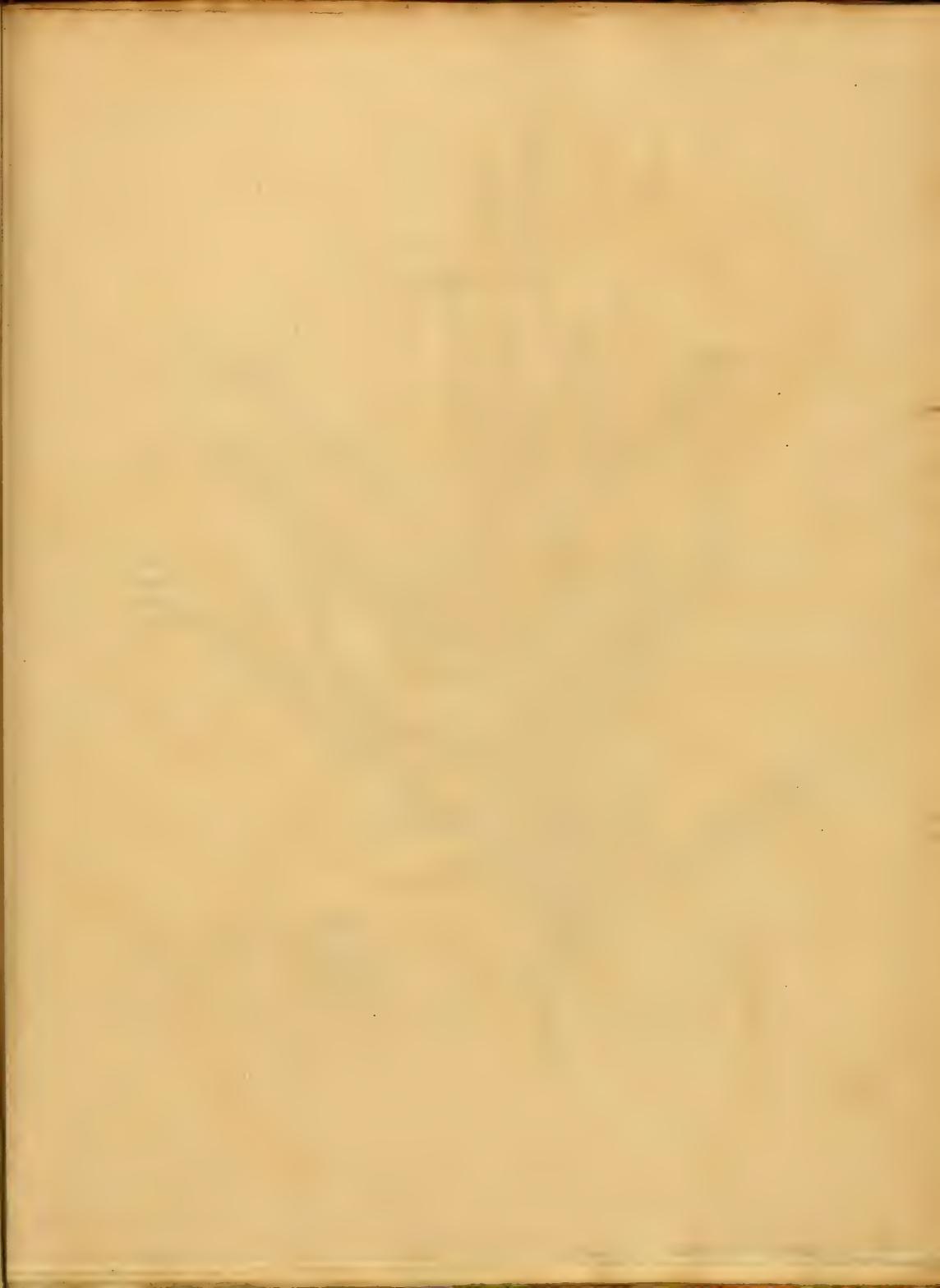


PLATE CCLXXXVIII.
MELALEUCA CORONATA.

Flax-leaved Melaleuca.

CLASS XVIII. ORDER IV.

POLYADELPHIA POLYANDRIA. Threads in many Sets. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquefidus, semifuperus. Petala quinque. Filamenta multa longissima, connata in quinque corpora. Pifillum unum. Capfula 3-locularis.

CUP five-cleft, half above. Petals five. Threads numerous, very long, united into five bodies. Pointal 1. Capful 3-celled.
See MELALEUCA ERICÆFOLIA, Pl. 175. Vol. III.

SPECIFIC CHARACTER.

Melaleuca foliis oppofitis, lanceolatis, enerviis, glaberrimis; floribus feffilibus, ad bafin ramulorum confertis; filamentis pinnatis, incurvatis, purpureis.

Melaleuca with oppofite, lance-shaped leaves, without nerves and very fmooth; flowers grow clofe to the branches, and crowded together at their bafe; threads winged, turned inward, and purple.

REFERENCE TO THE PLATE.

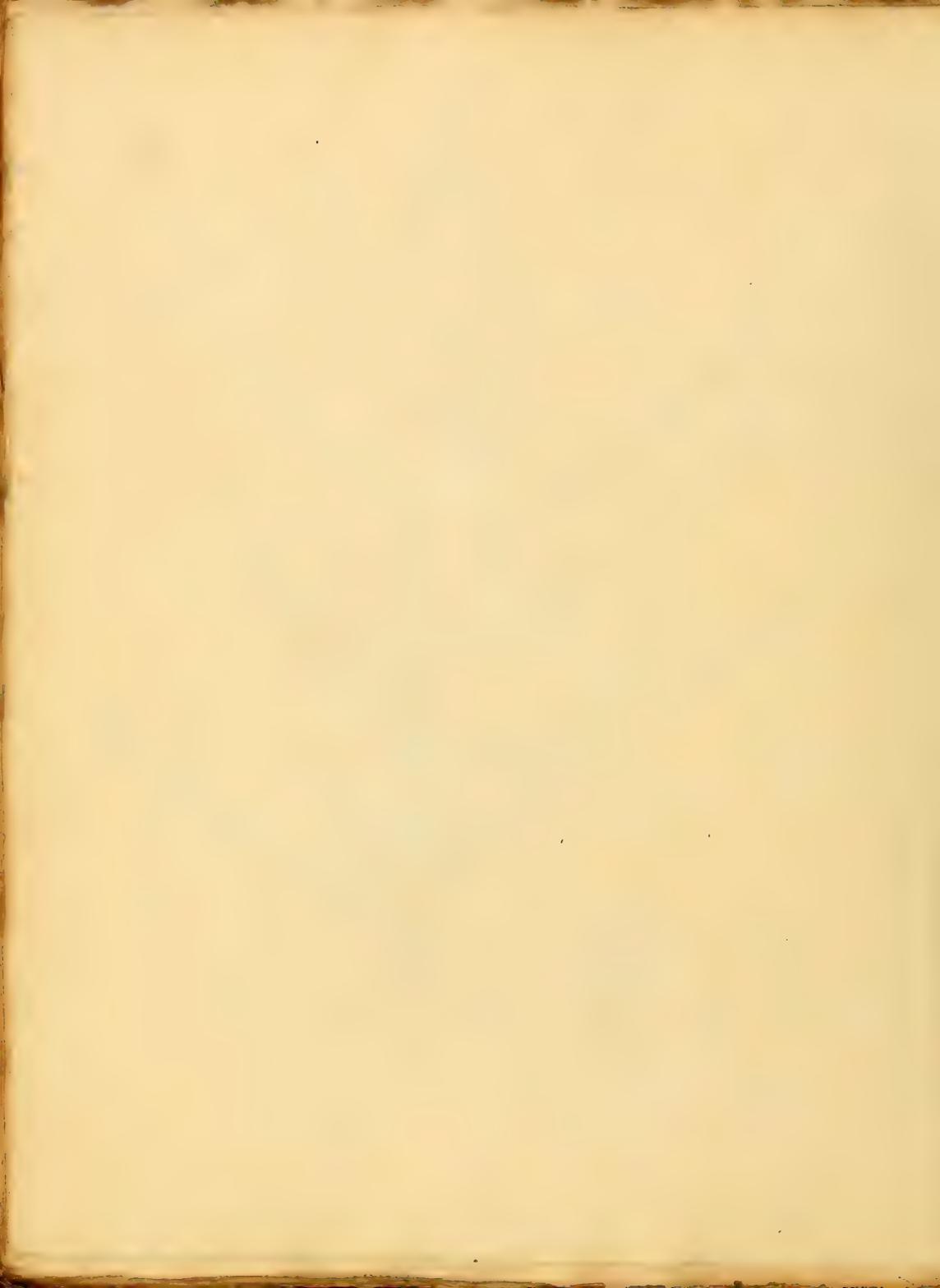
1. The Empalement and Seed-bud.
2. The fame, fhewn in a front view.
3. A Petal.
4. One of the five bundles of Chives, magnified.
5. The Seed-bud with the fhafte remaining, the cup cut off.

THIS fingularly delicate little plant, a native of Botany Bay, was firft raifed from feeds in this country by Mr. I. Fairbairne of the Phyfic Gardens, Chelfea, in the year 1792. It is rather more tender than moft of the plants we have, as yet, received from thence; requires to be kept in a dry and airy part of the green-houfe and watered but feldom, in the winter. It grows to the height of about two feet, perfects its feeds, and may be increafed by cuttings; fhould be planted in very fandty peat earth, and kept in a fmall pot proportionally to its fize. Our figure was taken from the branch of a plant, in the confervatory, at the Hammerfmith Nurfery, in the month of Auguft, 1800.



Melaleuca corymbata

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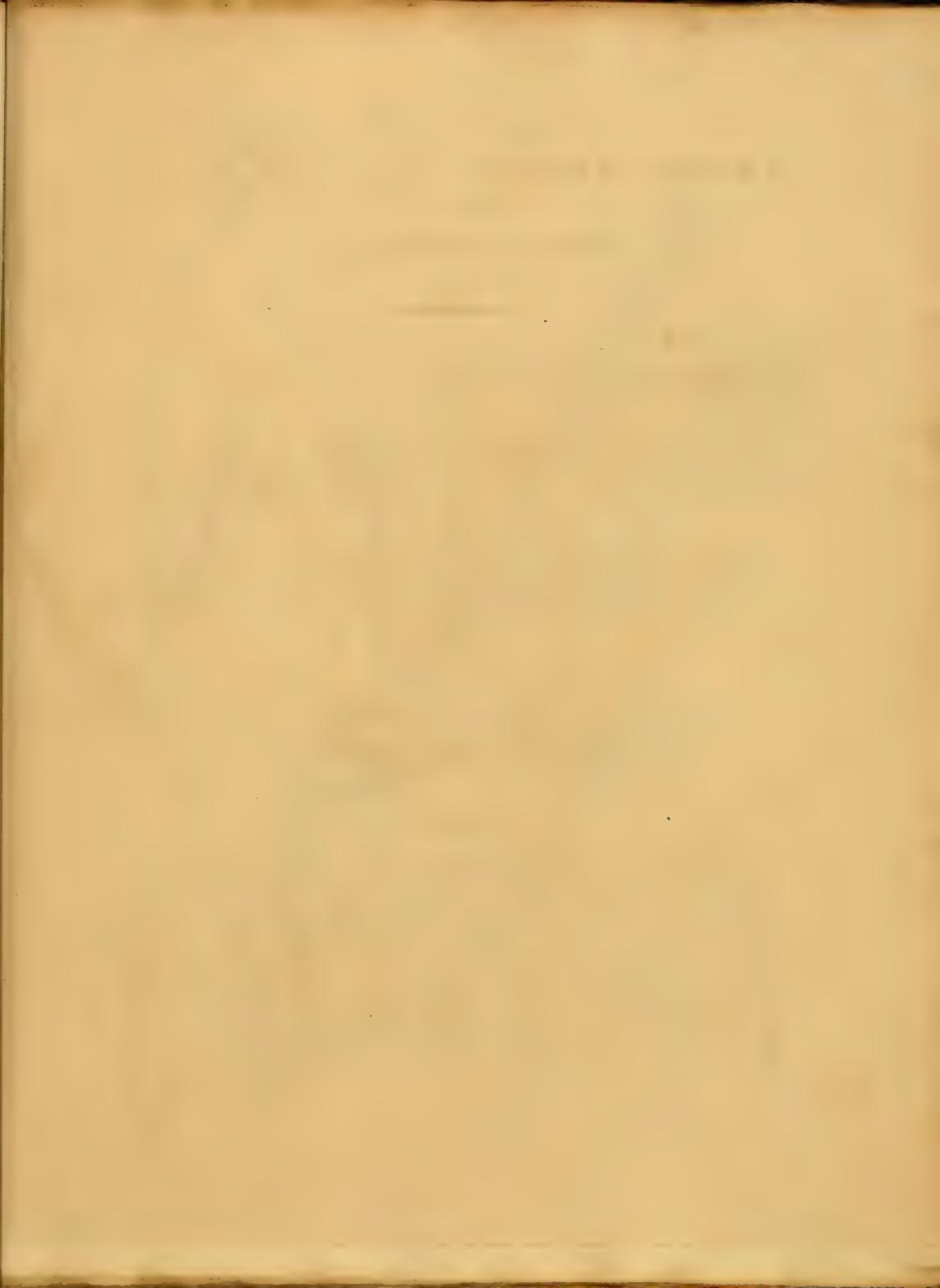


PLATE CCLXXXIX.
XERANTHEMUM FASCICULATUM.

Var. flore albo.

Bundle-leaved Everlasting-flower.

White Var.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum. Pappus setaceus.
Calyx imbricatus, radiatus; radio colorato.

RECEPTACLE chaffy. Feather bristly. Cup-
tiled, with a ray; the ray coloured.
See XERANTHEMUM SPECIOSISSIMUM, Pl. LI. Vol. I.

SPECIFIC CHARACTER.

Xeranthemum foliis caulinis linearibus, sub-
teretibus, fasciculatis, longissimis; floribus
foliariis; squamis calycis lanceolatis,
albis.

Everlasting-flower with the stem-leaves linear,
roundish, bundled, very long; flowers foli-
litary; scales of the cup lance-shaped and
white.

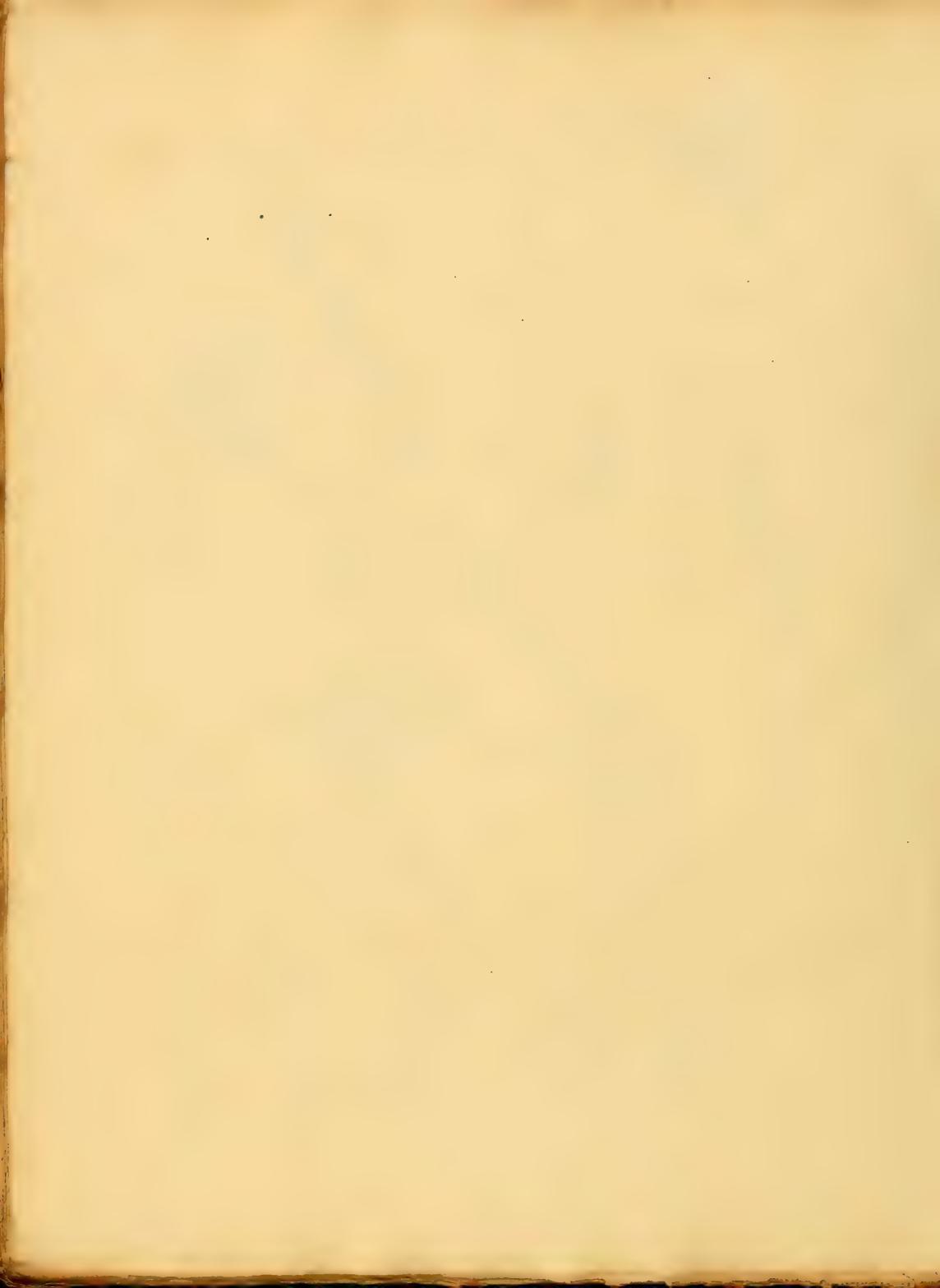
REFERENCE TO THE PLATE.

1. An Hermaphrodite Floret, with its seed, magnified.
2. A Female Floret, with its seed, magnified.
3. The Pointal from a Female Floret, magnified.

As a fine variety of the Bundle-leaved Everlasting-flower, figured in this work, Pl. 242 of this Vol.; we now present this plant to our friends. 'Tis true, it may be thought by some, at first sight, there is too considerable a degree of similitude in the plants to deserve a particular plate for each; but, upon a nigh investigation, it will be found there exists a stronger marked difference, in the growth of the plants, than, at first, meets the eye; not certainly enough to constitute a specific difference, but undoubtedly a strong variety. The flower stems, in this, grow more straddling; and the long stem-leaves are more dispersed on the upper part of the plant; at the base they nearly resemble each other. We have our figure from the Clapham Collection, to which the plants were introduced at the same time, and through the same channel as the above cited species; seeds of both having been sent from the Cape of Good Hope, by Mr. Niven, in the year 1799. For all that relates to the management of this, we must refer our readers to the figure just alluded to; as its habits, time of flowering, &c. in nothing differ.



Xeranthemum fasciculatum Torr. fl. alb.



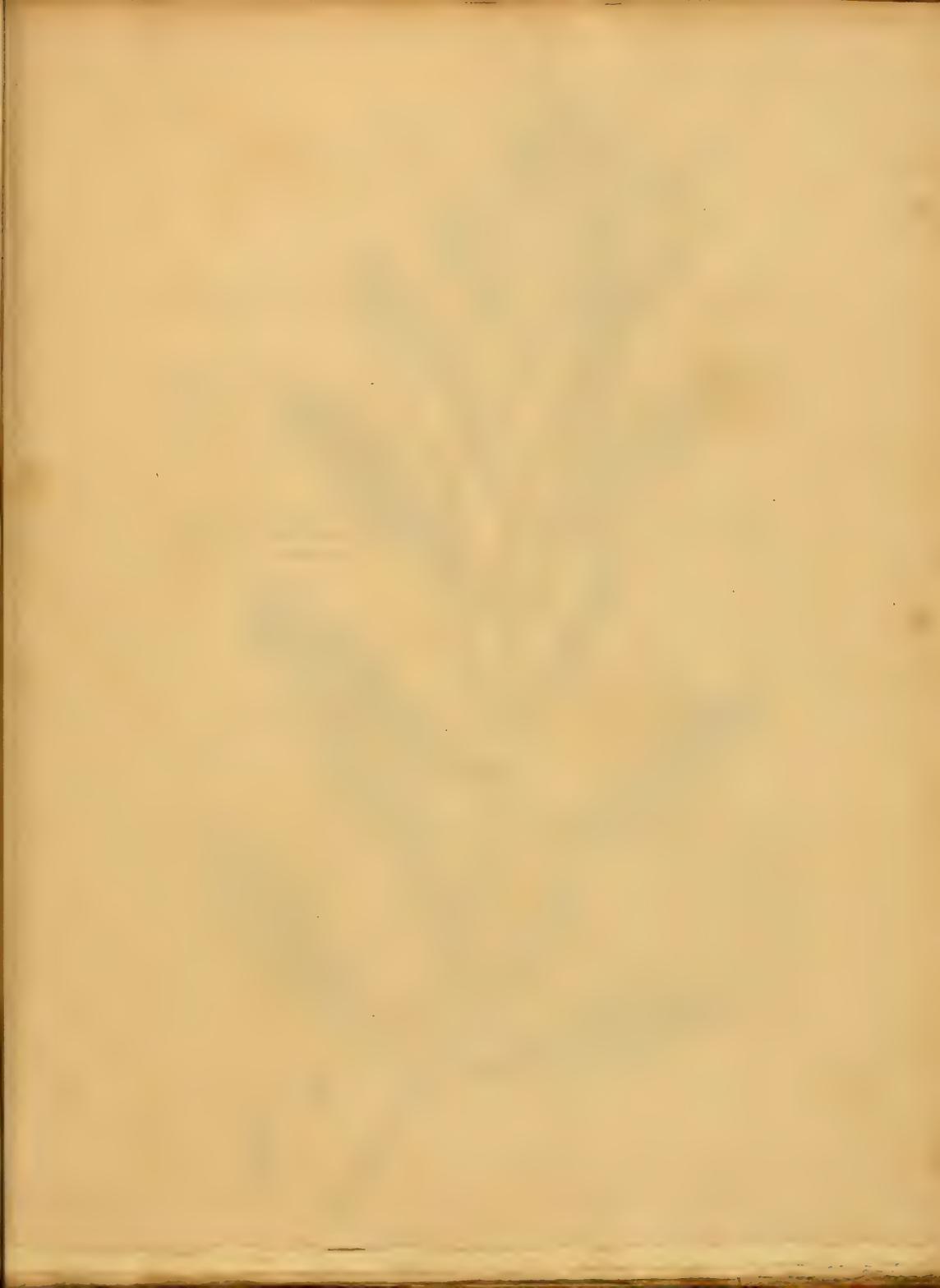


PLATE CCLXXX.
PERSOONIA LATIFOLIA.

Broad leaved Persoonia.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Petala 4, basin versus stamini-
fera. Glandulæ 4 ad basin germinis. Stig-
ma obtusum. Drupa monosperma.

EMPALEMENT none. Petals four, supporting
the chives near the base. Four glands at
the base of the seed bud. Summit blunt.
A pulpy berry with one seed.

See PERSOONIA LANCEOLATA, Pl. LXXIV. Vol. II.

SPECIFIC CHARACTER.

*Persoonia foliis subovatis, utrinque glabris,
crassiusculis, uninerviis; petiolis brevibus,
tortis.*

Persoonia with leaves approaching to inverfely-
egg-shaped, smooth on both sides, thickish,
one-nerved; foot-stalks short and twisted.

REFERENCE TO THE PLATE.

1. A Flower.
2. One of the Petals, with its Chive.
3. The Pointal and Seed-bud.
4. The same, magnified.
5. The receptacle, with the four glands at the base of the Seed-bud, magnified.

THE very exact conformation of the flower in this, when compared with the other two species of the genus, already figured in this work; is a circumstance but seldom to be found, in plants, where the whole habit is so totally different in each species, as we here find it. This plant, until it flowered, was considered as a species of *Conchium*, (one of the Genera made by Dr. Smith from Banksia,) as nearest in appearance to some species of that Genus. It has flowered, for the first time in England, in the month of October, 1802. The plant being set in the conservatory at the Hammermith-Nursery, the flowers have continued to succeed each other, progressively, upon the young branches, without intermission, as the shoot grows, from the base of each leaf. It is with great difficulty raised by cuttings; but, from every appearance, seed will be procured in this country; as the seed-buds have already become pretty large, and seeds of the other species have matured with us. It was first raised from seed, communicated by Colonel Paterson, from Port Jackson, New South Wales, in the year 1795. Sandy loam, or a mixture of sandy peat and loam, is the soil it most approves.



Persea latifolia



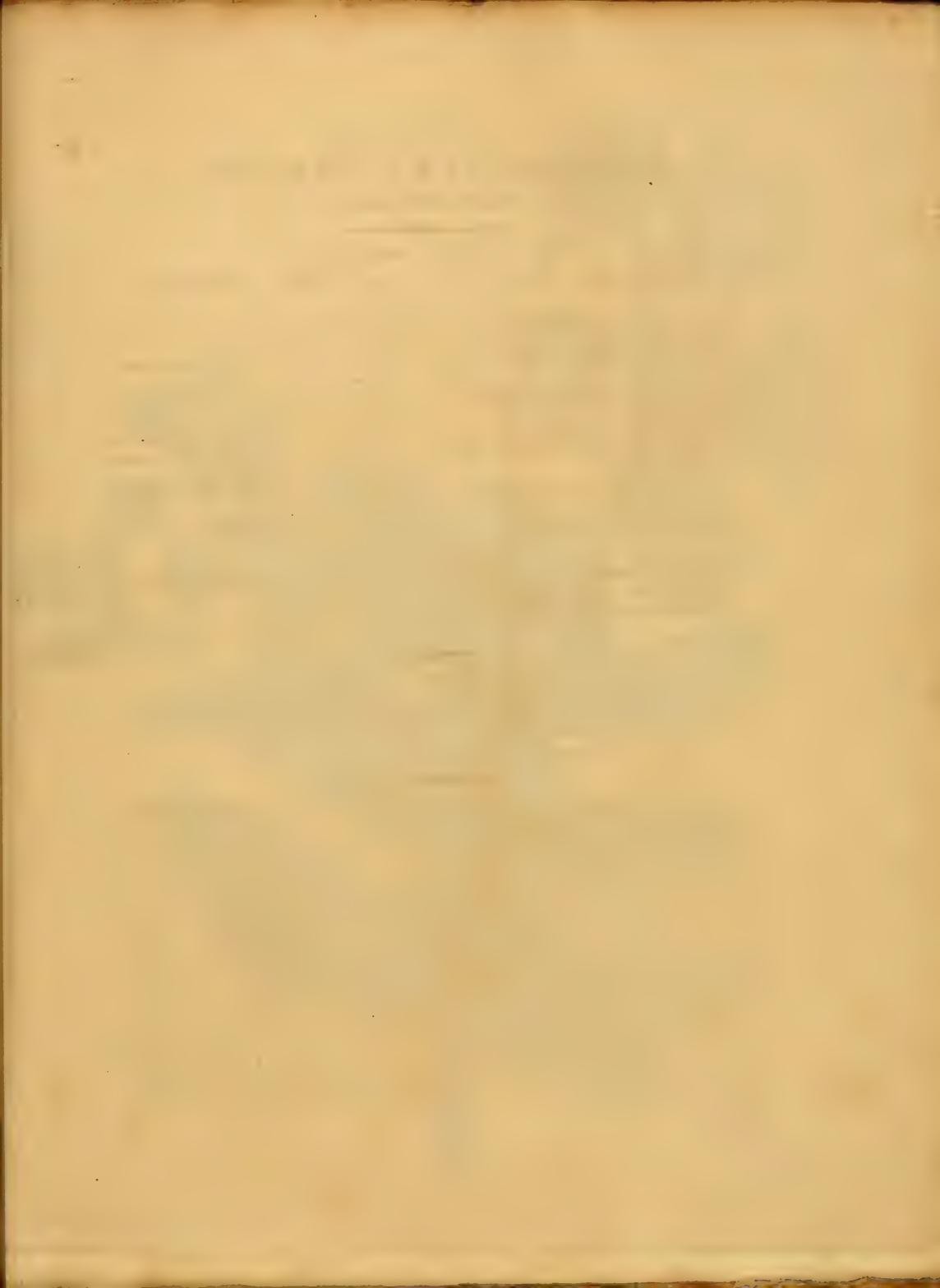


PLATE CCLXXXI.
METROSIDERA HIRSUTA.
Hairy Metrosidera.

CLASS XII. ORDER I.
ICOSANDRIA MONOGYNIA. Twenty Chives. One Pointal.

GENERIC CHARACTER.	GENERIC CHARACTER.
<p>CALYX. Perianthium monophyllum, quinquefidum, semisuperum.</p> <p>COROLLA. Petala quinque, concava, subsessilia, decidua.</p> <p>STAMINA longissima, libera, filiformia. Antherae incumbentes.</p> <p>PISTILLUM. Germen turbinatum, fundo calycis adnatum. Stylus filiformis, erectus. Stigma simplex.</p> <p>PERICARPIMUM. Capsula campanulata, 3 seu 4 locularis, 3 seu 4 valvis.</p> <p>SEMINA plurima, rotundato-angulata.</p>	<p>EMPALEMENT. Cup one-leaved, five-cleft, half above.</p> <p>BLOSSOM. Five petals, concave, nearly sessile, falling off.</p> <p>CHIVES very long, free, thread-shaped. Tips lying on the threads.</p> <p>POINTAL. Seed-bud top-shaped, growing to the bottom of the cup. Shaft thread-shaped, upright. Summit simple.</p> <p>SEED-VESSEL. Capsule bell-shaped, 3 or 4 celled, 3 or 4 valved.</p> <p>SEEDS many, roundedly-angular.</p>

SPECIFIC CHARACTER.	SPECIFIC CHARACTER.
<p><i>Metrosidera</i> foliis oppositis, basi cordatis, amplicaulibus; ramulis, pedunculis, calycibusque pilis rubro-fuscis tectis.</p>	<p><i>Metrosidera</i> with opposite leaves, heart-shaped at the base and embracing the stem; small branches, flower-stems, and flower-cups covered with reddish-brown hairs.</p>

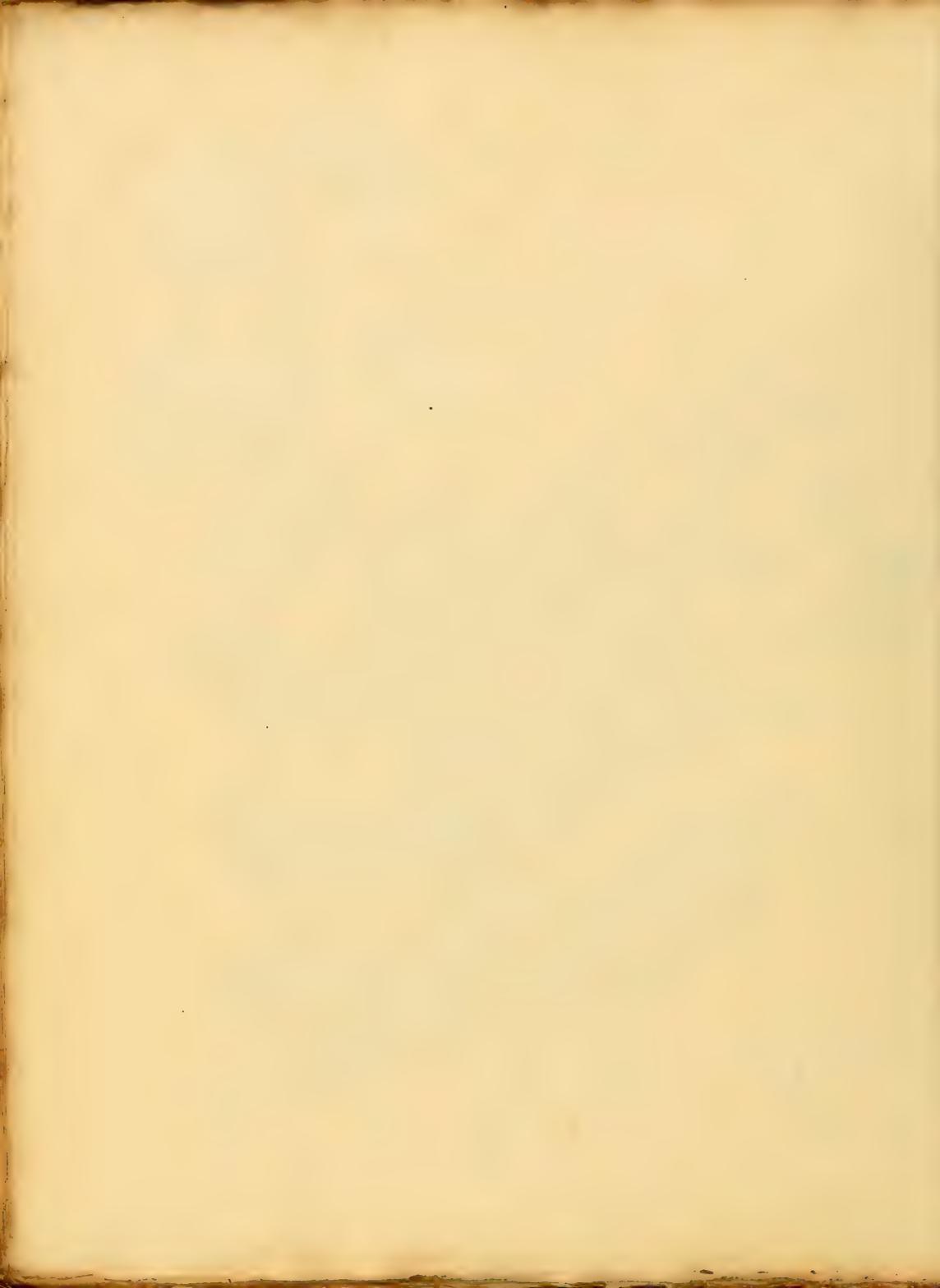
REFERENCE TO THE PLATE.

1. The Seed-bud and Cup, divested of the Petals and Chives.
2. One of the segments of the Cup, shewn from the under side.
3. A Chive magnified.
4. A Seed-bud cut transversely.

ALTHOUGH little can be said in favour of the flowers of this plant, yet the singularity of its foliage excites our attention, as very distinct from all its congeners. It grows with us to the height of six or seven feet; at which size, it produces its blossoms. The first plants were raised from seeds in the year 1787 at the garden of the late Dr. Pitcairne at Edington. It is increased by cuttings, after the usual mode made use of for propagating Botany Bay plants; that is to say, by placing the cuttings in the heat of a hot-house, or hot-bed, early in the month of March, till they are rooted. It is a hardy green-house plant when old, but rather delicate when young. Our figure was began from a plant in the Hibbertian collection, which flowered in the month of August, 1800; and finished from one at the Hammermith Nursery, in November, 1802. A short apology may be thought necessary for our retaining the original mode of terminating the name of this Genus, rather than as it is given by most authors at present. Our plea is that only of priority, and the name under which the plants have been known, in our gardens, these 30 years; since, indeed, Sir J. Banks's return from the South Seas. A slight mistake we wish likewise to notice, in the etymology of the word *Metrosideros*, as given by Dr. Martyn in his edition of Miller's Dictionary; it is there said to be thus derived, *Μητρα*, medulla, the heart or pith of a tree, and *σιδηρος* iron; supposing the heart of the trees to possess the hardness, or colour of iron. Now the true idea on which the name of the Genus was founded, is the shape and hardness of the seed-vessel, thus; *Μετρον* a measure and *σιδηρος* iron, as the appearance of the capsule, when ripe, will fully justify.



Melrosidera hirsuta



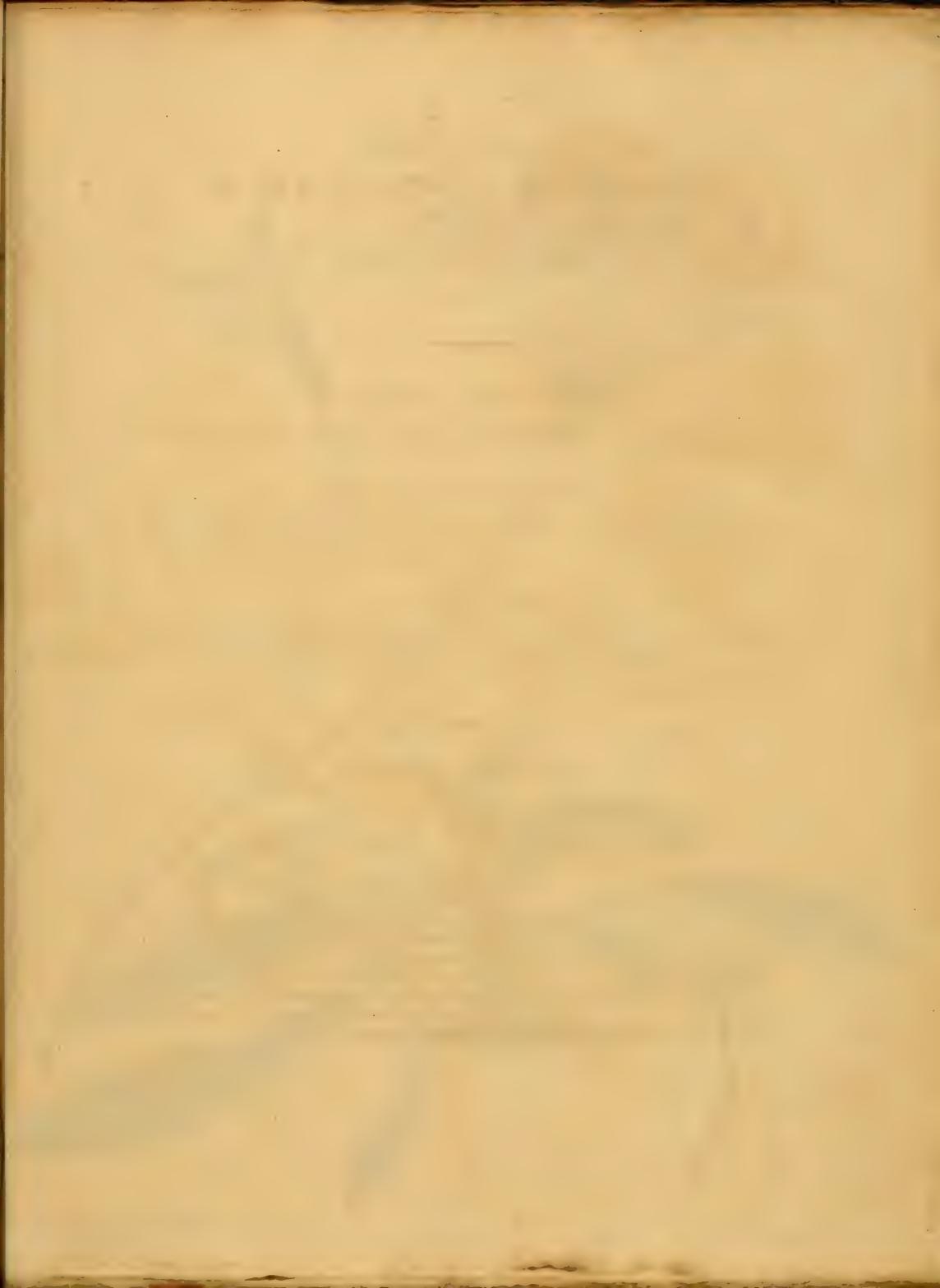


PLATE CCLXXXII.
GERANIUM SPATHULATUM.

Var. curviflorum.

Spatula-leaved Geranium.

Curled-flowered Var.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus rotundus, penta-coccus.		One Pointal. Five Summits. Fruit furnished with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.
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SPECIFIC CHARACTER.

Geranium foliis integerrimis, spathulatis, subciliatis; calycibus monophyllis; petalis recurvatis; flaminibus quinque fertilibus; radice tuberosa.		Geranium with quite entire leaves, spatula-shaped, slightly fringed; cups one-leaved; petals recurved; five fertile chives, root tuberos.
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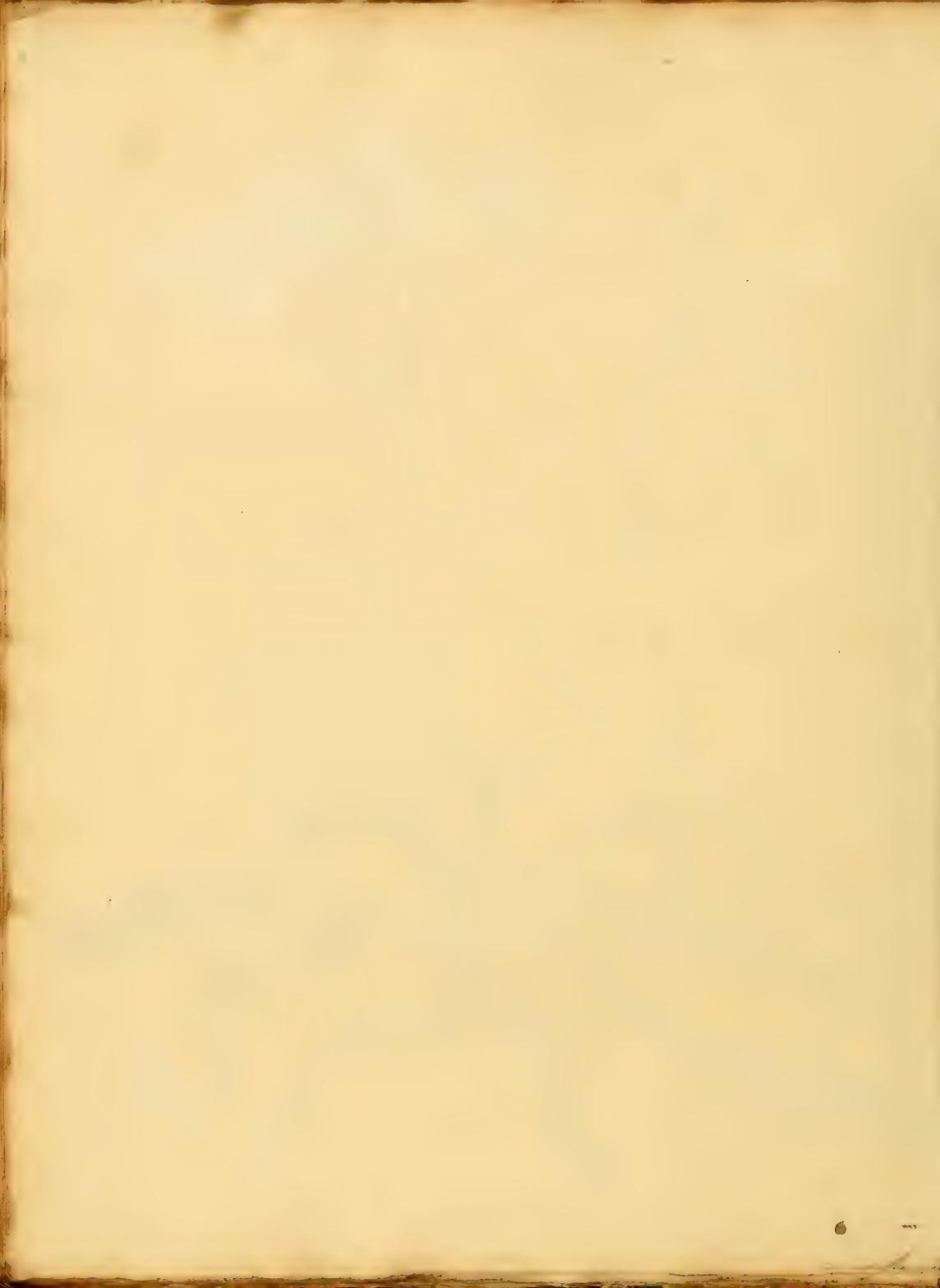
REFERENCE TO THE PLATE.

1. The Empalement magnified.
2. The Chives spread open.
3. The Pointal natural size.
4. The same magnified.

THIS fine variety of the Spatula-leaved Geranium is, as yet, only to be found, in the Hibbertian collection. Its date in Britain is the same as the *G. spathulatum*, of this work, plate 152, Vol. III. We should not have considered the curved character of the petals, alone, a sufficient groundwork to constitute, even a variety; but the slight fringe which may be discovered on the leaves of our present plant, and not in the smallest degree to be traced in the other, determined this to be, in our opinion, deserving notice, at least as a variety. For the treatment and culture of the plant, see *G. punctatum* of the Botanist's Repository, plate 60, Vol. I. which may well serve for this.



Geranium spathulatum var. *arvensis*



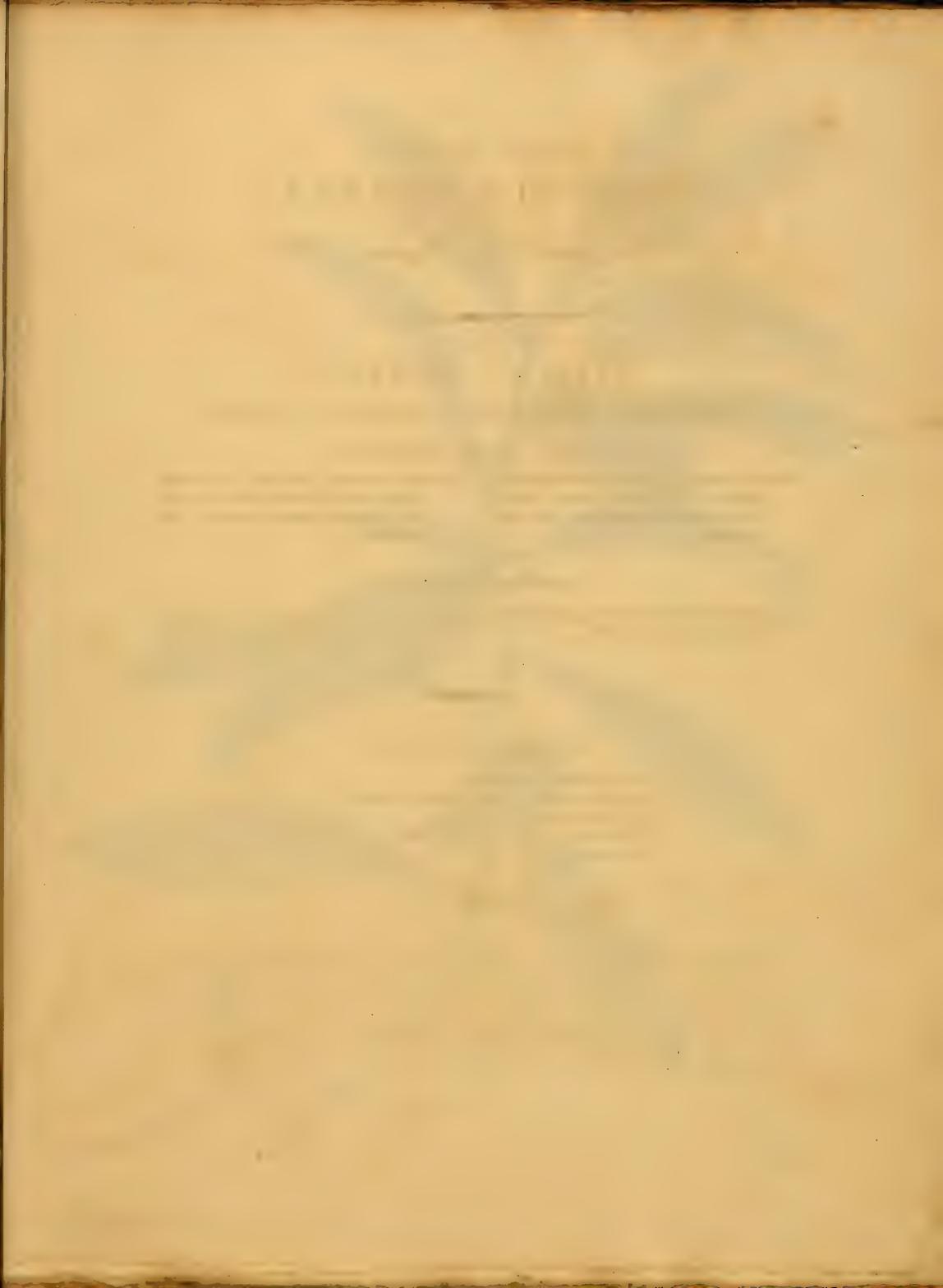


PLATE CCLXXXIII.
POGONIA GLABRA.

Smooth-leaved Pogonia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Two Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA monopetala; tubus ad faucem pilosus.		BLOSSOM one petal; tube hairy at the mouth.
Stamina supra medium corollæ inserta.		Chives inserted into the middle of the blossom.
Stigma concavum, declinatum. Nux quadrilocularis.		Summit concave, declined. Nut four-celled.

SPECIFIC CHARACTER.

<i>Pogonia</i> foliis elliptico-lanceolatis, glabris; floribus pendulis, minutis, albis.		<i>Pogonia</i> with leaves elliptically lance-shaped, smooth; flowers hanging down, small and white.
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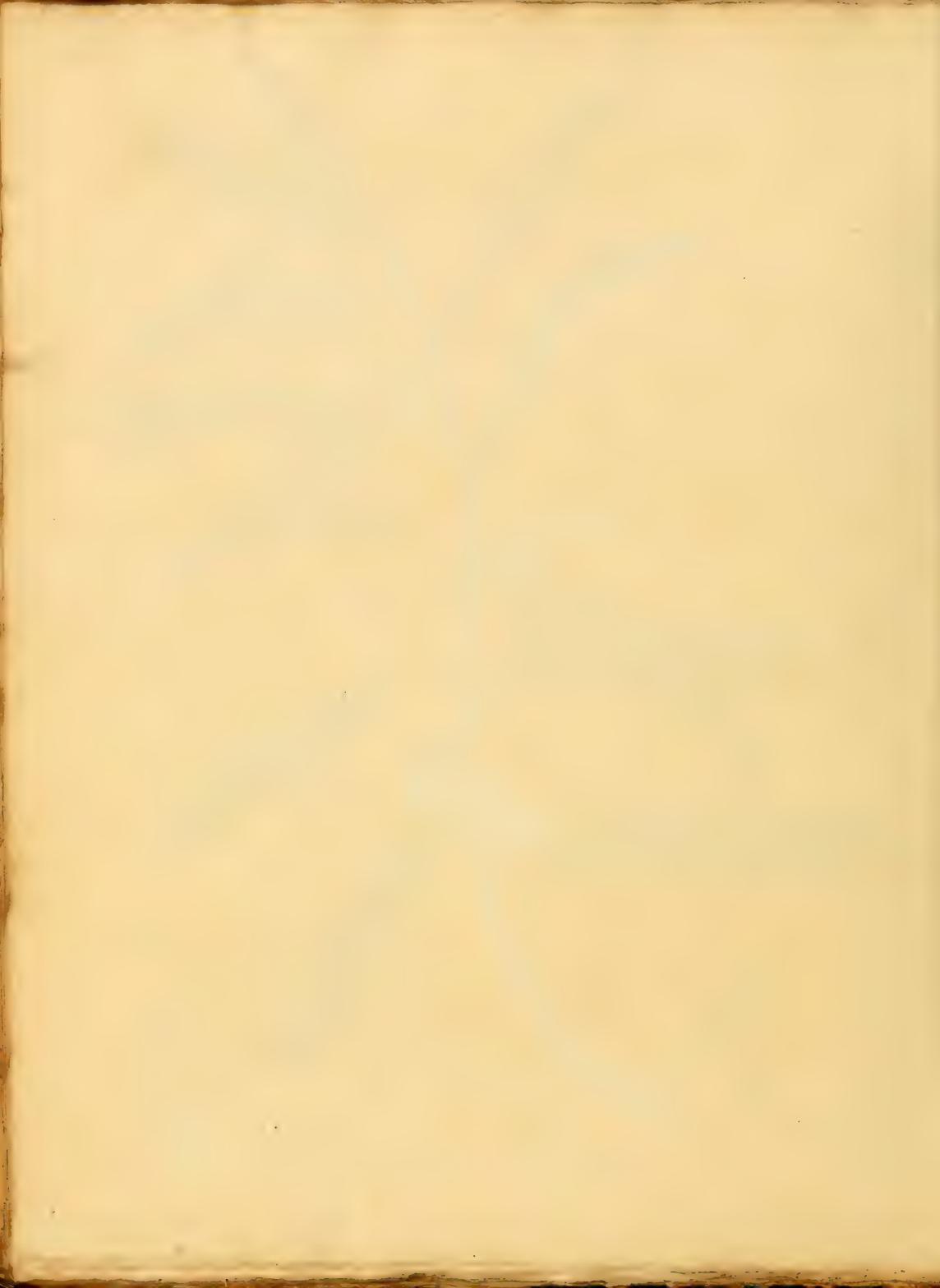
REFERENCE TO THE PLATE.

1. The Empalement, magnified.
2. A Blossom cut open, with the Chives in their place.
3. A Chive, magnified.
4. The Pointal and Seed-bud, natural size.
5. The same magnified.

THIS plant from New Holland, is rather more delicate than most of those we possess from that country; as it is apt to lose its leaves if exposed either to damps, or much cold. It was first raised in the year 1790, by the late Mr. Robertson, of Stockwell; is easily propagated by cuttings, and flowers in January, or February. The other species figured in this work, Plate 212, and our present plant, are the only two yet known of this genus. They require a very light sandy loam, or peat soil, to make them flourish. The *P. glabra* does not grow more than three feet high and flowers the first year from cuttings. Our figure was taken at the HammerSmith Nurseries.



Pogonia glabra



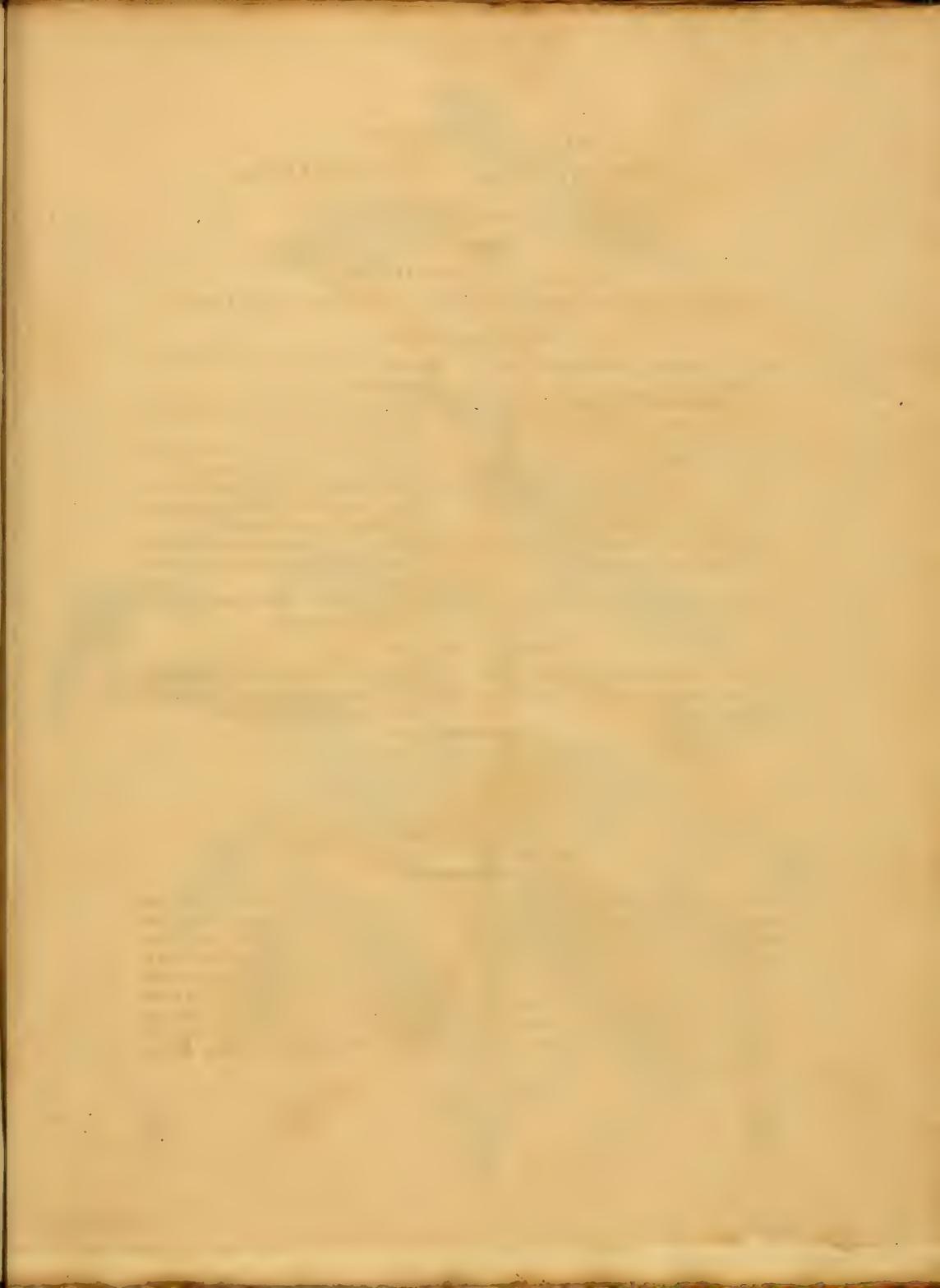


PLATE CCLXXXIV.
CHIOCOCCA RACEMOSA.

Opposite-leaved Snowberry-tree.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinque-dentatum, foveolum, persistens.	EMPALEMENT. Cup five-toothed, above and remaining.
COROLLA monopetala, infundibuliformis; tubus longus, patens; limbus quinquepartitus; laciniis aequalibus, acutis, reflexis.	BLOSSOM one petal, funnel-shaped; tube long, spreading; border five divided; segments equal, pointed and reflexed.
STAMINA. Filamenta quinque, filiformia, longitudine corollæ. Antheræ oblongæ, erectæ.	CHIVES. Five threads, hair-like, the length of the blossom. Tips oblong, upright.
PISTILLUM. Germen inferum, subrotundum, compressum. Stylus filiformis, longitudine staminum. Stigma simplex, obtusum.	POINTAL. Seed-bud beneath, roundish, flattened. Shaft thread-shaped, the length of the chives. Summit simple, blunt.
PERICARPIUM. Bacca subrotunda, compressa, coronata calyce, bilocularis.	SEED-VESSEL. A roundish berry, flattened, crowned with the permanent cup, two-celled.
SEMINA duo, subrotunda, compressa, distantia.	SEEDS two, roundish, flattened, and at a distance from each other.

SPECIFIC CHARACTER.

Chiococca foliis oppositis, ovatis, acuminatis; ramis horizontalibus; floribus racemosis, pendulis.	Snowberry-tree with opposite leaves, egg-shaped, tapered; branches grow horizontal; flowers grow in bunches hanging down.
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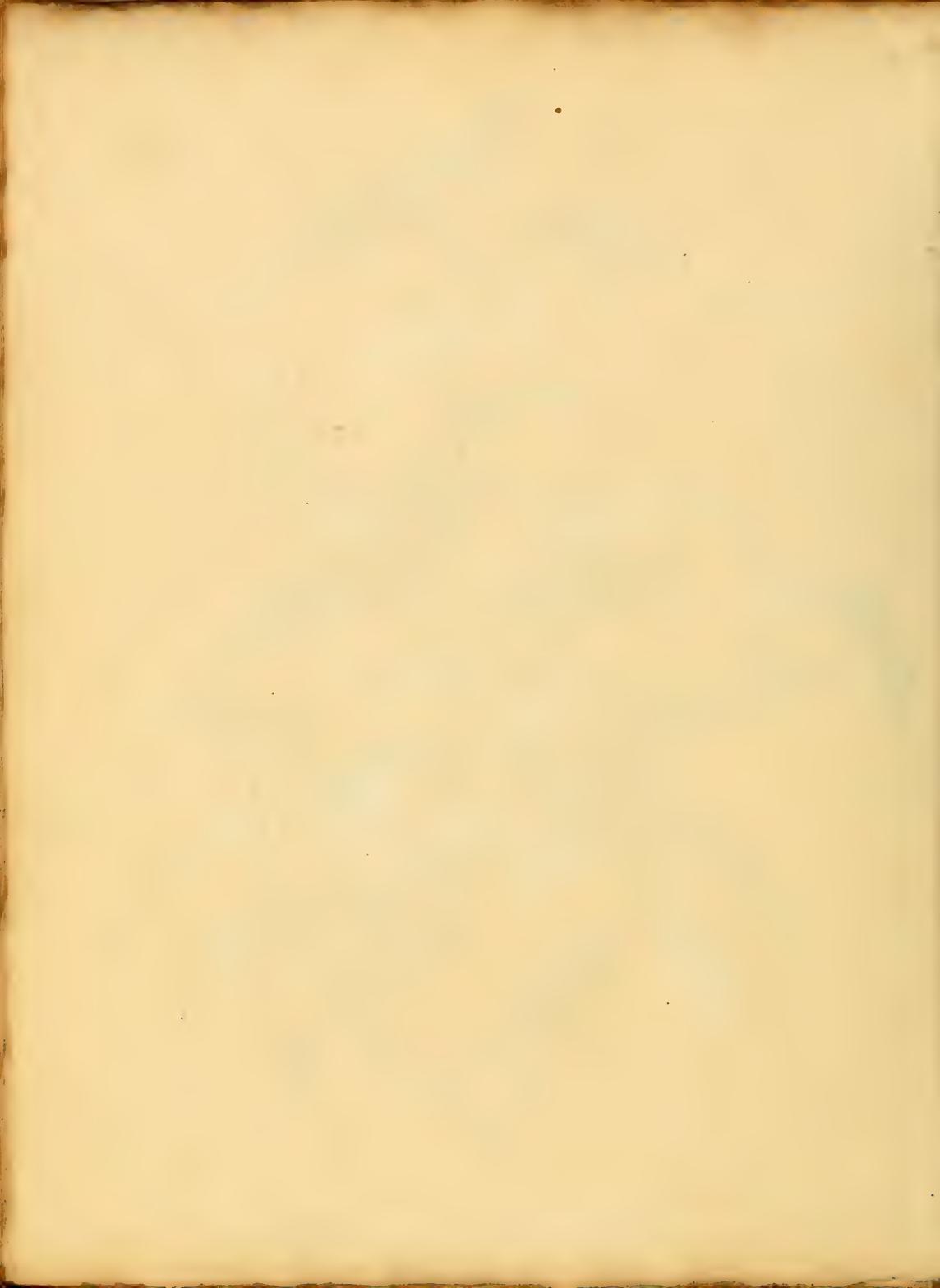
REFERENCE TO THE PLATE.

1. The Empalement, natural size.
2. The same, magnified.
3. A Flower.
4. The Chives and Pointal, natural size.
5. The same magnified.

THE Snowberry-tree is a native of Jamaica, and some of the other West India islands; requiring the temperature of the hothouse to preserve it; growing to the height of four or five feet; but the stem being too weak to support itself, must be assisted. It is propagated by cuttings, and delights in a rich soil. We are informed in Miller's Dictionary, treating of this plant, that it was introduced to us, in the year 1729, by Mr. Warner, of London; and that it was cultivated, in the garden of Mr. Sherard, at Eltham, about that time. The root of this plant is used medicinally, and has a very bitter, acrid taste. It is a very free blowing plant, flowering the first year from the cuttings; but but never produces its fine white berries in this country, which constitute its greatest beauty, and whence its generic title. Our figure was made from a plant in the Hammersmith Collection. Flowers in September.



Chamaecrista racemosa



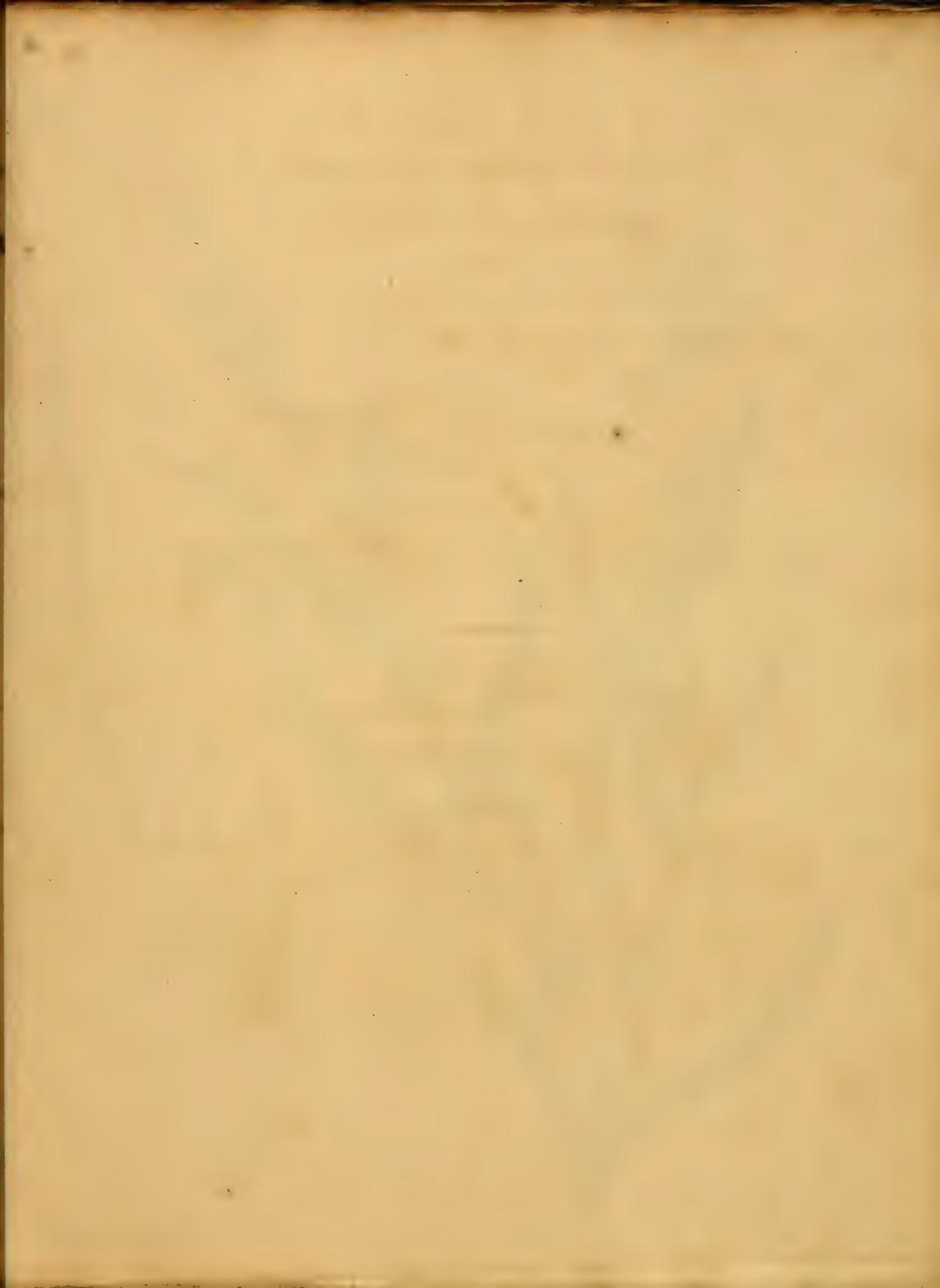


PLATE CCLXXXV.

FERRARIA VIRIDIFLORA.

Green-flowered Ferraria.

CLASS XVI. ORDER I.

MONADELPHIA TRIANDRIA. Threads united. Three Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Spathæ unifloræ.

PETALA sex, undulato-crispata. Stigmata cucullata. Capsula 3-locularis, infera.

ONE POINTAL. Sheaths one-flowered.

PETALS six, waved and crisped. Summits cowled. Capsule three-celled beneath.

See FERRARIA PAVONIA, Pl. CLXXVIII. Vol. III.

SPECIFIC CHARACTER.

Ferraria foliis diffichis, vaginantibus, costatis; petalis lanceolatis æqualibus, interioribus immaculatis, angustioribus, virescentibus.

Ferraria with leaves pointing opposite ways sheathing the stem and ribbed; petals lance-shaped, equal, the inner ones without spots, narrower and greenish.

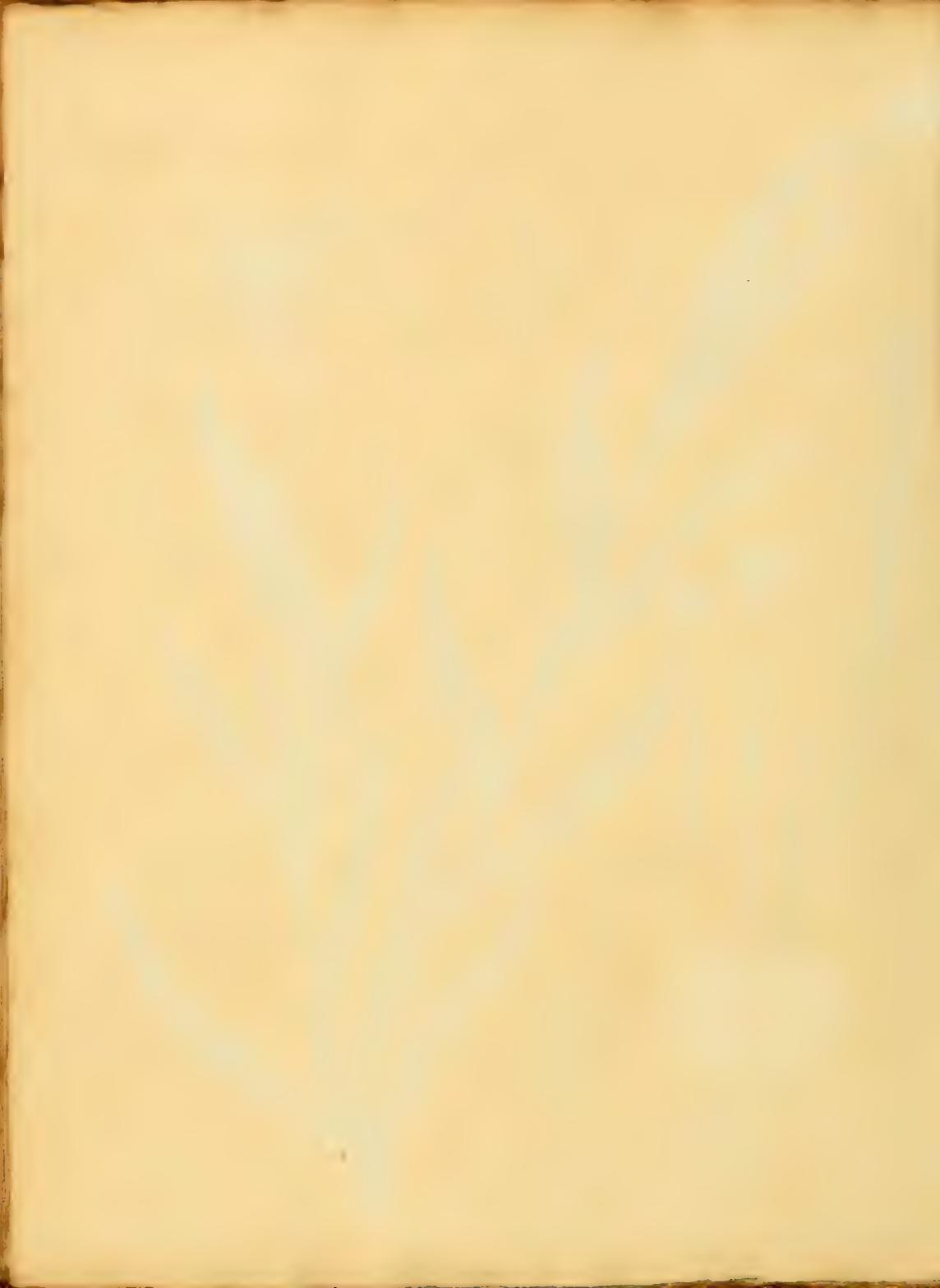
REFERENCE TO THE PLATE.

1. The Seed-bud, Chives and Pointal.
2. One of the Chives, a little magnified, as seen from the inside.
3. The same seen from the outside.
4. The Seed-bud, Shaft and Summits, the Chives removed.
5. One of the Summits magnified.

OUR figure represents the *Moræa Ferrariola* of Jacquin's *Collectanea* 4. p. 141; but, as we conceive *Ferraria* a good, and distinct genus, we have not followed either him, or Thunberg, who has likewise thrown these plants to *Moræa*. At first sight we did not think this plant possessed of sufficient distinctive character to be treated as a different species from the *F. undulata*; but upon closer inspection found it to vary nearly in every part; in the shape of the flower, the leaves and the root. The singular character of this, and the other Cape *Ferrarias*, of making but one growth in two, and sometimes three years; is hardly to be traced in any other plants, but constantly so in these. They produce their flowers about July, the season of their flowering; the flowers are as transitory as those of the *F. pavonia*; that is to say, the duration of about six hours. Our figure was taken from a plant in the Hibbertian Collection, which flowered in the month of July 1802. The *Ferrarias* all propagate by the root; and should be planted in sandy peat mixed with a small portion of loam.



Tesaria undulata



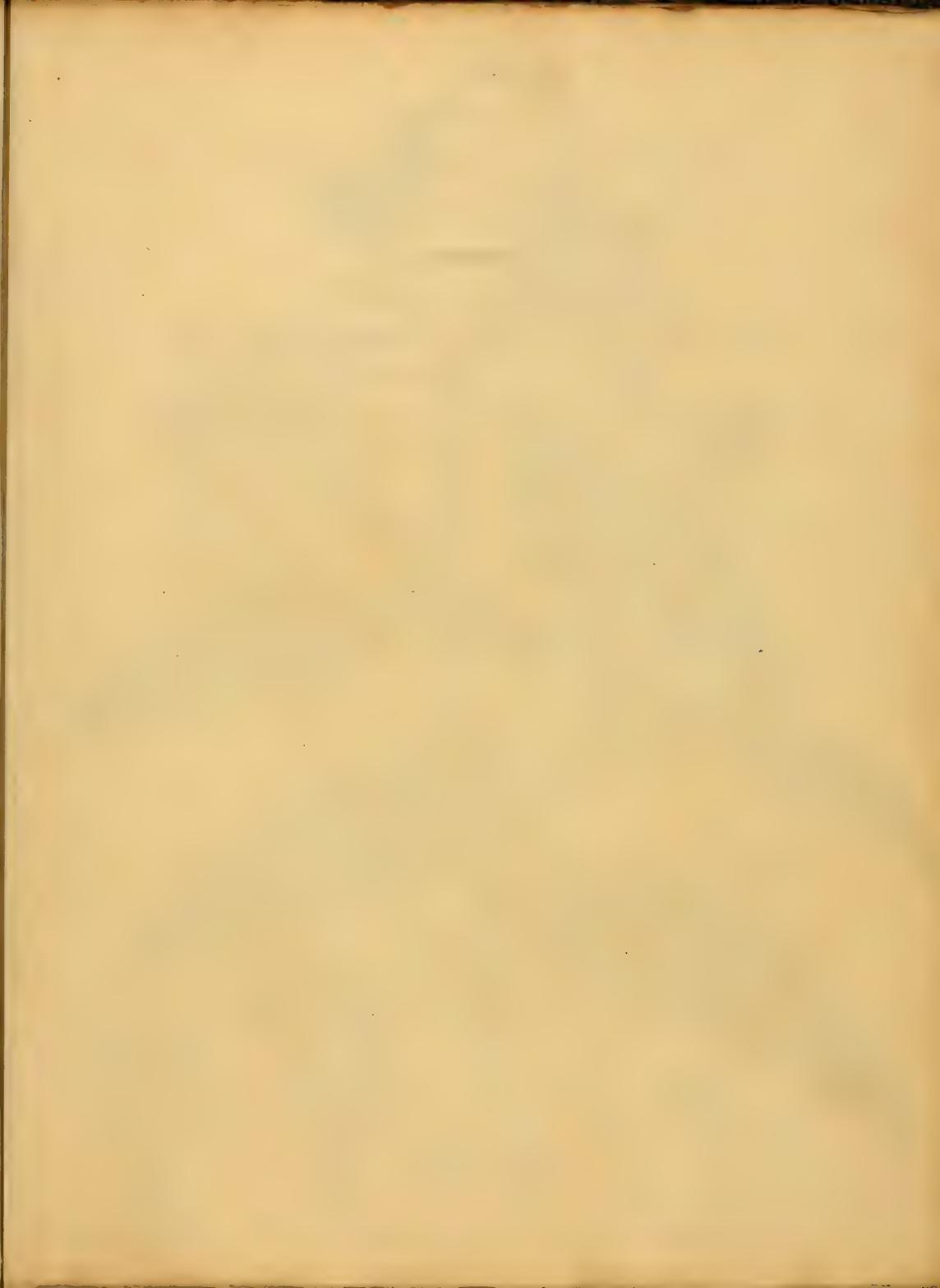


PLATE CCLXXXVI.
HIBISCUS PATERSONIUS.

Norfolk Island Hibiscus.

CLASS XVI. ORDER VI.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX duplex; exterior polyphyllus. Stigmata
5. Capsula 5-locularis, polysperma.

EMPALEMENT double; outer one many-leaved.
Five Summits. Capsule five-celled, many-
seeded.
See HIBISCUS MUTABILIS, Pl. CCXXVIII. Vol. IV.

SPECIFIC CHARACTER.

Hibiscus foliis acuminato-lanceolatis, coriaceis,
supra punctatis, subtus tomentosis; floribus
axillaribus; calycibus monophyllis, quin-
quedentatis.

Hibiscus with tapering lance-shaped leaves,
leathery, dotted above and downy under-
neath; flowers grow from the insertion of
the leaves; cups one-leaved, five-toothed.

REFERENCE TO THE PLATE.

1. The Cup with its foot-stalk.
2. The columnar part of the Chives cut open, the pointal taken away.
3. The Pointal.
4. A skinny membrane, which surrounds the seed-bud at the base.
5. A ripe capsule, with the enlarged cup attached.
6. The same, cut through the middle horizontally.
7. A ripe seed.

THE Norfolk Island Hibiscus is a tender greenhouse plant; was introduced to Britain, in the year 1792, having been raised from seeds communicated by Col. Paterson, then stationed on that Island. It attains the height of 12 feet, or more, becoming a small tree; may be increased readily from cuttings, and should be planted in a mixture of loam and sandy peat. Our figure is from a specimen received from the Right Hon. Lord Viscount Courtenay, in whose collection at Powderham, near Exeter, it flowered for the first time in the year 1800; and where also the seeds ripened.

We have no doubt but this plant belongs to the Genus *Lagunæa*, of Schreber; but as he proposes himself, and as L'Heritier as justly observes, the simplicity of the cup is not a sufficient ground, on which to found a new genus; so we have rather given our present subject, the name under which it is in general known, than adopt a title for it which is acknowledged by the author, as rather unwarrantable.



Nibea glutinosa



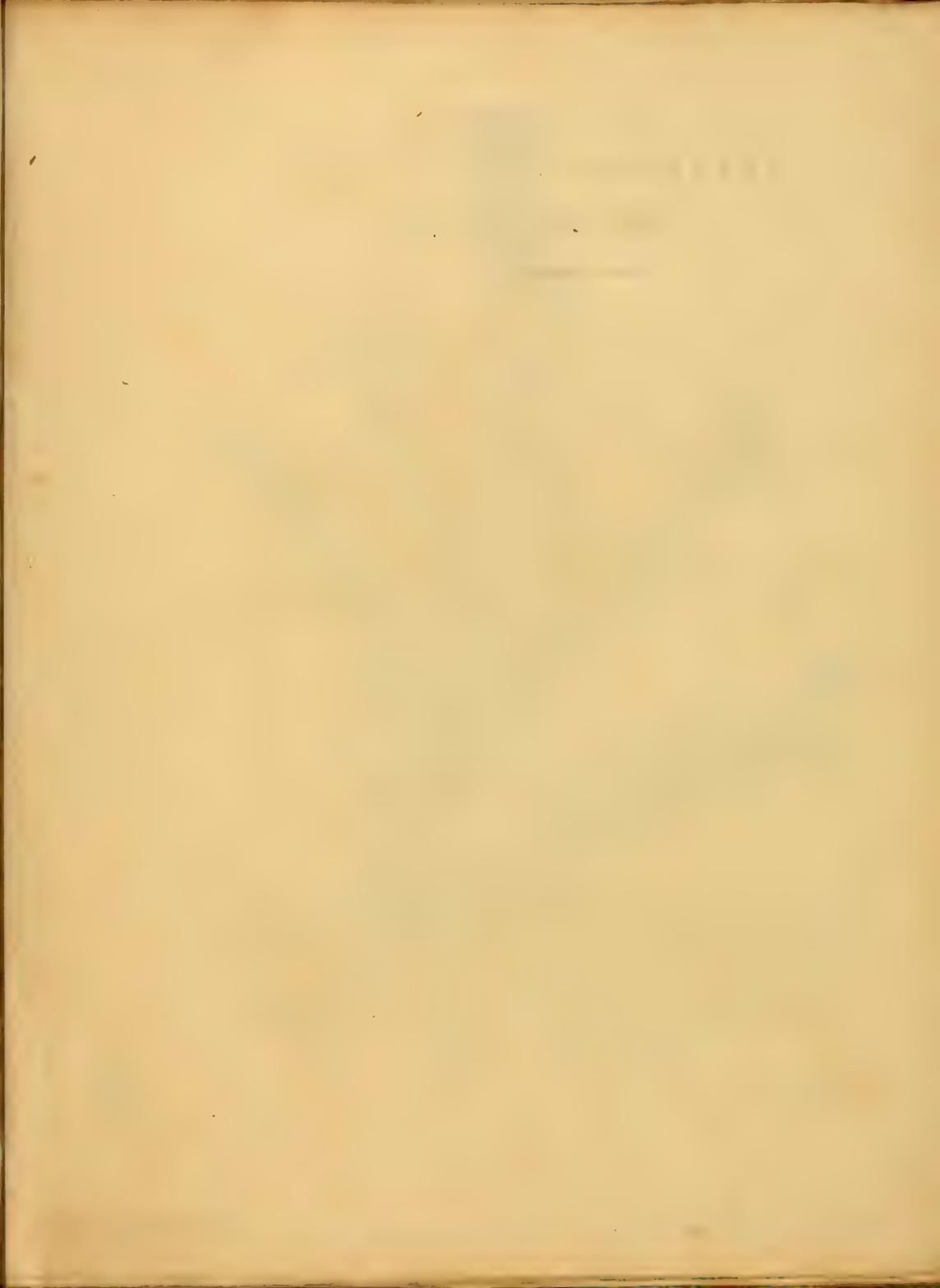


PLATE CCLXXXVII.
STYPHELIA PARVIFLORA.

Small-flowered Styphelia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus. Corolla tubulosa.

STAMINA fauci inferta. Drupa quinquelocularis.
Semina bina.

EMPALEMENT tiled. Blossom tubular.

CHIVES inferted into the mouth of the blossom.
A five celled berry. Seeds by twos.

See STYPHELIA TRIFLORA, Pl. LXXII. Vol. I.

SPECIFIC CHARACTER.

Styphelia foliis lanceolatis, oppositis; floribus
capitatis terminalibus; corollis minutis,
albis.

Styphelia with lance-shaped, opposite leaves;
flowers terminate the branches in heads;
blossom small and white.

REFERENCE TO THE PLATE.

1. The Empalement magnified.
2. A Flower, natural size.
3. The same, magnified.
4. A Blossom, cut open, with the Chives attached.
5. The Pointal, natural size.
6. The same, magnified.

This Styphelia, as are all the known species of the genus, is a native of New Holland, and was amongst the first plants which were raised from seeds from that country. It is a hardy greenhouse plant; grows very bushy, handsome in its foliage, and seldom exceeds two feet in height. It is propagated by cuttings, made from the tender shoots, about the month of April; and treated as directed for other plants natives of the same clime. Should be planted in sandy peat earth.

Our figure was taken from a specimen communicated by Mr. Cuff, from his select collection at Teddington, Middlesex; where it flowered, we believe, for the first time in England, last year, in the month of August, 1802.



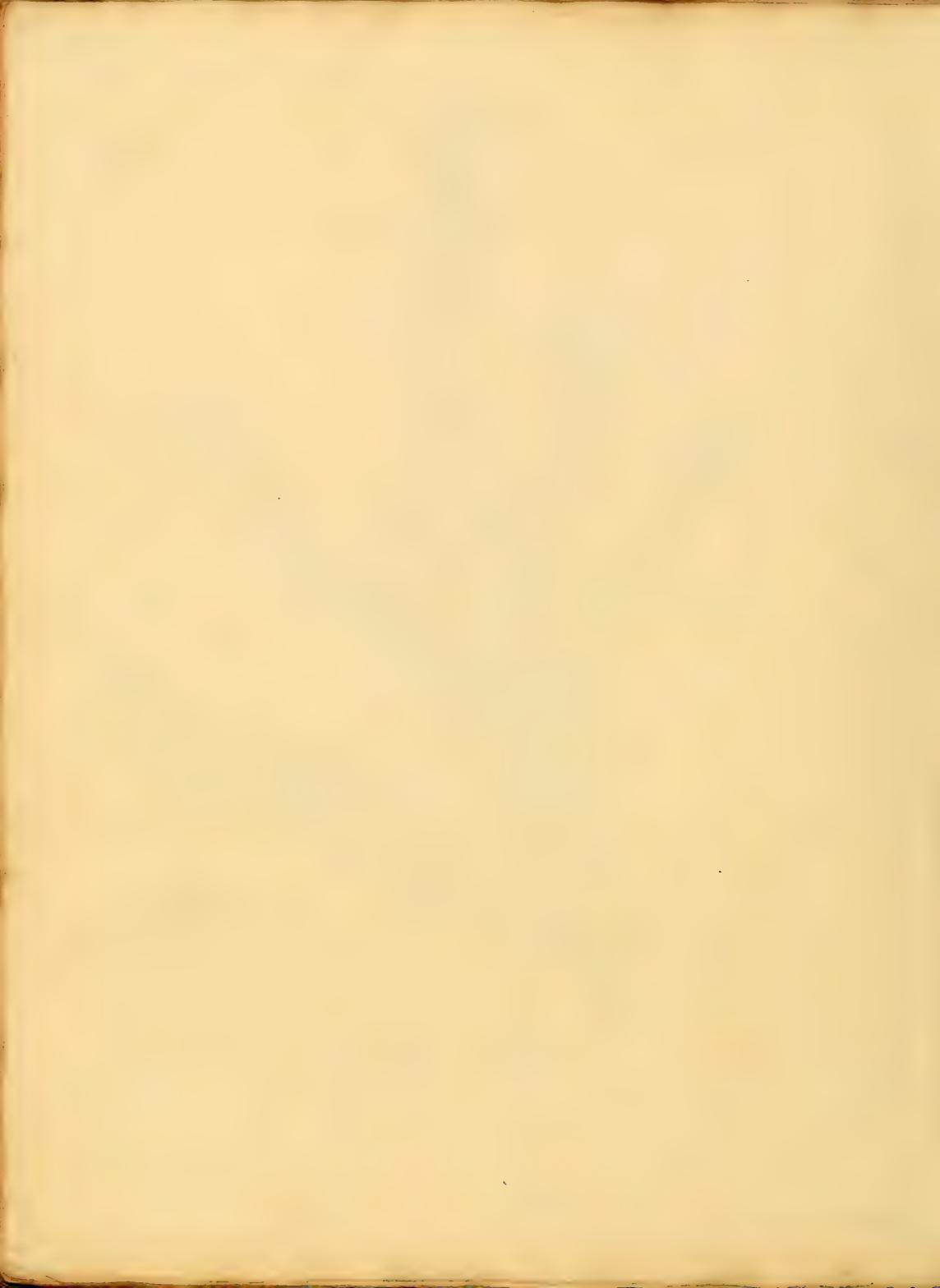
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Styphelia parviflora



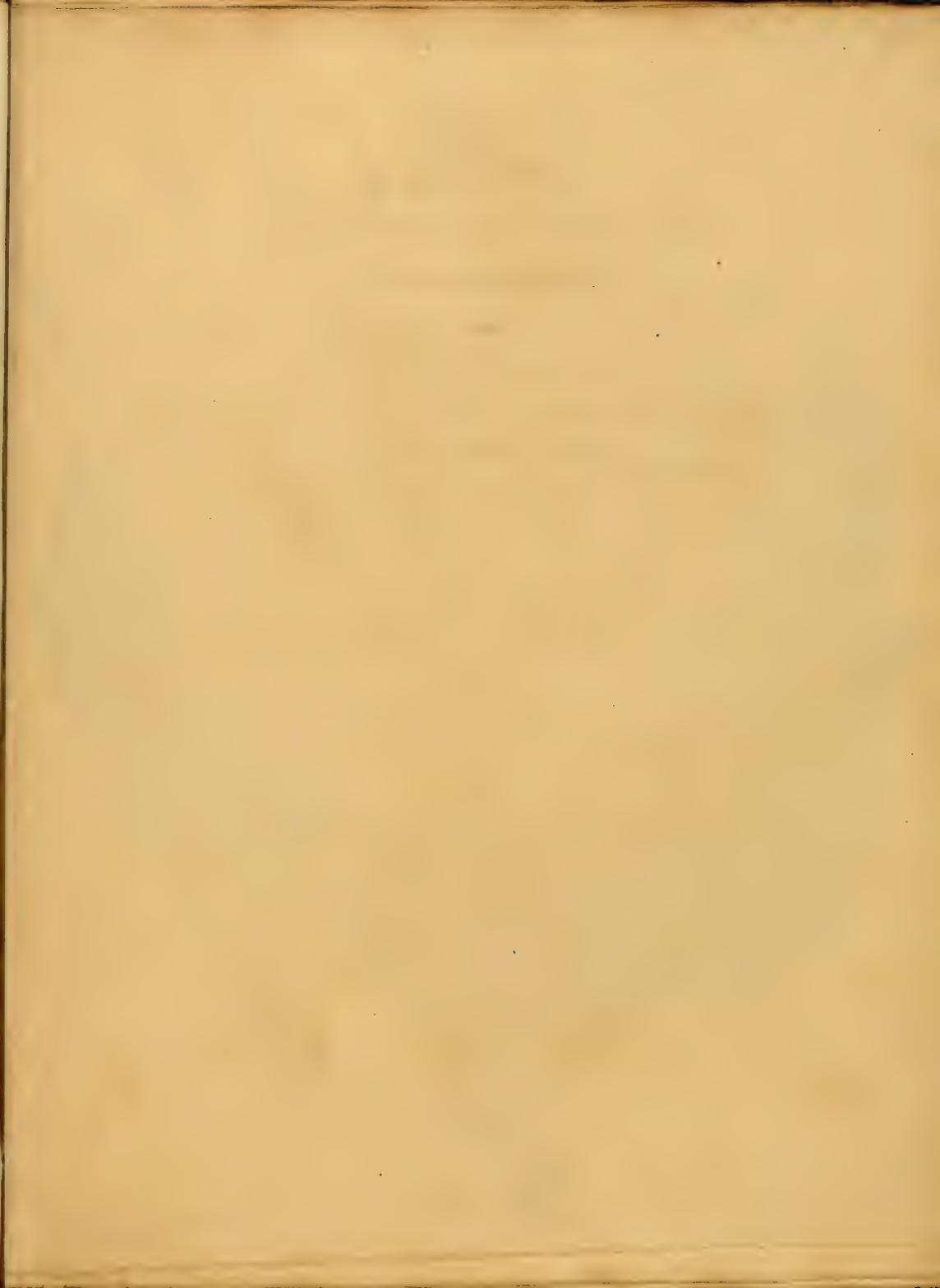


PLATE CCLXXXVIII.
PROTEA CYNAROIDES.

Artichoke-like-flowered Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

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

SEMINA folitaria.

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

SEEDS folitary.

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

SPECIFIC CHARACTER.

Protea foliis suborbiculatis, glaberrimis; petiolis longissimis; squamulis calycinis lanceolatis, apice carinatis.

Protea with nearly orbicular leaves, and very smooth; footstalks very long; scales of the cup lance-shaped, keeled at the point.

REFERENCE TO THE PLATE.

1. A Floret spread open, with the Chives in their places.
2. The Pointal and Seed-bud.

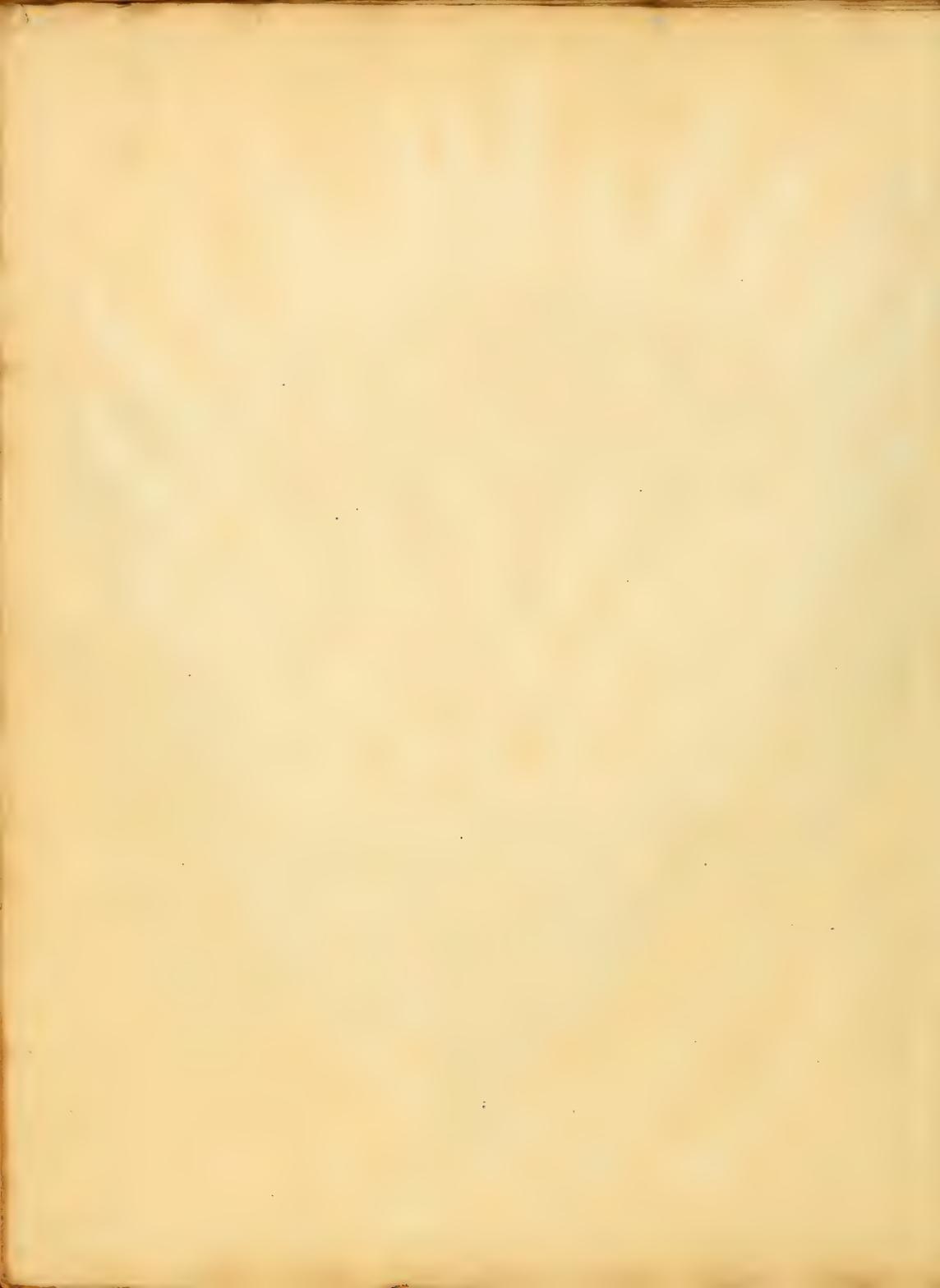
To the Right Hon. the Earl of Coventry we are indebted for the figure of this superb plant; it having flowered in his Lordship's rich, and extensive collection at Croome, Worcesterhire, this present February, 1803, for the first time, in England; his Lordship did us the favour to order the flower to be cut, and sent to London; where it arrived, without the least injury, and continued in perfection many days.

The magnificence of this species of Protea, can be but poorly expressed within the limited bounds of our publication; we have, nevertheless, endeavoured to do it all the justice within our grasp. A considerable part of the lustre of the flower is lost, from the small portion of the leaves which could be introduced; as the contrasted beauty of the fine broad shining leaves, which form, as it were, a nidus, or ground wood for the blossom, contribute, so much, to heighten the beauty of the whole.

The Protea cynaroides is a hardy greenhouse plant, was introduced to Britain, in 1792, by Messrs. Lee and Kennedy, Hammermith, from the Cape of Good Hope. May be increased by cuttings, taken off the lower part of the plant; where they shoot out in clusters to the length of an inch or more, and must be treated as has already been directed for Proteas in general. The plant, even at the Cape, seldom grows higher than 18 inches, or two feet.



Protea cynosuroides



INDEX

TO THE PLANTS CONTAINED IN VOL. III.

Plate 145	Hillia longiflora	Long-flowered Hillia.	H. H.	Shrub.	February.
146	Pforalea aculeata	Prickly Pforalea	G. H.	Shrub.	August.
147	Gladiolus cuspidatus	Spear-spotted Gladiolus	G. H.	Bulb.	May.
148	Lachenalia quadricolor	Four-coloured Lachenalia	G. H.	Bulb.	December.
149	Struthiola ciliata	Fringed-leaved Struthiola	G. H.	Shrub.	August.
150	Geranium pramosum	Bitten-leaved Geranium	H. H.	Shrub.	March.
151	Pittoporum coriaceum	Thick-leaved Pittoporum	G. H.	Shrub.	May.
152	Geranium spathulatum	Spathula-leaved Geranium	G. H.	Shrub.	April.
153	Viola pedata	Bird's-foot-leaved Violet	Har.	Herb.	May.
154	Echium argenteum	Silvery-leaved Viper's Bugloss	G. H.	Shrub.	July.
155	Ixia polytachia	Many-spiked Ixia	G. H.	Bulb.	May.
156	Bankfia ericeifolia	Heath-leaved Bankfia	G. H.	Shrub.	March.
157	Cordia Sebestena	Rough-leaved Cordia	H. H.	Shrub.	April.
158	Geranium echinatum	Prickly-stalked Geranium	H. H.	Shrub.	March.
159	Ixia capitata, <i>Var. fl. albo, fundo nigro.</i>	Bunch-flowering Ixia. <i>Var. white fl. black bottom.</i>	G. H.	Bulb.	May.
160	Aristea major	Spike-flowered Aristea	G. H.	Herb.	July.
161	Hermannia pulverata	Powdered Hermannia	G. H.	Shrub.	April.
162	Verbascum ferrugineum	Rusty-flowered Mullein	Har.	Herb.	April.
163	Amaryllis Fothergillia	Fothergillian Lily-Daffodil	H. H.	Bulb.	May.
164	Galaxia grandiflora	Large-flowered Galaxia	G. H.	Bulb.	February.
165	Echium glaucophyllum	Sea-green-leaved Viper's Bugloss	G. H.	Shrub.	May.
166	Gladiolus abbreviatus	Shortened-petalled Gladiolus	G. H.	Bulb.	March.
167	Brunsfelia undulata	Waved-flowered Brunsfelia	H. H.	Shrub.	March.
168	Geranium pictum	Painted-flowered Geranium	H. H.	Shrub.	April.
169	Crinum giganteum	Gigantic Afpoddell-Lily	H. H.	Bulb.	August.
170	Ixia Bulbocodium <i>Var. fl. speciosissimo</i>	Crocus-leaved Ixia. <i>Var. most beautiful flower</i>	G. H.	Bulb.	March.
171	Hypoxis linearis	Linear-leaved Hypoxis	G. H.	Bulb.	March.
172	Anemone palmata	Cyclamen-leaved Portugal Anemone	Har.	Herb.	May.
173	Geranium roseum	Rosy Geranium	H. H.	Shrub.	March.
174	Antholyza tubulosa	Tubular Antholyza	G. H.	Bulb.	June.
175	Melaleuca ericeifolia	Heath-leaved Melaleuca	G. H.	Shrub.	July.
176	Cratæva Capparoides	Caper-like Cratæva	H. H.	Shrub.	June.
177	Ixia punctata	Dotted-flowered Ixia	G. H.	Bulb.	May.
178	Ferraria pavonia	Mexican Ferraria	H. H.	Bulb.	July.
179	Amaryllis reticulata	Netted-flowered Lily-Daffodil	H. H.	Bulb.	May.
180	Atragene austriaca	Austrian Atragene	Har.	Herb.	May.
181	Vaccinium virgatum	Green-twigged Whortle-berry	Har.	Shrub.	June.
182	Malva divaricata	Straddling-branched Mallow	G. H.	Shrub.	June.
183	Gardenia tubiflora	Tube-flowered Gardenia	H. H.	Shrub.	July.
184	Pergularia minor	Smaller West-Coast Creeper	H. H.	Shrub.	August.
185	Pergularia odoratiflora	Sweet Pergularia, or Chinese Creeper	H. H.	Shrub.	August.
186	Ixia speciosa	Deep Crimson Ixia	G. H.	Bulb.	May.
187	Echites suberecta	Oval-leaved Echites	H. H.	Shrub.	May.
188	Gladiolus campanulatus	Bell-flowered Gladiolus	G. H.	Bulb.	May.
189	Zinnia verticillata	Double Zinnia	Har.	Ann.	August.
190	Geranium astragalifolium	Astragalus-leaved Geranium	H. H.	Shrub.	July.
191	Platylobium foliopendrum	Scolopendra-like-stemmed Platylobium	G. H.	Shrub.	May.
192	Antholyza fulgens	Refulgent-flowered Antholyza	G. H.	Bulb.	May.
193	Geranium lineare	Linear-petalled Geranium	H. H.	Shrub.	July.
194	Hemerocallis alba	White Day-Lily	G. H.	Herb.	August.
195	Hypoxis obliqua	Oblique-leaved Hypoxis	G. H.	Herb.	June.
196	Ixia maculata	Spotted-flowered Ixia	G. H.	Bulb.	May.
197	Nymphaea cerulea	Blue Water-Lily	G. H.	Aqua.	July.
198	Bauera rubioides	Three-leaved Bauera	G. H.	Shrub.	August.
199	Camellia japonica. <i>Var. fl. rub. pleno</i>	Double Red Camellia	G. H.	Shrub.	January.
200	Melaleuca hypericifolia	St. John's-wort-leaved Melaleuca	G. H.	Shrub.	September.
201	Aizoon canariense	Purslane-leaved Aizoon	H. H.	Herb.	July.
202	Samyda ferrulata	Sawed-leaved Samyda	H. H.	Shrub.	July.
203	Ixia columnaris	Columnar-chived Ixia	G. H.	Bulb.	June.
204	Geranium laciniatum. <i>Var. fl. purp.</i>	Ragged-leaved Geranium. <i>Purp. fl. Var.</i>	H. H.	Shrub.	June.
205	Platylobium laeocolatum	Lance-shaped-leaved Flat-Pea	G. H.	Shrub.	November.
206	Dracæna borealis	Oval-leaved Dracæna	Har.	Herb.	July.
207	Mimosa longifolia	Long-leaved Mimosa	G. H.	Shrub.	March.
208	Lasiopetalum ferrugineum	Rusty Woolly-blossom	G. H.	Shrub.	March.
209	Geranium melananthum	Black-flowered Geranium	H. H.	Shrub.	June.
210	Antholyza Erihoniæca	Broad-leaved Antholyza	G. H.	Bulb.	June.
211	Ixia columnaris. <i>Var. vesicolor.</i>	Columnar-chived Ixia. <i>Changeable fl. Var.</i>	G. H.	Bulb.	June.
212	Pogonia debilis	Twining Pogonia	G. H.	Shrub.	September.
213	Ixia colummaris. <i>Var. latifolia.</i>	Columnar-chived Ixia. <i>Broad-leaved Var.</i>	G. H.	Bulb.	June.
214	Westeringia rosmarinacea	Rosemary-like Westeringia	G. H.	Shrub.	September.
215	Embothryum faliguum	Willow-like Embothryum	G. H.	Shrub.	May.
216	Epidendrum finense	Chinese Epidendrum	H. H.	Shrub.	September.

ERRATA.

- Plate 153, Order, dele *polygamia*.
 163, Sp. Ch. lin. 2, genitalibus, lege, *genitalibus*.
 171, Sp. Ch. lin. 2, longiore, lege, *longior*.
 175, Sp. Ch. lin. 2, enerviis, lege, *enerviis*.
 Ref. lin. 1, for, one which, read, *one of which*.
 184, Gen. Ch. Nest. lin. 1, exterium, lege, *exterius*. Lin. 4, interium, lege, *interius*.
 188, Sp. Ch. lin. 2, longior, lege, *longiore*.
 189, Sp. Ch. lin. 1, for, without, read, *with*.
 191, Gen. Ch. Stam. lin. 3, affurentia, lege, *assurgentia*.
 197, Gen. Ch. Carol. lin. 1, quindecim, lege, *quindecim*.
 200, Sp. Ch. lin. 2, uninerviis, lege, *uninerviis*.
 202, Gen. Ch. Stam. lin. 2, octodecem, lege, *octodecim*.
 206, Order, for Pointals, read, *Pointal*. Gen. Ch. Pist. lin. 2, staminium,
 lege, *staminum*.
 207, Sp. Ch. lin. 1, post, integris, inf. (,)
 210, Sp. Ch. lin. 2, corolla, lege, *corollæ*.

I N D E X

TO THE PLANTS CONTAINED IN VOL. IV.

Plate 217	<i>Paffiflora maliformis</i>	Apple-fruited Passion-flower	II. H. Shrub.	July.
218	<i>Embothrium buxifolium</i>	Box-leaved Embothrium	G. H. Shrub.	September.
219	<i>Gladiolus cuspidatus, Var. petalis crispis</i>	Spear-spotted Gladiolus, <i>With crimped petals</i>	G. H. Bulb.	May.
220	<i>Maffonia feabra</i>	Rough-leaved Maffonia	G. H. Bulb.	March.
221	<i>Wurmbea capensis, Var. B.</i>	Cape Wurmbea, <i>Var. 2</i>	G. H. Bulb.	May.
222	<i>Geranium radiatum</i>	Rayed-leaved Geranium	G. H. Herb.	July.
223	<i>Clusia flava</i>	Yellow-flowered Balsam-tree	H. H. Shrub.	September.
224	<i>Geranium reflexum</i>	Reflexed-leaved Geranium	G. H. Herb.	July.
225	<i>Gnidia oppositifolia</i>	Opposite-leaved Gnidia	G. H. Shrub.	April.
226	<i>Magnolia pumila</i>	Dwarf Magnolia	G. H. Shrub.	September.
227	<i>Gladiolus ringens, Var. multiflorus</i>	Gaping Gladiolus, <i>many flowered Var.</i>	G. H. Bulb.	May.
228	<i>Hibiscus mutabilis, Var. flore pleno</i>	Changeable-rose Hibiscus, <i>Double-flow. Var.</i>	II. H. Shrub.	November.
229	<i>Magnolia fucata</i>	Brown-stemmed Magnolia	G. H. Shrub.	April.
230	<i>Dodonaea triquetra</i>	Three-sided Dodonaea	G. H. Shrub.	March.
231	<i>Cerbera Ahouai</i>	Oval-leaved Cerbera	H. H. Shrub.	July.
232	<i>Ixia capitata, Var. stellata</i>	Bunch-flowering Ixia, <i>Star-flowered Var.</i>	G. H. Bulb.	May.
233	<i>Melanthium viride</i>	Green-flowered Melanthium	G. H. Bulb.	July.
234	<i>Protea spicata</i>	Spike-flowered Protea	G. H. Shrub.	May.
235	<i>Mimosa difcolor</i>	Two-coloured-leaved Mimosa	G. H. Shrub.	September.
236	<i>Hypoxis felitata, Var. flore albo</i>	Star-flowered Hypoxis, <i>White Variety</i>	G. H. Bulb.	April.
237	<i>Cytisus tomentosus</i>	Downy-leaved Cytisus	G. H. Shrub.	August.
238	<i>Roëlla decurrens</i>	Decurrent-leaved Roëlla	G. H. Ann.	August.
239	<i>Geranium felinum</i>	Rock-parley-leaved Geranium	G. H. Herb.	June.
240	<i>Gladiolus carneus</i>	Flesh-coloured Gladiolus	G. H. Bulb.	May.
241	<i>Gladiolus orchidiflorus</i>	Orchis-like-flowered Gladiolus	G. H. Bulb.	March.
242	<i>Xeranthemum fasciculatum</i>	Bundled-leaved Everlasting-flower	G. H. Shrub.	May.
243	<i>Protea lagopus</i>	Woolly-leaved Protea	G. H. Shrub.	June.
244	<i>Hemerocallis graminea</i>	Grass-leaved Day-Lily	Har. Herb.	June.
245	<i>Ixia pumila</i>	Dwarf-blue Ixia	G. H. Bulb.	April.
246	<i>Geranium incrassatum</i>	Fleshy-leaved Geranium	G. H. Herb.	July.
247	<i>Geranium ciliatum</i>	Fringed-leaved Geranium	G. H. Herb.	July.
248	<i>Protea umbellata</i>	Umbellated Protea	G. H. Shrub.	August.
249	<i>Pitcairnia sulphurea</i>	Sulphur-colourèd Pitcairnia	H. H. Herb.	April.
250	<i>Ixia columnaris, Var. grandiflora</i>	Columnar-chived Ixia, <i>Large-flowered Var.</i>	G. H. Bulb.	June.
251	<i>Lachenalia purpureo-cerulea</i>	Sweet violet-coloured Lachenalia	G. H. Bulb.	April.
252	<i>Hebenfretia aurea</i>	Golden-flowered Hebenfretia	G. H. Shrub.	August.
253	<i>Talinum patens</i>	Panicled Purslane	H. H. Ann.	August.
254	<i>Geranium procumbens</i>	Procumbent Geranium	G. H. Shrub.	May.
255	<i>Moræa Northiana</i>	Northian Moræa	II. H. Herb.	July.
256	<i>Ixiamaculata, Var. minor, flo. purpureo</i>	Spotted-flowered Ixia, <i>Small Var. purp. flo.</i>	G. H. Bulb.	June.
257	<i>Falkia repens</i>	Creeping Falkia	G. H. Herb.	August.
258	<i>Bankfia præmorsa</i>	Bitten-ended-leaved Bankfia	G. H. Shrub.	July.
259	<i>Geranium pilosum</i>	Hairy Geranium	G. H. Herb.	July.
260	<i>Ornithogalum odoratum</i>	Sweet-scented Star of Bethlehem	G. H. Bulb.	June.
261	<i>Cameraria latifolia</i>	Bastard Mangenel	H. H. Shrub.	August.
262	<i>Xeranthemum spirale</i>	Spiral-leaved Everlasting-flower	G. H. Shrub.	July.
263	<i>Vaccinium staminium</i>	Green-wooded Whortle-berry	Har. Shrub.	June.
264	<i>Protea glomerata</i>	Woolly-headed Protea	G. H. Shrub.	August.
265	<i>Cyrtanthus obliquus</i>	Oblique-leaved Cyrtanthus	G. H. Bulb.	July.
266	<i>Platylobium ovatum</i>	Oval-leaved Flat-Pea	G. H. Shrub.	July.
267	<i>Jatropha pandurifolia</i>	Fiddle-leaved Physic-Nut	H. H. Shrub.	July.
268	<i>Gladiolus plicatus</i>	Plaited-leaved Gladiolus	G. H. Bulb.	May.
269	<i>Geranium laciniatum, Var. bicolor</i>	Ragged-leaved Geranium, <i>Two-coloured flower Var.</i>	G. H. Herb.	July.
270	<i>Protea pulchella</i>	Waved-leaved Protea	G. H. Shrub.	September.
271	<i>Aclepias gigantea</i>	Gigantic Swallow-wort	II. H. Shrub.	August.
272	<i>Embothrium lineare</i>	Narrow-leaved Embothrium	G. H. Shrub.	July.
273	<i>Lobelia pinifolia</i>	Pine-leaved Lobelia	G. H. Shrub.	July.
274	<i>Ornithogalum lacteum</i>	Large White-flowered Star of Bethlehem	G. H. Bulb.	July.
275	<i>Gladiolus ringens, Var. undulatus</i>	Gaping-flowered Gladiolus, <i>Waved-flowered Var.</i>	G. H. Bulb.	June.
276	<i>Monfonia filia</i>	Hairy-leaved Monfonia	G. H. Herb.	July.
277	<i>Protea speciosa, Var. foliis glabra</i>	Smooth-leaved fleshy Protea	G. H. Shrub.	October.
278	<i>Melaleuca coronata</i>	Flax-leaved Melaleuca	G. H. Shrub.	August.
279	<i>Xeranthemum fasciculatum, Var. fl. al.</i>	Bundle-leaved Everlasting-flower, <i>White Var.</i>	G. H. Shrub.	August.
280	<i>Pertonia latifolia</i>	Broad-leaved Pertonia	G. H. Shrub.	November.
281	<i>Metrofidera hirsuta</i>	Hairy Metrofidera	G. H. Shrub.	November.
282	<i>Geranium spatulatum, Var. curviflo.</i>	Spatula-leaved Geranium, <i>Curled-fl. Var.</i>	G. H. Herb.	July.
283	<i>Pogonia glabra</i>	Smooth-leaved Pogonia	G. H. Shrub.	March.
284	<i>Chiocecca racemosa</i>	Opposite-leaved Snowberry-tree	H. H. Shrub.	July.
285	<i>Ferraria viridiflora</i>	Green-flowered Ferraria	G. H. Bulb.	July.
286	<i>Hibiscus Paterfonius</i>	Norfolk Island Hibiscus	G. H. Shrub.	August.
287	<i>Styphelia parviflora</i>	Small-flowered Styphelia	G. H. Shrub.	May.
288	<i>Protea cynaroides</i>	Artichoke-like-flowered Protea	G. H. Shrub.	January.

ERRATA.

- Plate 217, *Puffinora maliformis*. For Plate CCVII, put, CCXVII.
218, To No. 1 and 2 of the reference to the plate, add, *magnified*.
226, Gen. Char. Clives, line 4, for, fixed on side, read, *fixed on each side*.
233, For, Order I, read, Order III, for monogynia, read, *trigynia*, and for One Pointal,
read, Three Pointals. Blossom, after claws put a comma.
235, English name. For, two coloured leaved, read, *two-coloured-leaved*.
245, Char. Spec. line 2, dele (,) post *longitudine*.
257, Gen. Char. Pift. Pro Germen, lege, *Germina*.
270, Specific Char. line 3, for flower head, read, *flower-head*.
276, Gen. Char. Corolla. Post obovata pone comma.
282, *Geranium spathulatum*, for, Plate CCLXX, put, CCLXXXII.

