THE

BOTANICAL REGISTER:

CONSISTING OF

Coloured Figures

OF

EXOTIC PLANTS,

CULTIVATED IN

BRITISH GARDENS;

WITH THEIR

HISTORY AND MODE OF TREATMENT.

THE DESIGNS BY

Sydenham Edwards,

AND OTHERS.

VOL. VI.

——viret semper——nec fronde caducâ
Carpitur.

LONDON:
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1820.

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APPENDIX TO THE CATALOGUES OF BOOKS

IN THE

FOREGOING FIVE VOLUMES;

OR,

List of Books quoted in the Sixth Volume and which have not been enumerated in the Lists given in any of the other Volumes.

ACTES de la soc. d'hist. nat. de Paris. Actes de la Société d'Histoire Naturelle de Paris. Tom. 1. 1 partie. Paris, 1792. fol.

Adanson fam. Familles des Plantes. Par M. Adanson. Paris, 1763. 2 Parties. 8vo.

*Barton's elem. of bot. ed. Lond.** Elements of Botany, or outlines of the Natural History of Vegetables, illustrated by thirty Plates. By Benjamin Smith Barton. Revised, with notes by the english Editor. London, 1804. 8vo.

Boccon. sic. Icones et descriptiones rariorum plantarum Siciliæ, Melitæ, Galliæ et Italiæ; auctore Paulo Boccone. Oxonii, 1674. 4to.

Bork. holz. Versuch einer forstbotanischen Beschreibung der in den Hessen-Darmstädtischen landen im freien wachsenden Holzarten. Von Moriz Balthasar Borkhausen. Francfurt am Main, 1790. 8vo.

Bory de St. Vincent voy. Voyage dans les quatre principales Iles des Mers d'Afrique, fait par ordre du gouvernement, pendant les années 1801 et 1802. Par J. B. G. M. Bory de St. Vincent. Paris, 1804. 3 vol. 8vo.

Bosc. dict. d'agr. Annales de l'Agriculture Françoise par Messrs. Tessier et Bosc. Paris, 1799. 68 vol. 4 vol. par an. seqq.

Brown's botany of Congo. Observations systematical and geographical on the Herbarium collected by Professor Christian Smith, in the vicinity of the Congo, during the expedition to explore that river under the command of Captain Tuckey, in the year 1816. By Robert Brown. London, 1818. 4to.

Bulletin. Bulletin des Sciences, par la Société Philomatique. Paris, 1791—1805. 4to.

Decand. monsp. Augustin Pyramus de Candolle Catalogus plantarum horti botanici Monspeliensis, addito observationum circa species novas aut non satis cognitas fasciculo. Monspelii, 1813. 8vo.

* This book should have been inserted in the Catalogue of the Second Volume.

Desfont. cat. (ou *tabl.*) Tableau de l'école de botanique du jardin du Roi. Par M. Desfontaines. Ed. 2. Paris, 1815. 8vo.

Edinb. philos. journ. Edinburgh Philosophical Journal. Edinburgh, 1819. Vol. 1. seqq.

Ehret pict. Plantæ et Papiliones rariores depictæ et ære incisæ à Geo. Dion. Ehret. Tabulæ 15. Londini, 1748—1759. fol.

Gaterau montaub. Description des plantes qui croissent aux environs de Montauban ou qu'on cultive dans les jardins. Par M. Gaterau. Montauban, 1789. 8vo.

Gmel. bad. als. Carol. Christ. Gmelin. Flora Badensis-Alsatica. Carlsruhæ, (1) 1805, (2) 1806, (3) 1808. 8vo.

Gron. fl. orient. Flora orientalis, sive Recensio Plantarum quas Leonhardus Rauwolfius annis 1573, 1574, 1575, in Syria, Arabia, Mesopotamia, Babylonia, Assyria, Armenia, Judæa crescentes observavit et collegit. Curâ Johan. Fred. Gronovii. Lugduni-Batavorum, 1755. 8vo.

Haworth succ. suppl. Supplementum plantarum succulentarum, sistens plantas novas vel nuper introductas sive omissas in Synopse Plantarum Succulentarum. Aut. A. H. Haworth. Londini, 1719. 8vo.

Hughes barbad. The Natural History of Barbados, by Griffith Hughes. London, 1750. fol.

Knight et Salisb. prot. On the cultivation of the plants belonging to the natural order of PROTEEÆ, with their generic as well as specific characters and places where they grow wild. By Joseph Knight. London, 1809. 4to.

Lagasca gen. et spec. Genera et Species Plantarum, quæ aut novæ sunt aut nondum rectè cognoscuntur. Auct. Mariano Lagasca. Matriti, 1816. 4to. Cum Elench. impress. (Vid. cat. vol. 4. ad *Lag. elench.* ubi annus 1816, non 1716 ponendus).

Lehmann asperif. Plantæ è familia Asperifoliarum nuciferæ. Descripsit Joannes Geo. Christ. Lehmann. Berolini, 1818. Partes 2. seqq. 4to.

Lobel adv. Stirpium adversaria nova, auctoribus Petro Pena et Matthia de Lobel. Londini, 1571. fol. Matthiæ de Lobel adversariorum pars. ib. 1605. fol.

Marsch. bieb. fl. taur. cauc. suppl. Flora Taurico-caucasica. Auct. L. B. Friderico Marschall à Bieberstein. Supplementum continens plantas phanerogamas per Tauriam atque Caucasum, post edita priora volumina, detectas, et in pristinas animadversiones. Charkouiæ, 1819. 8vo.

Mér. par. Nouvelle Flore des environs de Paris. Par F. V. Mérat. Paris, 1812. 8vo.

Muhlenb. catal. Catalogus Plantarum Americæ Septentrionalis hucusque cognitarum indigenarum et cicurum. By Henry Muhlenberg. Edit. 2. Philadelphia, 1818. 8vo.

Münch. hausv. Der Hausvater. (Auctore Von Münchausen). Hannover. (Zweyter Theil, 1766). 8vo.

Petiv. mus. Musæi Petiveriani Centuria prima Rariora Naturæ continens. A Jacobo Petiver. Londini, 1695. 8vo.

Pollich palat. Joh. Adam Pollich. Historia Plantarum in Palatinatû sponte nascentium. Manheim, 1776. vol. 3. 8vo.

Rau enum. Enumeratio Rosarum circa Wirceburgum et pagos adjacentes sponte crescentium cum earum definitionibus descriptionibus et synonymis, &c. &c. Auct. Ambrosio Rau. Cum tab. æneâ pictâ. Norimbergæ, 1816. 8vo.

Roloff ind. h. craus. Christ. Lud. Roloff. Index Plantarum Horti Krausiani. Berolini, 1746. 8vo.

Roxb. fl. ind. Flora Indica, or descriptions of Plants by the late Dr. Roxburgh. Edited by William Carey. To which are added descriptions of Plants more recently discovered by Nathaniel Wallich, Superintendent of the Botanic Garden at Calcutta. Serampore, 1820. Vol. 1. seqq. 8vo.

Russell alepp. The Natural History of Aleppo, by Alex. Russell. 2d Edition. Revised by Patrick Russell. London, 1794. 2 vol. 4to.

Smith new holl. A specimen of the Botany of New Holland, by J. E. Smith. London, 1793. 4to.

Sprengel cent. spec. minùs cogn. Novi Proventus Hortorum Academicorum Halensis et Berolinensis. Centuria specierum minus cognitarum, quæ vel per annum 1818 in horto halensi et berolinensi floruerunt vel siccæ missæ fuerunt. Auct. C. Sprengel. Halæ, 12mo.

Trattinick archiv. der gewachs. Archiv der gewachskunde. Wienn, 1811; seqq. 4to.

Trattinick obs. bot. Idem. Observationes botanicæ Tabularium rei herbariæ illustrantes. Viennæ, 1811; seqq. 4to.

Viviani fl. ital. Dom. Viviani. Floræ Italicæ fragmenta. Genuæ, 1808; seqq. 4to.

Wahl. carp. Georgii Wahlenberg. Flora Carpathorum principalium. Gottingæ, 1814. 8vo.

Zanon. ist. bot. Istoria Botanica di Giacomo Zanoni. Bologna, 1675. fol.

ERRATA.

Vol. 2. fol. 142. l. 5. for "*Jussieu gen.* 207." read "*Jussieu gen.* 307."
Vol. 2. fol. 152. l. 14. for "*Barton's elem. of bot. ed. Lond.*" read "*Barton's elem. of bot. Lond. ed. append.* 30. *tab.* 25."
Vol. 3. fol. 220. l. 5. pro "*Div. II.*" lege "*Div. IV.*"
Vol. 3. fol. 245; overleaf, l. 7. *for* "broader than long" *read* "longer than broad."
Vol. 3. fol. 258. l. 9. pro "*abiuus*" lege "*abiens.*"
Vol. 4. in cat. libr. p. iv. l. 16. for "1716" read "1816."
Vol. 4. fol. 265. l. 7. pro "*vol.* 1. *fol.* 43." lege "*vol.* 4. *fol.* 221."
Vol. 4. fol. 339; overleaf, l. 6. for "remitted" read "transmitted."
Vol. 4. fol. 349. l. 8. of the english text. Leave out the words "or, as it is."
Vol. 5. fol. 350; overleaf, last line but one, for "but might" read "but the name from the above work might."
Vol. 5. fol. 365. l. 5; from the bottom, after "form of" add "*a.*"
Vol. 5. fol. 366. l. 4. from the bottom, for "of these distinguished" read "of these, which is distinguished."
Vol. 5. fol. 377. l. 2. of the english text, for "with that in" read "the one in."
Vol. 5. fol. 404. l. 17; pro "Achenia *plurima*" pone "*Achenia* plurima."
Vol. 5. fol. 432; overleaf, l. 18, 19; for "shows that excellent horticulturist to have intended" read "shows that that excellent horticulturist intended."
Vol. 5. fol 435. l. 16. pro "*ungulati*" lege "*angulati.*"
Vol. 5. both Indexes in this Volume, for "Mespilus japonicus" read "Mespilus japonica."
Fol. 440; overleaf, l. 16. for "LEUCAJUM" read "LEUCOJUM."
Fol. 441; overleaf, last line: for "OLEA *odoratissima*" read "OLEA *fragrans.*"
Fol. 448. l. 13. à calce paginæ: pro "*Wahl cauc.*" pone "*Wahl carp.*"
Fol. 450. l. 3. for "*Cuckow-point*" read "*Cuckow-pint.*"
Fol. 480; overleaf, l. 3, for "Donn" read "Don."
Fol. 509. l. 11. pro "capoque" *lege* "scapoque."
In the several Indexes to the volumes preceding the present, for "Euphorbia punicea, vol. 3. 199." read "Euphorbia punicea. vol. 3. 190."

ALPHABETICAL INDEX TO VOLUME VI.

Hart. del. Pub. by J. Ridgway 170 Piccadilly March 1. 1820. J. Walls sc.

JASMINUM undulatum.

China Jasmine.

DIANDRIA *MONOGYNIA.*

Nat. ord. JASMINEÆ. *Jussieu gen.* 104. *Div. II.* Fructus baccatus.
JASMINEÆ. *Brown prod.* 2. 520.
JASMINUM. Suprà vol. 1. *fol.* 1.

Div. Folia simplicia.

J. *undulatum*, foliis cordato-oblongis nitidis, ramis pedunculisque hirtis, pedunculis subtrifloris, laciniis calycinis rectis. *Vahl enum.* 1. 27; *(exclus. syn. Burmanni).*

Jasminum undulatum. *Willd. sp. pl.* 1. 36; *(excl. syn. Rheedei).*

Mogorium undulatum. *Lamarck encycl.* 4. 212.

Nyctanthes undulata. *Linn. sp. pl. ed.* 2. 1. 8; *(excl. syn. Rheedei).*

Arbuscula. Caulis *erectus, (ramosissimus, cortice subcastaneo-fuscâ:* rami *subbrachiato-ramulosi, elongati, diffusi, supernè volubiles, numerosè foliosi,* nob.), *teretes, uti ramuli petioli pedunculi calycesque è villis copiosis hirti.* Folia *brevitèr petiolata, opposita, vix bipollicaria, attenuata, subundulata, avenia, nervosa.* Pedunculi *breves ex apice ramulorum.* Flores *albi tres vel plures.* Calycis *laciniæ setaceæ.* Corollæ *limbus 8-fidus: laciniæ oblongæ.* Vahl loc. cit.

We do not know of any published figure of this rare species. It has not appeared in the Hortus Kewensis, nor have we met with it among the numerous East Indian ones observed by Dr. Roxburgh; at least we find no mention of it in the manuscripts of that botanist in the Banksian Library.

We were favoured with the specimen from a plant which flowered in Lady Aylesford's collection at Stanmore; but have never heard that the species has been seen in blossom in any other of our gardens. Very strong plants of it are growing at Messrs. Colville's nursery in the King's Road, Chelsea, where they are kept in the hothouse.

Native of China, and apparently more nearly related to JASMINUM *angustifolium* than to any other; but in that the branches have scarcely any fur, the foliage is far more widely apart than in this, scarcely undulate and of a lighter green, the flowers of much larger dimensions, and the leaves with an even ovately rounded, instead of a cordately indented, base. The two agree however in the curious upright straight setaceously narrowed segments of the calyx.

A bushily branched dark full-leaved *shrub*, having a thickish straight tall clean stem with an opaque chesnut-brown bark: *branches* brachiately subdivided, long, twining at the upper part, numerously leaved, round, like the branchlets petioles peduncles and calyxes covered with a close short roughish fur. *Leaves* cordate, oblong, of a dark dingy glossy green, shortly petioled, opposite, $1\frac{1}{2}$-2 inches long, tapered, slightly waved, veinless, nerved. *Peduncles* generally three-flowered. *Flowers* white. Segments of the *calyx* narrow, setiform, straight. *Limb* of the *corolla* eight-parted, stellate: *segments* oblong.

Jasminum and Nyctanthes are now the only genera comprised in the Order *Jasmineæ;* abundantly distinguished, as Mr. Brown observes, from the *Oleinæ*, lately detached from them, by the difference of the situation of the ovula, as well as of the structure of the seed, the mode in which the corolla is divided and its æstivation (or the way it is disposed in the bud-state). Neither is there any resemblance between the general appearances of the two orders; though they coincide in so far as that both have a diandrous regular corolla and a fruit which is either berried or capsular.

The *Jasmineæ*, freed from the *Oleinæ* (or Olive-tribe), have been defined by Mr. Brown in the first part of the Prodromus of his Flora of New Holland, and the following is our version of that character.

Species shrubby and generally twining. *Leaves* opposite, usually compound, ternate or pinnate with an odd leaflet at the end, sometimes simple; *petiole* jointed in most. *Flowers* of the corymbs opposite. *Calyx* of one piece, either divided or only indented, permanent. *Corolla* onepetalled, inferior, regular, hypocrateriform (tubular with a divided rotate limb); *limb* 5-8-parted, segments overlapping at the edges, imbricate and twisted together before they expand. *Stamens* epipetalous (upon the corolla), enclosed within the tube. *Germen* without any surrounding glandular disk (not imbedded at the base in a shallow fleshy matrix as this part is in some of the nearest tribes), 2-celled; *cells* one-seeded; *ovula* upright. *Style* single. *Stigma* 2-lobed. *Fruit* either a twin *berry* or a bipartible *capsule*. *Seed* either with a very scanty *albumen* or else with none at all. *Embryo* straight: *radicle* inferior.

Rev. W. Herbert del. Pub. by J. Ridgway 170 Piccadilly March 1. 1820. J. Watts sc.

IPOMŒA sagittifolia.

Catesby's Ipomœa.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.* Stylus unicus.
CONVOLVULACEÆ. *Brown prod.* 1. 481. *Sect. I.* Germen unicum.

IPOMŒA. Suprà vol. 1. *fol.* 9.

I. *sagittifolia*, volubilis, glaberrimus; foliis oblongo-sagittatis; sinû profundissimo: auriculis subacuminatis, pedunculis unifloris, laciniis calycis rotundato-ovalibus, corollâ infundibuliformi-campanulatâ. *Pursh amer. sept.* 1. 144; *(sub* CONVOLVULO sagittifolio).

Convolvulus sagittifolius. *Michaux bor. amer.* 1. 132. *Persoon syn.* 1. 177. *Pursh loc. cit. Poiret suppl. encyc. de Lamarck* 3. 461. *Elliot sket.* 1. 254. *Nuttall* 1. 123. *n.* 9.

Convolvulus speciosus. *Walt. carol.* 93.

Convolvulus caroliniensis angusto sagittato folio, flore amplissimo purpureo, radice crassâ. *Catesb. carol.* 1. 35. *t.* 35.

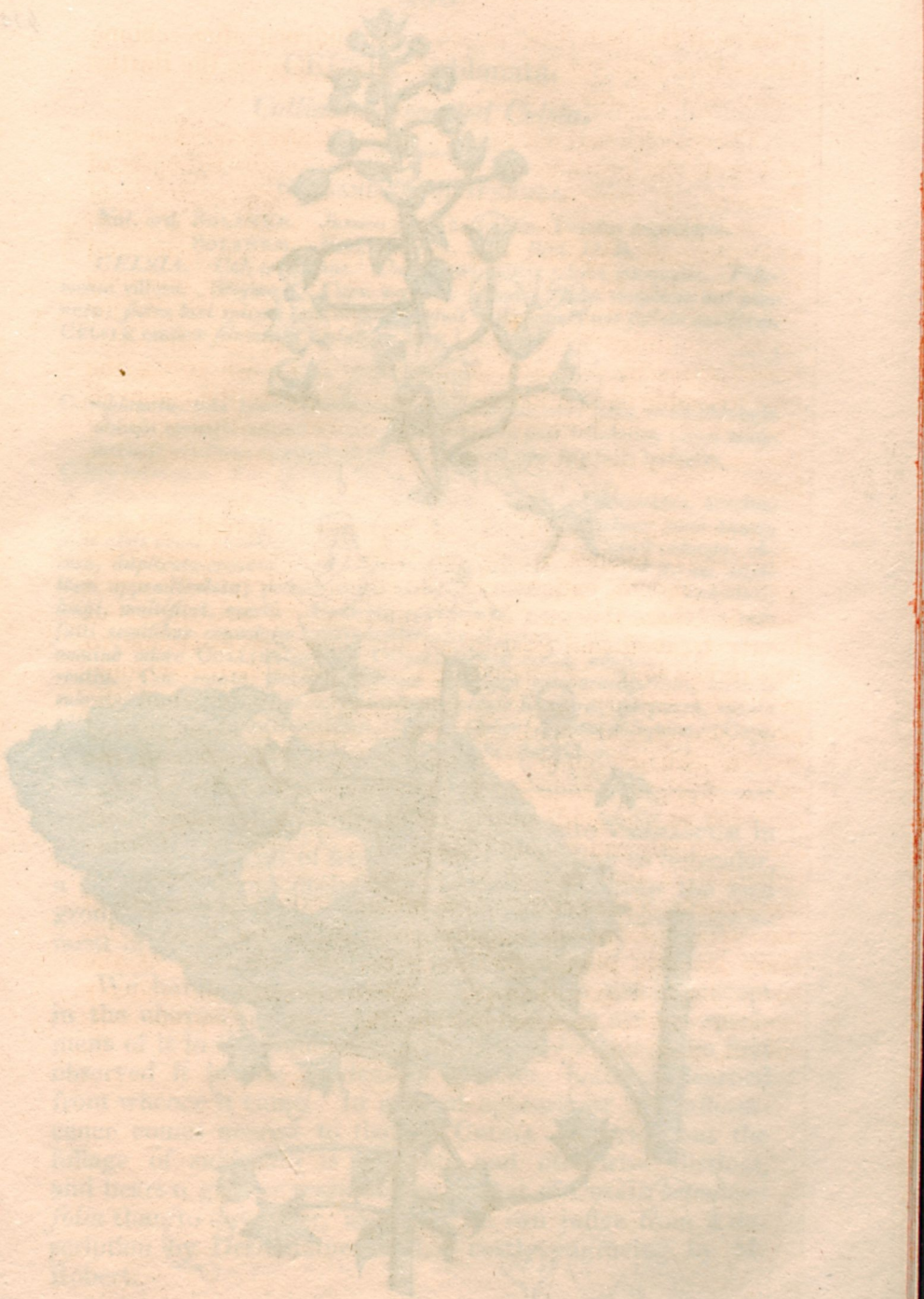
Perennis radice *crassâ* caule *tereti, glabro.* Folia *glabra margine integro, mucronata, lobo antico posticis divergentibus longè acuminatis acutissimis plurimùm latiore:* petioli *uni-biunciales.* Flores *ampli, roseo-purpurei, folia exsuperantes:* pedunculis *axillaribus, solitariis, unifloris, petiolo robustioribus, erectis, circa medium bibracteolatis.* Calycis *foliola erecta, imbricato-conniventia, ovato-oblonga, apice rotundata, subæqualia, tria exteriora reliquis manifestiùs mucronata.* Corolla *infundibuliformis, limbo exanguloso,* fauce *extùs carneo-pallente cylindricâ unciali, triplo longiore calyce.* Filamenta *inæqualia, basi barbata:* anth. *lineari-oblongæ, albidæ erectæ, basi sagittatæ.* Stylus *staminibus longior,* stigmate *bicolli-globoso vel didymo-capitato, albo, incluso.* Caps. 2-3-*valvis, bilocularis.*

We are obliged to Mr. Herbert for the excellent drawing of this plant, as well as for a specimen of the same. It was raised last year in the hothouse at Spofforth from seed received from Carolina, and flowered during the summer. The species does not appear to have been introduced before, nor is there a sample of it either in the Herbarium of Sir Joseph Banks or that of Mr. Lambert. Mr. Elliot, the author of the very useful work entitled "A Sketch of the Botany of South Carolina and Georgia," tells us, that it grows wild "along the sides of salt waters; among rushes and saline plants." Mr. Pursh speaks of it as native of Virginia and Carolina, and as growing in wet situations among bushes. Catesby, upon the authority of Colonel Mure, a Carolinian gentleman, said to have been an eye-

witness of the fact, tells us, that the Indians, after rubbing themselves with the juice of this plant, handle the Rattlesnake without fear of harm.

The species had not been recorded in any general system of Vegetables previous to the appearance of the Synopsis of Persoon. It comes very near to the Ipomœa *sagittata* of Messrs. Poiret and Desfontaines (the Convolvulus *Wheleri* of Willdenow's Species Plantarum), a native of Spain and Barbary; but there the lower leaves are cordate and only the upper sagittate; in all other respects, however, as far as we can judge from a middling engraving and the short descriptions by which alone *sagittata* is known to us, the two resemble each other very exactly, even to the colour of the flower; and both are attached to wet maritime spots of the mutually distant regions to which they respectively belong.

Perennial. *Root* thick. *Stem* smooth round, twining about small bushes, rarely prostrate. *Leaves* oblongly sagittate, smooth, entire round the edge, the front lobe much broader than the two hinder ones, which are divergent longly tapered and sharply pointed: *petioles* from one to two inches long. *Flowers* large, of a purplish rose-colour; *peduncles* solitary, axillary, one-flowered, stouter than the petioles, upright, with two small opposite close-pressed *bractes* situated about the middle of it. *Leaflets* of the calyx upright, imbricately connivent, ovately oblong, rounded at the end, nearly equal, three outer ones more conspicuously mucronate than the two inner ones. *Corolla* funnelform; *limb* cornerless; *faux* of a pale flesh colour on the outside, cylindrical, an inch long, 3 times the length of the calyx. *Filaments* unequal, bearded at the base. *Anthers* linearly oblong, whitish, upright, sagittate at the base. *Style* longer than the stamens; *stigma* didymously capitate, white, enclosed within the faux. *Capsule* 2-3-valved, 2-celled.



Lydt. Edwards del. Pub by J. Ridgway. 170 Piccadilly March 1.1820. J. Watts sc

CELSIA sublanata.

Collinsonia-scented Celsia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SOLANEÆ. *Jussieu gen.* 124. *Div.* Fructus capsularis.
SOLANEÆ. *Brown prod.* 1. 443. *Sect. II.* B.

CELSIA. Cal. 5-partitus. *Cor.* rotata patens 5-loba inæqualis. *Filamenta* villosa. *Stigma* 1. *Caps.* 2-valvis. *Herbæ; folia simplicia aut pinnata; flores laxi spicati terminales, singuli unibracteati aut foliolo axillares.* CELSIÆ creticæ *filamenta* 2 *glabra.* Juss. l. c.

C. *sublanata,* tota lanato-tomentosa, caule suffruticoso: foliis ovali-oblongis obtusis crenatis rugosis mollibus uno alterove pari foliolorum (nunc minimorum) sessilium appendiculatis; staminibus pilis capitatis barbatis.

Celsia sublanata. *Jacq. fragm.* 79. *n.* 247. *t.* 126.

Planta bipedalis, tota lanato-tomentosa. Caulis *suffruticosus, erectus, digitum crassus, teres, semipedalis et ultrà, supernè ramosus:* rami *annui, pilis albis densè obsiti, virentes.* Fol. *alterna, petiolata, ovali-oblonga, obtusa, duplicato-crenata, rugosa, mollia, uno-alterove pari foliolorum sessilium appendiculata;* petiolis *densè hirsutis.* Racemi *terminales, simplices, longi, multiflori, erecti.* Pedicelli *subunciales, patentissimi,* bracteis *suffulti sessilibus convolutis acutis subserratis et parvis.* Flores *suaveolentes, omninò odore* COLLINSONIÆ. Calycis foliola *ovata, acutula, villosa, virentia.* Cor. *rotata, flava cum fauce et ungue purpurascentibus, laciniis subrotundis, subæqualibus.* Fil. *erecta, petalo breviora, purpurea, omnia pilis capitatis purpureis barbata.* Stylus *glaber:* stigma *obliquum.* Caps. *subrotunda, bilocularis, glabra:* semina *minuta.* Jacq. l. c.

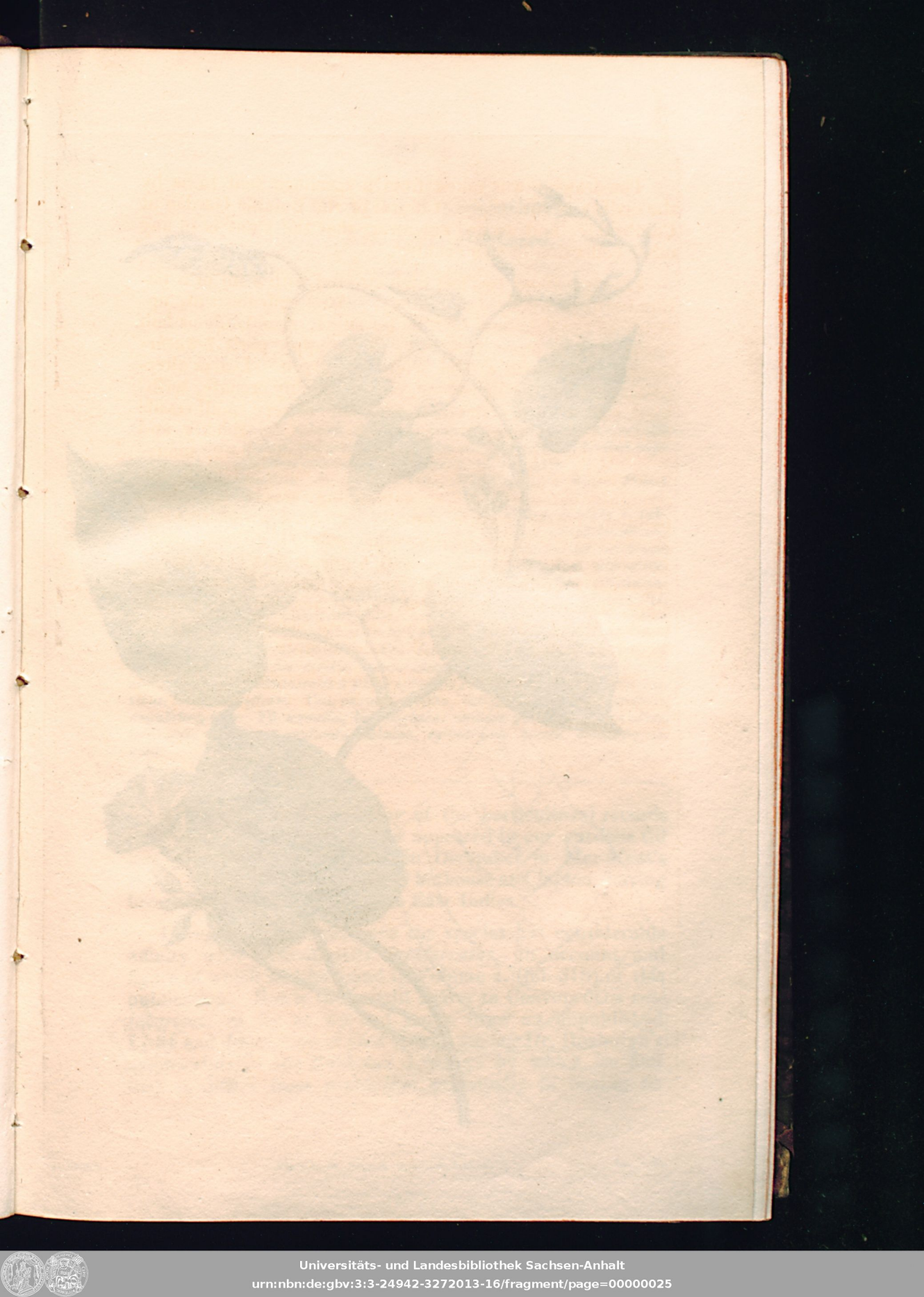
CELSIA differs from its nearest co-ordinate VERBASCUM in having four instead of five stamens; according to Schrader, a stable mark and of influence sufficient to keep the two groups naturally apart, notwithstanding their close agreement in most other respects.

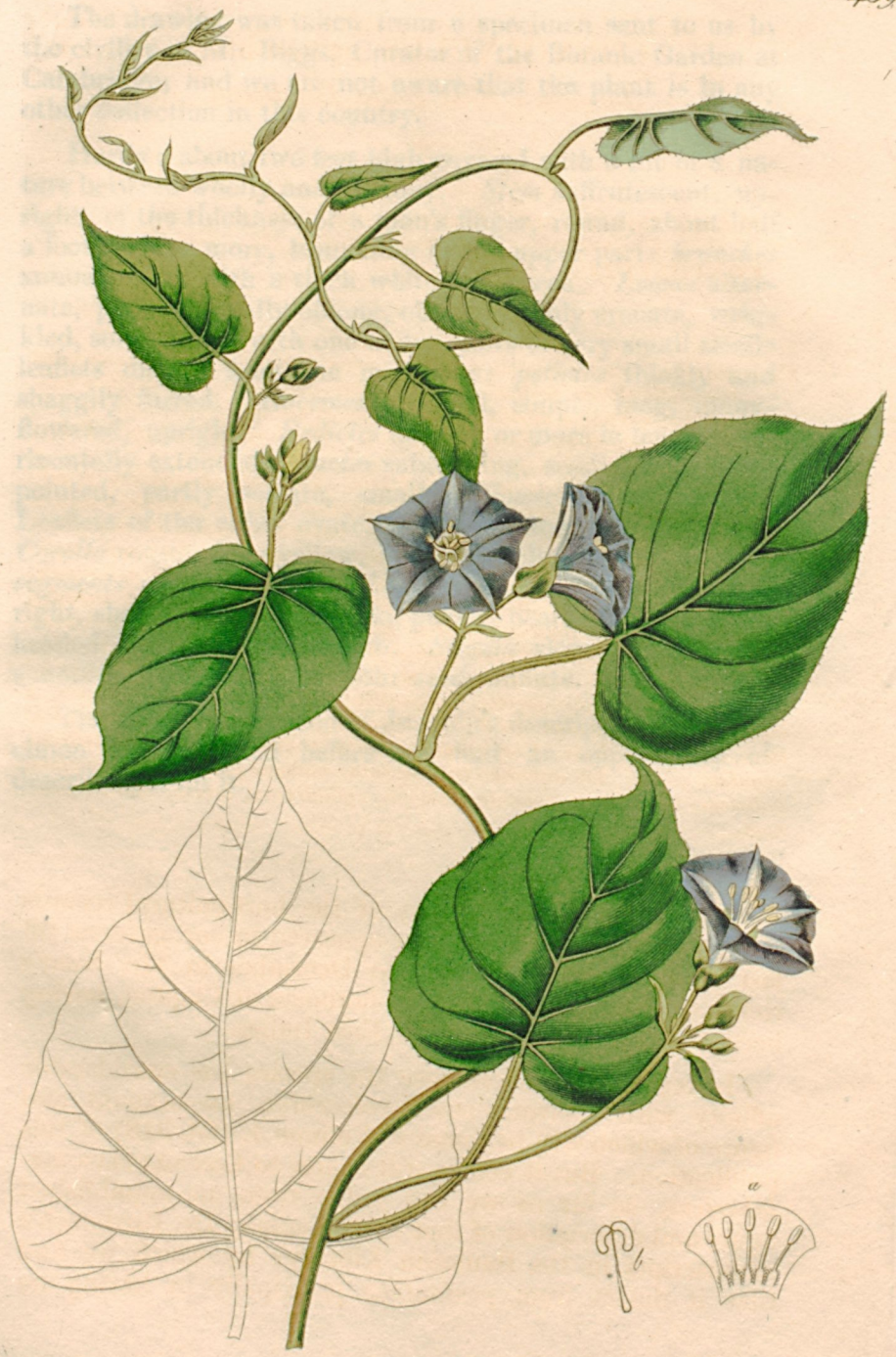
We have not found any mention of the species except in the above-cited work of Jacquin. There are no specimens of it in the Banksian Herbarium. Jacquin, who first observed it in the gardens of Vienna, had not learned from whence it came. In general appearance the inflorescence comes nearest to that of CELSIA *Arcturus,* but the foliage of *sublanata* is alternate and otherwise distinct, and bears a greater resemblance to that of CELSIA *betonicæfolia* than to any other, as far as we can judge from a description by Desfontaines and a costly engraving by M. Robert.

The drawing was taken from a specimen sent to us by the civility of Mr. Biggs, Curator of the Botanic Garden at Cambridge; and we are not aware that the plant is in any other collection in this country.

Hardy; about two feet high covered with a fur of a nature between woolly and cottony. *Stem* suffrutescent, upright, of the thickness of a man's finger, round, about half a foot high or more, branching at the upper part: *branches* annual, beset with a thick white fur, green. *Leaves* alternate, petioled, ovally oblong, obtuse, doubly crenate, wrinkled, soft, winged with one or two pairs of very small sessile leaflets distant from the main one: *petioles* thickly and shaggily furred. *Racemes* terminal, simple, long, many-flowered, upright. *Pedicles* an inch or more in length, horizontally extended: *bractes* subtending, sessile, convolute, pointed, partly serrate, small. *Flowers* sweet-scented. Leaflets of the *calyx* ovate, rather pointed, villous, green. *Corolla* rotate, deep yellow, with a purple faux and unguis; *segments* roundish nearly of the same size. *Filaments* upright, shorter than the corolla, purple, bearded with purple-headed hairs. *Style* smooth. *Stigma* slanting. *Capsule* roundish, two-celled, smooth: *seeds* minute.

The above is a version of Jacquin's description; the specimen having faded before we had an opportunity of describing from it.





Hart. del. Pub. by J. Ridgway 170 Piccadilly March 1. 1824. J. Wells sc.

CONVOLVULUS pentanthus.

Jacquin's East India Bindweed.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.*
CONVOLVULACEÆ. *Brown prod.* 1. 481. *Sect. I.*
CONVOLVULUS. Suprà vol. 2. *fol.* 133.

Div. Caule volubili.

C. *pentanthus*, caule volubili fruticoso, foliis oblongo-cordatis acuminatis subrepandis glabris, pedunculis umbellatim subquinquefloris, floribus subsessilibus, calycibus ciliatis. *Jacq. ic. rar.* 2. 10. *tab.* 316.

Convolvulus pentanthus. *Jacq. coll.* 4. 210. *Willd. sp. pl.* 1. 855. *Poiret suppl. Lamarck encyc.* 3. 468.

Frutex *caule ramisque teretibus glabris.* Folia *oblongo-cordata v. subovata, acuminata, nervosa nervo medio laterales plurimos parallelos divaricato-ascendentes utrinque emittente, subtùs reticulato-venosa, ad marginem villosiuscula, suprà nuda, majora subtriuncialia interdùm basi subhastato-excisa sinú brevi latissimo, juniora sinú angusto:* petiolus *villosiusculus uni-sesquiuncialis v. ultrà.* Pedunculi *axillares, solitarii,* 2-6-*unciales, filiformes, graciles, elastico-rigentes, ascendentes, villosiusculi, terminati* cymâ *subcapitato-contractâ pluri-(sub5-)florâ subtrichotomâ subfoliosâ,* foliolis 2 *v.* bracteis *ad dichotomias.* Cal. *foliaceus, tenuis, venosus, usque ad basin partitus,* foliolis *erectis, inæqualibus, ovato-acuminatis, ciliatis,* 2 *multò majoribus villosiusculis à plano oppositis florem nascentem intercludentibus, lateribus reflexis.* Cor. *cærulea, rotata, radiis* 5 *pallidioribus stellata, angulato-5-loba.* Fil. *æqualia, basi barbata:* antheræ *pallidæ.* Stylus *albus, indivisus:* stigmata 2 *replicata, oblonga, cylindracea, brevia, albida, pruinosa.*

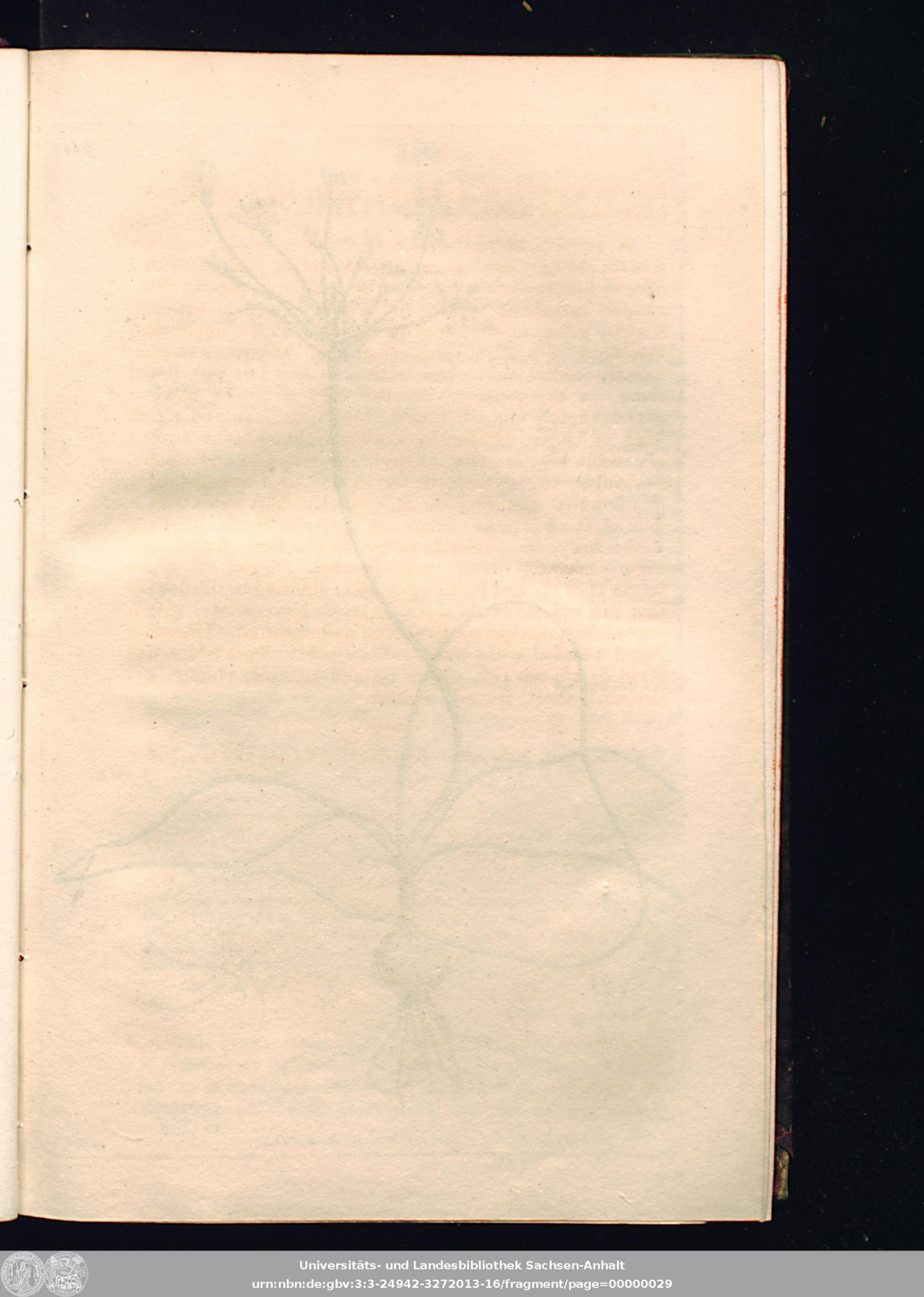
It does not appear by any of the horticultural records that this pretty shrub has ever appeared in our gardens till last year; when it flowered in December in Mr. Kent's richly stored and well-managed hothouse at Clapton, having been raised from seed from the East Indies.

In regard to inflorescence the species has considerable affinity with CONVOLVULUS *involucratus*, an account and figure of which will be found in Volume 4. (fol. 318) of this publication. But it comes still nearer to CONVOLVULUS *malabaricus*, as far as we can judge from an unpublished figure and description of that species among Dr. Roxburgh's manuscripts in the Banksian Library; by which we find that it differs from *pentanthus* principally in having no

bractes, a corolla of a different colour, and a small membranous calyx instead of a large foliaceous one.

A twining *shrub; stem* and *branches* round, smooth. *Leaves* oblongly cordate or subovate, taper-pointed, with a midrib furnished on each side with numerous parallel divaricately ascending nerves, reticulately veined underneath, slightly villous at the edge, quite naked on the upper side, the larger ones about three inches long, sometimes subhastatedly cordate at the base with a shallow but very broad sinus, in the younger ones the sinus is always narrow: *petiole* slightly napped, from an inch to an inch and a half long or longer. *Peduncles* axillary, solitary, from two to six inches long or more, filiform, slender, firm and elastic, ascending, slightly napped, terminated by a several-(about 5?)-flowered subtrichotomous somewhat leafy *cyme* with a pair of small leaves or *bractes* at the forks of the divisions. *Calyx* leafy, thin, veined, parted to the base, *leaflets* upright, unequal, ovate, taper-pointed, fringed, 2 much larger than the rest facing each other shutting in the flower-bud and reflexed at the sides. *Corolla* blue, rotate, with a star of five paler points, five-lobed and cornered. *Filaments* equal, bearded at the base: *anthers* pale. *Style* white, undivided: *stigmas* two, divaricate and reflexed, oblong, cylindrical, short, frosted, whitish.

N. The stigmas in the outline of the dissection are somewhat magnified.



Reinh. del. Pub. by J. Ridgway 170 Piccadilly March. 1. 1820. S. Wells. sc.

STRUMARIA filifolia.

Fine-leaved Strumaria.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen. Div. II.*
AMARYLLIDEÆ. *Brown prod.* 1. 296. *Sect. I.*

STRUMARIA. Spatha 2-valvis, brevior *umbellâ* bracteatâ. *Cor.* supera, erecta v. nutans, regularis, subæqualis, 6-petalo-partita, turbinata ad stellato-divaricatam, laciniis lanceolatis, nunc in tubum ad basin connexis. *Fil.* disco corollæ inserta, haud rarò exserta, distincta v. monadelpha v. alterna 3 inter se concreta 3 altera gynandricè cum stylo: *anth.* oblongæ, plurimùm breviores filamentis, versatiles. *Stylus* strictissimus, polymorphus, nunc fusiformis triquetro-sulcatus, nunc alatus, nunc infernè strumâ variâ protuberans: *stig.* 3, attenuata, replicata vel in cuspidem coadunata. *Caps.* membranacea, trigibba, 3-valv. valvis medio septigeris: *sem.* biserialia, in loculamentis singulis pauca, v. unicum bulboso-laxatum *albumine* herbaceo-emollito. *Bulbus tunicatus. Fol. 2-plura è vaginâ radicali, filiformia ad lorato-oblonga, à plano bifaria, nunc tardiora scapo.* Umbella *parca laxa ad congesto-multiradiatam. In quibusdam corpuscula* 3 *strumosa inter stylum et stamina videnda. Differt* HÆMANTHO, *tam ob spatham non multivalvem quàm ob capsulam non baccatam; à* LEUCOJO *ob spatham non follicularem ob antheras breviores filamento, necnon haud inversas neque apice hiantes.* Nob, in Curtis's magaz. 1363.

S. *filifolia,* foliis filiformibus, corollis stellato-divaricatis: stylo strumâ inflatâ anguloso-plicatâ infra medium protuberante.

Strumaria filifolia. *Jacq. ic. rar.* 2. 14. *Willd. sp. pl.* 2. 32. *Hort. Kew. ed.* 2. 2. 213.

Leucojum strumosum. *Solander in Hort. Kew.* 1. 407. *t.* 5. *Jacq. coll.* 3. 222. *ic. rar. t.* 361; *(in ipsâ icone non verò in textu.) Thunb. prod.* 68.

Crinum tenellum. *Lin. suppl.* 194; *(excl. synonymo).*

Bulbus *ovatus magnitudine ovi passerini.* Fol. *plura, plurimùm longiora scapo, procumbentia, subtus convexa, suprà canaliculata.* Scapus 3-4-*uncialis pennâ corvinâ duplo gracilior, flexuosus, nunc infrà sanguineo-rubens.* Umbella *pluri*(6-10-)*-flora, laxa:* pedunc. *patentes, unciales v. ultrà, filiformes, strictiusculi, suprà subtriquetri.* Flores *inodori.* Germ. *subglobosum,* 3-*gibbum.* Cor. *erecta, micans, intùs candicans, extùs cinamomeo-punicans, semunciam transversa v. circà, laciniis* 3-*plo latitudine angustioribus, subunguiculatis, concavis, ad basin usque distantibus.* Fil. *distincta,* $\frac{1}{3}$ *breviora corollæ, basi ovato-dilatata contigua, indè setaceo-subulata patentia:* anth. *cinnamomeo-rubentes.* Stylus *albus, infernè strumâ obovato-turbinatâ angulari-plicatâ micante extumescens, indè triquetro-subulatus,* 3-*sulcus:* stig^a. *obsoletè trina.*

This genus, comprising a very naturally assorted group, is remarkable in its ordinal section, for the strange inconstancy in the configuration of the style, a part of almost undeviating uniformity throughout the rest of the section.

In this genus however it is a part more prone to conspicuous change in the transitions of species, than even the less essential ones, and those usually the subjects of obvious variation, are found to be in most other vegetables=and it would seem as if this circumstance was combined with a similar tendency in the filaments, which occur within the corresponding limits, sometimes entirely distinct, at other times variously monadelphous, at others partly monadelphous and partly gynandrous, three alternate ones adhering one to the other, the rest to the style; differences that in strictness would require their dispersion among three distant classes of the Linnean System.

All the species yet known belong to the Cape of Good Hope; from whence the present was introduced by Mr. Masson in 1774, and soon after recorded by Dr. Solander in the first edition of the Hortus Kewensis, under LEUCAJUM; from which genus, though plainly its near of kin, it differs in not having a follicular or unilaterally dehiscent spathe, nor reversed anthers longer than the filament, and that shed the pollen from an aperture at their summit.

In the genus our species is known by a style with a turbinately ovate angularly plaited wenlike protuberance, forming the part below the middle and just above the base.

The drawing was taken towards the end of autumn from a plant that flowered in the conservatory of Mr. Griffin, at South Lambeth, where the bulb had been recently received from abroad. We never saw it growing in any other collection.

SPECIES.

spiralis. *nob. in Curtis's magaz. tab.* 1383.
rubella. *Jucq. ic. rar. tab.* 358.
stellaris. *nob.* AMARYLLIS. *Jacq. hort. schœnb. tab.* 71.
crispa. *nob. in Curtis's magaz. tab.* 1363.
gemmata. *nob. in Curtis's magaz. tab.* 1620.
undulata. *Jacq. ic. rar. tab.* 360.
linguæfolia. *Jacq. ic. rar. tab.* 356.
truncata. *Jacq. ic. rar. tab.* 357.
angustifolia. *Jacq. ic. rar. tab.* 359.
filifolia. *Suprà.*

Hart. del. Pub by J. Ridgway 170 Piccadilly March 1. 1820. J. Watts sc.

STENOCARPUS salignus.

Willow-leaved Stenocarpus.

TETRANDRIA *MONOGYNIA.*

Nat. ord. PROTEÆ. *Jussieu. gen.* 78. *Div. II.* Fructus unilocularis polyspermus.

PROTEACEÆ. *Brown in trans. lin. soc.* 10. 15, *seqq.* *Div. II.* Fructus dehiscens. *Subdiv.* A. Unilocularis.

STENOCARPUS. Cor. irregularis, petalis distinctis secundis. *Stamina* apicibus cavis petalorum immersa. *Glandula hypogyna* unica, semiannularis. *Germ.* pedicellatum polyspermum. *Stylus* deciduus. *Stigma* obliquum, orbiculato-dilatatum, planiusculum. *Folliculus* linearis. *Semina* basi alata! *Frutices glaberrimi. Folia alterna, integerrima. Umbellæ axillares v. terminales pedunculatæ. Flores ochroleuci.* Brown prod. 1. 390.

S. *salignus*, foliis elongato-lanceolatis basi trinervibus. *Brown prod.* 1. 390. Stenocarpus salignus. *Brown in linn. trans.* 10. 202.

It is a notable fact in botanical geography, and of which the observation is due to Mr. Brown, that the type of no australasian species of the present natural order, has been found to have extended itself into another region. With the exception of the present genus, a species of which has been found in New Caledonia, and of LOMATIA exemplified by several species in South America, the same observation applies to genera under the existing definitions.

STENOCARPUS appears to come between LOMATIA and BANKSIA, and consists at present of two species, of which only the New Holland one has found its way into our gardens. When we do not exactly know, but most probably not long since. It has not a place either in the Hortus Kewensis or in Sweet's Catalogue, the latest and most comprehensive enumeration of the plants in our gardens.

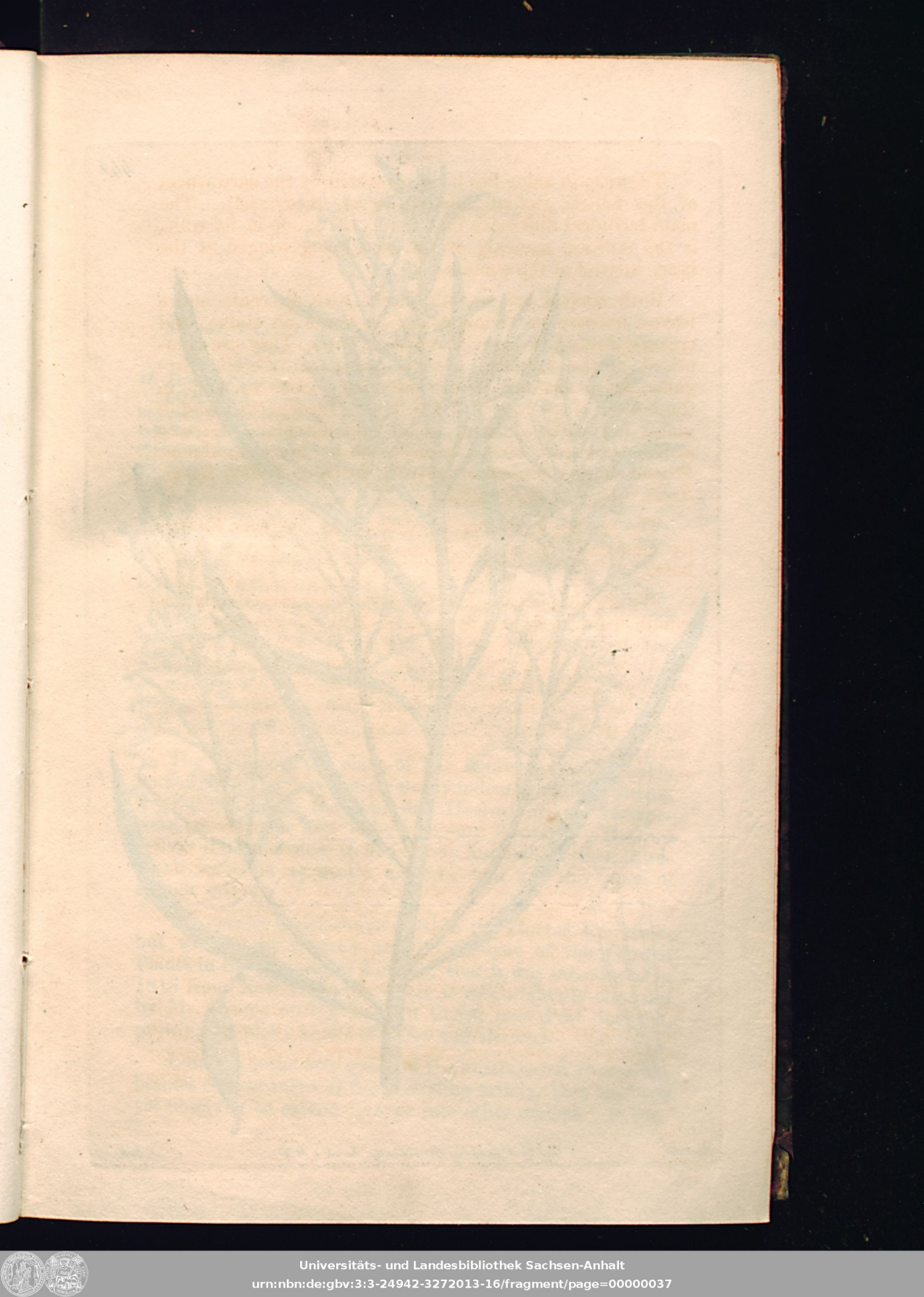
The drawing was taken from a sample that flowered in the greenhouse at the nursery of Messrs. Colville in the King's Road, Chelsea, where it had been raised from imported seed, along with other curious plants from the same quarter.

The generic name has been suggested by the narrowness of the follicle (unilaterally dehiscent seedvessel). The main technical difference that marks the group in its tribe, is the striking anomaly of the seed being winged at the base, instead of the summit.

Both species are smooth shrubs with alternate entire leaves, axillary or terminal umbels borne on stalks, and cream-coloured or greenish white flowers. They are comprised in the following general character: *Corolla* irregular, *petals* distinct, in one direction. *Stamens* sunk in the hollow of the tops of the petals. *Hypogynous gland* (a gland below the germen) solitary semicircular. *Germen* pedicled (with a stalk), many-seeded. *Style* deciduous. *Stigma* slanted, orbicularly dilated, flattish. *Follicle* linear. *Seeds* winged at the bottom.

The species is distinguished from its congener *Forsteri* by elongately lanceolate leaves with three nerves at the base.

We should observe that the flowers are exceedingly fragrant; with the flavour of those of Olea *odoratissima*.



Hart. del. Pub. by J. Ridgway 170 Piccadilly March 1. 1820. J. Watts. sc.

LOMATIA longifolia.

Long-leaved Lomatia.

TETRANDRIA *MONOGYNIA.*

Nat. ord. PROTEÆ. *Jussieu gen.* 78. *Div. II.* Fructus 1-loc. polyspermus.

PROTEACEÆ. *Brown in trans. linn. soc.* 10. 15, *seqq.* *Div. II.* Fructus dehiscens. *Subdiv.* A. Unilocularis.

LOMATIA. Cor. irregularis, petalis distinctis secundis. *Stam.* apicibus cavis corollæ immersa. *Glandulæ hypogynæ* 3, secundæ. *Germ.* pedicellatum, polyspermum. *Stylus* persistens. *Stig.* obliquum, dilatatum, subrotundum, planiusculum. *Folliculus* ovali-oblongus. *Sem.* apice alata; alâ marginatâ, disco evasculoso. *Frutices. Fol. alterna, in plerisque divisa v. dentata, rariùs integerrima, quandòque in eodem frutice varia. Racemi terminales, interdum axillares, elongati, laxi, nunc abbreviati corymbosi, paribus pedicellorum* 1-*bracteatis. Flores ochroleuci. Involucr. nullum. Seminis nucleus farinâ sulphureâ conspersus.* Brown prod. 1. 389.

L. *longifolia*, foliis lineari-lanceolatis elongatis glabris remotè serratis, racemis axillaribus, pedicellis corollisque pilosiusculis, pistillis glaberrimis. *Brown prod.* 1. 390.

Lomatia longifolia. *Brown in linn. trans.* 10. 200. *Sweet hort. suburb. lond.* 22.

Embothrium myricoides. *Gært. sem.* 3. 215. *t.* 218? *(conjectante Dom. Brown.)*

Tricondylus myricæfolius. *Knight et Salisb. prot.* 122.

The foliage of the plant of our figure was considerably narrower and far less conspicuously indented than in the native specimens in the Banksian Herbarium; the racemes were also longer and more remotely flowered. But we believe the differences to be entirely imputable either to seminal variation or exotic culture; and not the types of specific origin.

The species is not enumerated in the Hortus Kewensis; but we find by Sweet's useful Catalogue of the Garden Plants in the environs of London, that it was introduced in 1816 from New Holland; where it was originally observed by Mr. Brown on the Eastern Coast, near Port Jackson, growing on rocky banks of rivers and streams.

LOMATIA is the only genus of the australasian *Proteaceæ*, besides STENOCARPUS of the preceding article, that has been yet observed to extend its type into other regions. It con-

sists at present of eight species, three of which belong to South America, the rest to New Holland. The following is the version of its character as defined by Mr. Brown. *Corolla* irregular: *petals* distinct, in the same direction. *Stamens* sunk within the hollow summits of the corolla. *Hypogynous glands* (glands below the pistil) 3, in one direction. *Germen* stalked, many-seeded. *Style* permanent. *Stigma* slanted, dilated, roundish, a little flattened. *Follicle* ovally oblong. *Seeds* winged at the top; *wing* bordered, evascular in the space within the border. The species consist of *shrubs* with alternate and for the most part either divided or toothed *leaves*, seldom quite entire, but sometimes varying in this respect on the same plant: *racemes* that are generally terminal, but sometimes axillary, sometimes elongated and loosely flowered, sometimes close and corymbose; *pedicles* in pairs with one *bracte* to each pair; cream-coloured *flowers:* no *involucre:* and the body of each *seed* powdered over with a sulphur-coloured meal.

Longifolia is specifically distinguished in the genus by its linearly lanceolate elongated smooth widely serrate leaves, axillary racemes, slightly furred pedicles and corollas, and smooth pistils.

The drawing was taken last summer from a plant in the conservatory at the nursery of Messrs. Colville in the King's Road, Chelsea. It is still rare; although of easy culture and propagation.

Hart. del. Pub. by J. Sidgwick, 170 Piccadilly, March 1. 1820. J. Watts sc.

GREVILLEA buxifolia.

Box-leaved Grevillea.

TETRANDRIA *MONOGYNIA.*

Nat. ord. PROTEÆ. *Jussieu gen.* 78. *Div. II.* Fructus unilocularis polyspermus.

PROTEACEÆ. *Brown in trans. linn. soc.* 10. 15, *seqq. Sect. II.* Fructus dehiscens. *Subdiv.* A. Unilocularis.

GREVILLEA. Cor. irregularis; petalis laciniisve secundis: apicibus cavis staminiferis. *Anth.* immersæ. *Glandula hypogyna* unica, dimidiata. *Germ.* dispermum. *Stig.* obliquum depressum, (rarò subverticale, conicum.) *Folliculus* 1-loc., 2-spermus, *loc.* centrali. *Sem.* marginata, v. apice brevissimè alata. Frutices *rariùs* arbores, *pilis dum adsint medio affixis?* Fol. *alterna, indivisa v. pinnatifida.* Spicæ *nunc elongatæ racemosæ, nunc abbreviatæ corymbosæ v. fasciculiformes, involucro nullo, pedicellis geminatis, rarò pluribus, paribus fasciculisve* 1-*bracteatis.* Corollæ *sæpissimè rubicundæ nunc flavæ, in quibusdam obliquè insertæ.* Folliculi *vel coriacei ovati, stylo toto coronati, seminibus ovalibus, angustissimè marginatis et apice brevissimè alatis: vel lignei, suborbiculares, pseudo-bivalves, basi tantummodò styli mucronati,* seminibus *undique alatis.* Brown prod. 1. 375.

Div. I. Folliculi coriacei stylo toto stigmateque depresso coronati. Semina ovalia angustissimè marginata, apiceve brevissimè alata. Subdiv. C. *Folia omnia integerrima. Flores fasciculati, subumbellati. Pistillum lanatum, pedicellatum. Folliculus ecostatus.* ERIOSTYLIS. Brown l. c.

G. *buxifolia,* foliis ellipticis suprà punctatis scabris subtùs tomento adpresso cinereis, stigmate orbiculato appendicem recurvum vix æquante. *Brown prod.* 1. 379.

Grevillea buxifolia. *Brown in trans. lin. soc.* 10. 174. *Idem in Hort. Kew. ed.* 2. 1. 206.

Embothrium buxifolium. *Willd. sp. pl.* 1. 538. *Smith new holl.* 29. *t.* 10. *Andrews's reposit.* 218.

Embothrium genianthum. *Cavanill. ic.* 4. 60. *t.* 387.

Stylurus buxifolia. *Knight et Salisb. prot.* 115.

Stylurus collina. *Knight et Salisb. prot.* 116? *(conjectante Dom. Brown.)*

This pretty shrub was introduced by Messrs. Lee and Kennedy from New South Wales in 1790. The drawing was taken from a plant that flowered in the greenhouse of Messrs. Colville, of the Chelsea Nursery in the King's Road, in November last. We shall transcribe some remarks on the genus from Mr. Brown's elaborate account of the order to which our plant belongs.

"GREVILLEA is probably the most extensive genus of *Proteaceæ* in New Holland, and admits of division into several very natural sections, most of which are readily dis-

tinguishable by more than one character, existing either in the parts of fructification or in habit, notwithstanding which I have not ventured to separate them into distinct genera, as I probably should have done, had I been acquainted with fewer species; but have given to each section a proper name, a practice that may perhaps be advantageously adopted in all large genera, where they are thus capable of natural subdivision. It must be unnecessary to observe that proper names can in this manner be given only where the sections are perfectly natural, and not in those cases where genera have been subdivided from single characters, and those too of but little importance, as in Thunberg's division of PROTEA, from the form and division of the leaves, to which may be opposed the masterly subdivision of the same genus given by Linnæus in the Mantissa, whose sections, though apparently depending upon single characters, are evidently formed from a contemplation of the whole structure, as far as it was then understood; and it is remarkable that, with the exception of the first species, with whose real structure he was necessarily unacquainted, the rest are arranged, and even divided into sections, in most cases corresponding with the genera proposed in the present way."

Buxifolia falls within the division distinguished by coriaceous follicles surmounted by the entire style with its depressed stigma, and by oval seeds which are either very shallowly bordered all round or very shortly winged at the top; and within the subdivision entitled ERIOSTYLIS, containing those species where the leaves are all entire, flowers fascicled and subumbellate; pistil woolly and stalked, and the follicle without ribs. Among these it is specifically characterized by elliptical leaves dotted and rough above, cinereous underneath, from the effect of a close-pressed cottony fur, and by an orbicular stigma that is scarcely equal to its recurved appendage at the top.

Our page will not admit of the version of the definition of the genus by Mr. Brown.

Pub.d by J. Ridgway 169 Piccadilly April 1.1820.

AMARYLLIS aulica.

Mr. Woodford's Amaryllis.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.*
AMARYLLIDEÆ. *Brown prod.* 1. 296. *Sect. I.*
AMARYLLIS. Suprà vol. 3. *fol.* 226.

Div. Bi-multifloræ: tubus coronatus: folia bifaria.

A. *aulica,* biflora, ringens; foliis nitidis; tubi coronâ firmâ coloratâ obsoletè denticulatâ; laciniâ imâ limbi infernè involutâ; staminibus inclusis.

Amaryllis aulica. *Nobis in journ. of scien. and the arts.* 2. 353. *Sweet hort. sub. lond.* 65. *n.* 10.

Bulbus *integumentis cinerascentibus.* Fol. *plùs minùs* 9, *lorato-elongata, utrinque attenuata, erecto-divergentia, non glauca.* Scapus *vix longior foliis, teres, glauciusculus.* Germ. *lætè virens, oblongum, rotundatè* 3-*gonum, exsulcum, estriatum.* Cor. *nutans punicea, venis saturatibus picta, infernè pro* ⅓ *parte virescens, subquncialis,* 6-*petalo-partita, campanulato-ringens,* labio inferiore *porrecto,* superiore *suberecto-patente:* tubus *subnullus, viridis* coronâ *viridissimâ* ¼ *unciæ profundâ v. circà;* faux *turbinatè dilatata viridis orâ utráque atrosanguineo-rubens;* laciniæ *oblongæ, lanceolatæ,* tres exteriores 2 *summis interioribus duplo angustiores,* labii inferioris *tres infrà imbricato-conniventes suprà distantes, harum* laterales 2 *lineari-oblongæ sursùm obliquatæ canaliculatæ,* media *latior porrectior longiùs acuminata infrà ex lateribus inflexis filamenta incumbentia comprehendens.* Fil. *fasciculata, declinato-resurgentia, breviora limbo, rubra, parùm inæqualia, infernè albo et rubro varia, crassitudine fermè pennæ corvinæ:* anth. *atro-purpureæ, erecto-vibratiles;* pollen *sulphureum.* Stylus *filamentis subæquicrassus concolorque, longitudine corollæ:* stig. 3 *replicata, rubro-violacea, pruinosa.*

This splendid novelty was imported by Mr. Griffin from the Brazils. It flowered in the hothouse at South Lambeth in December last. A name had been already attached by ourselves to the species, taken up in a paper on this genus in the second volume of the Journal of Science and the Arts from a transient view of a sample produced in the gardens at Kew.

The species belongs to a division of the genus distinguished by a crowned tube. In most this crown is an inconspicuous shallow colourless pellicle shredded into a kind of fringe; but in a group of **3** newly recorded ones among which is the present, this appendage is nearly entire, substantially membranous, conspicuous, and seemingly associated with the production of a two-flowered scape, if we are

to judge from the specimens we have witnessed in the instances of *calyptrata*, *psittacina*, and *aulica*.

Our plant differs from its two immediate relatives in having a bright foliage, the outer segments of the corolla much narrower than the inner, and the lowermost one of all involute below the middle; specially from *calyptrata* by stamens which are shorter than the limb, from *psittacina* by a more deeply divided corolla and a broader crown of one colour. The species was first observed by the late Mr. Woodford.

We have withdrawn the AMARYLLIS *hyacinthina* of the 163d article (given in the second volume of this publication) from the genus where it had been provisionally deposited, and have founded a new one upon it, under a name intended as an acknowledgment of the benefit derived to Botany from the pursuits of Mr. Griffin; the means through which many and valuable additions have been made to the *Liliaceæ* of our collections.

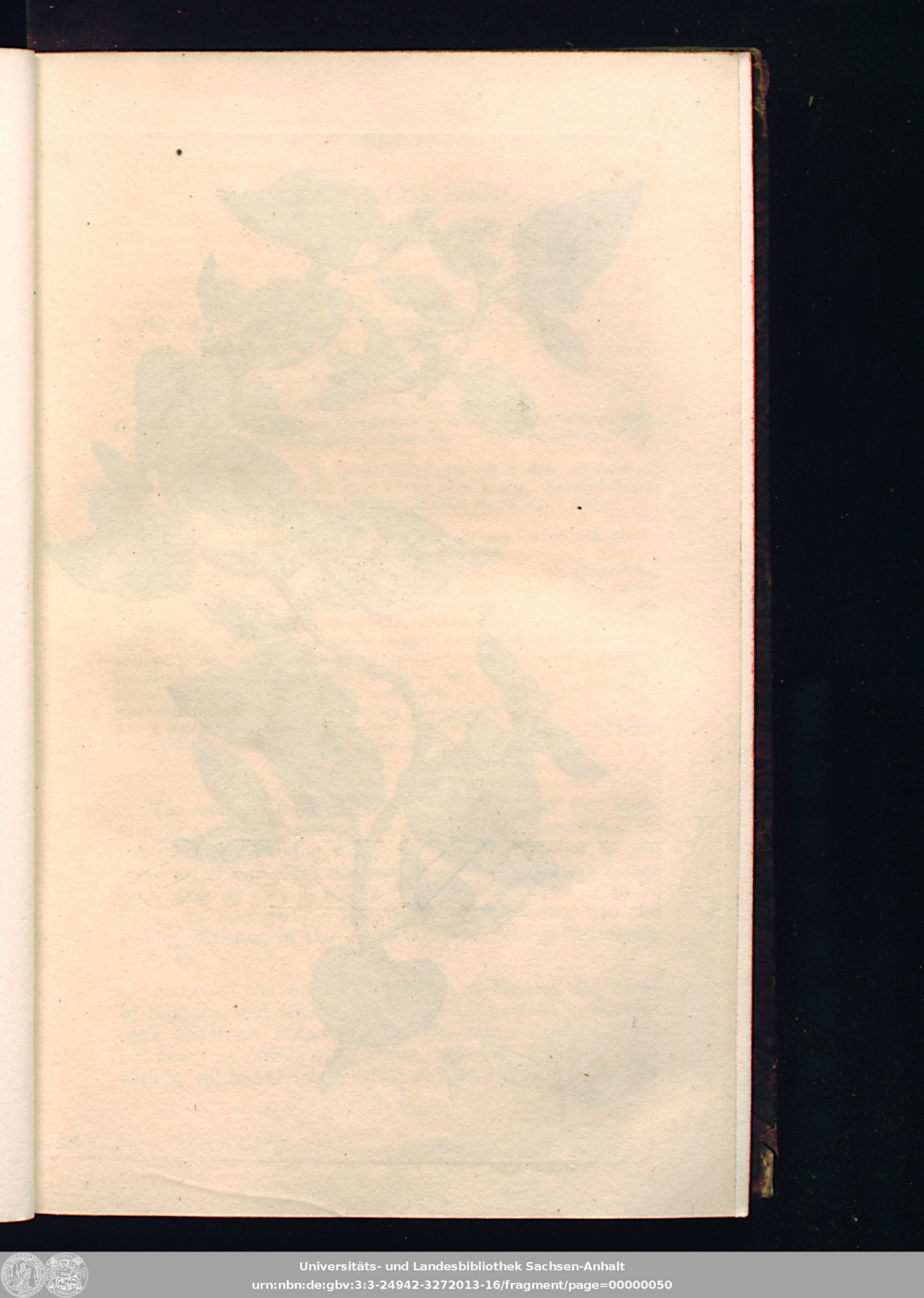
GRIFFINIA hyacinthina.

GRIFFINIA. *Spatha* 2-valvis umbellâ polyanthâ brevior. *Cor.* infundibuliformis nutans, *limbus* 6-partitus irregularis bilabiato-campanulatus, *laciniæ* 2 laterales *labii* superioris cæteris dissimiles collaterali-conniventes. *Fil.* summo tubo inserta, unum remotum arrectum, reliqua declinata. *Germ.* loculamentis imo angulo collaterali-dispermis: *stig.* simplex. *Sem. (ex dictú D. Griffin)* globosa, duriùs tuberosa, nitida.

Differt AMARYLLIDE *stamine uno inflexione cæterorum contrariâ, laciniis* 2 *labii superioris disparibus colore substantiâ atque inflexione quadantenùsque etiam formâ, loculamentis germinis ovulis* 2 *arrectis collateralibus angulo interiori fundi annexis, et foliis petiolatis cum laminâ costatâ.* Pedunculi *fructiferi floriferis plurimùm productiores.* Semina *magnitudine pisi majoris, pallidè flavicantia.*

Griffinia hyacinthina.

Amaryllis hyacinthina. *Nob. suprà vol.* 2. *fol.* 163. *et in journ. of scien. and the arts. v.* 2. 369.



M. Hart. del. Pub by J. Ridgway 170 Piccadilly April 1. 1820. J. Watts sc.

CONVOLVULUS siculus.

Small-flowered Bindweed.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.*
CONVOLVULACEÆ. *Brown prod.* 1. 481. *Sect. I.*
CONVOLVULUS. Suprà vol. 2. *fol.* 133.

Div. Caule prostrato s. non volubili.

C. *siculus,* foliis cordato-ovatis superioribus acutis, pedunculis unifloris folio brevioribus, bracteis oblongo-lanceolatis calyce ciliato longioribus. *Willd. enum.* 1. 205.

Convolvulus siculus. *Lin. sp. pl. ed.* 2. 1. 223. *Mill. dict. ed.* 8. *n.* 2. *Willd. sp. pl.* 1. 866. *Hort. Kew.* 1. 212. *ed.* 2. 1. 335. *Lamarck encyc.* 3. 540. *Flor. græc. t.* 196. *Lam. & Decand. flor. franç.* 3. 646.

Convolvulus ovatus. *Mœnch meth.* 450.

Convolvulus siculus minor flore parvo auriculato. *Boccon. sic.* 89. *tab.* 48.

Convolvulus africanus minor. *Moris. hist.* 2. 18. *t.* 7. *fig.* 5.

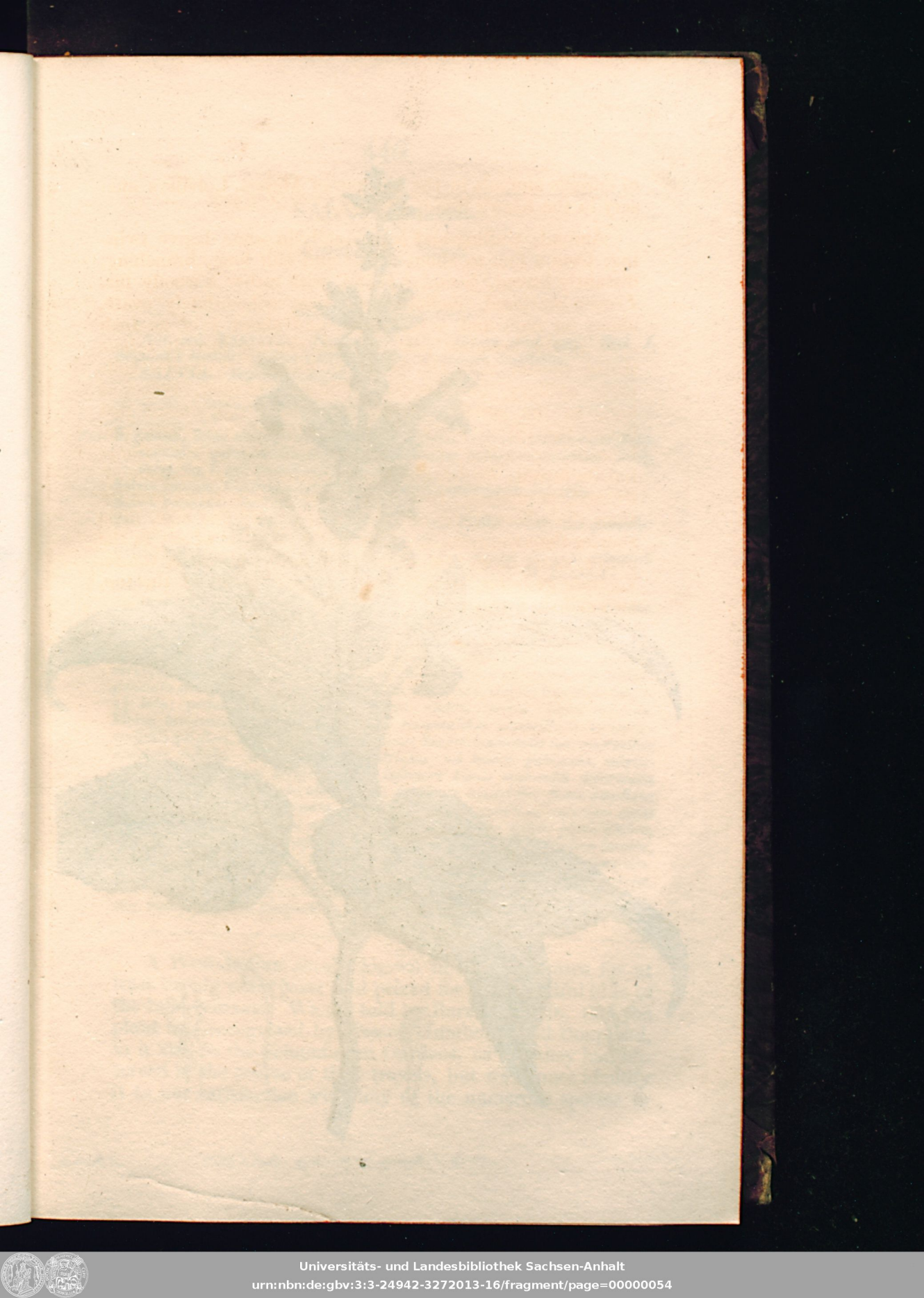
Annuus prostratus v. rariùs subvolubilis, pedalis v. subsesquipedalis, ramosus, distantèr foliosus, ramis teretibus sublanato-pilosis. Fol. *sparsa inflexione subsecundâ, subcordato-ovata, sesquiuncialia v. circa latitudine* ¾ *partium unciæ, nervosa, pilosiuscula;* petiolus *triplo brevior laminâ v. ultrà.* Pedunculi *solitarii, axillares, uniflori, filiformi-graciles, bis longiores petiolis, pilosi, juxtà infra calycem opposito-bibracteati;* bracteis *foliaceis elongato-lanceolatis pubescentibus patentibus duplo longioribus calyce.* Cal. *pilosus;* foliola *elliptico-lanceolata, acuminata, piloso-ciliata, persistentia,* 2 *interiora duplo ferè minora,* 3 *exteriora subæqualia parùm breviora corollâ.* Cor. *è minimis generis, cæruleus; limbo turbinato-rotato, tubo brevi pallido.* Caps. *globosa, glabra, apiculata,* 2-*loc.* 4-*sperma.*

The smallest flowered of its genus we have met with. Usually ranked in the division of trailers or those which do not climb by twining round foreign support; but as the branches of our plant are sometimes seen to wind round each other as they lie on the ground, it seems to us to be rather an intermediate link between the twining and the trailing divisions of the genus, than to belong exclusively to either.

Native of the southernmost parts of Europe, the Coast of Barbary, and Greece. Cultivated, as stated in Parkinson's Theatrum Botanicum, by Mr. James Boel in 1640; but now very rare in our gardens, where we had never met with it, till last October, when we found it in a collection

of curious annuals in the borders of Messrs. Colville's nursery in the King's Road, Chelsea.

Annual; trailing and occasionally in some degree twining, from a foot to about a foot and half long, branching, distantly leaved, *branches* round, with rather a woolly fur. *Leaves* scattered, inclining one way, subcordately ovate, about an inch and a half long, and about ¾ of an inch over at the broadest part, nerved, slightly furred: *petiole* thrice shorter than the blade or more. *Peduncles* solitary, axillary, one-flowered, filiform, slender, twice as long as the petiole, furred, oppositely bibracteate just below the calyx; *bractes* leafy elongatedly lanceolate, pubescent, spreading, twice longer than the calyx. *Calyx* hairily furred; *leaflets* elliptically lanceolate, taper-pointed, fringed, permanent, two inner ones nearly twice smaller than the others, three outer ones nearly of one size, little shorter than the corolla. *Corolla* the smallest of any in the genus, azure blue; tube short, pale, limb turbinately rotate. *Capsule* globular, smooth, with a small point at the top, two-celled, four-seeded.



M.Hart. del. Pub. by J. Ridgway 170 Piccadilly. April. 1. 1820. J. Watts. sc.

SALVIA amœna.

Caribbean Sage.

DIANDRIA *MONOGYNIA.*

Nat. ord. LABIATÆ. *Jussieu gen.* 110. *Brown prod.* 499. *Sect. I.* Stamina 2 fertilia; v. dum 4 fertilia, antheræ omnium dimidiatæ.
SALVIA. Suprà vol. 4. *fol.* 347.

S. *amœna*, foliis oblongo-ovatis rugosis serratis; floribus spicato-verticillatis secundis, galeâ corollæ rectâ villosâ; bracteis linearibus deciduis. *Jacq. eclog.* 69. *t.* 47; *(sub* SALVIÂ boosianâ.)
Salvia amœna. *Curtis's magaz.* 1294. *Aiton's epitome in add.* 379.
Salvia boosiana. *Jacq. eclog. loc. cit.*
Salvia Boosii. *Trattinick observat. botan.* 1. 59. *Ejusd. archiv. der gewächskunde.* 1. *n°.* 92; *(fide Jacquini in loc. cit.)*
Salvia latifolia. *Anderson in trans. soc. enc. arts and man.* 25. 210; *(exempl. prototypum spontaneum ex ins. Sct. Vincentii in herb. D. Lambert).*
Salvia violacea. *Donn. cant. ed.* 4. 8; *(non aliorum).*

Radix *perennis.* Caules *fruticosi,* 6 *ad* 8 *pedes alti, digitum minorem inferiùs crassi, erecti, lignosi, cortice fusco-viridi rimoso vestiti.* Rami *oppositi, patentes, laxi, obtusè tetragoni, glabri, purpurascenti-virides.* Folia *opposita, petiolata, oblongo-ovata, acuminata, serrata, undata, rugosa, utrinque glabra, facie lætè viridi, nitida; dorso pallida ad lentem subtilissimè punctata sed opaca venisque prominentibus reticulata, majora* 6 *pollices longa,* 2½ *lata;* petioli *bipollicares et breviores, glabri, teretes, suprà depressi.* Flores *brevissimè pedicellati, in spicis terminalibus verticillatis secundis:* verticilli 3-6-*flori, singuli* bracteis 2 *minimis lineari-lanceolatis marcescentibus deciduis suffulti.* Cal. *cylindricus, striatus, ad lentem pubescens, subringens; labio superiore integro acuto, inferiore bifido segmentis divaricatis acutis.* Cor. *cyanea: tubo albo glabro, sub fauce constricto; fauce ampliata subplicata sub labiis angustata glabra; labiis subæqualibus, superiori extùs villoso recto concavo obtuso apice emarginato, inferiore trilobo plano glabro, laciniâ mediâ rotundatâ majore, lateralibus oblongis.* Fil. *longitudine corollæ, alba, post anthesin erecta, in medio pedicellata, parte inferiore latiore connata et interdùm glandulâ antheriformi aucta:* anth. *lutescentes, erectæ, didymæ.* Stylus *longitudine labii superioris, flavescens, sub stigma villosus:* stig. *bifidum laciniis inæqualibus revolutis.* Jacq. loc. cit.

A West-Indian shrub, known in our hothouses for at least twenty years past; and prized for the beautiful blue of the inflorescence. We are told by Baron Jacquin, that the plant was recognized by Messrs. Humboldt and Bonpland, in a visit to the Schœnbrunn Gardens, as one they had observed in the course of their travels, but we cannot identify it to our satisfaction with any of the numerous species in

the botanical works of those celebrated naturalists; and have consequently omitted the synonym adduced by Baron Jacquin from Willdenow as referring to a plant among those of Messrs. Humboldt and Bonpland.

There are wild samples of the species in the Herbarium of Mr. Lambert, gathered by Dr. Anderson in the woods of the Island of St. Vincent, and recorded as above. There is also in the same Herbarium a sample from Jamaica with a spike of flowers nearly a foot in length.

Root perennial. *Stems* shrubby, 6-8 feet high, about as thick as the little finger at the lowermost part, upright, woody, with a cracked brownish green bark. *Branches* opposite, spreading, wide-set, obtusely 4-cornered, smooth, green tinged with purple. *Leaves* opposite, petioled, oblongly ovate, taper-pointed, serrate, waved, wrinkled, smooth on both sides, on the upper side of a lively green, on the under pale, and when seen through a magnifying glass marked with very subtile dots but opaque and reticulately and varicosely veined, the largest ones about 6 inches long, by 2½ broad: *petioles* about 2 inches long or less, smooth, round, depressed above. *Flowers* very shortly stalked, on terminal spikes, in whorls pointing one way: *whorls* 3-6-flowered, each whorl with two minute linearly lanceolate withering deciduous subtending *bractes*. *Calyx* cylindrical, fluted, obscurely furred, subringent; *upper lip* entire pointed, *lower* 2-cleft with pointed divaricate segments. *Corolla* deep blue: *tube* white smooth, constricted under the faux; *faux* wide, slightly plaited, narrowed close under the lips, smooth; *lips* nearly equal, *upper lip* furred on the outside straight concave obtuse notched at the end, *lower lip* 3-lobed flat smooth, middle segment rounded largest, side-ones oblong. *Filaments* the length of the corolla, white, upright after the pollen has been shed, stalked at the middle, connate at the lower broader part and sometimes augmented with an anther-shaped gland: *anthers* yellowish, upright, twin. *Style* the length of the upper lip, deep yellow, villous under the stigma: *stigma* 2-cleft, with unequal revolute segments. (From the latin of Baron Jacquin).

Rawle del. Pub by J. Ridgway 170 Piccadilly April 1. 1820. J. Watts sc.

CROTALARIA vitellina.

Colville's Crotalaria.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V. Cor.* irregularis papilionacea. *Legum.* 1-loc. 2-valv.=PAPILIONACEÆ. *Brown in append. to Flind. voy.* 2.

CROTALARIA. Suprà vol. 2. *fol.* 123.

Div. Foliis ternatis.

C. *vitellina*, pubescens; foliis ternatis, exstipulatis, foliolis ovali-lanceolatis acutis duplo longioribus petiolo hirtiùs villoso, lateralibus paulò minoribus: leguminibus pendulis.

Frutex *villosus, gracilis, flexuosè diffusèque ramosus.* Fol. *sparsa, distantia, ternata, exstipulata?* petiolo communi *erecto, stricto, villoso-canescente, subunciali, unisulco,* foliolis *ovali-oblongis, lanceolatis, plus minus sesquiuncialibus, utrinque acuminatis, suprà nudiusculis v. ad venas tantùm pubentibus, infrà villosis pallentibus nervosis, lateralibus paulò minoribus,* petiolis propriis *brevissimis crassis hirsutis flexilibus (meris articulis).* Racemi *terminales, solitarii, erecti, stricti, multiflori,* 3-5-*unciales,* pedunculo *virenti cum pube fulvâ,* floribus *laxiùs sparsis, deflexis, fulvo-flavicantibus longitudine infra semuncialem,* pedicellis *duplo brevioribus calyce teretibus decurvis* bracteâ *duplo breviore v. ultrà lineari subulatâ villosâ deflexâ subtensis, unam v. et alteram minutam appressam altiùs in se gerentibus.* Cal. *virescens, fulvo-villosus,* ⅓ *brevior corollâ v. circà, ad* ⅔ *partes usque* 5-*fidus,* 10-*nervis, tubo brevi fuscescente, segmentis æqualibus lanceolato-attenuatis bilabiato-patentibus.* Vex. *cordato-orbiculatum, secùs pedicellum reflexum, mucronatum, cum maculâ violaceâ radiato-crinitâ ad basin:* alæ *vexillo carinâque duplo angustiores, conniventes, laminâ obcuneato-oblongâ obtusissimâ:* carina *falcata, ventricosissima, pallida, acuminata, apice virescens.* Fil. *monadelphum, medio tenùs* 10-*fidum, ungue tubuloso fissurâ dorsali in longum diviso:* anth. *flavæ, oblongæ, erectæ, à basi infixæ.* Germ. *pedicellatum, viride, sericeum, oblongum, compressum, poly-*(10?)-*spermum;* stylus *bis longior germine, virens, subulatus, supernè arrecto-inflexus, pro maximâ parte à latere interiore albo-barbatus:* stigma *penicillus erectus summitatem denudatam styli terminans indèque stipitatum comparens.* Legum. *pedicellatum, pallidum, vix unciale, oblongum, inflatum, appressè villosum, rigido-membranaceum, stylo persistente caudato-acuminatum:* semina *plura,* 2-4?; *(at non vidimus adulta.)*

We are informed that this plant has been only lately introduced from the Brazils. We do not find it either in Sir Joseph Banks's or in Mr. Lambert's Herbariums; nor can we reduce it to any published species within our research.

The drawing was taken in the hothouse at the nursery of Messrs. Colville, in the King's Road, Chelsea, where the plant flowers freely and produces seed.

A small slender flexuosely and diffusely branched villous *shrub* about 2 or 3 feet high in the samples we have seen. *Leaves* widishly scattered, ternate, without stipules? *common petiole* upright straight furred scarcely an inch long, with a furrow, *leaflets* ovally-oblong, lanceolate, tapered at both ends, about $1\frac{1}{2}$ inch long or thereabout, smooth on the upper side except on the nerves and veins, covered with a grey nap at the under, side ones rather smaller than the middle one, *partial petioles* exceedingly short flexile (mere joints). *Racemes* terminal, solitary, upright, straight, 3-5 inches long, many-flowered, *peduncle* green with a roughish tawny nap; *flowers* loosishly scattered, reddish yellow, reflexed, rather less than half an inch in length; *pedicles* single, twice shorter than the calyx, recurved, round, with a twice shorter deflexed linearly subulate villous *bracte* at their base with one or two other very small close-pressed ones situated higher up. *Calyx* tawny-green, villous, about $\frac{1}{4}$ shorter than the corolla or thereabouts, 5-cleft for about $\frac{3}{4}$ of the length, 10-nerved, with a shallow brownish tube and bilabiately spreading lanceolately tapered equal segments. *Vexillum* (upper petal) cordately orbicular reflexed to the pedicle, mucronate (with a small distinct point) marked with a violet-coloured radiately bordered spot at the base: *alæ* (side-petals) twice narrower than the vexillum and carina or more, connivent, cuneately oblong, rounded at the end: *carina* (the two lower petals conjoined) bloatedly falcate, taper-pointed, pale, green at the tip. *Filament* monadelphous, 10-cleft down to about the middle, tubular below with a dorsal fissure reaching to the base: *anthers* deep yellow, oblong, upright, inserted at the base. *Germen* green, short-stalked, silky, oblong, compressed, many (10?)-seeded; *style* twice the length of the germen, green, subulate, geniculately turned up, upright at the upper part and whitely bearded along the inner edge: *stigma* a small white pencil placed above the naked interval at the end of the style and appearing as if stalked. *Pod* pedicled, pale, scarcely an inch long, oblong, bloated, covered with a close-pressed fur, stiffly membranous, terminated by the permanent style: *seeds* 2-4?

Lyd. Edwards del. Pub. by J. Ridgway 170 Piccadilly April 1. 1820. J. Watts

ROSA gallica; α: *subvar. cuprea.*

Officinal Rose; α: *subvariety* "Tuscany Rose."

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ. *Jussieu gen.* 334. *Div. II.* Rosæ.
ROSA. Suprà vol. 1. *fol.* 46.

Div. VI. Centifoliæ. *Setigeræ, armis difformibus; bracteatæ. Foliola oblonga v. ovata, rugosa. Discus incrassatus faucem claudens. Sepala composita.* Lindley monogr. 60.

R. *gallica,* armis subæqualibus conformibus debilibus, foliolis rigidis ellipticis, floribus erectis, sepalis (foliolis calycinis) ovatis, fructû subgloboso. *Lindley monogr.* 68. *n.* 41.

Rosa gallica. *Linn. sp. pl. ed.* 2. 2. 704. *Mill. ic. t.* 221. *fig.* 2. *Dict. ed.* 8. *n.* 20. *Du Roi harbk.* 2. 263. *Allion. pedem.* 2. 139. *Thunb. jap.* 214? *Willd. sp. pl.* 2. 1071. *Rössig rosen. tt.* 17. 22. 25. *fig.* 6. 26. 28. 31. 36. 38. 39. *Persoon syn.* 2. 48. *Gmel. bad. als.* 2. 406. *Hort. Kew. ed.* 2. 3. 262. *Smith in Rees's cyclop. in loco. Redouté's roses.* 1. 73. *t.* 25.—135. *t.* 52.—2. 17. *t.* 7.—19. *t.* 8. 10.

Rosa cuprea. *Jacq. fragm.* 31. *t.* 34. *fig.* 4; *(subvar. hujus loci).*

Rosa belgica. *Brotero fl. lusit.* 1. 338.—blanda. *id. eod.*

Rosa holosericea. Rössig rosen. *t.* 16.—damascena rubro-purpurea. *id. eod. t.* 18.

Rosa rubra. *Lamarck fl. franç.* 3. 130.

Rosa sylvatica. *Gaterau montaub.* 94.

Rosier de Provins. *Regn. bot.*

Rosa centifolia. *Mill. dict. ed.* 8. *n.* 14. *Willd. sp. pl.* 2. 1071. *Persoon syn.* 2. 48.; *(non verò Linnæi quæ* provincialis *Milleri,* &c.)

Rosa *n.* 3. *Linn. cliff.* 191.

Rosa rubra, &c. *Bauh. hist.* 2. 34.

(β) *pumila,* floribus simplicibus, radicibus repentibus. *Lindley l. c.*

Rosa pumila. *Linn. suppl.* 262. *Jacq. austr.* 2. 59. *t.* 198. *Allion. pedem.* 2. 140. *Willd. sp. pl.* 2. 1072. *Persoon syn.* 2. 49. *Marsch. Bieb. fl. taur. cauc.* 1. 397. *Hort. Kew. ed.* 2. 3. 263. *Pohl bohem.* 2. 172. *Wahl. cauc.* 150. *Smith in Rees's cyclop. in loco. Rau enum.* 112.

Rosa olympica. *Donn cant. ed.* 8. 170.

Rosa austriaca. *Crantz austr.* 86. *Pollich palat.* 50.

Rosa repens. *Munch. hausv.* 5. 281.—hispida. *id. eod.*

Rosa 1104. *Hall. helv.*

(γ) *arvina,* foliis utrinque nudis. *Lindley loc. cit.* 69.

Rosa arvina. *Krock. siles.* 2. 150. *Rau enum.* 106.

This universally admired genus, for ages the object of ornamental culture, has become so blended in our gardens by variation, that the accounts of the species are embarrassed by iterations and false synonyms, springing from the difficulty of arriving at genuine distinction in a maze of transitions obscured by an endless fluctuation of variety.

Difficulty has not however deterred Mr. Lindley from applying his talents and acquirements to a new illustration of the whole group in a Monograph from whence the above most valuable synonymy and ensuing account of the subject of this article have been borrowed, and which in the course of the current month will be ready for the public.

The present species is distributed by that gentleman under three principal varieties, branching within themselves into numerous subordinate ones or subvarieties, the technical discriminations of which may serve rather for the amusement of the florist than the occupation of the botanist, and are only noticed when the subjects are to be reduced, by means of synonymy, to places from which they may have been erroneously removed, as the present seems to have been by the late venerable botanist of Schœnbrunn. Why this has been called "Tuscany Rose" we are not told.

"Since ROSA *pumila* of Jacquin is to be considered as the wild state of this species, it ought perhaps to have been placed first rather than as a variety. In that case, however, the well-known name of *gallica* must have been given up for another, the knowledge of which scarcely extends beyond the country in which it grows wild.

"Switzerland and Austria produce it in the greatest abundance, but it has also been found in Asia by Bieberstein. Rau informs us that in the vicinity of Wurzburgh it grows so copiously as to injure the corn exceedingly by its creeping roots, like RUBUS *cæsius* (the Dewberry). It is better known in our gardens by Donn's name of *olympica*, while the name *pumila* is improperly applied to ROSA *majalis*.

"The numerous double varieties known under the names of the Giant, Velvet, Bishop, &c. Roses are of the most exquisite beauty, and would be unrivalled in the vegetable world if accompanied by the fragrance which characterizes less brilliant species. The most splendid of them all is the Tuscany Rose.

"The ROSA *arvina* of Krocker's Flora Silesiaca differs, as Rau himself confesses, in little except having a smooth tube to the calyx and naked leaves.

"ROSA *gallica* has many points in common with ROSA *centifolia (provincialis* of the authors subsequent to Linnæus). They may be distinguished in any state by the stiff upright flowerstalks, want of large prickles, rigid leaves and smaller petals with shorter sepals (calycine leaflets) of the former; its mode of growth is more compact and stature generally less. Its leaves are moreover never edged with glands, which those of *centifolia* always are.

"Forskähl's ROSA *gallica*, which he mentions as growing at Constantinople as high as the houses, and with double white flowers, cannot possibly be this. Could he mistake ROSA *moschata* for it? which is known to be cultivated there." *Lindley monogr. loc. cit.*

Hart. del. Pub. by J. Ridgway 170 Piccadilly April 1. 1820. J. Walls sc.

GARDENIA florida; α: *flore simplici.*

Single-flowered Cape Jasmine.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RUBIACEÆ. *Jussieu gen.* 196. *Div. IV.* Fructus monocarpus bilocularis polyspermus. Stam. 5. Fol. opposita; caulis sæpè frutescens.

GARDENIA. Cal. numero segmentorum varius. *Cor.* infundibuliformis. *Germ.* inferum, 1-loculare, *receptaculis* 2 v. pluribus, parietalibus, *ovula* numerosa affigentibus. *Bacca* 1-locularis, polysperma. *Embryo* directione varius. *Roxburgh MSS. (ex angl.)*

Div. Inermes.

G. *florida*, fruticosa, foliis ovatis, utrinque attenuatis; baccis elongato-turbinatis costis tot acutè prominentibus quot segmenta calycis. *Roxb. loc. cit. (ex angl.)*

Gardenia florida. *Linn. sp. pl. ed.* 2. 1. 305. *Mill. dict. ed.* 8. *n.* 7. *Thunb. diss. de Gardeniâ. n.* 2. *Ejusd. fl. jap.* 108. *Loureiro cochin.* 147; *(fide speciminis archetypi Herb. banks. asservati). Hort. Kew.* 1. 293. *ed.* 2. 1. 368. *Willd. sp. pl.* 1. 1225. *Smith in Rees's cyclop. in loco.*

Arbuscula sinensis, Myrti majoris folio, vasculo seminali hexagono, ad singulos angulos alis foliaceis munito, quæ porrectæ vasculi coronam efformant, Umki Sinensibus dicta. *Plukn. amalth.* 29.

Frutex cynosbati fructû alato, tinctorio, barbulis longioribus coronato. *Petiv. mus.* 498. *Ray hist.* 3. 233.

Si *vulgò* Kutsjinas. *Kæmpf. amæn. exot. fasc.* 5. 808.

(α) flore simplici.

Gardenia jasminoides. *Solander in philosoph. trans.* 52. 654. *tab.* 20; *(exemplario sicco desumpta).*

Umki, aliàs Umuy; cujus fructum ad colorem escarlatinum tingendum inservit; florem fert rosaceum, album, hexapetalum. *Plukn. amalth.* 212. *tab.* 448. *fig.* 4.

(β) flore pleno.

Gardenia jasminoides. *Ellis in philosoph. trans.* 51. 935. *tab.* 23.

Jasminum? ramo unifloro pleno, petalis coriaceis. *Ehret pict. tab.* 15.

Jasminum foliis lanceolatis oppositis integerrimis calycibus acutioribus. *Mill. ic. tab.* 180.

Catsjopiri. *Rumph. amb.* 7. 26. *t.* 14. *fig.* 2.

Frutex. Germ. *turbinatum costis* 5-6 *acutè prominentibus, fundo* 3-5-*loculare, suprà* 1-*loculare.* Bacca *oblonga, aurantiaca, glabra, magnitudine ovi columbini, costis* 5-6 *è segmentis calycinis, persistentibus decurrentibus angulata,* 1-*locularis:* receptacula *sæpiùs* 4 *de pariete interaneâ usque ad ¼ partem diametri cavitatis loculamenti prostantia, indèque in lobos* 2 *v. plures discedentia:* sem. *numerosa, pulpâ aurantiacâ nidulantia, subrotunda, subcompressa, rugosa.* Roxb. l. c. (ex angl.)

There is no published figure of this shrub from the living plant in the single-flowered state; but we find an engraving

of it in that state from a dried sample attached to the history of the species by Dr. Solander in the Philosophical Transactions; which has not however been cited in any subsequent book we have looked into.

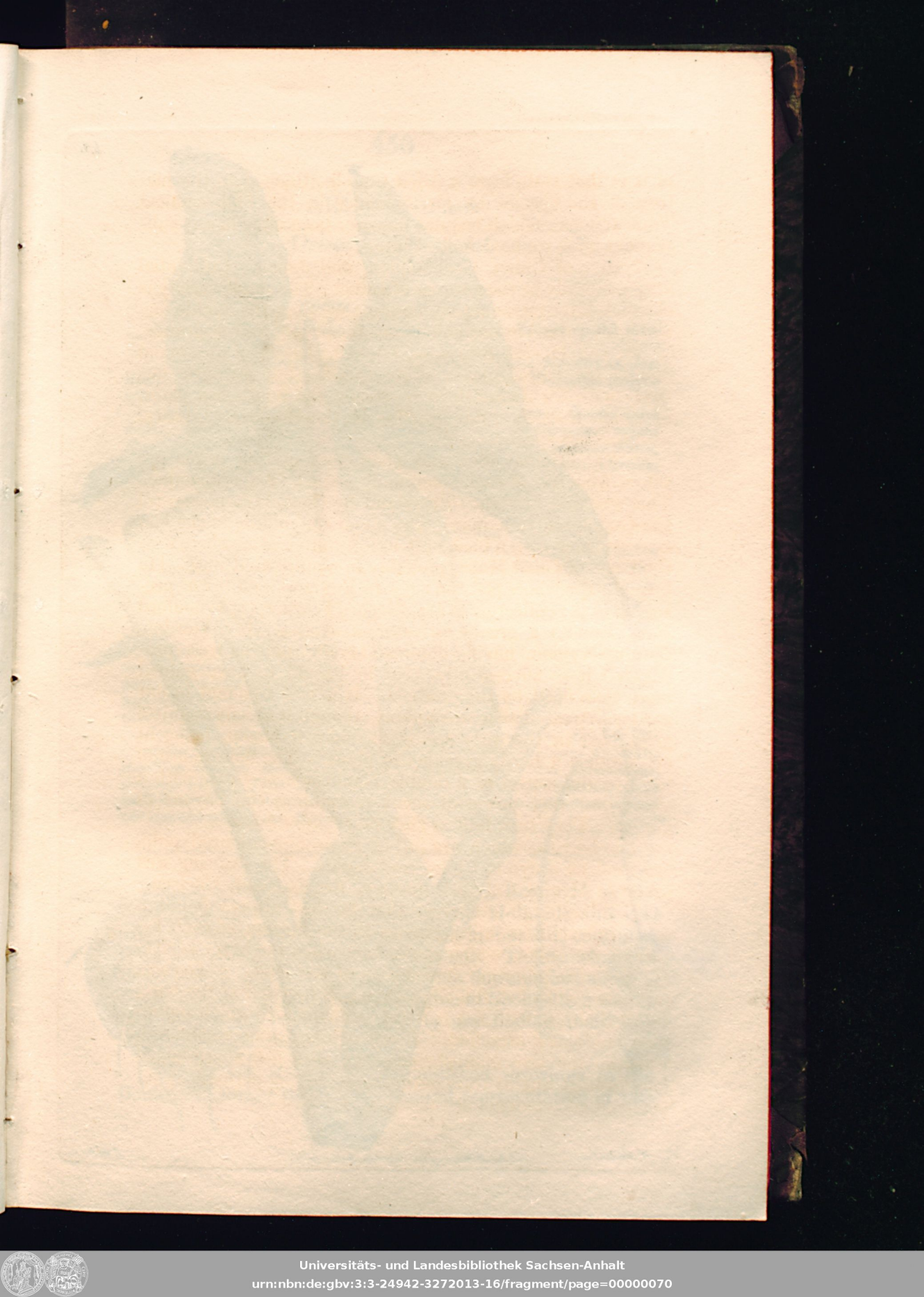
Native of China, Cochinchina, and Japan. Cultivated very generally in the gardens of India. The single variety is of much later introduction amongst us, than the double one so highly prized in our collections for beauty and fragrance.

In the Hortus Kewensis, Otaheite has been numbered among the native places of the species; but we agree entirely with Sir J. Smith in regarding the South Sea plant, of which there is a fine drawing in the Banksian Library, as a distinct species.

"The original idea and characters of this genus are taken from G. *florida*, commonly called 'Cape Jasmine.' This was first brought to England by Capt. Hutchinson (of the Godolphin Indiaman), who about the middle of the last century, met with a bush of it in full flower, somewhere near the Cape of Good Hope, probably in a cultivated state. He brought the whole plant in a pot to England, and it was preserved in the collection of Mr. Richard Warner, (of Woodford Row, Essex,) a great cultivator of exotics. Mr. Gordon, the nurseryman, having obtained layers from the tree, propagated it so successfully, that he is said to have gained more than 500*l.* by the produce. It is now frequent in our gardens, treated as a stove-plant, though it chiefly requires great heat in the early spring to make it bloom, being at other times a hardy greenhouse plant. The flowers are of the size and aspect of a double Narcissus *poeticus*, with a sweet and very powerful scent resembling the flavour of ginger. They turn buff as they fade." *Smith l. c.*

The berries, which are full of an orange-coloured pulp, are used as a dye in China and Japan. The drawing was taken at Messrs. Colville's nursery, King's Road, Chelsea.

Dr. Roxburgh observes, that he has always found a small inflected toothlike process in the bottom of each fissure of the calyx, which shows best when the berry is ripe. He gives the following description of the fruit. "*Germen* turbinate, with 5-6 ridgelike angles, 3-5-celled at the base, 1-celled above, with 3-5 parietal receptacles to which numerous *ovula* are attached. *Berry* oblong, orange-coloured, smooth, the size of a pigeon's egg with 5-6 sharp-edged longitudinal angles the continuations of the permanent taper-pointed segments of the calyx, 1-celled."



Rev. W. Herbert del. Pub. by J. Ridgway 170 Piccadilly April 1. 1820. J. Wells sc.

ARUM orixense.

Orissa Cuckow-point.

MONŒCIA *POLYANDRIA.*

Nat. ord. AROIDEÆ. *Jussieu gen.* 23. *Div. I.* Spadix spathâ involutus.

AROIDEÆ *(includentes tam* TYPHAS *quam* AROIDEAS *Jussieuii). Brown prod.* 1. 333. *Sect. I.* Flores diclines; Perianthio (calyce *nob.)* nullo. *Aroideæ veræ.*

ARUM. Spatha monophylla, cucullata, basi convoluta. *Spadix apice* nudus, *medio* staminifer, antheris multiserialibus; basi femineus: sæpiùs *Staminibus pistillisve* sterilibus fertilibus approximatis. *Baccæ* uniloculares, polyspermæ. *Semina* parieti altero inserta. *Radicula* umbilico obversa. *Brown prod.* 1. 335.

Div. Acaulia foliis simplicibus.

A. *orixense,* foliis hastato-tripartitis, spathâ pedunculatâ bicolori spadice longiore: apice lanceolato deflexo. *Brown in Hort. Kew. ed.* 2. 5. 309.

Arum orixense. *Roxburgh MSS. cum tab. pict. ined. Andrews's reposit.* 356. *Brown prod.* 1. 336. *Carey hort. beng. in loc.*

Perenne, acaule, radice *tuberosâ subanfractuoso-rotundatâ, albâ, magnitudine circitèr ovi pullastrini minoris, fibris circa gemmæ matricem crinitâ.* Folia *radicalia, petiolata, profundè trilobata,* 8-10-*uncialia,* lobis *ovatis acuminatis repandis nervo geminato periphæriæ proximè parallelo à parte supinâ circumdatis:* petioli *teretes erecti attenuati striati* 12-*unciales, basi convoluto-vaginantes.* Scapus *axillaris (subterraneus) pro tanto duntaxat elongatus ut spatham proximè extra humum sublevet.* Spatha *petiolis brevior striata erecta, intùs rubro colorata, extùs herbacea.* Spadix *basi (femineus)* germinibus *congestis indèque contiguo suprà contectus filamentis sterilibus ramosis, medio* antheris *aggregato-circumdantibus extumescens, indè suprà iterùm filamentorum priorum consimilium annulo crinitus;* clavâ *nudâ coccineâ subulatâ spadicem totum reliquam æquante basi latiore subtusque concavâ terminatus.* Roxb. MSS. (ex angl. versum).

The species has been observed by Dr. Roxburgh in the East Indies and by Mr. Brown in New Holland; and was introduced by Sir Joseph Banks in 1802; but still continues to be exceedingly rare in our collections. The drawing was taken by Mr. Herbert from a plant that flowered last autumn in the hothouse of his Botanic Garden at Spofforth, a source from which numerous rare plants are finding their way among the curious.

Among Dr. Roxburgh's unpublished drawings in the Banksian Library there is a coloured representation of this

plant done in India. From this we have borrowed the sketch of the spadix, to be seen by the side of the principal figure in our plate; and from the manuscript illustration of the drawing the following account.

" Native of the shady Mango-Groves, &c. near Semulcotah, where the soil is pretty dry and fertile. *Root* perennial, tuberous, nearly round, white with small inequalities; surrounded by fibres at the top where the leaves and scape come out. *Stem* none. *Leaves* radical, petioled, deeply three-lobed, 8-10 inches across each way, lobes ovate, pointed, a little scalloped, smooth, with a double nerve at the under side near to and parallel with the margin: *petioles* erect, round, tapering, striate, about 12 inches long, sheathing and embracing each other at the base. *Scapes* axillary very short, just long enough to elevate the spathes above the ground. *Spathes* shorter than the petioles, striate, erect, red on the inside, herbaceously green on the outer. *Spadix* surrounded at the base with germens crowned (placed immediately below) many yellow branching (antherless) filaments; swelled in the middle with *anthers;* and above these a second row of barren filaments; *club* scarlet, as long as all the rest of the spadix, upright, tapered from a concave base to a point which is neither obtuse nor sharp."

" The roots when fresh are exceedingly acrid, more so than those of the Common Dragon (Arum *Dracunculus)* or the Wake-Robin (Arum *maculatum)* of Europe. The natives apply them in cataplasms to discuss or bring forward scirrhous tumours. They also apply them externally for the bite of venomous snakes; at the same time giving inwardly a piece about as big as a field-bean."

The *Aroideæ* of Mr. Brown include the *Typhæ* as well as the *Aroideæ* of Jussieu, and are defined by a character, of which the following is intended for the english version.

Flowers spadiceously aggregated (collected together in a body upon a spadix); sometimes bearing the stamens and the pistils separate and usually naked; sometimes with a 4-6- seldom 3-parted calyx bearing both stamens and pistil. *Stamens* in the naked flowers aggregated, in those with a calyx opposite to the segments of the calyx and generally equal to them in number, with *anthers* that face outwards. *Germens*, in flowers where stamens and pistil are borne in separate ones, placed at the lowermost part of either the same

or a different spadix, aggregated: in those where the stamens and pistil are borne in one flower, solitary within the calyx, detached, 1-3-celled, 1-manyseeded, *ovula* upright, sometimes inverted or else inserted at the wall of the cell. *Style* either none, or simple. *Stigma* 1. *Seedvessel* close, either berried or else with a shell. *Seeds* with an albumen (perisperm), seldom (and then most probably only after germination has begun?) without. *Embryo* (rudiment of the future plant) in the axis of the albumen, straight, cylindrical, monocotyledonous (with one seed-lobe). *Radicle* (rostel) obtuse, pointing towards the umbilicus of the seed, seldom the contrary way. *Cotyledon* (seed-lobe) cylindrical, having on one side (outwardly where the seedvessel is manyseeded) a short longitudinal cleft situated near the radicle. *Plumule* (plume) 2-3-leafletted, leaflets rolled inwards at the edge, the outermost one placed opposite to the cotyledon, embraced between the edges of the cleft belonging to that viscus, more or less uncovered and enfolding the inner mutually fronting ones. *Plants* either herbaceous or else suffrutescent. *Root* either tuberous or else thick and fleshy. *Leaves* sheathing, simple or compound, all usually upon the root. *Spadix* terminal, lateral, or radical, mostly only one and shrowded by a spathe; sometimes naked.

Mr. Brown observes that the only distinctive character that marks the order throughout, is afforded by the embryo, which is of a very different structure from that of any other of the vegetable groups comprised in the monocotyledonous class to which this order belongs.

Arum belongs to the first section of its order, consisting of the genuine *Aroideæ*, with androgynous naked flowers; and has received a generic definition from Mr. Brown, of which the version is as follows. *Spathe* of one piece cucullate (cowled), convoluted at the base. *Spadix* naked at the top, bearing the stamens (consisting of numerous rows of anthers) in the middle, and the germens at the bottom: generally having barren stamens or barren pistils near to the fertile ones. *Berries* one-celled, manyseeded. *Seeds* inserted on one side of the loculament or cell. *Radicle* pointing towards the umbilical point of the seed.

It is suggested by the same author, that the genus will hereafter be to be divided into two, according to the structure of the germen which is manyseeded in some, and clearly

one-seeded in others. And he observes that it is still a matter to be investigated whether those appendages of the spadix always found near the anthers in genuine ARUMS (the ones with manyseeded fruit) are of course to be regarded as barren stamens, while on the other hand in the one-seeded species where they are contiguous to the germens they are consequently to be accounted as barren germens.

Orixense is known among its congeners, by hastate three-parted leaves, a peduncled two-coloured spathe longer than the spadix, lanceolate and deflexed at top.

N. In the last fasciculus, fol. 440, page 2, line 16, for "LEUCAJUM" read "LEUCOJUM;" in the last line of the second page of fol. 441, for "OLEA *odoratissima*," read "OLEA *fragrans*."

Pub. by J. Ridgway 170 Piccadilly May 1. 1820.

CHIMONANTHUS fragrans: β. *grandiflorus*.

Large-flowered Japan Allspice.

ICOSANDRIA *POLYGYNIA*.

Nat. ord. CALYCANTHEÆ. *Lindley suprà vol. 5. fol.* 404.

CHIMONANTHUS. Stamina subæqualia, persistentia, 5 exteriora fertilia, maturitate basibus connatis faucem operientia. *Frutices (Japoniæ) ramis virgatis. Flores axillares, solitarii, odori, flavescentes, intùs purpurei.* Lindley suprà vol. 5. fol. 404 in notâ ad calcem pag.

Chimonanthus fragrans. *Lindley MSS.*

Calycanthus præcox. *Lin. sp. pl. ed.* 2. 2. 718. *Willd. sp. pl.* 2. 1120. *Hort. Kew.* 2. 220. *t.* 10. *ed.* 2. 3. 282. *Curtis's magaz.* 466.

Obai s. Robai. *Kæmpf. amœn. exot.* 878. *t.* 879.

(β) *grandiflorus;* floribus subrotundis majoribus: laciniis patentibus: exterioribus nunc margine crispatulis. *Lindley MSS.*

(α). Frutex *virgatus.* Rami *oppositi, virgati, impubes, cortice pallidè brunneo scabrello; ad nodos tumidi.* Folia *opposita, brevitèr petiolata, rigida, lanceolata, acuminata, plana, integerrima, scabra, venis primariis præcipuè subtùs pilosiusculis, suprà atro-viridia nitentia, infrà pallidiora.* Flores *post folia, odoratissimi, axillares, subsessiles, solitarii, cernui;* bracteæ *numerosæ, pilosæ, brunneæ, imbricatæ,* superiores *sensìm majores, demùm transeuntes in* perianthium: foliolis *impubibus, imbricatis, basi in tubo connatis,* exterioribus *ovalibus, concavis, obtusis, margine plano seu crispatulo, amœnè lutescentibus, semidiaphanis,* interioribus *unguiculatis, sensìm minoribus, crassioribus, coccineis albido-maculatis.* Stamina *fauce carnosâ inserta, numero variabilia, sæpissimè* 10, *tum serie duplici;* 5 exteriora *fertilia, filamentis carnosis pilosiusculis, foliolis intimis breviora, ultra* antheras *posticas, ellipticas, adnatas, biloculares, longitudinalitèr dehiscentes, lutescentes, medio semiseptiferas, producta:* pollen *sphæricum;* interiora *totidem paulò breviora, filiformia, pilosa, æqualia, stylorum longitudine.* Stamina *plura utriusque seriei quandòque superadduntur, sed hæc vel manca vel sitû irregularia.* Ovaria (germina) *receptaculo carnoso in basi tubi sessilia, unilocularia, impubia:* ovulis *duobus, verticalibus, adscendentibus, superiore citissimè obliterato;* styli *totidem, filiformes;* stigmata *simplicissima.* Fructus *oblongus, è tubo perianthii incrassati, velutinus, laciniis deciduis cicatrizatus, fuscus, staminibus persistentibus carnosis basi connatis (an semper?) coronatus, sapore terebinthino.* Achenopses 1 *v.* 2 (5-6 *ex* Kæmpf.), *oblonga, brunnea, nitida, basin versùs pilosa, cornea.* Semen *solitarium adscendens;* testa *papyracea, pallidè brunnea;* raphe *crassa rectilinea axi fructûs adversa;* chalaza *orbicularis.* Embryo CALYCANTHI. Lindley MSS.

"Under the article CALYCANTHUS *fertilis* in vol. 5. fol. 404, I have proposed to distinguish the CALYCANTHUS *præcox* of Linnæus as a separate genus, by the name of CHIMONANTHUS. The propriety of this measure has been confirmed by my subsequent observations. It differs very ma-

terially from the true CALYCANTHI, which are confined to North America, in having the fruit crowned by the persistent, recurved, fleshy stamens, which grow together and close up its orifice. The difference in number of stamens is also of importance, because in the present genus they are ten inserted in a double row; in CALYCANTHUS, on the contrary, 48 and inserted in four rows, the innermost being merely rudimentary; so that CHIMONANTHUS must not be understood as a reduced CALYCANTHUS, because, if it were such, its stamens would be twelve, or some such division of 48, and not ten, which is a division of 40. The *pericarpia (seedvessels)*, moreover, are very numerous in CALYCANTHUS, and few in CHIMONANTHUS."

"There is some reason to suppose that two species are confounded under the name of CALYCANTHUS *præcox*, in the gardens. But as I have been unable to ascertain their limits satisfactorily, I shall confine myself to indicating in what the chief differences appear to consist. The one, which is that figured in the Hortus Kewensis and Curtis's Magazine, has greenish yellow flowers, of which the outer segments are even at the edge and scarcely spreading, and the inner ones dull purple; the other of which my figure in flower is a representation, has large, clear, yellow, roundish flowers, whose outer segments are sometimes curled at the edge and spreading, and inner ones bright red. I have not succeeded in detecting other differences, but am assured that the leaves of the large-flowered sort (which is cultivated in the collection of Comtesse de Vandes, at Bayswater) are rougher than those of the other, and of a lighter green. It is necessary to state, that the fruit and details of the plate all belong to the small-flowered kind."

"From the drawings of the Chinese I am disposed to believe that at least one more species exists among them, with very small yellow flowers. There is also, in an invaluable collection of Japanese wood-figures of plants in Sir Joseph Banks's library, a representation of what I am willing to consider a fourth species of CHIMONANTHUS, with smooth egg-shaped fruit, and a very stunted habit." *Lindley MSS.*

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a, fruit of *C. fragrans*; (α); 1, stamens of the same with perianthium (calyx) torn off; 2, a section of the same; 3, a

section of an ovarium (germen); 4, fruit divided vertically; 5, an achenopsis; 6, the same divided vertically; 7, the seed; 8, the embryo; 9, the same divided transversely. *Lindley.*

This valuable article is a contribution by Mr. Lindley, as is also the fine drawing of the present unpublished variety (probably distinct species) as well as the representation of the fruit of the previously published variety and the masterly illustration of its constituent members, of which the figures of the minuter kinds are highly magnified.

NOTE.

The english generic name of ARUM *orixense* of the 450th article (see the fasciculus for last month) has been accidentally misprinted "*Cuckow-point*" for "*Cuckow-pint.*"

a

b

J. Lindley, Esq. del. Pub.d by S. Ridgway 170 Piccadilly May 1. 1820. P. Watts sc.

ROSA parvifolia.

Burgundy Rose.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ. *Jussieu gen.* 334. *Div. II.* Rosæ.
ROSA. Suprà vol. 1. *fol.* 46.

Div. VI. Centifoliæ. *Setigeræ, armis difformibus; bracteatæ. Foliola oblonga vel ovata, rugosa. Discus incrassatus faucem claudens. Sepala (foliola calycina) composita.* Lindley monogr. 60.

R. *parvifolia,* nana, armis subæqualibus, foliolis rigidis ovatis acutis argutè serratis, sepalis (foliolis calycinis) ovatis. *Lindley monogr.* 70. *n.* 42.

Rosa parvifolia. *Ehrhart beytr.* 6. 97. *Willd. sp. pl.* 2. 1078. *Persoon syn.* 2. 50. *Smith in Rees's cyclop. in loco.*

Rosa remensis. *Desfont. cat.* 175. *Decand. fl. franç.* 4. 443. *Mer. par.* 191.

Rosa burgundiaca. *Rössig rosen. t.* 4. *Gmel. bad. als.* 2. 431. *Brotero flor. lusit.* 1. 339.

Planta *fusca compacta cæsia:* rami *subglaucescentes, stricti, erecti, graciles,* aculeis *inæqualibus tenuibus subfalcatis* setis *parcè intermixtis armati.* Folia *surculorum adultiorum bis saltèm internodiis longiora, ramulorum novellissimorum confertissimè aggregata;* stipulæ *lineares, subnudæ, glandulis ciliatæ, lucidè virentes;* petioli *pilosi, aculeolis paucis robustis subtùs armati, glandulosi;* foliola 3-7, *sæpissimè* 5, *parva, rigida, ovata, acuta, plana, subtilissimè et simpliciter dentata dentibus hinc glandulâ donatis, suprà saturatè opacèque virentia rugosa atque nuda, subtùs cinereo-pallentia varicoso-venosa costâ mediâ pilosâ, par imum, cum paria trinis plura, plerùmque exiguissimum.* Flores *solitarii, ramulis novellis exsuperati, ebracteati, purpurei, seriebus multiplicibus petalorum semper repleti;* pedunculus *depilis, setis paucis invalidis adspersus:* calycis tubus *ovatus, nudus;* foliola (sepala) *ovata cum acumine, subsimplicia, concava, reflexa, pilosa glandulisque adspersa, plurimùm breviora petalis: petala patentia, præter interiora partìm germinibus provenientia arctissimèque imbricantia;* styli *pilosi, aliquantulum exserta, à pube suâ invicèm cohærentes.* Lindley loc. cit. (ex angl. versum).

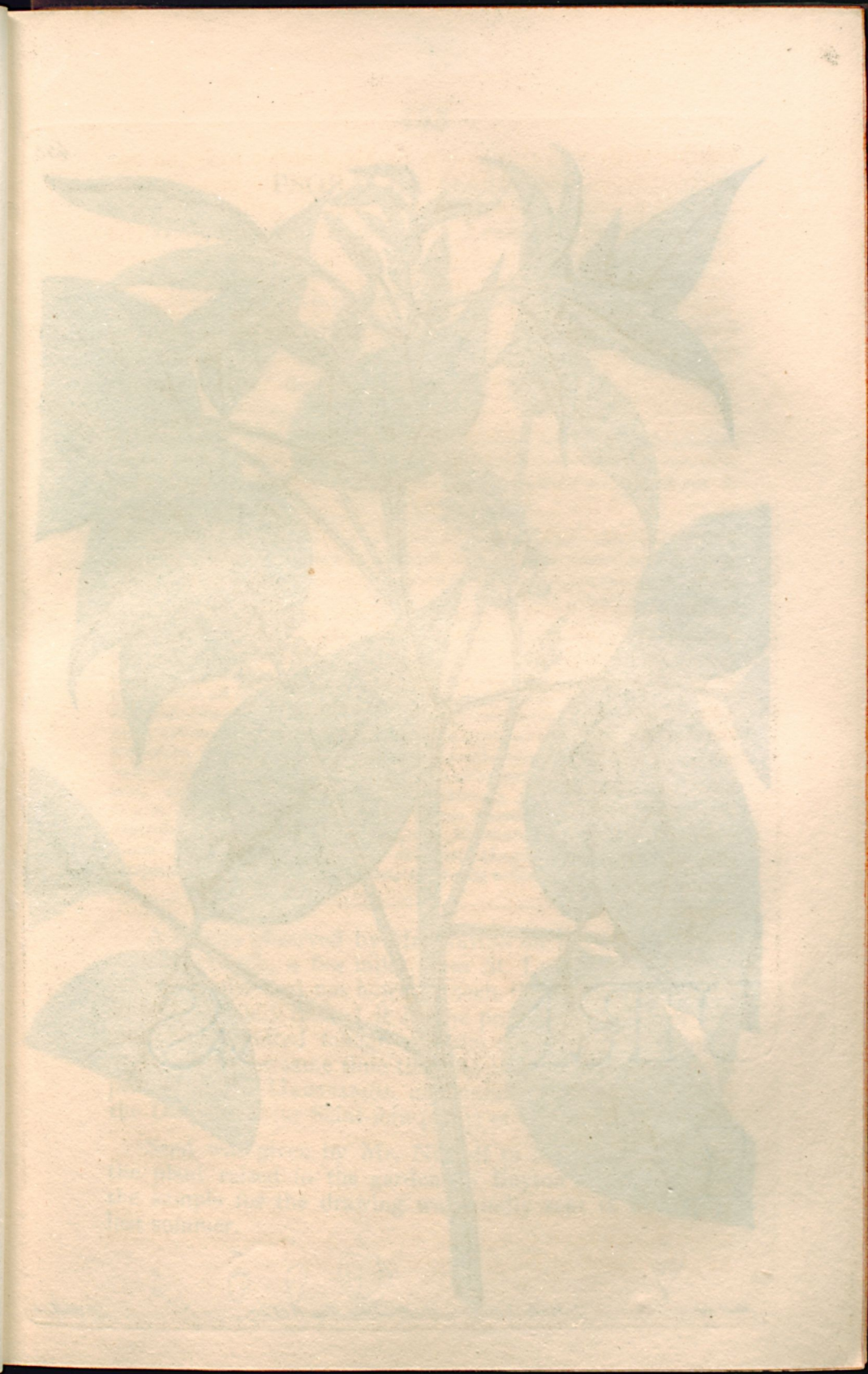
Through the ingenious and instructive Monograph of the Roses with which Mr. Lindley has just presented the public, the history of that intricate group has been freed by sound criticism from the obscurity and ambiguity which have hitherto perplexed the study of it, and its bounds largely extended by newly observed and curious species illustrated by original descriptions and admirably characteristic figures.

The subject of this article is found under the section *Centifoliæ,* a section named after its assumed type the Rosa *centifolia* of Linnæus, of which the Rosa *provincialis* of suc-

ceeding writers is ably shown by Mr. Lindley to be an unguarded repetition, while the *centifolia* of the same authorities is proved to belong to the Linnean *gallica*. In this way *provincialis* becomes justly merged in *centifolia*. The section consists of *damascena*, *centifolia*, *gallica*, and *parvifolia*; and comprises in their varieties all the primeval favourites, as well as the kinds which afford the celebrated essential oil called "Attar of Roses." A hint is dropped by Mr. Lindley showing, that in his opinion, it is not improbable but that *centifolia* may have been the parent-stock of the entire section.

"This species forms a little dark, compact, blueish grey plant. *Branches* somewhat glaucous, straight, erect, slender, armed with unequal, scattered, slender, somewhat falcate prickles and a few setæ. *Leaves* on the strongest shoots at least twice as long as the joints, on the branchlets very densely aggregated; *stipules* linear, nearly naked, fringed with glands, bright green; *petioles* hairy, having at the back a few strong short straightish little prickles, glandular; *leaflets* 3-7, usually 5, small, stiff, ovate, acute, flat, very finely and simply toothed; *serratures* with a gland on one side, of a deep dull green, rugose, and naked above, pale ash-colour, with a hairy rib and prominent veins beneath, the lowest pair, when more than three, generally very small. *Flowers* solitary, overtopped by the young shoots, without bracteæ, purple, always very double; *peduncle* naked; *sepals (calycine leaflets)* ovate with a point, nearly simple, concave, reflexed, hairy and scattered over with glands, very much shorter than the *petals;* these are spreading, except the inner ones, which are in part formed from the ovaria (germens) and very closely imbricated; *styles* hairy, a little protruded, and adhering by their down."

"I have little hesitation in distinguishing this particularly from *gallica* (see above, fol. 448), especially as I have the authority of the accurate and observing Ehrhart for doing so. It surely differs as much from that, as that does from *centifolia;* and as I have no varieties to enumerate of it, there is the less difficulty in finding characters that may be depended upon. I have seen it growing in the most sterile and the most fertile soils; yet without material alteration in its appearance, and most certainly without the slightest tendency to assume the characters of *gallica* (its nearest kin). M. Durand is reported, on the authority of M. Decandolle, to have found this wild on the mountains in the neighbourhood of Dijon." *Lindley monogr. l. c.*



Hawk. del. Pubd by J. Ridgway 170 Piccadilly May. 1. 1820. S. Watts. sc.

PSORALEA Onobrychis.

Rough-podded Psoralea. Louisiana Saint-foin.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Corolla irregularis papilionacea. Legumen 1-loc. 2-valve.=PAPILIONACEÆ. *Brown in append. Flind. voy.* 2.

PSORALEA. Suprà vol. 3. *fol.* 223.

P. *Onobrychis*, caule alto glabro; foliis ternatis, foliolis ovato-lanceolatis subpubescentibus, racemis (axillaribus) longè pedunculatis, secundis, legumine subovato muricato glabro, radice flagelliformi. *Nuttall gen.* 2. 104; *excluso Muhlenb. catal. (Ex angl. versum).*

Stylosanthes racemosa. *Fraser's catalogue for* 1813.

Caulis *spadiceo-fuscescens*, 3-5-*pedalis;* ramis *striato-angulosis villosis.* Foliola 3-4-*uncialia latitudine subduplo minore longè acuminata, utrinque punctata villosaque;* petioli proprii *villosi, foliolorum lateralium subminorum brevissimi, centralis semunciam longus v. magis triploque* petiolo communi *brevior;* stipulæ *parvæ lineari-subulatæ, erectæ, hirsutæ.* Racemi *plurimi, solitarii, confertiùs spicati, subæquales folio;* spica *subinterrupta, duplo brevior* pedunculo *densè villoso v. multò magis,* pedicelli *per binos? vel trinos? segregati pilosiores subbreviores calyce, deflexi,* bracteâ *singulâ lineari-subulata hirsuta, citò caduca ad basin cujusque fasciculi:* flores *parvuli, purpurascentes.* Cal. *turbinato-campanulatus, impunctatus, appressè villosus, duplo brevior corollâ,* (10-*nervis?*) *brevi-bilabiatus æqualis dentibus* 5 *acutis, labio superiore* 2-*dentato, inferiore* 3-*dentato.* Corollæ petala *omnia obtusa;* carina *brevior inclusa, (non vidimus recentem).* Germ. *oblongum, brevius calyce, compressum, utrinque attenuatum (subpedicellatum?) papillosum:* stylus *duplo longior, glaber, à medio cum angulo obtuso ascendens:* stigma *punctum subcapitellato-obtusum.* Stam. *diadelpha: filamentum alterum brevissimè* 9-*fidum:* antheræ *subrotundo-ovatæ acutulæ.* (Legumen *ex Nuttall, calycem exsuperans, monospermum, nigrum, tuberculis vehementèr exasperatum).*

A species observed by Mr. Nuttall on the banks of the river Merrimek, a few miles from St. Louis, in Louisiana. That botanist had not however seen the flowers before he recorded it, but ranked it in the present genus from the glandularly dotted foliage and the short one-seeded pod; observing at the same time that the plant had much the appearance of an HEDYSARUM, and naming it specifically after the *Onobrychis* (or Saint-foin plant) of that genus.

Seed was given by Mr. Nuttall to Mr. Lambert; and the plant raised in the gardens of Boyton House, whence the sample for the drawing was kindly sent to us during last summer.

Mr. Nuttall questions whether our plant may not be the PSORALEA *hedysaroides* of Muhlenberg's Catalogue; but there the flower is yellow.

A hardy tall-growing herbaceous perennial. *Stem* brown, 3-5 feet high; *branches* flutedly angular villous. *Leaves* ternate; *leaflets* ovately lanceolate, long-taper-pointed, slightly furred and glandularly dotted on both sides, 3-4 inches long, about half as broad, two side-ones somewhat smaller, all when dry of a heavy yellowish green; *common petiole* shorter than the leaflets; *lateral partial ones* very short, *central one* about half an inch long or more; *stipules* small, linearly subulate, upright, shaggy. *Racemes* many, axillary, solitary, equal to the leaves or thereabouts, *peduncle* thickishly furred, twice as long as the spike or more; *spike* somewhat broken, closish; *pedicles* scatteredly detached in pairs or triplets? thickishly furred, rather shorter than the calyx, deflexed, with a single linearly subulate shaggy quickly falling *bracte* at the base of each pair or triplet: *flowers* small, purplish red, sweet. *Calyx* turbinately campanulate, not dotted, close-pressedly furred twice shorter than the corolla (10-nerved?), shallowly 2-lipped, equal, with five pointed teeth, 2 to the upper lip, 3 to the under. *Petals* all blunt, the two of the *carina* enclosed by the *alæ;* (but we did not see the flowers while fresh). *Germen* oblong, shorter than the calyx, compressed, tapered at both ends (somewhat stalked?) papillary: *style* twice longer, smooth, bent upwards with an obtuse angle near the middle: *stigma* a small headed point. *Stamens* diadelphous; one filament very shallowly 9-cleft: *anthers* roundish, ovate, rather pointed. *Pod* (according to Mr. Nuttall) overtopping the calyx, one-seeded, black and extremely rough with tubercles.

NOTE.

The following synonym may be added to the ASTRAGALUS *caryocarpus* of fol. 176, vol. 2 of the present work;

Astragalus carnosus. *Nuttall gen.* 2. 100; *(non tamen Pursh̄ii speciem quandam* SOPHORÆ *cui perperàm ex D. Nuttall fructum* ASTRAGALI carnosi *attribuerat intelligentis).*

Plantæ delin. Pub by J. Ridgway 170 Piccadilly May 1. 1820. J. Watts sc.

PSORALEA melilotoides.

Melilot Psoralea.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Cor. irregularis papilionacea. *Leg.* 1-loc. 2-valv.=PAPILIONACEÆ. *Brown in append. to Flind. voy.* 2.

PSORALEA. Suprà vol. 3. *fol.* 223.

Div. Foliis ternatis.

P. *melilotoides,* foliis omnibus ternatis, foliolis lanceolatis, pedunculis folio longioribus spicatis: spicis lineari-lanceolatis, bracteis calyce longioribus. *Solander MSS; (sub.* P. Asphaltite).

Psoralea melilotoides. *Michaux bor. amer.* 2. 58. *Pursh amer. sept.* 2. 475. *Ventenat malm.* 94. *Curtis's magaz.* 2063.

Psoralea Melilotus. *Persoon syn.* 2. 347.

Psoralea Asphaltites. *Solander in Herb. & Sched. banksianis. Specimine spontaneo sicco assumpta.*

Melilotus psoraloides. *Nuttall gen.* 2. 104.

Trifolium psoralioides. *Walt. carol.* 184.

Hedysarum leguminibus monospermis, foliis ternatis foliolis lanceolatis. *Gron. virg. ed.* 1. 87; *(affirmante specimine archetypo Claytoni in Herb. Gronov. in Mus. banks. Hoc malè a Linnæo* HEDYSARO violaceo, *nunc* LESPEDEZÆ violaceæ, *pro synonymo adjunctum est.)*

Melilotus flore violaceo, odore remisso. *Clayton n.* 103. *(ex specim. archetypo).*

Onobrychis (fortè) Asphaltites angustiori folio triphyllo floribus purpureis spicatis ex terrâ marianâ. *Pluk. mant.* 140; *(affirmante specimine Herbar. Pluknetiani pag.* 133; *fide Solandri).*

Caulis *angulatus, erectus, ramis caule brevioribus.* Fol. *alterna, ternata, petiolata:* petiolo communi *unciali:* foliola *lanceolata, obtusiuscula, subglabra sed punctis callosis utrinque adspersa, æqualia:* impar *longiùs à reliquis remotum quàm illa à basi (in superioribus, inferiora non vidi).* Stipulæ *lineares, lanceolatæ, punctis adspersæ.* Pedunculi *è supremis alis, undè subterminales, foliis duplo v. triplo longiores.* Flores *subsessiles spicati:* spica *lineari-lanceolata.* Calyces *punctis glandulosis adspersi.* Bracteæ *punctis magis callosis adspersæ, ovatæ, acuminatæ, floribus* 3*-plo longiores, eosque arctè includunt ante explicationem dum bracteæ cadunt; valdè enim caducæ sunt.* Soland. l. c.=*Perennis, herbacea, pubescens.* Racemus *longissimè pedunculatus.* Cal. *varicoso-venosus.* Cor. *violaceo-pallens.* Alæ *duplo longiores carinâ v. ultrà.* Legumen *monospermum, nudum, longitudine calycis, gibbosum, transversè rugosum, stylo persistente resupinato terminatum.* Nuttall loc. cit. (ex anglico.)

By the inspection of the corresponding sample in the Claytonian Herbarium, from which the Flora Virginica was compiled by Gronovius, we are certain that our plant belongs to the species cited from the first edition of that work;

but at the same time we perceive that some confusion has been produced in the subsequent history of the species, from the plant having been erroneously identified by Linnæus with his widely distinct HEDYSARUM *violaceum*, and by the error having been adopted, instead of corrected, by Gronovius in the second edition of the Flora Virginica, where our plant (the one of the first edition) appears under the specific phrase by which Linnæus had distinguished HEDYSARUM *violaceum* in his Species Plantarum, while the right phrase of the first edition is in this postponed to the wrong one, and transferred to the synonymy. We have in consequence omitted all reference to the second edition of the Flora Virginica.

The species was taken up many years ago by the late Dr. Solander, under the specific title *Asphaltites*, from a spontaneous sample in the Banksian Herbarium. The description we have published from the manuscript, anxiously wishing to promulgate even the least unnoticed memorial of that accomplished pupil of Linnæus.

We are at a loss to conjecture why Mr. Nuttall should have displaced the species from this genus, with the assertion that it is not furnished with the glandules or calli, that denote an affinity to PSORALEA; the foliage of the plant being in fact covered with such.

The drawing was taken from a sample that flowered in the Sloane Square Nursery; the seed of which had been imported from Virginia, where the species is native, by Messrs. Frasers. It is a hardy herbaceous perennial. Not enumerated in the Hortus Kewensis.

Stem from a foot to a foot and a half high, angular, upright, roughishly furred. *Leaves* alternate; *leaflets* very slightly furred, glandularly dotted, lanceolate with a bluntish point, equal; *central partial petiole* on the upper leaves as long or longer than the *general one; stipules* linear, lanceolate, glandularly dotted. *Peduncles* from the axils of the upper leaves, hence in some sort terminal, twice or thrice the length of the leaves (4-6? inches long). *Flowers* racemosely spiked, shortly stalked, of a palish violet-blue: *raceme* linearly lanceolate (3-4? inches long), upright. *Calyx* pubescent, varicosely veined, and glandularly dotted. *Bractes* ovate, taper-pointed, three times the length of the flowers and enveloping them before they expand, after which they quickly fall off, dotted with glandules of a harder consistence than those of the other parts of the plant. *Alæ* twice the length of the very short *carina*. *Pod* one-seeded, the length of the calyx, gibbous, cross-wrinkled, not furred.

Smith. del. Pub by J. Ridgway 170 Piccadilly May. 1. 1820. Coriers.sc.

CHRYSANTHEMUM indicum; δ. *superbum.*

Superb White Indian Chrysanthemum.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. COMPOSITÆ. *Adanson fam.* 2. 103.
CORYMBIFERÆ. *Jussieu gen.* 177. *Div. III.* Receptaculum nudum. Semen nudum seu non papposum. Flores radiati.
CHRYSANTHEMUM. Suprà vol. 1. *fol.* 4.

Chrysanthemum indicum. *Character speciei cum synonymis suprà vol.* 2. *fol.* 4. *videndus.*

We have been favoured with the following very useful communication from Mr. Sabine, the Secretary to the Horticultural Society. The description of the species and the synonymy have already been given in the fourth article of the first volume of the present publication.

"Since the two varieties were figured in the fourth plate of the first volume of the Botanical Register, some fresh importations have added others to the number already known of this ornamental species, amongst which is the one now represented, which came from China in 1817. The drawing was made from a plant that flowered in the autumn of 1818 in the nursery of Messrs. Colville, in the King's Road, Chelsea.

"Although the colours into which the flowers of this species sport in China are many, yet it has so happened, that of the twelve varieties which are now established in this country, four are white: of these the plant represented in the annexed plate is by far the finest, the terminating flower of the corymb being frequently near four inches in diameter. The inflected direction of the florets sufficiently distinguishes this from the others. The tubular part of each floret enlarges towards the lip, which does not expand as in several others, but assumes a hollow shape in consequence of the contraction of its edges and apex. The following is a list of the varieties we have alluded to above:

α. Purple. *Bot. Mag.* 327.
β. Changeable White. *Bot. Mag.* 2042.
γ. Quilled White. *Bot. Reg.* 4.

δ. Superb White. *Bot. Reg.* 455.
ε. Tasselled White.
ζ. Quilled Yellow.
η. Sulphur Yellow.
θ. Golden Yellow. *Bot. Reg.* 4.
ι. Large Lilac.
κ. Rose or Pink.
λ. Buff or Orange.
μ. Spanish Brown.

"Many others are described in different accounts of Chinese plants, as well as represented in drawings of unquestionable authority, some of them much excelling in beauty and splendour any of those above enumerated. We understand that Messrs. Barr and Brookes have, amongst other valuable novelties, obtained three new kinds by their late spirited mission of a gardener to Canton; and the Horticultural Society have also imported several in the last season, which will still further increase the number of varieties." *Sabine.*

The drawing was taken at the nursery of Messrs. Colville, King's Road, Chelsea.

M. Hart. del. Pub. by J. Ridgway 170 Piccadilly May 1. 1820. J. Watts. sc.

VIBURNUM odoratissimum.

China Laurestine.

PENTANDRIA *TRIGYNIA.*

Nat. ord. CAPRIFOLIA. *Jussieu gen.* 210. *Div. III.* Calyx bracteatus. Stylus nullus: stigmata 3. Cor. monopetala.
VIBURNUM. Suprà vol. 5. fol. 376.

V. *odoratissimum*, sempervirens, glabrum; foliis coriaceis elliptico-oblongis, distantèr subdentatis margine reflexo: thyrso omninò hermaphrodito brachiato, ramulorum pedunculis trichotomo-pedicellatis.

Frutex *sempervirens, erectus, glaber, ramis teretibus robustis punctis extantibus, verruculatis.* Fol. *opposita (modò verticillato-trina), coriacea, patentia, elliptico-oblonga, distantèr nervosa, margine subtili cartilagineâ reflexâ obsoletè distantèrque dentatâ vel interdum subintegrâ, petiolum versùs attenuata, acumine brevi obtusulo apiculata, subtùs pallentia, juniora lucidè lætèque virentia, seniora opaciora, majora nunc 5-uncialia latitudine fermè 3-unciali:* petiolus *ad maximum* ¾ *unciæ longus.* Thyrsi *terminales brachiato-decompositi, stricti, laxiùs numerosiflori, subtriunciales, glabri, patentes bracteati, ramulis in* pedunculos *trichotomo-pedicellatos terminantibus:* pedicelli proprii *brevissimi crassi basi cicatrice dilapsæ bracteæ profundè notati;* bracteæ *sphacelatæ, acuminatæ, caducæ; pedicellorum minimæ.* Cal. *minutus, campanulatus, rotundatè 5-lobulatus, pallidus.* Cor. *carnosula, turbinato-rotata, alba, caduca, lutescentèr-emarcescens:* tubus *triplo longior calyce vel magìs fauce dilatatâ;* limbus *sublongior tubo, revoluto-reflectendus, laciniis rotundatis convexis.* Fil. *tubo adnata, laciniis corollæ alterna, divaricata, æqualia limbo, subulata, alba, stricta, persistentia:* anth. *incumbentes, oblongæ, bilobæ, lobis linearibus basi sagittato-distinctis:* pollen *ochroleucum.* Germ. *disco glanduloso depresso viridi orbiculato fundo calycis delitescente insidens, virens, conicum, æquale calyci, rotundatè trigonum, tubo corollæ inclusum,* stigmate *obsoletè tricolli continuo pallido pruinoso apiculatum.*

A handsome evergeen shrub, with blossom scarcely inferior in fragrance to that of the well-known Sweet Olive of India (OLEA *fragrans).* The species is of recent introduction, and said to be native of China. It does not appear to have been recorded. The plant from which the drawing has been taken was kindly sent to us by Sir Abraham Hume from the collection at Wormleybury, where it flowered last February for the first time in this country. It has been treated till now as a hothouse plant, but will probably be found to flower more freely when it shall have been treated less tenderly. We saw fine strong samples of it in the stove

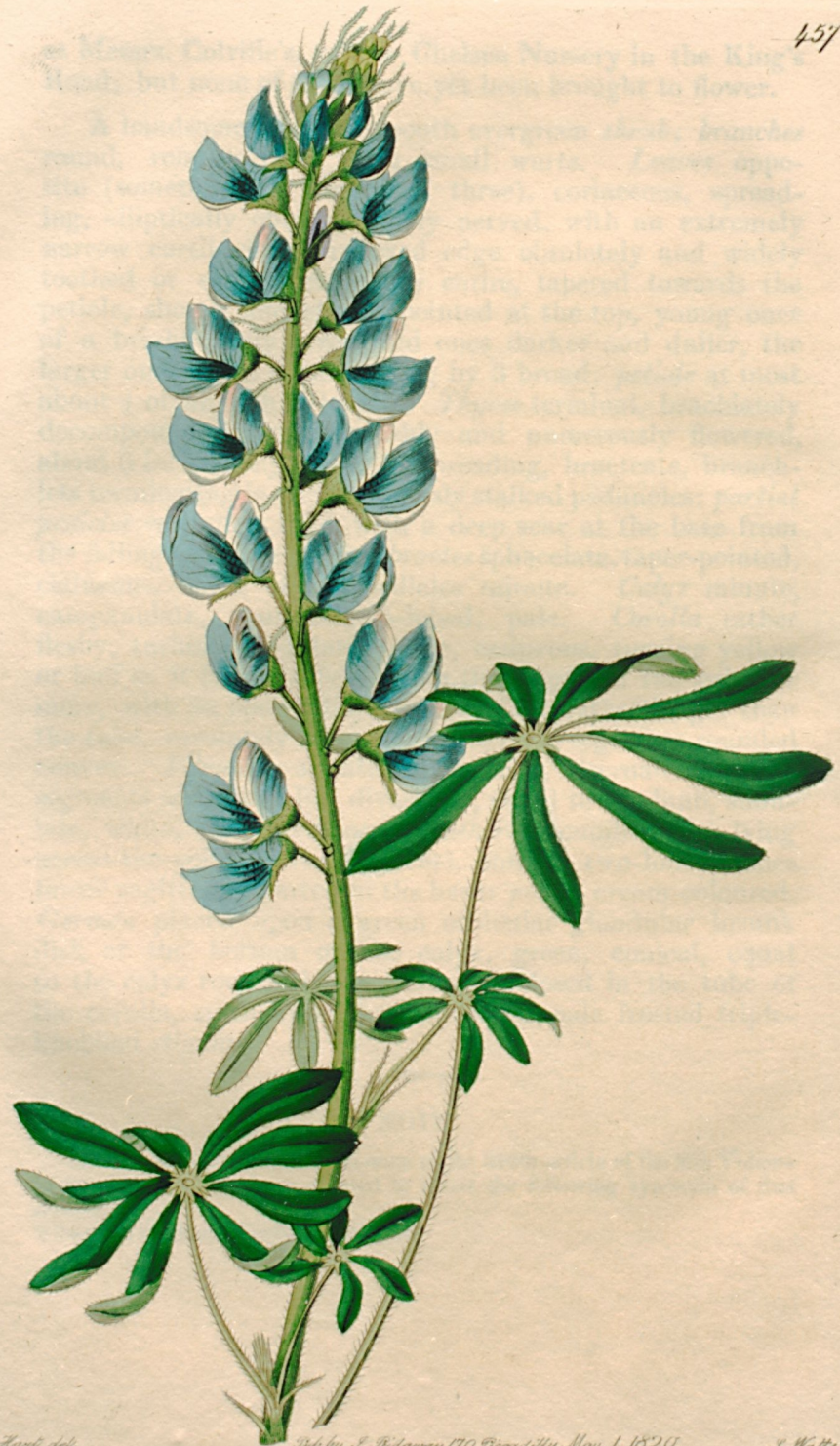
at Messrs. Colville's, of the Chelsea Nursery in the King's Road; but none of them have yet been brought to flower.

A handsome upright smooth evergreen *shrub; branches* round, robust, beset with small warts. *Leaves* opposite (sometimes in whorls of three), coriaceous, spreading, elliptically oblong, widely nerved, with an extremely narrow cartilaginous reflexed edge obsoletely and widely toothed or sometimes nearly entire, tapered towards the petiole, shortly and bluntly pointed at the top, young ones of a bright lively green, old ones darker and duller, the larger ones about 5 inches long by 3 broad: *petiole* at most about $\frac{3}{4}$ of an inch in length. *Thyrse* terminal, brachiately decompounded, stiff, loosishly and numerously flowered, about 3 inches long, smooth, spreading, bracteate, branchlets terminating in trichotomously stalked peduncles: *partial pedicles* very short thick with a deep scar at the base from the falling off of the bracte: *bractes* sphacelate, taper-pointed, caducous, those of the pedicles minute. *Calyx* minute, campanulate, roundedly 5-lobed, pale. *Corolla* rather fleshy, turbinately rotate, white, caducous, turning yellow or buff as it fades; *tube* 3 times the length of the calyx or more, with an open dilated orifice; *limb* rather longer than the tube, revolutely reflexed in the end, segments rounded convex. *Filaments* adnate to the tube, alternate with the segments of the corolla, divaricate, equal to the limb, subulate, white, stiff, permanent: *anthers* incumbent (or lying across the point of the filament), oblong, two-lobed, lobes linear sagittately parted at the base: *pollen* cream-coloured. *Germen* placed upon a green orbicular glandular insunk disk at the bottom of the calyx, green, conical, equal to the calyx roundedly 3-cornered, inclosed in the tube of the corolla, surmounted by continuous pale frosted triple-knobbed *stigma*.

NOTE.

In the article VIBURNUM *rugosum* of the 376th article of the fifth Volume of this Register, we have omitted to insert the following synonym of that species.

Viburnum rigidum. *Ventenat malm.* 98.



Hartt. del. Pub by J. Ridgway 170 Piccadilly. May. 1. 1820. J. Watts sc.

LUPINUS mexicanus.

Mexican Lupine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Corolla irregularis papilionacea. Stam. 10. diadelpha. Legum. uniloculare bivalve. *Frutices aut herbæ; folia simplicia aut ternata aut variùs digitata; stipulæ subnullæ, nunc conspicuæ imo petiolo adnatæ aut ab eodem distinctæ.*=PAPILIONACEÆ. *Brown in append. to Flind. voy.* 2.

LUPINUS. Calyx 2-fidus laciniis integris aut dentatis. *Carina* basi bipartita. *Stamina* basi monadelpha; *antheris* 5 subrotundis, 5 oblongis. *Legumen* coriaceum oblongum polyspermum. *Herbæ; folia digitata, stipulis imo petiolo adnatis; flores spicati terminales, in spicâ alterni aut subverticillati, nudi aut bracteati. An* LUPINUS integrifolius *Linnæi affinior* CROTALARIÆ? Juss. loc. cit. 354.

L. *mexicanus*, calycibus alternis appendiculatis labio superiore semibifido, inferiore obscurè 3-dentato. *Lagasca gen. et sp. pl.* 22.

Planta præter corollam omninò molli-pilosa. Foliola 3?-5?-7-8, *elongato-cuneata, angusta acumine brevi, longè deorsum attenuata, suprà nuda, infrà pilis sericeis albicantia, longiora biuncialia,* petiolis *pilosis breviora;* stipulæ *subulato-lineares erectæ pilosæ.* Racemi *spicatim elongati, laxiùs multiflori,* floribus *sparsis purpureo-cærulescentibus venis saturatioribus pictis, antè anthesin bracteosi:* pedunculus *(ex* Lagascâ) *oppositifolius;* pedicelli *hirsuti, ascendentes subbreviores calyce:* bracteæ *lineari-subulatæ, angustissimæ, longiores calyce, caducæ.* Cal. *hirsutus, viridis, labiis divaricatis, summo emarginato-fisso.* Vex. *conduplicato-reflexum, ex imi disci plicâ margines supremas alarum infernè equitans;* alæ *dolabriformes, acutæ, à marginibus anticis cohærentes;* carina *pallens, ascendens, angusta, subulato-falcata, longitudine alarum, acumine longiusculo saturatè violaceo.* Antheræ *flavæ, alternæ tardiores lineares, alternæ præcociores subrotundæ.* Germ. *setoso-pilosum:* stylus *assurgens* penicillo stigmatoso *terminatus.*

A handsome species, lately introduced into the Botanic Garden at Madrid from Mexico. Its seed was sent by M. Lagasca to Mr. Lambert; and from this the present plant was raised in the garden at Boyton House, where it flowered last February in the stove. Probably biennial? but its duration has not been yet ascertained amongst us. In Mr. Lagasca's opinion it comes nearest to LUPINUS *Thermis*, an egyptian species.

The whole plant, except the corolla, is more or less beset with a long soft pile. *Leaflets* 3?-5?-7-8, cuneately elongated, narrow, shortly taper-pointed, tapered for a considerable way downwards, naked, rendered white underneath by

their silky fur, the longest about two inches in length, shorter than the long-piled petioles; *stipules* subulately linear, upright, long-piled. *Racemes* spiked and long, widishly many-flowered; *flowers* scattered, of a purplish blue colour with deeper streaks, bracteose (or intermixed with longish bractes) before they open: *peduncle* (according to M. Lagasca) opposite to its leaf; *pedicles* shaggy, inclining upwards, somewhat shorter than the calyx: bractes linearly subulate, extremely narrow, longer than the calyx, caducous. *Calyx* shaggy, green, with divaricate lips, the upper one of which is split at the end into a notch. *Vexillum* foldingwise reflexed placed astride by the deep plait at the lower part upon the upper edges of the alæ; *alæ* dolabriform (hatchet-shaped) pointed, cohering by their front edges; *carina* pale, inclining upwards, narrow, subulately falcate, the length of the alæ, with a longish deep violet tapered point. *Anthers* deep yellow, alternate ones linear and shedding their pollen later, the other 5 round. *Germen* setaceously furred: *style* ascending, terminated by a pencilled *stigma*.

J. Lindley. Esq. del. Pub.d by J. Ridgway 170 Piccadilly June 1. 1820. J. Watts sc.

ROSA fraxinifolia.

Newfoundland Rose.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ. *Jussieu gen.* 334. *Div. II.* Rosæ.

ROSA. Calycis tubus urceolatus carnosus *achenia* plurima hirsuta includens. *Receptaculum* villosum. *Lindley monogr. xxxi.*

Div. IV. Cinnamomeæ. *Setigeræ, v. inermes, bracteatæ. Foliola lanceolata eglandulosa. Discus tenuis (nequaquam incrassatus).* Lindley monogr. 13.

R. *fraxinifolia,* elatior inermis, ramis strictis glaucescentibus, foliolis opacis undulatis impubibus. *Lindley monogr.* 26. *n.* 17.

Rosa fraxinifolia. *Bork. holz.* 301. *Gmel. bad.* 2. 413.

Rosa alpina. *β. Hort. Kew. ed.* 2. 3. 265.

Rosa alpina lævis. *Redouté's roses.* 1. 57. *t.* 19.

Red alpine rose. *Miss Lawrance's roses. t.* 75.

Rosa corymbosa. *Bosc dict. d'agr.? Desfont. cat. hort. paris.* 272?

Rosa blanda; *α. Solander MSS. Jacq. fragm.* 70. *t.* 105.

Rosa virginiana. *Mill. dict. ed.* 8. *n.* 10.

Rami *erecti, inermes, fusco-purpurei, rore cæsio cerino obducti;* surculi radicales *aculeis paucis setiformibus debilibus ad basin muniti.* Folia *opaca, omninò impubia;* stipulæ *latæ, extrema versùs plurimùm dilatatæ, planæ, serrulatæ;* petioli *inermes;* foliola 5-7 *lanceolata, simplicitèr serrata, suprà incanescenti-virentia, infrà glauca.* Cymæ *pauciforæ,* floribus *parvis rubris;* bracteæ *ellipticæ, nudæ, fimbriatæ atque denticulatæ;* pedunculi *brevissimi foliis, nudi;* tubus calycinus *depresso-globosus, incanus, nudus;* sepala (foliola calycina) *ovata, integra acumine longo, dorso hispidata;* petala *obcordata, subconniventia;* discus *non distinctus;* styli *villosi.* Fructus *parvus, globosus vel ovatus, opacè et pallidè rubens, nudus.* Lindley monogr. loc. cit. (ex anglico versum).

"In appearance and size resembling Rosa *cinnamomea. Branches* erect, unarmed, dark purple, covered with a pale blue, waxen bloom; *rootshoots* with a few weak setiform prickles at their base. *Leaves* opaque, entirely free from pubescence; *stipulæ* broad, much dilated towards the extremities, flat, serrulate; *petioles* unarmed; *leaflets* 5-7, lanceolate, simply serrate, greyish green above, glaucous beneath. *Flowers* small, red, in few-flowered cymes; *bracteæ* elliptical, naked, fringed and toothletted; *peduncles* shorter than the leaves; *tube of the calyx* depressedly globose, grey—these last quite naked; *sepals* ovate, entire, with a long point, hispid at the back; *petals* obcordate,

somewhat converging; *disk* not distinct; *styles* villous. *Fruit* small, round or ovate, dull pale red, naked."

"I have already (under Rosa *blanda)* attempted to explain why this, the original Rosa *blanda,* should not now be distinguished by that appellation. In determining on another for it, I have thought it right to take the oldest, excepting Miller's, for which probably no one will contend. The description of Bosc's Rosa *corymbosa* answers so closely to this species that I have few doubts of the propriety of citing it here. So little reason was there to suppose this to be a variety of Rosa *blanda,* that, in the last edition of the Hortus Kewensis, it has actually been considered as not distinct from Rosa *alpina.*"

"Gathered in Newfoundland by Sir Joseph Banks."

"The want of prickles distinguishes this from most of the section. Rosa *blanda* when unarmed, as it often is, is readily known by the downy stalks of its leaves. *Cinnamomea* in a similar state may be recognized by the same character, with the addition of the majority of its leaves on its stipules being inflexed at the edge, not reflexed." *Lindley monogr.* 26, 27.

The drawing for this article was kindly contributed by Mr. Lindley; from whose able Monograph of the genus the above synonymy and account of the species have been borrowed.

M. Hart. del. Pub. by J. Ridgway 170 Piccadilly June 1. 1820. S. Watts. sc.

CARICA Papaya; *fœmina.*

Papaw Tree; fertile flowered plant.

DIŒCIA *DECANDRIA.*

Nat. ord. CUCURBITACEÆ. *Jussieu gen.* 399. *Div. V.* Genera Cucurbitaceis affinia, germine supero præcipuè distincta.

CARICA. Cal. minimus 5-dentatus. MASC. *Cor.* monopetala tubulosa infundibuliformis, limbo 5-lobo. *Stam.* fauci corollæ inserta; alterna *filamentis* duplo brevioribus, calycinis laciniis opposita; *anth.* erectæ oblongæ. FŒM. *Cor.* 5-partita. *Germ.* superum oblongum; *styli* 5 breves; *stigmata* dilatata compressa, cristata. *Bacca* maxima cucumerina aut ovata, 5-sulcata, oblonga, intùs pulposa 1-loc. ad parietes 5-placentaris polysperma; *sem.* numerosa, arillata, *arillo* testam fragilem rugosam 1-spermam obvolvente. *Embryo* planus in *albumine* compresso carnoso oleoso. *Arbores succo lactescente glutinoso, ligno fungoso lævi, trunco indiviso aut variùs ramoso, subspinoso aut sæpiùs inermi et pristinorum foliorum vestigiis tantùm scabro;* fol. *terminalia conferta alterna longè petiolata, digitata aut sæpiùs palmata et subtus in nervorum concursú subsquamulosa;* flores *axillares, MASCULI in longis pedunculis racemosi penduli aut erecti, FŒMINEI pedunculo crassiori breviori et pauciflоro insidentes; quidam interdum HERMAPHRODITI in fœmineis arboribus observante Trewio, in masculis memorante Commersonio;* fructus *esculentus peponiformis.* Juss. l. c. (sub PAPAYÂ).

C. *Papaya,* foliis palmatis septemlobis, lobo intermedio sinuato, laciniis oblongis acutis, floribus masculis corymbosis. *Willd. sp. pl.* 4. 814.
Carica Papaya. *Linn. sp. pl.* 2. 2. 1466. *Mill. dict. ed.* 8. *n.* 1. *Hughes barbad.* 181. 14, 15. *Hort. Kew. ed.* 2. 5. 399. *Smith in Rees's cyclop. in loco. Kunth nov. gen. et spec.* 2. 99.
Papaya vulgaris. *Lamarck illustr. tab.* 821.
Papaya Carica. *Gærtn. sem.* 2. 191. *t.* 122. *fig.* 2.
Carica fronde comosa, foliis peltatis: lobis variè sinuatis. *Browne jam.* 360.
Arbor Platani folio, fructu Peponis magnitudine eduli. *Merian surinam.* 40. *t.* 40. *et tabb.* 62, 64.
Papaya-maram. *Rheede mal.* 1. 23. *t.* 13. *fig.* 1. ♀.
(MAS.) Ambapaya. *Rheede mal.* 1. 21. *t.* 15. *fig.* 2.
Papaya mas. *Ehret pict. t.* 3. *fig.* 1. *Rumph. amb.* 1. 145. *tt.* 50. 51.
(FEM.) Papaya fructu oblongo melonis effigie. *Trew ehret. t.* 7.

The separate flower and pistil at the bottom of the nanexed Plate are represented of the natural dimensions, but the principal figure is diminished in the proportion which these flowers bear to those in their places on the plate, that the general appearance of the tree might be shown in our page.

The drawing was taken from a sample produced in the Duke of Northumberland's garden near Brentford, where

the plant was cultivated in the hothouse. The present individual belonged to the fertile-flowered side of the species, which is dioicous. The flowers of the barren side of the species are very different, but these we have not yet met with. The genus is placed, by Jussieu, as an anomalous associate among the *Cucurbitaceæ*. It has a superior germen, instead of the inferior one of the genuine members of the order.

The following account of the species is borrowed from that by Sir J. Smith in Rees's Cyclopedia.

"Somewhat the habit of a Palm. *Root* perpendicular, whitish, spongy, of a disagreeable taste and smell. *Stem* twenty feet high, a foot thick, naked almost to the top, marked almost its whole length with the scars of fallen leaves, of a tender substance like that of the Banana, solid towards the base, hollow in its upper part. *Leaves* on *petioles* near two feet long, the lower ones almost horizontal, upper ones erect, deeply divided into 7, 9, or 11 sinuated gashed lobes, alternate, near together. *Flowers* axillary, white, sweet-scented; *barren ones* in slender, pendulous racemes, 2 or 3 feet long; *pedicles* short; *fertile-flowered ones* numerous on short simple peduncles. *Fruit* about the size of a small Melon; various in its form, sometimes angular and flattened at both ends, sometimes oval or round, and sometimes pyramidal, yellow when ripe, containing a yellow succulent pulp of a sweetish taste and aromatic smell. It is seldom eaten raw, but, when boiled, is esteemed a wholesome sauce to any kind of fresh meat. It is also sometimes pickled in vinegar, and is frequently preserved in sugar, and sent to Europe with other tropical sweetmeats. When ripened in our stoves, it does not acquire its proper flavour, and is even said by Miller to be detestable. The whole plant abounds with a milky acrid juice. Barren flowers are occasionally found on the fertile-flowered plants, and *vice versâ*. A native of both the East and West Indies. The Annona *triloba*, trifid Custard-Apple, is also called the Papaw-Tree in the southern states of North America."

Grown in 1690, at the Royal Garden at Hampton Court.

Said by Messrs. Humboldt and Bonpland to be cultivated over the whole of South America.

We shall insert in this place some instructive observations, relating in part to the subject of the present article, from Mr. Brown's View of the Botany of Congo.

"It is particularly deserving of attention, that the greater portion of the plants now enumerated, as cultivated on the banks of the Congo, and among them nearly the whole of the most important species, have probably been introduced from other parts of the world, and do not originally belong even to the continent of Africa. Thus it may be stated with confidence that the Maize, the Manioc or Cassava, and the Pine Apple, have been brought from America, and probably the *Papaw*, the Capsicum, and Tobacco; while the Banana or Plantain, the Lime, the Orange, the Tamarind, and the Sugar-Cane, may be considered as of Asiatic origin."

"In a former part of this essay, I have suggested that a careful investigation of the geographical distribution of genera might in some cases lead to the determination of the native country of plants at present generally dispersed. The value of the assistance to be derived from the source referred to, would amount to this; that in doubtful cases, where other arguments were equal, it would appear more probable that the plant in question should belong to that country in which all the other species of the same genus were found decidedly indigenous, than to that where it was the only species known to exist. It seems to me that this reasoning may be applied with advantage towards determining the original country of several of the plants here enumerated, especially of the Banana, the *Papaw*, the Capsicum, and Tobacco."

"Thus, the *Papaw* (Carica *Papaya)* may be regarded as of American origin; there being several other decidedly distinct species natives of that continent, while no species except the cultivated *Papaw*, nor any plant nearly related to this singular genus, is known to exist either in Asia or Africa. But in the present case, the assistance derived from the argument adduced may be considered as unnecessary; for the circumstance of there being no Sanscrit name for so remarkable a plant as the *Papaw*, is nearly decisive of its not being indigenous to India. And in the Malay Islands, the opinion of the inhabitants, according to Rumphius, is that it was there introduced by the Portuguese."

"It is certainly not meant, however, to employ this reasoning in every case, and in opposition to all other evidence; and instances may be found, even among the alimentary plants, where it is very far from satisfactory. Thus the Cocoa Nut, though it will probably be considered as indigenous to the shores and islands of equinoctial Asia, is yet the only species of its genus that does not belong exclusively to America." *Brown obs. on Herb. of the Congo.*

M. Hart. del. Pub by J. Ridgway 170 Piccadilly June 1. 1820. R. Watts. Sc.

POLEMONIUM mexicanum.

Greek-Valerian of Mexico.

PENTANDRIA *MONOGYNIA.*

Nat. ord. POLEMONIA *(recentiùs* POLEMONIDEÆ). *Jussieu gen.* 136.

POLEMONIUM. *Cal.* urceolatus, 5-fidus. *Cor.* rotata, tubo brevi, limbo 5-fido (regulari). *Staminum filamenta* (medio corollæ tubo inserta) basi latiora: *antheræ* incumbentes. *(Caps.* calyce persistente cincta, 3-locularis, 3-valvis, polysperma, valvis medio septiferis seu costâ prominente instructis, *receptaculo* s. dissepimento centrali trigono valvularum septis angulatim applicito). *Herbæ erectæ; folia alterna pinnata; flores corymbosi terminales.* Juss. l. c.

P. *mexicanum,* foliis pinnatis polyphyllis, terminali trilobo: floribus cernuis: calycibus villoso-viscidis. *Lagasca elench. append.* 10.

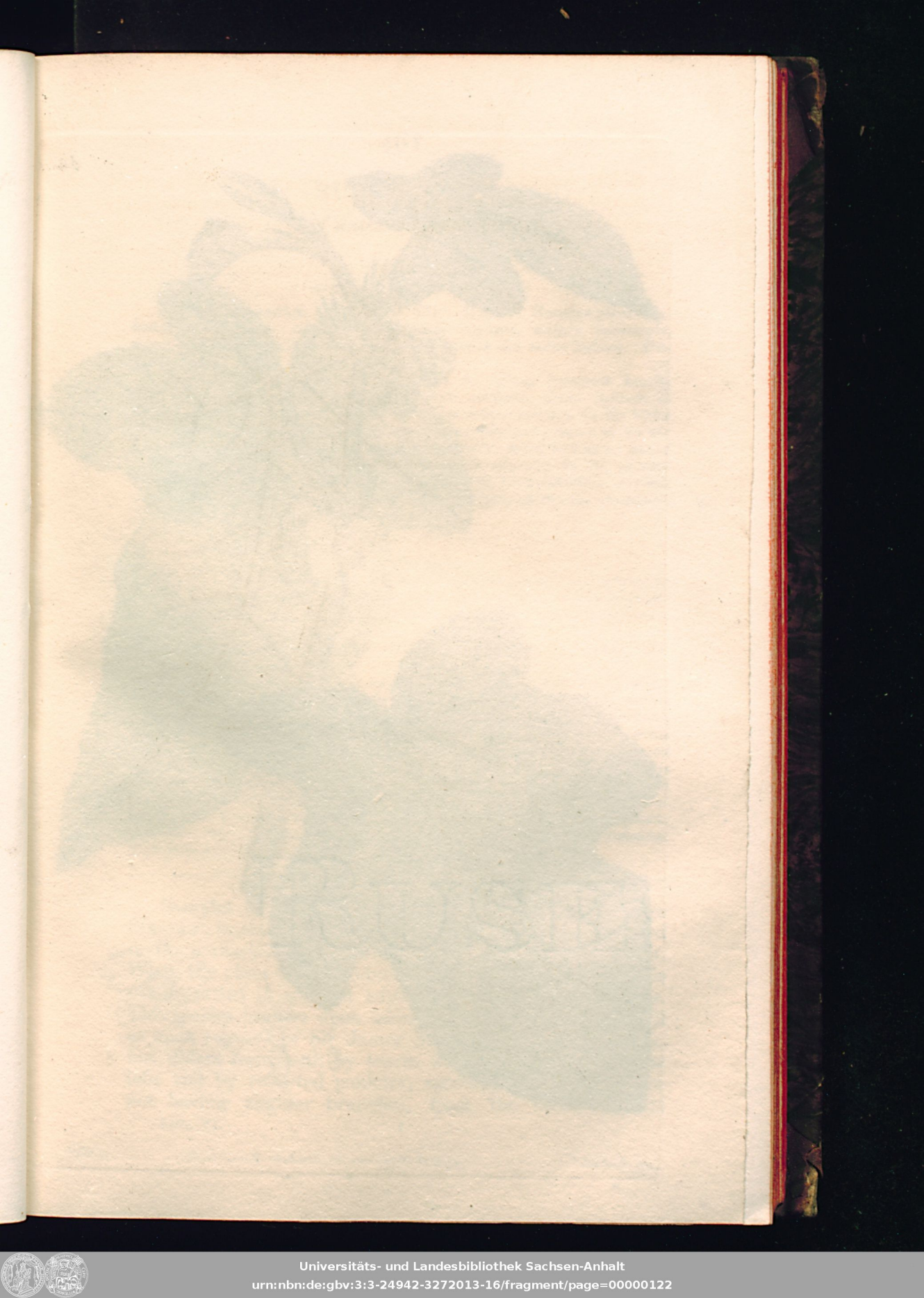
Herbacea, biennis, erecta, viscoso-villosa, sesquipedalis v. ultrà, caule *striato-tereti, alternè remotèque folioso, supernè paniculato ramulis axillaribus apice aggregatim pauci-*(2-4-)*floris summis in pedunculos unifloros abeuntibus, infernè ad articulos vaginâ brevi membranaceâ cincto.* Fol. *erectiuscula, multi-*(12-13-)*pinnata foliolis angustè decurrentibus ovato-oblongis acutis.* Cal. *villis viscosis subhirsutiùs pubescens, cylindrico-campanulatus, persistens, segmentis brevibus angulato-ovatis, ad imum divisurarum angulum glanduloso-lutescentibus.* Pollen *vitellino-flavescens.* Germ. *conicum, torulosum, glabrum, obtusum:* stylus *filiformi-clavatus:* stigmata 3 *ligulato-lobata, obtusula, replicato-patentia.* Caps. *calyce inclusa.*

In the capsule of the *Polemonideæ* the angles of the receptacle of the seed (which is central) come in contact with the valves at the partition borne along the middle; and by this circumstance the order has been technically distinguished from the *Convolvulaceæ,* where the angles of the receptacle come in contact with the outermost edges of the valves; characters mutually influencing the general habits of the two orders they distinguish.

The present species was sent by Professor Cervantes from the Botanic Garden at Mexico to Madrid, where it flowered, according to M. Lagasca, in 1815. The plant that afforded the drawing was raised in the hothouse at Boyton from seed received from Madrid by Mr. Lambert, and flowered last autumn for the first time in this country, when it was kindly transmitted to our draughtsman.

A herbaceous upright clammy biennial plant, about a foot and a half high; *stem* round, fluted, alternately and

widely leaved, encircled at the lower joints by a short membranous sheath; paniculately divided at the upper part; *branchlets* axillary fasciculately few (2-4)-flowered at the end, uppermost ones passing gradually into one-flowered peduncles. *Leaves* pointing upwards, multi-(12-13)-pinnate, *leaflets* ovately oblong, pointed, narrowly decurrent along the sides of the common *petiole*. *Calyx* hirsutely furred, pile clammy, cylindrically campanulate, permanent; segments short angularly ovate, with a glandular yellow spot at the bottom of the fork that separates them. *Pollen* reddish yellow. *Germen* conical, full of knobs, smooth, obtuse: *style* clavately filiform: *stigmas* 3, ligulately lobe-shaped, bluntish, reflexed and spreading. *Capsule* enclosed within the calyx.



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RUBUS reflexus.

Canton Bramble.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. ROSACEÆ. *Jussieu gen.* 334. *Div. IV.* Germina plura indefinita, verè supera, receptaculo communi imposita, singula monostyla. Semina totidem nuda aut rariùs baccata. Herbæ aut rariùs frutices. POTENTILLÆ.

RUBUS. Cal. patens, 5-fidus. *Pet.* 5. *Stam.* numerosa brevia. *Sem.* numerosa baccata, supra receptaculum commune densè collecta in baccam compositam. *Frutices aculeati vel quandòque inermes, rariùs herbæ semper inermes,* fol. *simplicia aut ternata aut digitata, aut pinnata in* RUBIS *quibusdam Commersonianis habitú similibus* ROSÆ; *flores terminales aut et rariùs axillares, racemoso-paniculati aut rariùs solitarii, in* R. odorato *corymbosi et abortú dioici.* R. Chamæmorus *sub terrá monoicus et extùs dioicus, radicibus maris et feminæ junctis, caulibus distinctis, observante post Solandrum Linnæo.* Juss. l. c. 338.

Div. Frutescentes.

R. *reflexus,* ramis teretibus, foliis oblongis cordatis lobatis lobo antico maximo ovato-elongato acuminato, infernè subcruciato-repandis, stipulis bracteisque pectinatis, paniculis solitariis axillaribus paucifloris brevioribus petiolo, reflexis.

Rubus moluccanus. *Aiton's Epitome* 373? *Sweet hort. sub. (non aliorum).*

Frutex sarmentosus, exceptis corollá facieque supiná foliorum, undìque tomentosus; ramis *longissimis* petiolis pedunculisque *lanato-tomentosis,* aculeis *reversis fulvis armatis.* Fol. *palmaria ad dodrantalia, transversè* $\frac{1}{3}$ *angustiora vel circitèr, serrata, à supino virentia tessellato-rugosa nudiuscula ad nervos pilosiuscula, à prono tomentoso-albicantia reticulato-venosa, vetustiora ad nervos venasque ferrugineo-fulvescentia, infernè subcruciato-quadriloba lobis 2 inferioribus obtusissimis inferiùs ad latus sinú brevi excisis:* petiolus *triplò brevior laminá:* stipulæ *oblongæ breviores petiolo,* bracteis *membranaceis rotundo-ovatis longiores atque profundiùs incisæ.* Paniculæ *lanatæ reflexæ.* Cor. *alba, calyce subæquilonga?* petalis *obovatis.* Antheræ *lateritio-rubentes.* Styli *longiores staminibus.*

Samples of this species were gathered by Sir George Staunton in the province of Canton, China, and deposited in the herbariums of Sir Joseph Banks and Mr. Lambert. When the plant was introduced we have not learned. It is not recorded in the last edition of the Hortus Kewensis. The species borders upon *alceæfolius* of Lamarck as well as upon *rugosus* of Sir James Smith in Rees's Cyclopedia, but differs from both by leaves with an elongated middle lobe and by reflected panicles; specially from the first in not having angular branches, from the second by its

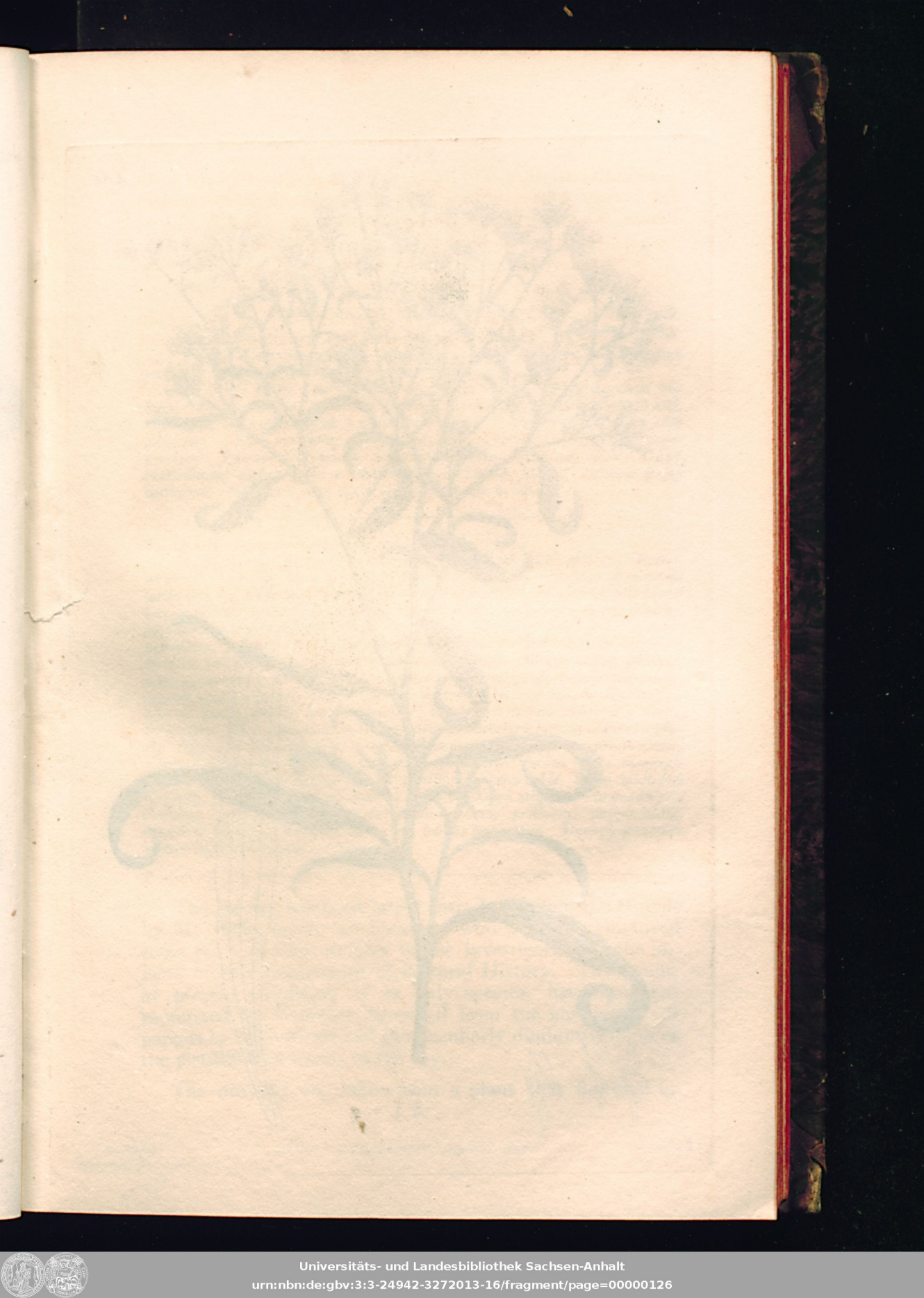
pectinated stipules and bractes. The plant seems to have been very generally mistaken in our gardens for *moluccanus*, a very distinct species with aggregated panicles; nor is it even the *moluccanus* of Thunberg's Flora Japonica, as is proved by the prototype sample in the Banksian Herbarium, although that is different from the true *moluccanus*.

The drawing was taken at Mr. Kent's at Clapton, where it flowered in the hothouse during last autumn, we believe for the first time in this country. There are very large plants of it in Mr. Lee's nursery at Hammersmith, but none of them have been yet brought to flower.

A sarmentose shrub growing much in the way of the Common Bramble or Blackberry of our hedges, and extending its long woolly branches to a great distance. The flowers are white and about the size of a sixpence. The anthers tile-red. The styles are longer than the stamens. The leaves in some of the samples were little less than nine inches in length; and covered underneath with a thick white cottony fur, which in time becomes rusty or reddish.

The genus belongs to the Cinquefoil section of the *Rosaceæ*, and is distinguished by the numerous fleshily berried seed of the fruit being collected together on the outside of a common receptacle into a compound berry, and forming the esculent portion, as in the Raspberry and some other species. The Strawberry is another genus of the same section of the same order; but there the fruit may in some sort be called the converse of the Raspberry kind, the seeds being dry and fleshless, but the receptacle on which they are collected fleshy and succulent, and forming the whole of the esculent part of the fruit, as the seeds on the contrary do in the Raspberry, where the receptacle is dry.

Rubus is of those genera whose type is pretty numerously represented in all quarters of the globe.



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SELLOA glutinosa.

Clammy Selloa.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. COMPOSITÆ. *Adanson fam.* 2. 103.
CORYMBIFERÆ. *Jussieu gen.* 179. *Div. I.* Receptaculum nudum. Semen papposum. Flores flosculosi.

SELLOA. Calyx (anthodium) imbricatus ovatus. *Receptaculum* nudum. *Pappus* nullus. *Flosculi fœminei* inconspicui. *Genus* BACCHARI, CONYZÆ, GNAPHALIO *et* ARTEMISIÆ *affinis.* Planta *suffruticosa tota glutinosa.* Folia *conferta, fasciculata, lineari-lanceolata, trinervia, integerrima.* Panicula *corymbosa, terminalis, erecta, ramis angulatis.* Calyx (anthodium) *glaber, ovatus, imbricatus.* Corollæ *flavæ. Nullum* pappi *vestigium.* Sprengell cent. spec. minùs cogn. 36. n. 85.

SELLOA glutinosa. *Sprengell loc. cit.*

Caules *teretes, flexuosi, striati, prolifero-foliosi.* Fol. *viscosa, alterna, numerosa, sessilia, decurrentia, elongatè lanceolata, angusta,* 3-*uncialia latitudine vix* $\frac{1}{2}$ *unciæ, trinervia immersè puncticulata et pruinâ albidâ ad lentem visibili densissimè adspersa, tenuia, lenta, acuminata apice recurvo, glandulis minutis subciliolata.* Panicula *decomposito-dichotoma, cymoso-fastigiata, foliosa, ramulis axillaribus gracilibus strictis elasticis angulosostriatis,* pedunculis *terminalibus subsessili-trifloris.* Flores *aurei, purvuli, odorem spirantes nostrâ mente Algæ cujusdam marinæ quodammodò referentem, singuli* bracteâ *lineari-oblonga appressè subtensi.* Cal. *viscosus, ovali-oblongus, albo et viridi varius, ore constrictior;* foliola *arctissimè imbricata, plura, lanceolata, dorso carinata, apice virentibus, interiora latiora obtusa.* Discus hermaph. flosculis 4-6? *calycem exsuperantibus limbo revoluto;* anth. *vitellino-flavicantes;* stigmate *bilobo-clavato exserto:* radius femin. *inconspicuus,* flosculis tubo *pallido erecto capillari germine bis, limbo multoties longiore,* limbo *minuto flavo recurvo lineari-oblongo stigmate vix grandiore.* Germina *ambo similia, alba, turbinato-linearia, pruinosa,* pappo *nullo,* stigma *in flosc. fem. aureum bifurcum, lobulis linearibus.* Recept. *punctum nudum in fundo calycis.*

The species has been lately introduced from the Brazils by Mr. Sello, a german botanist, who has been employed some years in that country in the investigation of the objects of this department of Natural History. The genus, at present consisting of an only species, has been characterized by Professor Sprengell from the absence of all pappus or seed-crown and the peculiarly diminutive limb of the pistilliferous florets of the ray.

The drawing was taken from a plant that flowered in

the hothouse at the botanic establishment of Comtesse de Vandes at Bayswater, in February last.

Stems round, flexuose, fluted, proliferously leafy. *Leaves* clammy, alternate, numerous, sessile, decurrent, long-lanceolate, narrow, of the length of 3 inches with the breadth of scarcely ¼ of an inch, 3-nerved, covered with small glandular pits and white particles perceptible only by the help of a magnifier, thin, pliant, taper-pointed and recurved at the top, with a slight minute glandular edging. *Panicle* repeatedly dichotomous, cymously level, leafy; *branchlets* slender, stiff and straight, elastic, angularly fluted; *peduncles* terminal subsessilely 3-flowered. *Flowers* golden-yellow, small, and as it appeared to us with a scent something like that of Seaweed; each subtended by a linearly oblong close-pressed *bracte*. *Calyx* clammy, ovally oblong, white and partly green, constricted at the orifice; *leaflets* several, closely imbricate, lanceolate, keeled at the back, green at the top, inner ones broader, obtuse. *Disk* of the *flower* of about 4-6? *florets* with stamens and pistil, higher than the calyx, with a revolute *limb; anthers* of a deep reddish yellow, *stigma* two-lobed clavately connivent protruded: *ray* of inconspicuous pistilliferous *florets*, *tube* slender capillary straight pale twice the length of the germen and many times that of the limb; *limb* minute, yellow, linearly oblong, hardly larger than the stigma. *Germens* of both disk and ray the same, white, turbinately linear, frosted; *pappus* (seed-crown) none; *stigma of the ray* deep yellow, forked, with two fine linear lobes. *Receptacle* a naked point at the bottom of the calyx.

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HOVEA linearis.

Linear-leaved Hovea.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. V.* Corolla irregulāris, papilionacea. Legumen uniloculare bivalve.=PAPILIONACEÆ. *Brown in append. to Flind. voy.* 2.

HOVEA. Suprà vol. 4. *fol.* 280.

H. *linearis,* foliis linearibus subtùs pilosiusculis, leguminibus glabris. *Brown in Hort. Kew. ed.* 2. 4. 275.

Poiretia linearis. *Smith in trans. linn. soc.* 9. 304.

Frutex *pube fulvo-fuscâ villosus:* rami *teretes graciles stricti elastici subflexuosi laxiùs foliosi.* Fol. 3-*plo intervallis longiora, sparsa, patentissima, lanceolato-linearia, rugulis subtilibus utrinque immersè reticulata, subtùs appressè pilosiuscula, margine depressa, recurvo-apiculata, nervo medio simplici subtùs pube brevi ferrugineâ densâ appressâ vestito:* petiolus *fuscus teres brevissimus,* stipulâ *parvulâ subulatâ utrinque stipatus.* Flores ¼ *unciæ subadæquantes, lilacino-pallentes, inodori;* pedunculi *(an veriùs* pedicelli *in* pedunculo *obsoleto? basi enim cohærent) per ramos ramulosque racemosè dispositi, axillares, parùm longiores petiolis, sæpiùs aggregatè bini?—quaterni? rariùs solitarii,* 1-*flori, fusco-hirsuti,* bracteâ *minutâ singulorum basi appressâ.* Cal. *more pedunculorum pubescens,* bracteolis 2 *oppositis calyculatim subtensus, nutans, bis fermè brevior vexillo, bilabiatus,* labiis *æquilongis,* summo *latissimè cuneato truncato-retuso, lateribus deflexis, dorso carinato, cornubus extremis acutis,* imo *ad* ⅓ *usque* 4-*fido segmentis æqualibus erectis acuminatis.* Vex. *arrectum, oblato-v. subreniformi-ovatum, retusum, basi laminæ areolâ luteâ margine radiatâ extùs halone purpureo circumdatâ,* ungue *triplo breviore lineari-oblongo:* alæ *porrectæ vexillo à margine interiore transversè oppositæ oblongæ apice rotundatæ,* ungue *brevi simplici:* carina *inclusa paulò exsuperans calcem, obtusa, compresso-ventricosa, apice saturatè violacea, petalis à margine inferiore conniventibus,* unguibus *obsoletè bicruribus crure altero brevissimo rotundato, altero angusto duplo breviore laminâ.* Fil. *monadelphum brevitèr æqualitèrque* 10-*fidum, fissurâ dorsali omninò divisum:* anth. *pallidè luteæ, lineari-oblongæ, erecto-incumbentes.* Germ. *oblongum, viride, glabrum;* stylus *pluriès longior, albus, glaber, filiformis, adscendens capitello stigmatoso minuto concolori pruinoso terminatus.*

Still an extremely rare greenhouse shrub, although introduced from New South Wales by Mr. George Hibbert, as far back as the year 1796. It is one of the two species enumerated in the Hortus Kewensis; but has never been represented by any published figure. Four species of this genus are now cultivated in our gardens.

The drawing was taken at the nursery of Messrs. Colville in the King's Road, Chelsea, where the plant is in

blossom about February and March. We have never seen any other than young small samples. They are always much fuller of flowers than any we have seen of Hovea *Celsi* treated of in a preceding article of the present publication.

A shrub, furred with a brownish tawny pile: *branches* round slender straight stiffish elastic slightly flexuose, widishly leaved. *Leaves* three times the length of the intervals, scattered, wide-spread, lanceolately linear, minutely wrinkled or netwisely marked with fine insunk lines, underneath slightly and close-pressedly hairy, depressed at the edge, pointed and recurved at the top, midrib simple covered underneath by a short rust-coloured dense flat-pressed pile: *petiole* brown, round, very short, furnished on each side with a small subulate *stipule*. *Flowers* about a quarter of an inch long, pale blueish lilac, without scent; *peduncles* (or rather perhaps pedicles upon an obsoletely shortened peduncle? for they cohere at the bottom) racemosely disposed upon the main and partial branches, axillary, but little longer than the petioles, generally aggregated by pairs? or fours?, not often solitary, oneflowered, furred, a minute close-pressed *bracte* at the foot of each. *Calyx* furred in the same way as the peduncles, calyculately subtended by two opposite *bracteoles*, nodding, almost twice shorter than the vexillum; *lips* of one length; *uppermost* very broadly cuneate, truncately retuse, bent down at the sides, keeled at the back, with two pointed corners at the extremities; *lowermost* 4-cleft to about one third of its depth with upright equal taper-pointed segments. *Vexillum* oblately or subreniformly ovate, retuse, at the base of the *blade* or *broad part* marked with a yellow radiately edged spot surrounded with a purple halo; *unguis* three times shorter linearly oblong: *alæ* pointing straight forwards with their upper edges opposite to the vexillum, round-pointed; *unguis* short, simple; *carina* enclosed, exceeding the calyx but little, obtuse, compressedly ventricose, of a deep violet colour at the end, *petals* meeting at the lower edge; *ungues* obsoletely 2-pronged, one prong extremely short and rounded, the other narrow and twice shorter than the blade. *Filament* monadelphous, shallowly and equally 10-cleft, divided all the way down at the back: *anthers* pale yellow, linearly oblong, from upright lying across the points of the filament. *Germen* oblong, green, smooth; *style* several times longer, white, smooth, filiform, ascending, terminated by a minute frosted stigmatose head.

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TOURNEFORTIA fruticosa.

Sweet-scented Tournefortia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. BORAGINEÆ. *Jussieu gen.* 128. *Brown prod.* 1. 492.

TOURNEFORTIA. Cal. 5-partitus. *Cor.* hypocrateriformis (v. subrotata), fauce nudâ. *Stam.* inclusa. *Stig.* peltatum, subconicum. *Bacca* dipyrena, *ossiculis* dispermis. *Frutices volubiles v. erecti. Fol. scabra v. tomentosa, integra. Spicæ secundæ, ebracteatæ, sæpiùs cymosæ.* Brown prod. 1. 496.

T. *fruticosa*, caule fruticoso, foliis petiolatis, corollis hypocrateriformibus. *Lin. suppl.* 132; *(sub* MESSERSCHMIDIÂ).

Tournefortia Messerschmidia. *Sweet hort. sub. lond.* 31.

Messerschmidia fruticosa. *Linn. suppl.* 132. *Willd. sp. pl.* 1. 789. *Ejusd. enum.* 1. 188. *Hort. Kew. ed.* 2. 1. 303.

Rami *axillares, flexuosi, virides, teretes, hispidi.* Fol. *divaricata, elongato-lanceolata, saturatè viridia, hispida, nitida,* 3-*uncialia v. ultrà latitudine unciali v. infrà, infernè subovata supernè longiùs attenuata:* pet^us *pluriès brevior laminâ, à supino canaliculatus.* Paniculæ *ebracteatæ, ramulorum summorum terminales, dichotomo-cymosæ, divaricatæ, flexuosæ, flore solitario in singulis furcis sessile;* spiculæ *dichotomæ, pedunculatæ, recurvæ,* floribus *parvulis bifariàm v. disticho-secundis, approximatis,* rachide *appressè villosâ.* Cal. *parvus, herbaceus, pubescens, campanulatus, aliquotiès brevior tubo corollæ, persistens, segmentis acuminatis.* Cor. *hypocrateriformis, luteo-virens, extùs pubescens:* tubus *rectus, tereti-angulosus;* faux *inflatior, saturatè virens, intùs ad orificium plicis* 5 *cum laciniis alternantibus notata:* limbus *pallidè et squalidè lutescens, stellato-pàtens æstivatione valvari infracto-connivente, laciniis acuminatis undulatis intùs glabris.* Anth. *subsessiles, fuscæ, sagittato-oblongæ, fauce inclusæ.* Stylus *columnaris, teres, glaber, crassiusculus:* stig. *peltato-capitatum, virens, conicum, villosum, obtusum, basi planum:* germ. *calyce inclusum, viride, rugosum, umbilicatum, subrotundum, basi disco glanduloso luteo cinctum.*

The genus MESSERSCHMIDIA, where our plant formerly ranked, has been incorporated by Mr. Brown with TOURNEFORTIA, technically distinguished in the Prodromus of the Flora of New Holland among its co-ordinate *Borragineæ* by a definition of which the following is a version:

Calyx 5-parted: *corolla* hypocrateriform or nearly rotate smooth (naked) in the *faux: stamens* enclosed: *stigma* peltate, subconical: *berry* dipyrenous (twin-stoned), each *stone (ossicle)* containing two *seeds (kernels): embryo* inverted. The species are shrubby and consist of both twining and standard plants, with entire and either rough or

else downy *leaves*, onesided bracteless *spikes* usually divided in the manner of a cyme.

The present species was introduced by Mr. Masson in 1779 from the Canary Islands; but has never been represented by any published figure. It is a greenhouse shrub of easy culture, rather straggling in its growth, but desirable on account of the exquisite scent of the blossom, the fragrance of which seems to us to partake of the flavour of the Violet and the Mignionette.

Branches axillary, flexuose, green, round, rough-piled. *Leaves* widespread, long-lanceolate, deep green, rough-piled, shining, 3 inches long or more, an inch broad or less, subovate at the lower part, far-tapered at the upper: *petiole* several times shorter than the blade, channelled at the upper side. *Panicles* bracteless, terminating the upper branches, dichotomously cymose, widespread, flexuose, with a single sessile flower at the bottom of each fork; *spikelets* dichotomous, peduncled, recurved, with small nearset *flowers* facing one way in two rows, *rachis (general stalk)* close-pressedly villous. *Calyx* small, herbaceous, furred, campanulate, more than twice as short as the tube of the corolla, permanent, with taper-pointed segments. *Corolla* hypocrateriform, yellowish green, furred on the outside: *tube* straight, angularly cylindrical; *faux* wider, of a deep green, marked at the inside of the orifice with 5 plaits that alternate with the segments: *limb* of a pale squalid yellow, stellately spread; in the bud state with the valvular ends of the *segments* bent as if broken inwards, in the expanded state taper-pointed, undulate and smooth on the inside. *Anthers* nearly sessile, brown, sagittately oblong, enclosed within the faux. *Style* columnar, cylindrical, smooth, thickish: *stigma* peltately capitate, green, conical, villous, blunt, flat at the base: *germen* enclosed within the calyx, green, wrinkled, umbilicate, roundish, girded at the base by a yellow glandular disk.

The drawing was taken in March 1819 at the nursery of Messrs. Whitley and Co. Fulham.

J. Lindley Esq. del. Pub. by J. Ridgway 170 Piccadilly July 1. 1820. J. Mills sc.

ROSA sempervirens.

Evergreen Rose.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. ROSACEÆ. *Jussieu gen.* 334. *Div. II.* Rosæ.
ROSA. Suprà fol. 458.

Div. X. Systylæ. *Styli in columnam elongatam cohærentes. Stipulæ adnatæ.* Lindley monogr. 111.

R. *sempervirens,* surculis scandentibus, aculeis subæqualibus falcatis, foliis sempervirentibus. *Lindley monogr.* 117. *n.* 64.

Rosa sempervirens. *Linn. sp. pl. ed.* 2. 1. 704, *Mill. dict. ed.* 8. *n.* 9. *Willd. sp. pl.* 2. 1072. *Miss Lawrance's roses. t.* 45. *Persoon syn.* 2. 49. *Decand. fl. franç.* 4. 446. *Hort. Kew. ed.* 2. 3. 263. *Decand. monsp.* 138. *Smith in Rees's cyclop. in loco.*

Rosa scandens. *Mill. dict. ed.* 8. *n.* 8. *Brotero fl. lus.* 1. 341.

Rosa balearica. *Desfont. cat. h. par. Persoon syn.* 2. 49.

Rosa atrovirens. *Viviani fl. ital.* 4. *t.* 6.

Rosa capreolata. *Neill in Edinb. philos. journ.* 3. 104.

(β) *microphylla,* foliolis suborbiculatis. *Lindley l. c.*

Rosa microphylla. *Desfont. atl.* 1. 401.

Frutex *scandens* surculis *productissimis, gracilibus, lucido-virentibus, multotiès divisis, altero latere subrubescentibus, aculeisque tenuibus rubris subuncatis armatis.* Folia *plerumque deflexa, nitidissima, sempervirentia omninò sine pube;* stipulæ *angustæ, rubræ, fine reflexæ, glandulis raris ad marginem;* petioli *aculeolis curvatis armati;* foliola 5-7, *ovalia v. ovato-lanceolata, plana, simplicitèr serrata, utrinque lucido-virentia, subtùs verò plurimùm pallidiora.* Flores *valdè numerosi, fragrantes, albi;* bracteæ *nudæ, lanceolatæ, reflexæ, rubedine tinctæ;* pedunculi *nudi vel glandulosi;* tubus calycinus *ovatus, nudus vel glandulosus;* sepala (foliola calycina) *decidua, ovata, acuminata, subsimplicia, petalis breviora, glandulis scabrata;* petala *obcordata, concava;* stamina 138-140, *caduca;* discus *conicus, admodùm crassus;* ovaria 30; styli *in columnam longam pilosam coagmentati.* Fructus *globosus, aurantiacus, parvus.* Lindley loc. cit. (Ex anglico versum).

"A climbing plant with very long, slender, bright green, much divided shoots, reddish on one side, and armed with slender, somewhat hooked red prickles. *Leaves* usually deflexed, very shining, evergreen and without any sort of pubescence; *stipules* narrow, red, reflexed at the end, with a few glands on their edge; *petioles* armed with little curved prickles; *leaflets* 5-7, oval or ovato-lanceolate, flat, simply serrated, bright green on both sides, but much paler beneath. *Flowers* very numerous, white and fragrant; *bracteæ* naked, lanceolate, reflexed, stained with red; *peduncles* naked or glandular; *tube of the calyx* ovate,

naked or glandular; *sepals* deciduous, ovate, acuminate, nearly simple, shorter than the petals, rough with glands; *petals* obcordate, concave; *stamens* 138-140, quickly dropping off, *disk* conical, very thick; *ovaries (germens)* 30; *styles* united into a long hairy column. *Fruit* round, orange-coloured, small."

"A very ornamental plant, rapidly forming a compact covering to old pales or buildings against which it is planted. From Rosa *prostrata* its rambling shoots and hairy styles distinguish it. Viviani's Rosa *atrovirens* is described with rough and figured with smooth fruit."

"The Ayrshire Rose, described by Mr. Neill in the Edinburgh Philosophical Journal, under the name of *capreolata*, does not appear to differ from this, which is not a native of America, but is confined to the South of Europe and North of Africa." *Lindley monogr. l. c.*

The excellent drawing which accompanies this article has been kindly contributed by the author of the Monograph of the Roses.

M. Hart. del. Pub.d by J. Ridgway 170 Piccadilly July 1. 1820. F. Watts. sc.

BURCHELLIA capensis.

Cape Burchellia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RUBIACEÆ. *Jussieu gen.* 196. *Div. IV.* Fructus monocarpus bilocularis polyspermus. *Folia opposita; caulis sæpè frutescens.*

BURCHELLIA. Capitulum involucratum. *Cor.* clavato-infundibuliformis: *limbo* 5-fido abbreviato *fauceque* imberbi; æstivatione mutuò imbricatâ contortâ. *Stamina* supra medium tubi inserta; *antheris* subsessilibus inclusis. *Stigma* clavatum. *Bacca* calyce altè 5-fido coronata, bilocularis, polysperma. *Brown MSS.*

Frutex *ramosissimus pubescens,* ramulis *compressis.* Folia *opposita.* Stipulæ *interpetiolares, è dilatatâ basi subulatæ, indivisæ, caducæ.* Capitulum *terminale, extra involucrum monophyllum pluridentatum abbreviatum pari unico foliorum minorum stipulis proportionatim latioribus subtensum.* Ovaria *supra* receptaculum *convexum villosum* bracteolisque *nonnullis minutissimis conspersum sessilia, distincta.* Calyx: *limbo foliaceo æquali, tubum aliquotiès superante.* Corolla *coccinea, extùs pilis appressis, intùs glabra præter barbam annularem juxta basin tubi.* Antheræ *lineares.* Discus *epigynus carnosus, indivisus, imberbis.* Stigma *exsertum, utrinque sulco exaratum.* Bacca *turbinato-globosa, bilocularis septo completo.* Placenta *adnata.* Semina *angulata.* Embryo *axilis, dimidio albuminis cartilagini longior.* Brown MSS.

Burchellia capensis. *Brown MSS.*

Cephælis bubalina. *Persoon syn.* 1. 202.

Patabea. *Hujus congener aut genere proxima* LONICERA bubalina; &c. &c. *Jussieu gen.* 208.

Lonicera bubalina. *Lin. suppl.* 146. *Vahl symb.* 3. 57. *Thunb. prod.* 47. *Ejusd. flor. cap.* 2. 54. *Willd. sp. pl.* 1. 989.

Buffelhorn. *Colonis batavis Cap. B. S. (ob lignum durissimum).*

Ramuli *robusti.* Folia *saturatè viridia, subcoriacea, hispida, latooblonga brevitèr acuminata basi contractiùs subcordata,* 3-5-*uncialia, per paria distantia:* petiolus *brevis hirtus.* Corolla *uncialis vel paulo longior, diametro ferè pennæ scriptoriæ, firma.*

Native of the Cape of Good Hope. Long known in our Herbariums and the various botanical systems, though lately introduced into our gardens, where we believe it has now flowered for the first time.

By its original observer, the species had been ranked under the head LONICERA; but was afterwards referred by Jussieu to its true station, the RUBIACEÆ, though that learned botanist, in adopting an erroneous description, representing the seeds of the berry as solitary, has placed the plant in a wrong section of the order. Mr. Brown having

proved it not to be consistently reducible to any established genus, has formed a new one from it, and, with that liberality and vigilance which he extends to every interest of science, availed himself of the appropriate occasion of honouring the merits of Mr. Burchell, the zealous and enterprising investigator of the regions to which our plant belongs.

The shrub is called *Buffelhorn (Buffaloe-horn)* by the Dutch colonists at the Cape, from the hardness of the wood, according to Mr. Masson. The drawing was taken from a sample in the hothouse at the nursery of Messrs. Colville in the King's Road, Chelsea, and is the first ever published.

Shrub full of branches, furred; *branchlets* compressed. *Leaves* opposite. *Stipules* between the petioles, broad at the bottom subulate at the top, undivided, caducous. *Flower-head* terminal, subtended on the outside of a short *involucre* of one piece and with several indentations by a single pair of smaller leaves with proportionately broader stipules. *Germens* sessile, distinct, resting on a convex villous *receptacle* beset with a few minutely small *bracteoles*. *Calyx* deeply 5-cleft, with an equal foliaceous limb several times longer than the tube. *Corolla* scarlet, clavately funnelform, close-pressedly furred on the outside, except a bearded circle near the bottom of the tube quite smooth on the inside: limb 5-cleft, short: *æstivation* (folding of the segments in the unexpanded flower) mutually overlapped (as distinguished from alternately overlapped, a more common mode in this tribe). *Stamens* inserted just above the middle of the tube; *anthers* subsessile, enclosed, linear. *Stigma* protruded, clavate, with a furrowed line on each side. *Berry* turbinately globular, surmounted by the persistent calyx, 2-celled with an entire partition, many-seeded. *Placenta* (receptacle of the seed) adnate. *Seeds* angular. *Embryo* in the axis of the cartilaginous albumen, and longer than half the length of it. *(From the latin manuscript of Mr. Brown.)*

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MALACHRA fasciata.

Rough-piled Malachra.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. II.* Stamina in tubum corolliferum connata, indefinita. Fructus multicapsularis; capsulæ verticillatæ, in orbem dispositæ aut in unam compactæ.

MALACHRA. Involucrum 3-6-phyllum multiflorum. Singulo flori *calyx* 5-fidus, *caliculo* 8-12-phyllo cinctus. *Antheræ* in apice et superficie tubi. *Stigmata* 10. *Capss.* 5, in orbem dispositæ, 1-spermæ. *Herbæ; flores axillares.* Juss. loc. cit. 272.

M. *fasciata*, capitulis pedunculatis triphyllis subquinquefloris, foliis subrotundis obsoletè lobatis, caule villoso. *Willd. sp. pl.* 3. 769.

Malachra fasciata. *Jacq. ic. rar.* 3. *t.* 548. *Ejusd. collect.* 2. 352.

Planta annua? Caulis *unicus, erectus, 6-pedalis, pollice duplo crassior, teres, ex alis foliorum ferè omnium ramos emittens, infernè cinereus, pilis rigidis et pungentibus densissimè obsitus. Ex dextro latere axillæ ramorum omnium, qui ex caule egrediuntur, in caule fascia adscendit ferè ad proximum ramum usque viridis glabra erecta et plùs minùs 2 lineas lata.* Folia *sunt alterna longè petiolata, serrata, venosa, utrinque et ad ora hispidula, infima subrotunda et margine 5-loba, superiora 3-loba magìsque oblonga et acutiora*; *ad* petiolos *utrinque stat* stipula *solitaria, subulato-setacea, erecta, hispida et uncialis (vel 3plo brevior).* Florum capitula *axillaria, brevitèr pedunculata, 2-3 successivè. In basi cujusque folii* perianthii communis *sedet flos: reliqui brevissimè pedunculati centrum occupant.* Uterque calyx *longè ciliatus est,* exterior *insuper utrinque hispidus.* Perianthii proprii *tubus viret, laciniæ pallent cum striis badiis.* Cal. comm. 3-*(poly-) phyllus,* 5-*(multi-)florus, persistens:* foliola *ovato-acuminata, argutè serrata, nervosa, inæqualia (ad basin bistipulata ut reliqua folia) cum interjectis setis solitariis (stipulis):* cal. proprius *profundè 5-partitus, erectiusculus, persistens;* lac. *lanceolatæ, acuminatæ,* 3-*striatæ, corollá duplo breviores.* Cor. *forìs rosea cum striis purpureis, intùs pallet, extùs villosula,* 1-*petala, infundibuliformis, subsemuncialis,* limbo *patente* 5-*partito, laciniis obovatis, obtusis, planis.* Fil. *plurima, monadelpha, infernè villosa, corollá breviora, erecta:* anth. *subrotundæ, ochroleucæ.* Germ. *subrotundum,* 5-*sulcatum.* Stylus *filiformis, longitudine staminum;* 10-*fidus, supernè recurvus, apiculis rotundato-obtusis villosis terminatus.* Pericarpium: arilli 5 *glabri cinerei, in capitulum subrotundum collecti, introrsum dehiscentes, decidui:* sem. *solitaria.* Jacq. coll. 2. 352.

MALACHRA is distinguished from its nearest coordinates *(Malvaceæ)* principally by short-stalked subsessile flowers collected within a common involucre composed of the diminished upper leaves with their stipules. The leaves disappearing from about the central flowers, while the stipules remain, afford the appearance of an additional calyx.

The present species is said by Jacquin to come from the Caraccas, and is supposed to be annual. The samples in Mr. Lambert's Herbarium are from Jamaica. The drawing was taken from a plant which flowered during the winter months in Mr. Kent's hothouse at Clapton. The stem was more stunted, the heads of flowers nearer together, and apparently more numerous than is usual in the free-growing spontaneous individual.

The specific name has been suggested by a green longitudinal stripe divested of the hispid pubescence that covers the rest of the plant, and which is to be seen on strong samples on one side in the intervals between the branches; but which was not perceptible in the present.

The blossom continues expanding a long time in succession.

The species is not to be found in any of the records of our own gardens, and has been probably now first introduced. Some of them sting, like Nettles.

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RAPHIOLEPIS indica.

China Hawthorn or Raphiolepis.

ICOSANDRIA *DIGYNIA.*

Nat. ord. ROSACEÆ. *Jussieu gen.* 334. *Div. I.* Germen simplex inferum, polystylum. Pomum calycino limbo umbilicatum, multiloculare. *Arbores aut frutices.* POMACEÆ.

RAPHIOLEPIS. Cal. infundibuliformis 5-dentatus deciduus. *Filamenta* filiformia. *Ovarium (germen)* biloculare. *Pomum* disco incrassato clausum, *putamine* chartaceo: *semina* dua gibbosa, testâ coriaceâ crassissimâ. *Frutex (Chinæ). Folia sempervirentia crenulata coriacea reticulata. Racemi terminales bracteis foliaceis persistentibus squamosi.* Lindley MSS.

Raphiolepis indica. *Lindley MSS.*

Cratægus indica. *Linn. sp. pl. ed.* 2. 1. 683. *Willd. sp. pl.* 2. 1005. *Loureiro cochin.* 319. *Curtis's magaz.* 1726? *Hort. Kew. ed.* 2. 3. 203.

Arbor *magna, inermis ramis patentibus.* Folia *lanceolata, inæqualitèr serrata, glabra, alterna.* Flos *albus, corymbis racemosis, squamosis, terminalibus.* Cal. *superus, 5-fidus in senectute truncatus.* Corollæ petala 5, *subrotunda, patentia.* Stamina *icosandra.* Styli *duo.* Bacca *calycina subrotunda, umbilicata, carnosa,* 1-*locularis, edulis:* sem. 2-4, *oblonga.* Lignum *rubescens, grave, tenax, aptissimum ad formandos remos, vel quoslibet palos, qui impulsi, vel pondere gravati, aliquantulum cedunt, nec franguntur.* Lour. l. c.

RAPHIOLEPIS is proposed by Mr. Lindley in an unpublished tract on POMACEÆ, the first section of Jussieu's Order of ROSACEÆ. The character was kindly communicated to us from the author's manuscript.

The genus is distinguished from its coordinates of the same section by having a funnelform calyx, the whole of which, down to where it adheres to the germen, falls off immediately after or at the same time with the petals of the flower; specially from CRATÆGUS, where it has hitherto ranked, by a *fruit-stone* or *putamen* of a paper substance, and from all other double-celled single-fruited coordinates by a *seedcoat* or *testa* of a leathery substance. The name (ραφιον λεπις) has been suggested by the narrow bractes of the raceme, which in spontaneous specimens are sometimes found to have acquired a herbaceous or foliaceous consistence, and are unlike any thing else in this order.

A chinese plant. Introduced by Mr. James Drummond in 1806.

Said by Loureiro to grow to a large tree, the wood of which is of a reddish hue, heavy and tough, and applicable to various economical purposes. The Haw or fruit is eatable.

Mr. Lindley thinks that the CRATÆGUS *rubra* of Loureiro is another species of this genus.

The drawing was taken from a plant which blossomed in April last in the greenhouse at the botanical garden of the Horticultural Society near Hammersmith, an establishment which, under its present liberal and judicious superintendence, promises to become a valuable depository of curious and useful vegetables.

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STROPHANTHUS dichotomus; β. *chinensis.*

Chinese Strophanthus.

PENTANDRIA *MONOGYNIA.*

Nat. ord. APOCYNEÆ. *Brown in Wern. trans.* 1. 59. *Ejusd. prodr.* 465. *Sect. I.* Semina comosa. Fructus bifollicularis, nunc Capsula bilocularis.

STROPHANTHUS. Cor. infundibuliformis. *Faux* coronata squamulis 10 indivisis. *Limbi* laciniæ caudatæ. *Stamina* medio tubo inserta. *Antheræ* sagittatæ, aristatæ v. mucronatæ. *Germina* 2. *Stylus* 1, filiformis, apice dilatato. *Stigma* subcylindraceum. *Squamæ* 5, hypogynæ. *Folliculi* *****. *Frutices sarmentosi. Folia opposita.* Brown in wern. trans. 1. 72.

S. *dichotomus,* ramis pedunculisque dichotomis, foliis mucronato-acuminatis. *Persoon syn.* 1. 299.

Strophanthus dichotomus. *Decand. in ann. du mus.* 1. 408. *Id. in bulletin des sc. par la soc. philom. n.* 64. 123. *Lamarck encyc.* 7. 471. *Smith in Rees's cyclop. in loco.*

Nerium cordatum. *Lamarck encyc.* 3. 458. *Roxburgh flor. ind. ined.*

Nerium scandens. *Loureiro cochin.* 116.

Echites dichotoma. *Carey beng.* 20.

Echites caudata. *Lin. mant.* 52. *Burm. ind.* 68. *t.* 26. *Willd. sp. pl.* 1. 1240.

(α) *cochinchinensis,* segmentis calycinis erectis brevissimis transversè latioribus.

(β) *chinensis,* segmentis calycinis bracteisque erectis transversè magnoperè angustioribus.

(γ) *coromandelianus,* segmentis calycinis bracteisque recurvatis.

Frutex *scandens?* rami *oppositi cortice fusco verruculoso-scabrato.* Fol. *opposita, in summis ramis numerosa approximata, oblongo-v. obovato-lanceolata, saturatè viridia, nitida;* pet. *brevis:* stipulæ *collaterali-geminæ, parvulæ, virides, intraaxillares, semiovato-lanceolatæ.* Flores *inter folia ad finem ramorum, plures, dichotomo-cymosi, chloroleuci, biunciales v. ultrà;* bracteæ *angustæ, lanceolatæ, erectæ.* Cal. *campanulatus,* ¼ *unciæ vix adæquans, virens, 5-fidus segmentis lineari-acuminatis erectis canaliculatis formâ moleque ferè bractearum;* squamulæ 5 hypogynæ *virentes suborbiculatæ.* Cor. *infundibuliformis, æstivatione contortâ:* tubus *cum fauce turbinato-contractus subsemuncialis angulosus,* solus *vix excedens calycem constrictus striato-rugatus,* faux *angulosa intùs velutina punctis striisque densè consitis punicans;* limbus *maximus, sesquiuncialis, æqualis, recurvato-patens, laciniis stellato-distantibus, caudato-attenuatis, convoluto-canaliculatis, infernè intùs colore faucis:* corona faucis *è squamis 5 cuticulosis coloratis bifidis basi divisurarum limbi adnatis, lobis dentiformibus obtusissimis.* Fil. *pallida, brevitèr intra faucem libera, indè infrà omninò adnata fauci ad orificium tubi usque, formâ obversè clavatâ, prominentia, lanuginosa:* anth. *erectæ, sagittatæ, aristato-elongatæ, conniventes, ochroleucæ.* Germ. *viride, subrotundo-didymum, quadrilobo-sulcatum, glabrum, fundo glanduloso calycis incubans:* stylus *ferè* NERII, *albus, clavato-filiformis, pruinosus, sutura utrinque notatus, ut si ex binis conferruminatis:*

stigma *pruinosum, oblongum, cylindricum, erectum, basi marginatum, fundo subtus planum, apiculo angusto bifido terminatum, antheris demùm agglutinatum.*

The three plants, enumerated above as varieties of this species, come from three different countries; and are represented in the Banksian Herbarium by samples included under the present title. The subject of our article is clearly the same with the Chinese samples collected by Messrs. Bladh and Staunton at Macao; and differs from the Coromandel plant of Roxburgh by a closer foliage and in having the bractes and calycine segments entirely upright instead of conspicuously recurved; as also from the Cochinchinese plant of Loureiro by longer and proportionately narrower calycine segments as well as a longer tapered foliage. The three plants are probably specifically distinct; though we have contented ourselves by separating them as varieties, under names that may be retained or rejected, as subsequent investigation may suggest.

It does not appear that this singular plant had been known in our gardens till now. We saw it first in the hothouse of the nursery belonging to Messrs. Colville, in the King's Road, Chelsea, where it blossomed this spring, and afforded the subject of the present drawing.

A climbing? *shrub: branches* opposite, *bark* brown, minutely warted. *Leaves* opposite, numerous and close-set at the upper part of the branches, oblongly or obovately lanceolate, deep green, shining: *petioles* short: *stipules* within the axils of the leaves, in pairs, the one facing the other edgeways, small, green, semiovately lanceolate. *Flowers* among the leaves at the ends of the branches, several, dichotomously cymose, between straw and cream-coloured, two inches long or more; *bractes* narrow, upright, lanceolate. *Calyx* green, campanulate, scarcely $\frac{1}{4}$ of an inch deep, segments 5, upright linear and taper-pointed, channelled, nearly of the same shape and size as the bractes; *hypogynous squamules* (small green roundish scalelike appendage) 5, interposed between the germen and the segments of the calyx (outside the corolla?). *Corolla* funnelform: tube with the faux about half an inch long narrowly turbinate, *tube* (proper) scarcely longer than the calyx, narrow, of one colour throughout, wrinkled and streaked,

faux angular velvetly furred on the inside and crimsoned with closeset streaks and dots; *limb* very large, an inch and a half long, equal, distantly and recurvedly stellate, segments narrow, caudately tapered, involutely channelled, at the lower part on the inside of the same colour as the faux: *faucial scales* 5, of the colour and consistence of the interior lining of the faux, bifid, adhering to the faux at the base of the fork of each division between the segments of the limb, lobes short dentiform rounded at the ends. *Filaments* pale, downy, springing from the orifice of the tube, shortly detached at the top within the faux, thence embossedly adnate to the faux down to the tube, having the appearance of so many thick plaits of an obversely clavate form: *anthers* cream-coloured, sagittate, long-awned, upright, connivent. *Germen* on the glandular floor or disk of the calyx, green, smooth, twin, roundish, each lobe marked with a furrow: *style* white, pustular, clavately filiform, with a perpendicular seam on each side, showing it to consist of two parallelly cohering ones, nearly as in NERIUM; *stigma* white, frosted, oblong, upright, cylindrical, flat at the bottom with a projecting ledge or rim, with a narrow bifid summit; ultimately adhering to the lower part of the anthers.

Loureiro has described the twin *follicles (indehiscent seedvessels)* of his plant as horizontal, thick, and obtuse, with many oblong compressed feathered *seeds*.

STROPHANTHUS comes very near to NERIUM; but differs in the sarmentose or climbing nature of the shrubs, in the foliage being disposed in pairs instead of threes, in having a funnelform instead of an hypocrateriform corolla, and by a faucial crown of 5 regularly bifid scales instead of a crown with an irregularly shred border.

The type of this genus has been observed in India, Asia, and the tropical parts of Africa. The present we believe is the only species which has appeared in any European garden.

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CANNA Lamberti.

The new Indian Reed.

MONANDRIA *MONOGYNIA.*

Nat. ord. CANNÆ. *Jussieu gen.* 62. CANNEÆ. *Brown prod.* 1. 307, *in obs. III.; ubi à* SCITAMINEARUM *ordine distinguuntur.*
CANNA. Suprà vol. 3. *fol.* 206.

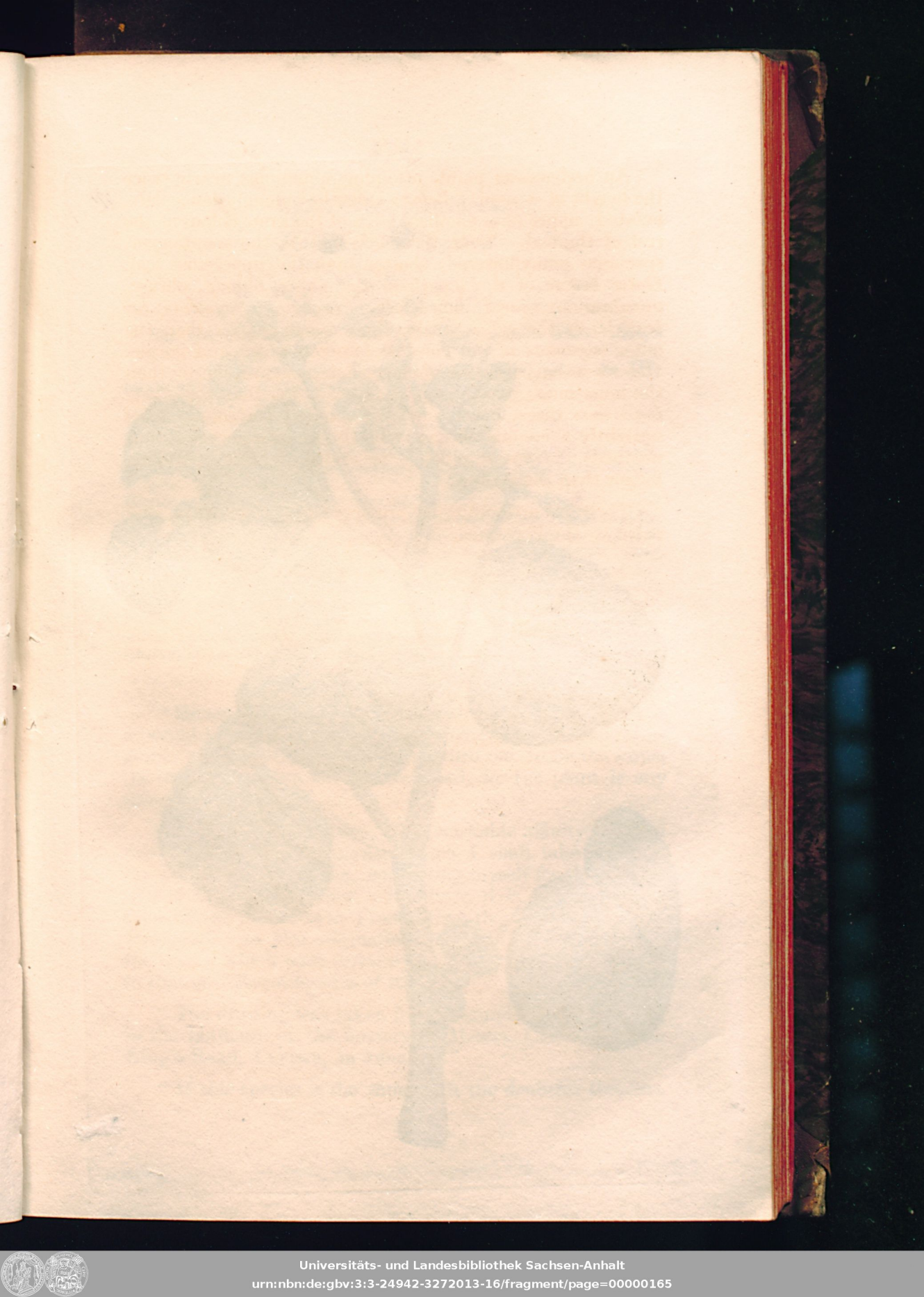
C. *Lamberti,* foliis impubibus, corollæ laciniis interioribus, ternis: labello oblongo erecto-patente integro.
Canna Lamberti. *Lindley MSS.*
Canna indica. *Ruiz et Pavon flor. peruv.* 1. 1; *(affirmante specimine archetypo Herbario Lambertiano asservato). Non aliorum.*
Planta 13-*pedalis.* Folia *oblongo-lanceolata, acuta, superiora minora, margine concolore.* Spica *triflora (vel exemplare spontaneo multiflora) folio superiore brevior.* Flores *omninò* EUPHORBIÆ puniceæ *colore rutilæ.* Bractea exterior *longitudine calycis, oblonga, obtusa, membranacea;* interior *lanceolata concava.* Sepala (segmenta calycina) *farinosa, laciniis perianthii (corollæ) exterioribus* 3*plo breviora, viridi-purpurea.* Perianthii (corollæ) *laciniæ* exteriores *lanceolatæ, concavæ, interioribus breviores: duæ anticæ paulò majores;* interiores *ternæ, suberectæ, oblongo-lanceolatæ:* labello *erecto-patente, majore, subundulato integerrimo.* Germen *oblongum tuberculosum.* Stylus *spathulatus,* stamine *longior.*

A new gay-flowered addition to our hothouses, raised by Mr. Lambert from seed collected in the Island of Trinidad. The plant blossomed in May last at Boyton House for the first time in England, when the sample exhibited in the annexed figure was kindly sent to us. The red of the corolla is peculiar, and resembles very closely the colour of the "Scarlet Spurge" (EUPHORBIA *puniceà*), but is distinct from that of any other Indian Reed previously known in our gardens.

That our plant is the CANNA *indica* of the Flora Peruviana, we are assured by the prototype sample in the rich Herbarium amassed by the public-spirited zeal of Mr. Lambert, and which sample had been transmitted by M. Pavon, one of the authors of the above Flora. The true CANNA *indica* is however a very distinct species, and differs at first sight from the present, in having a revolute label with a notch at the end, instead of an upright one without any notch, though the two agree in having only three inner segments to the corolla, and not four as in *patens* and *coccinea.*

An herbaceous plant, attaining sometimes nearly twice the height of a man. *Leaves* smooth, oblongly lanceolate, pointed, upper ones smaller, edge of the same colour as the rest of the leaf. *Spike* three-flowered (in the spontaneous specimen manyflowered) shorter than the uppermost leaf. *Outer bracte* of the length of the calyx, oblong, obtuse, membranous, *inner* lanceolate, concave. *Segments* (or *leaflets)* of the *calyx* mealy, three times shorter than the outer segments of the corolla, between green and purple. *Outer segments* of the *corolla* lanceolate, concave, shorter than the inner ones: two front ones rather larger than the other: *inner ones* three, nearly upright, oblongly lanceolate: *label* uprightly spreading, larger, slightly undulate, entire (unnotched). *Germen* oblong, tubercled. *Style* spatulate, longer than the stamen.

The roots are said to be preserved in various ways, and eaten by the Peruvians.



M. Hart. del. Pub. by J. Ridgway 170 Piccadilly July 1. 1820. P. Watts. sc.

BEGONIA pauciflora.

Few-flowered Begonia.

MONŒCIA *POLYANDRIA.*

Nat. ord. Plantæ incertæ sedis. Polypetala germine infero. *Jussieu gen.* 436.

Begoniaceæ. *Bonpland nav. et malm.* 151. An Hydrangeæ et indè *Rubiaceis* affines? *Lindley MSS.*

BEGONIA. Suprà vol. 4. *fol.* 284.

B. *pauciflora*, caulescens; foliis cordatis rotundatis nitidis plicatis subbicrenatis: inferioribus æquilateralibus, capsulæ alis inæqualibus obtusangulis. *Lindley MSS.*

Begonia patula. *Haworth suppl. succ. pl.* 100?

Herba *carnosa* 2-3-*pedalis.* Caules *teretes rubidi erecti ramosi impubes, internodiis petiolorum longitudine.* Folia *ferè verticalia minutìm puberula,* stipulis *ovatis acutis scariosis,* petiolo *suprà canaliculato, caulis colore, longitudine laminæ, quæ nitida, cordata plicata subbicrenata suprà lætè viridis infrà pallidior,* superiorum *oblìqua,* inferiorum *subæquilateralis.* Paniculæ *pauciforæ pilosæ,* bracteis ♂ *ovatis appressis,* ♀ *subrotundis.* Flores ♂ *pallidi rubro tincti laciniis* exterioribus *latè ovatis obtusis,* interioribus 4-*plo angustioribus concavis acutiusculis*— ♀ *pallidi virides paulò minores, alis ovarii obtusis, alterâ majore.* Lindley MSS.

"Begonia *patula* of Mr. Haworth's above cited tract is reported to be this, but the specific character does not altogether apply to it, and if it should turn out to be the same, the name *patula* can never be retained, for the plant is any thing but spreading."

"I think I have detected a remarkable affinity between this genus and Hydrangea, which I shall take a future opportunity of explaining, contenting myself for the present with indicating my view. I believe it is the opinion of some of the Botanists in France that the genus is allied to *Polygoneæ;* an idea originating, I presume, in the taste of the leaves, which have certainly a very striking resemblance to that of different species of Rumex."

"The drawing was taken from a sample which flowered in the hothouse at the nursery of Messrs. Colville, in the King's Road, Chelsea, in June last."

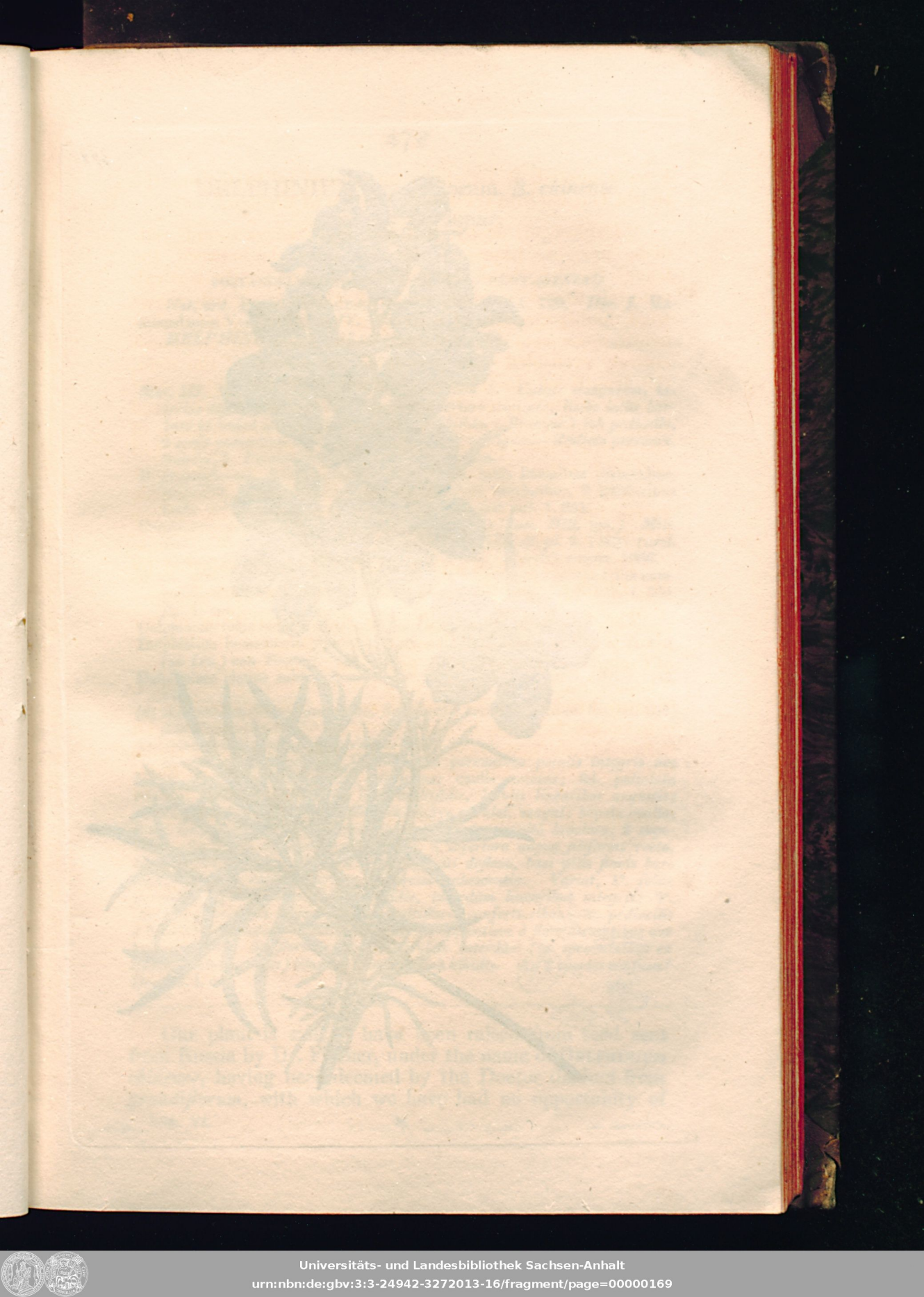
"If this species is the same with the doubtful Begonia

I have quoted, it has been introduced in 1816 from the Berlin Garden into the Physic Garden at Chelsea."

" Caulescent, fleshy, 2-3 feet high; *stems* round, reddish, upright, branched, furless, intervals between the leaves the length of the petioles. *Leaves* nearly vertical, minutely furred, cordate, rounded, shining, plaited, somewhat doubly crenate, of a lively green above, paler underneath, *upper ones* with a slanted blade, *lower* with an almost entirely evensided one; *petiole* of the colour of the stem, the length of the blade, channelled at the upper side: *stipules* ovate, pointed, scariose. *Panicles* few-flowered hairy; *bractes* of the *barren flowers* ovate close-pressed, of the *fertile flowers* nearly round. *Barren flowers* pale tinged with red, *outer segments* broad-ovate blunt, *inner ones* four times narrower concave rather pointed—*fertile flowers* pale green, but little smaller, wings of the *germen* obtuse one larger than the rest." *Lindley MSS.*

The whole of this article was kindly communicated by Mr. Lindley while the plant was in flower last spring.

The following short notice of the natural tribe of our plant is taken from Mr. Brown's Observations on the Botany of Congo. " The extensive genus Begonia, which it is per-
" haps expedient to divide, may be considered as forming a
" natural order, whose place, however, among the Dicoty-
" ledonous families, is not satisfactorily determined. Of
" *Begoniaceæ*, no species has yet been observed on the conti-
" nent of Africa, though several have been found in Mada-
" gascar and the Isles of France and Bourbon, and one in
" the Island of Johanna." *Brown obs. bot. Congo.* 45.



Syd. Edwards, del. Pub by J. Ridgway 170 Piccadilly F. Watts sc.

DELPHINIUM grandiflorum. β. *chinense.*
Fischer's Larkspur.

POLYANDRIA *TRIGYNIA: (rectiùs fortè PENTAGYNIA?)*

Nat. ord. RANUNCULACEÆ. *Decand. syst. nat.* 1. 129. *Div. I.* Ranunculaceæ Veræ. *Tribus IV.* Helleboreæ.
DELPHINIUM. Suprà vol. 4. *fol.* 327.

Sect. III. Delphinastrum. *Ovaria* 3 *interdùm* 5. *Calcar elongatum, interius dipetalum; Petala* 4 *libera,* 2 *inferiora stipitata, limbo intùs barbato in unicâ specie integro, sæpissimè bifido. Bracteæ* 1 *sub pedicello,* 2 *secùs pedicellum sæpissimè oppositæ flori contiguæ.—Radices perennes.* Subdiv. I. *Petalorum inferiorum limbo integro.*

D. *grandiflorum,* foliis palmatìm multipartitis, lobis linearibus distantibus, pedicellis bracteâ longioribus, petalis calyce brevioribus, 2 inferioribus limbo obliquè inflexo ovato integro. *Decand. syst. nat.* 1. 351.

Delphinium grandiflornm. *Lin. sp. pl. ed.* 2. 749 *(excl. Mill. syn.) Mill. dict. ed.* 8. *n.* 6. *Lamarck encyc.* 2. 264. *Willd. sp. pl.* 2. 1228; *(excl. secundo Mill. syn.) Hort. Kew. ed.* 2. 3. 320. *Curtis's magaz.* 1686.

Delphinium nectariis diphyllis labellis integris floribus subsolitariis foliis compositis lineari-multipartitis. *Lin. hort. ups.* 150. *Mill. ic.* 2. 167. *t.* 250. *fig.* 1. *opt.*

Delphinium foliis tenuiùs divisis. *Gmel. sib.* 4. 187. *t.* 78.

Delphinium lusitanicum glabrum aconiti folio. *Roloff ind. h. craus.* 61. *t.* 3. *(ex Lin.) non Tournef.*

Delphinium elatius subincanum perenne floribus amplis azureis. *Amm. ruth.* 175.

(β) *chinense,* caule rectiore rigido, florescentiâ seriori. *Decand. loc. cit.* 352; *fide Fischeri in litt.*

Delphinium chinense. *Loddiges's bot. cabin.*

Species ab omnibus ferè DELPHINIIS *perennibus petalis integris nec bifidis distinctissima.* Radix *nigricans;* caulis *erectus;* fol. *petiolata trisecta, segmentis tripartitis, lobis multifidis, lobulis linearibus angustis;* pedicelli *longi interdùm* 1-2-*pollicares;* flores *cærulei, magni;* sepala *ovalia,* 8-*lin. longa, dorso medio pubescentia;* petala *calyce multò breviora,* 2 *superiora alba limbo oblongo acuto integro,* 2 *inferiora ungue filiformi recto, limbo ovato falcatìm ad floris latus inferiùs deflexo, basi pilis flavis barbato;* ovaria 3 *rariùs* 4 *erecta, adpressè pubescentia. Variat,* 1°. *foliis floralibus inferioribus sæpiùs multifidis, interdùm linearibus integris;* 2°. *racemis pauciflоris laxissimis aut multifloris confertioribus;* 3°. *pedicellis à* 6 *ad* 24 *lin. longis;* 4°. *bracteolis alternis oppositisve à flore distantibus aut huic contiguis;* 5°. *floribus sæpiùs cæruleis interdùm (ex speciminibus ex iisdem seminibus ortis) lilacinis subroseis imò albidis. An* 2 *species confusæ?* Decand. l. c.

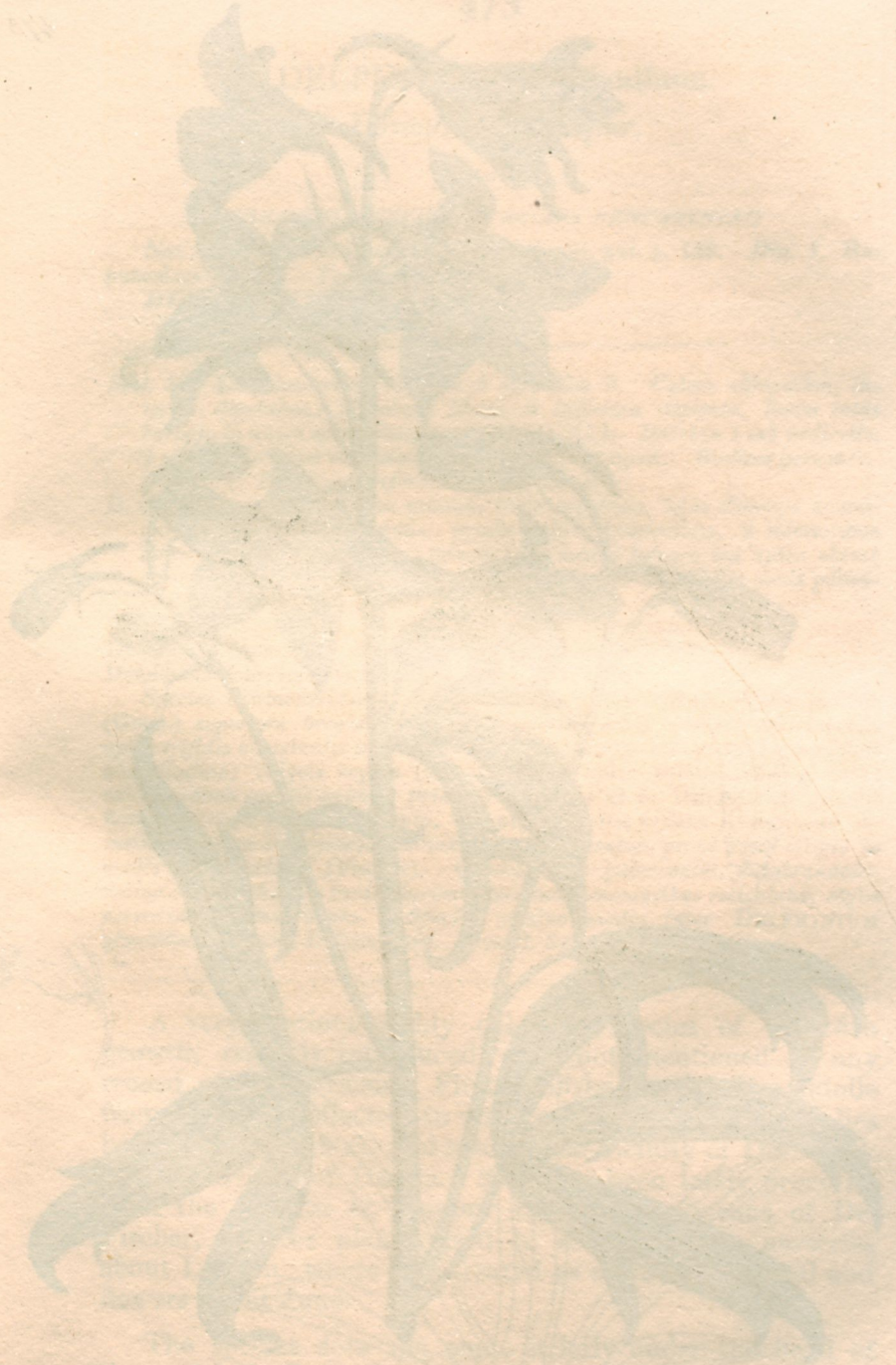
Our plant is said to have been raised from seed sent from Russia by Dr. Fischer, under the name of DELPHINIUM *chinense,* having been deemed by the Doctor distinct from *grandiflorum,* with which we have had no opportunity of

comparing it. The differences we find relied on, are, that it comes later into flower, is a taller, more upright, and stiffer plant, with a more narrowly divided leaf. We must also observe, that M. Decandolle has described the limb of the two upper petals in the flower of *grandiflorum* as *pointed*, in our plant it was manifestly *blunt* and *rounded*. We have preferred recording the plant as a strongly marked variety or possible species until the two can be determined by comparison in the living state or rather by experience.

The drawing was taken at the nursery of Messrs. Whitley and Co., King's Road, Fulham, in June 1818. Probably native of some of the Russian districts on the confines of China. Both (β) and (α) vary with cream-coloured flowers. Some of the samples we saw of (β) were three feet high. We found a garden one from Moscow in Mr. Lambert's Herbarium, where the plant is stated to be native of Kamchatka.

The species is remarkable among the perennial Larkspurs in having the limb of the lower petals entire instead of cloven.

Root inclining to black; *stem* upright; *leaves* petioled, triply divided, segments tripartite, lobes multifid (repeatedly cleft), lobules linear narrow; *peduncles* 1-2 inches long or more, ascending, stiff, one-flowered; a simple leafy *bracte* at their base, with two rather smaller ones placed above their middle. *Leaflets of the calyx* obovate, with a small hollow gibbous yellowish green externally villous point. *Petals* much shorter than the calyx, *two upper ones* with pale blue oblong round-ended limbs; *two lower ones* with a filiform straight unguis, limb deflexed, bearded at the base with yellow hairs. *Germens* 3-4, grey, close-pressedly furred.



M. Hunt. del. Pub by J. Ridgway 170 Piccadilly Aug. 1. 1820. J. Watts sc.

DELPHINIUM cheilanthum.

Doroninsk Larkspur.

POLYANDRIA *TRIGYNIA; (rectiùsne PENTAGYNIA!)*

Nat. ord. RANUNCULACEÆ. *Decand. syst. nat.* 1. 129. *Div. I.* Ranunculaceæ Veræ. *Tribus IV.* Helleboreæ.
DELPHINIUM. Suprà vol. 4. *fol.* 327.

Sect. III. Delphinastrum. *Ovaria* 3 *interdùm* 5. *Calcar elongatum, interius dipetalum; Petala* 4 *libera,* 2 *inferiora stipitata, limbo intùs barbato in unicâ specie integro, sæpissimè bifido. Bracteæ* 1 *sub pedicello,* 2 *secùs pedicellum sæpissimè oppositæ flori contiguæ. Radices perennes.*
Subdiv. I. *Petalorum inferiorum limbo integro.*

D. *cheilanthum,* caule erecto ramoso, foliis 5-partitis, lobis oblongis acuminatis subtrifidis subdentatis, petalis calyce brevioribus, 2 inferioribus limbo obliquè inflexo *(sub-)* integro *(non exactè integro sed apice obtusè emarginato aut vix ac ne vix bidentato),* capsulis reticulatîm pictis pubescentibus. *Decand. syst. nat.* 1. 352, 545.

Delphinium cheilanthum. *Fischer in litt. (fide Decandollæi).*
Delphinium daouricum. *Steven ined. (fide Decand.).*
Delphinium foliis hirsutis. *Gmel. fl. sib.* 4. 187. *t.* 76.

Species distinctissima! Omnium longè pulcherrima! Folia *hirsuta* (Gmel.) *superiora brevitèr petiolata* 5*-partita, lobis oblongis subtrinerviis apice trifidis acuminatis lateralibus subbifidis;* flores DELPHINII grandiflori *magnitudine;* calycis sepala (foliola) *ovalia apice calloso submucronato;* calcar *rectum sepalis æquale;* petala 2 *superiora ut in* DELPHINIO grandifloro, *inferiora brevitèr stipitata, ad apicem stipitis inflexa limbo ovato obtusissimo apice emarginato aut vix ac ne vix bidentato propè basin ciliato in medio disci barbato.* (Fischer). Capsulæ *tres pubescentes, membranaceæ, subinflatæ, ad dorsum venis nigricantibus anastomosantibus reticulatæ,* stylis *persistentibus mucronatæ. Species omnino media inter* DELPHINIUM grandiflorum *et alia* Delphinastra. *Decand. locc. citt.*

A very distinct richly coloured species of dwarfish growth, recently introduced, and not mentioned in any record of our gardens. First published by M. Decandolle from samples collected in that part of Siberia which lies beyond Lake Baikal, and also in the vicinity of Doroninsk in the province of Daûria. Seed has been lately procured from the gardens at Moscow through the means of Dr. Fischer, and the plant raised in several of the nurseries about London, where it is treated as a hardy perennial and flowers about June.

The species does not come strictly under the head of those with the limb of the lower petals entire or even, though

placed there by M. Decandolle, since the limb is manifestly indented; but is rather the intermediate link between *grandiflorum*, the limb of the lower petals of which is entire, and that section of *Delphinastrum* where this is bifid.

The figure from a dried plant in Gmelin's work, referred to above, is very characteristic and a certain synonym; but the term *hirsutus* applied to the foliage in the description implies, in our view, rather a more conspicuous kind of pubescence than is present in the cultivated samples, whose fur, although dense and uneven, is short. The flowers are said to vary to cream-colour.

Leaves subtomentosely furred of a dark blackish green, 3-5-parted, lobes oblong trifid taper-pointed lateral ones subbifid; *flowers* about the size of those of DELPHINIUM *grandiflorum*, of a very deep blue colour; *leaflets of the calyx* oval with a callously thickened submucronately pointed summit; *spur* straightish, equal to the leaflets; *two upper petals* just as in *grandiflorum*, *lower ones* shortly stipitate (stiped), inflexed at the top of the stipe with a very obtuse ovate limb indented at the top, scarcely bidentate, ciliated (fringed) near the base, bearded in the centre of the disk. *Capsules* three, furred, membranous, subinflated, reticulately marked at the back with black inosculating veins; mucronately pointed by the permanent styles.

The drawing was taken at Messrs. Colville's nursery in the King's Road, Chelsea.

W. Hooker del. Pub by J. Ridgway 170 Piccadilly Aug.1.1820. J. Watts

PÆONIA mollis.

Downy-leaved Pæony.

POLYANDRIA *DIGYNIA (v. potiùs PENTAGYNIA).*

Nat. ord. RANUNCULACEÆ. *Decand. syst. nat.* 1. 127. *Div. II.* Ranunculaceæ spuriæ, *Nempè antheris introrsis donatæ.*

PÆONIA. Suprà vol. 5. fol. 379.

P. *mollis,* foliolis ovali-lanceolatis planis lobatis imbricatis subtùs cæsiopilosis, lateralibus subsessilibus, germinibus tomentosis rectis. *Anderson in trans. linn. soc.* 12. 282.

Pæonia mollis. *Sweet hort. sub. lond.* 124.

Pæonia villosa. *Desfont. cat. h. par. ed.* 1. 126?; *(si ita sit malè à Decandollæo ad* PÆONIAM humilem *relata.)*

Radicis fibræ *longæ, tuberibus longis terminatæ.* Caulis *pedalis et ultra, rigidus, strictus, pilosiusculus, densè foliosus.* Petioli *breves, suprà glabri, subtùs pilosiusculi; partiales undique pilosi.* Folia *dodrantalia, inæqualitèr subtriternata, complanata, horizontalia, saturatè cæruleo-viridia.* Foliola *lateralia, subsessilia, extùs decurrentia, profundè lobata, lato-lanceolata, plana, obtusa, imbricato-congregata venis fuscis parallelis, subtùs densè pilosa, glauca; suprà glabra, nitidiuscula.* Bracteæ *foliaceæ, integræ v. incisæ.* Calycis foliola *obtusa, exteriora pubescentia, integra.* Germina 2-3 *rectiuscula, adpressa, apice distantia, mollitèr pubescentia pilis ferrugineis.* Semina *æqualitèr ovata rugosiuscula, nitida.* Anderson in loco citato.

"Although the Pæony here given is perhaps the least beautiful of that splendid genus, yet as it has not been any where described except in the place referred to, nor been figured in any publication, we feel ourselves authorized to lay it before our readers."

"Mr. Sabine, from whose collection the plant was described by the late Mr. George Anderson, procured it from Messrs. Loddiges and Sons, under the erroneous name of *anomala* (denoting a very distinct species); it had been cultivated some years in the nursery at Hackney, having been raised from seeds sent to the proprietors by Professor Pallas. It flowers in the month of May, and is probably a native of the southern districts of the Russian Empire, in or bordering upon the Crimea."

"The Downy-leaved Pæony is easily distinguished from its congeners by dwarf growth and rigid habit, by the peculiar crowding and overlapping of the lobes of the foliage, the upper surface of which is of a dark opaque green, and the

under very glaucous and woolly. The flowers are a dark purplish red, and appear imbedded in the leaves."

"PÆONIA *villosa* of the French Gardens seems to be a variety of this species, and consequently is improperly referred by Desfontaines in the Catalogue of the plants of the Royal Garden at Paris to PÆONIA *humilis*." Sabine MSS.

We have to thank Mr. Sabine, the Secretary of the Horticultural Society, for the liberal permission to engrave the annexed drawing by Mr. Hooker, and also for the communication of the above account of this nearly unnoticed species.

"Linnæus remarks, that though the most natural number of the germens in this genus is, in his opinion at least, two, they are often more numerous; but he thinks they scarcely ever amount to five. Some newly discovered species however contradict this, and indeed most of the old ones afford reasons, at one time or other, for the union of the Linnean Orders from *Digynia* to *Pentagynia*, in the Class *Polyandria*, into one; which is sanctioned also by DELPHINIUM, ACONITUM and others." *Smith in Rees's cyclop. in loco.*

The type of the genus seems confined to the northern hemisphere. No species has been observed in America.

M. Hart. del. Pub. by J. Ridgway 170 Piccadilly August 1. 1820 R. Watts. sc.

HAKEA microcarpa.

Small-fruited Hakea.

TETRANDRIA *MONOGYNIA.*

Nat. ord. PROTEÆ. *Jussieu gen.* 78. *Div. II.* Fructus 1-loc. polyspermus.

PROTEACEÆ. *Brown in trans. linn. soc.* 10. 15, *seqq.* *Div. II.* Fructus dehiscens. *Subdiv.* A. Unilocularis.

HAKEA. Cor. 4-petala, irregularis, petalis secundis, apicibus cavis staminiferis. *Antheræ* immersæ. *Glandula hypogyna* unica dimidiata. *Germ.* pedicellatum, dispermum. *Stigma* subobliquum, è basi dilatatà mucronatum. *Folliculus* unilocularis, ligneus, pseudo-bivalvis, loculo excentrico. *Semina* alà apicis nucleo longiore. Frutices *rigidi, quandòque* Arbores *mediocres, pilis dum adsint medio affixis!* Fol. *sparsa, in variis varia, nunc in eodem frutice diversiformia.* Fasciculi *v.* Racemuli *sæpiùs axillares, in plerisque involucrati, squamis imbricatis, scariosis, caducis, rudimenta ramulorum aliquandò simul includentibus, ideòque potiùs pro gemmâ habendis, sed genus, extra tropicum saltèm, à confinibus optimè distinguentibus, aliis notis in quibusdam vacillantibus.* Pedicelli *colorati, in racemosis geminati, paribus unibracteatis.* Flores *parvi, albi v. ochroleuci.* Pistillum *glaberrimum, stylo subdeciduo.* Folliculus *parietibus incrassatis.* Semina *atra, rarò cinerea.* Brown prod. 1. 381.

Div. *Capsulæ juxta apicem bicalcaratæ.* Subdiv. *Folia plura filiformia: aliqua plana.* Brown.

H. *microcarpa,* foliis integerrimis glabris: rameis teretibus; infimis planis, corollis pedunculisque glaberrimis, capsulis bicalcaratis umbellatis folio multotiès brevioribus. *Brown prod.* 1. 383.

Hakea microcarpa. *Brown in trans. linn. soc.* 10. 182.

Thirty-five species of this genus have been enumerated by Mr. Brown; all belonging to New Holland and Van Diemen's Island. Of these only one was observed within the tropic.

The present is of very recent introduction and not of the seventeen recorded in the last edition of the Hortus Kewensis. It belongs to a small division of the group, remarkable for some flat and more cylindrical leaves.

A greenhouse shrub, with a sweet-smelling blossom. The drawing was taken last May at Messrs. Colville's in the King's Road, Chelsea.

The following is the character of the genus from Mr. Brown's Prodromus.

Corolla of 4 petals, irregular, petals in one direction, bearing the stamens in the hollow tops. *Anthers* immerged in the hollow of the petals. *Hypogynous glandule* (small gland below the pistil) solitary, halved. *Germen* stalked, two-seeded. *Stigma* somewhat slanted, sharpening mucronately from a widened base. *Follicle* (indehiscent seedvessel) one-celled, woody, pseudo-bivalve, with a cell deviating from the centre. *Seeds* with the wing of the summit longer than the nucleus or body. The species consist of rigid shrubs, or sometimes middle-sized trees, with the hairs, when there are any, fixed down at the middle. *Leaves* scattered, of different shapes in different species, sometimes of different shapes in the same plant. *Flower fascicles* or *racemelets* usually axillary, in the greater part of the species enveloped in an involucre of imbricated scariose caducous scales, sometimes enclosing likewise the rudiments of the future branches and consequently rather to be regarded as the buds, but which serve to distinguish the genus very securely (the extratropical part of it at least) from the confining genera, while at certain points other marks are found to be less steadfast. *Pedicles* coloured, in pairs, where the flowers are in racemes, with a single bracte to each pair. *Flowers* small, white, or cream-coloured. *Pistil* quite smooth, style subdeciduous. *Follicle* with thickened walls. *Seeds* black, seldom ash-coloured.

The present species is characterized by quite entire smooth leaves; those on the branches being cylindrical, those lower down flat; by quite smooth corollas and peduncles and double-spurred umbellate capsules many times shorter than the leaves.

M. Hart. del. Pub by J. Ridgway 170 Piccadilly May 1. 1820. J. Watts sc.

DIOSMA lanceolata.

Lance-leaved Diosma.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RUTACEÆ. *Jussieu gen.* 269. *Div. III.* Genera Rutaceis affinia.

DIOSMEÆ. *Brown gen. rem. in append. to Flind. voy.* 2. 545.

DIOSMA. Suprà vol. 5. *fol.* 366.

Div. Agathosma. *Filamentis alternis sterilibus cochleari-petaloideis.*

D. *lanceolata,* foliis ellipticis obtusis glabris (utrinque pilis raris: *in notâ*). *Linn. syst. nat. ed.* 12. 2. 625; *(sub* HARTOGIÁ lanceolatâ.*)*

Diosma lanceolata. *Mill. dict. ed.* 8. *n.* 5. *Linn. syst. veg. Murr.* 239. *Willd. sp. pl.* 1. 11. 37; *(excluso syn. Thunbergii.) Hort. Kew. ed.* 2. 2. 31; *(exclusâ phrasi specificâ Willdenovii speciem omninò alienam intelligentis).*

Bucco obtusa oblonga. *Wendl. collect.* 1. 47. *t.* 14?

Hartogia lanceolata. *Linn. syst. nat. ed.* 12. 2. 625.

Fruticulus *dumosus subpedalis, resinam strenuissimè redolens, pubescens,* ramis *villosis foliosis.* Fol. *patentia, numerosa, sparsa, approximata, crassa, lanceolato-oblonga, obtusiuscula,* ¼ *unciæ vix longiora, suprà plano-convexiuscula pilis raris, margine et costâ subtùs pilis longioribus ciliata, à prono glanduloso-punctata pallidiora.* Flores *terminales, convexo-umbellati, roseo-subrubentes v. lilacino-albicantes, parvuli:* pedicelli *vix longiores floribus, hirsuti, globulis resinosis consiti, rubidi, recti.* Cal. *bis brevior corollâ, pubescens, glandulosus, infernè rubescens, supernè virescens, segmentis erecto-patentibus obtusis crassis.* Cor. pet. *campanulato-patentia, distantia, ligulata, angustiùs spathulata, concolora,* laminâ *oblongâ obtusâ planâ,* ungue *lineari villosiusculo.* Fil. 5 sterilia *erecta, breviora corollâ, petalodea, petalis opposita, lineari-ligulata, infernè plana pilosa, supernè convoluto-concava, apice cochleariformia rotundata.* Stam. 5 fertilia *successivè excrescentia, corollam exsuperantia, diffusè patentia, primò ad medium replicata indè sensìm arrigenda,* filamentis *glabris setaceis,* antheris *parvulis erectis à basi infixis ovato-rotundis flavis.* Germ. *viride, glabrum, disco crateriformi immersum, tricolle apiculis fuscis:* stylus *setaceus, albus, glaber, apiculorum germinis intermedius.*

A Linnean species, involved in some obscurity by an inadvertence of Willdenow in identifying it with a plant to which Thunberg had affixed the same name, under the impression of its being the same thing, but which a critical review proves to be of a very different nature. We know by the sample that the present is the species intended in the Hortus Kewensis, notwithstanding its having been enumerated in the last edition of that publication by the phrase descriptive of Thunberg's plant.

The figure quoted in the synonymy from Wendland we think is meant for this plant, notwithstanding the bractes shown on the pedicles, which we never observed in any sample we saw. It may also be the Diosma *pubescens* of Willdenow's "Enumeratio;" but clearly not that of his "Species Plantarum," where it was adopted from Thunberg, and prefixed to an inappropriate synonymy; a circumstance we have noticed in the article Diosma *ciliata* (vol. 5. fol. 366). In Thunberg's *pubescens* the leaves are described as lanceolate, three-cornered and villous; in the *pubescens* of Willdenow, in his "Enumeratio," as oblong slightly pointed and fringed along the edge and midrib; while the figure we have quoted above from Wendland is adduced for the synonym of one of the varieties into which it is divided.

From *ciliata*, to which it has a near affinity, it may be at once distinguished by a germen with a bare smooth top instead of one with the top clothed with a shaggy pubescence.

Native of the Cape of Good Hope; requiring the same treatment as the hardier kinds of Heaths from the same quarter. Cultivated by Miller in 1768, in the Physic Garden at Chelsea.

A small bushy shrub, seldom much more than a foot high, exhaling a very strong resinous smell, especially when rubbed or bruised, furred; *branches* villous, leafy. *Leaves* substantial, spreading, numerous, scattered, near, lanceolately oblong, slightly blunted, scarcely exceeding a quarter of an inch in length, flat with a slight rise on the upper surface where they are furnished with a few straggling hairs, fringed with longer hairs at the edge and along the underside of the midrib, paler underneath with dotlike glands. *Flowers* small, terminal, convexly umbelled, often rosy red, sometimes nearly white: *pedicles* hardly longer than the flowers, reddish, straight, shaggily furred, bespangled with crystallized resinous globules. *Calyx* twice shorter than the corolla, glandular, furred, reddish below, greenish above, segments blunt thick. *Petals* campanulate, spreading, standing apart, ligulate, narrowishly spatulate, of one colour; lamina or blade oblong blunt flat; unguis (claw or stand) linear villous. *Sterile filaments* 5, one opposite to each petal, shorter than the corolla, petal-like, linearly ligulate, at the lower

part hairy flat, at the upper convolutely concave, at the top hollowed like the bowl of a spoon and rounded. *Fertile stamens* 5, acquiring their due length in succession, overtopping the corolla, diffusely spread, at first replicate at the middle, gradually straightening: *filaments* setaceous, smooth: *anthers* small, upright, fixed on at the base, ovately rounded deep yellow. *Germen* green, smooth, set in a cupped disk, triply pointed, points dark: *style* setaceous, white, smooth, placed amidst the points of the germen.

Drawing done at Messrs. Colvilles, King's Road, Chelsea.

M. Ravel. del. Pub by J. Ridgway 170 Piccadilly Aug. 1. 1820. J. Watts. sc.

MELALEUCA squamea.

Scaly-branched Melaleuca.

POLYADELPHIA *ICOSANDRIA.*

Nat. ord. MYRTI (MYRTACEI). *Jussieu gen.* 322. *Div. I.* Flores in foliorum axillis aut in pedunculis multifloris oppositi. Folia plerumque opposita et punctata.

MELALEUCA. Suprà vol. 2. *fol.* 103.

Div. Folia alterna.

M. *squamea*, foliis ovatis lanceolatis acuminatis trinervibus: novellis ramulisque villosis, capitulis globosis pubescentibus, phalangibus 5-6-(9) andris: unguibus petalis brevioribus. *Brown in Hort. Kew. ed.* 2. 4. 412.

Melaleuca squamea. *Labillard. nov. holl.* 2. 28. *t.* 168.

Frutex *erectus, subverticillato-ramosus,* ramis *teretibus, novellis villosis.* Fol. *tàm opposita quàm sparsa, patentissima, intervallis longiora, elliptico v. ovato-lanceolata, cuspidato-acuminata, nervosa nervis parallelis, brevissimè petiolata, novella villosa subtùsque hirsutiora.* Flores *lætè lilacini, basi ramulorum in capitulum subovatum v. globosum foliis floralibus brevioribus hirsutissimis confertis subtensum congesti, foliolis bracteaceis interstincti.* Cal. *oblongus, turbinato-campanulatus, pallidè virens, sublanato-villosus, segmentis ovatis triangularibus erectis, intùs concavis saturatè viridibus.* Petala corollæ *lilacina, obovata, convoluto-concava,* 3-*plo breviora staminibus,* 2-*plo longiora segmentis calycis vel magìs, unguiculata, margine erosa.* Phalanges staminei 5 *lilacini, polyandri, ungue brevissimo vel subnullo:* antheræ *luteæ.* Pistilla *quanta coram habuimus abortiva v. cassa.*

This lively flowered shrub is not uncommon in our greenhouses, though it has not yet been represented by any figure from the living plant.

A native of Van Diemen's Island. Introduced by Mr. Brown in 1805.

The specific name has been suggested by the peeling of the bark on the older branches of the plant in short scale-like strips along the intervals of the foliage.

An upright shrub; *branches* produced nearly in whorls, round, young ones villous. *Leaves* both oppositely and scatteredly disposed, wide-spread, longer than the intervals, elliptically or ovately lanceolate, long taper-pointed with parallel nerves, very shortly petioled, new ones villous more shaggily so underneath. *Flowers* of a lively lilac-red, produced at the base of the new branches in subovate or globular

heads subtended by crowded shorter and very shaggy floral leaves, separated one from the other by bractelike leaflets. *Calyx* oblong, turbinately campanulate, pale green with a woolly-villous fur; segments ovate triangular upright concave on the inside and deep green. *Petals of the corolla* lilac-red, obovate, convolutely concave, three times shorter than the stamens, three times longer than the segments of the calyx or more, unguiculate (i. e. with a narrow claw or stand), eroded at the edge. *Stamineous fascicles* 5, of from 5 to 9 stamens, lilac-red, with very short nearly obsolete stands: *anthers* yellow. All the *pistils* we examined were imperfect.

The drawing was taken in May, at the nursery of Messrs. Colville, in the King's Road, Chelsea.

M. Hart. del. Pub by J. Ridgway 170 Piccadilly Aug 1. 1820. J. Watts sc.

LYCHNIS fulgens.

Siberian Lychnis.

DECANDRIA *PENTAGYNIA.*

Nat. ord. CARYOPHYLLEÆ. *Jussieu gen.* 299. *Div. V.* Calyx tubulosus. Stamina 10 (alterna hypogyna, alterna sæpiùs epipetala). Styli duo aut tres aut quinque.

LYCHNIS. Cal. tubulosus 5-dentatus. *Petala* 5 unguiculata, limbo sæpè fissa. *Styli* 5. *Caps.* 3-locularis 5-valvis. *Flores sæpè corymbosi terminales, rariùs spicato-paniculati, in* LYCHNITE alpinâ *et* LYCHNITE quadridentatâ *interdùm* 4-*styli, in* LYCHNITE dioicâ *abortú dioici. Fructus in* L. viscariâ 5-*locularis, in* L. Flore Cuculi *unilocularis.* Juss. loc. cit. 302.

L. *fulgens,* hirsuta, floribus solitariis, foliis oblongis. *Sprengel cent. sp. pl. minùs cogn.* 26. *n.* 55.

Lychnis fulgens. *Fischer ined. (fide Sprengelii). Curtis's magaz.* 2104.

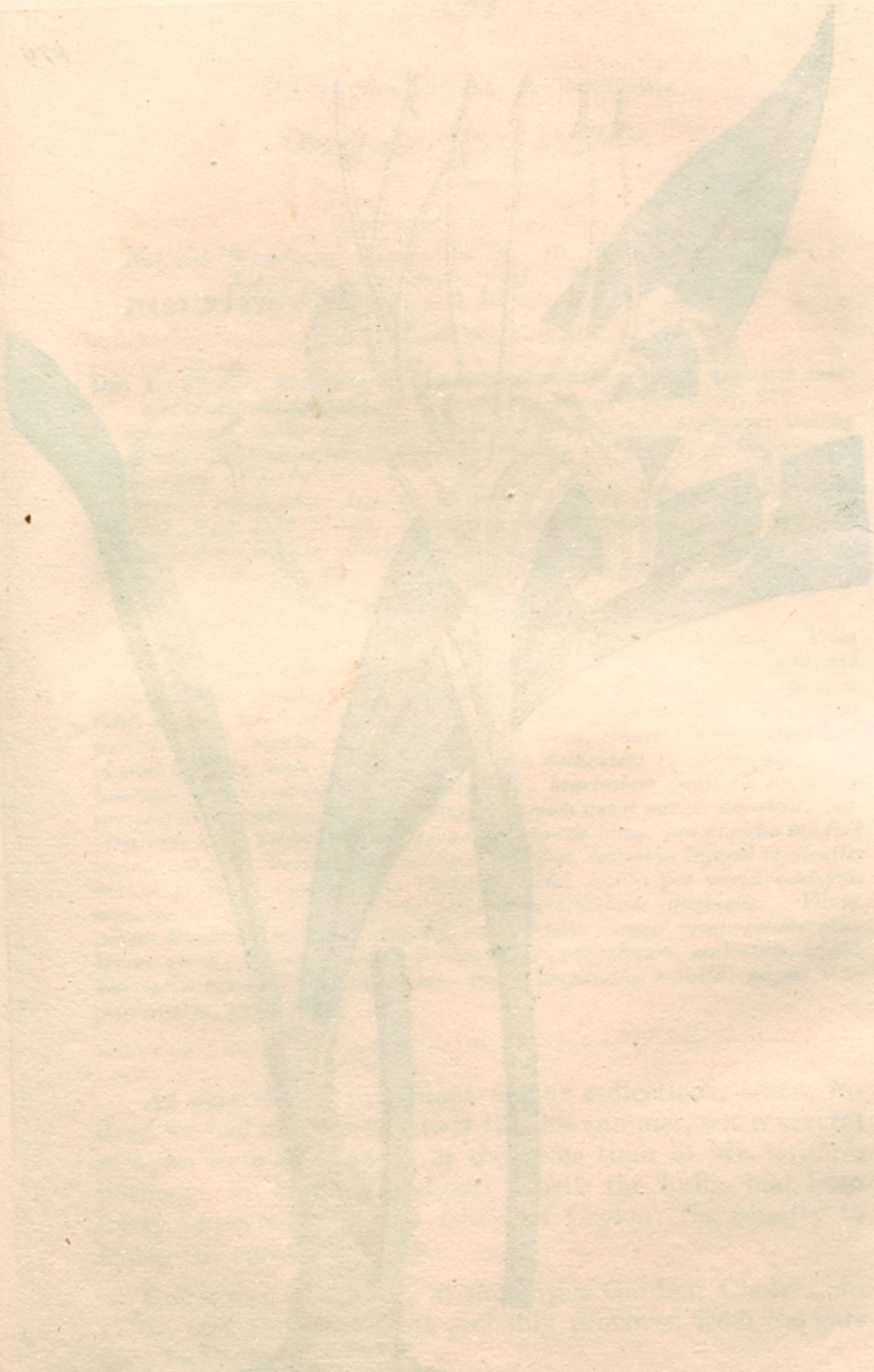
Herba hirtiùs tomentosa; caulis *subsesquipedalis erectus ramosissimus,* ramis *supernis floriferis trichotomo-cymosis, floribus brevissimè pedunculatis, medio singularum trichotomiarum ebracteato, lateralibus bibracteatis,* bracteis *calycem subæquantibus.* Fol. *opposita, decussato-distantia, sessilia, oblongo-ovata, acuminata.* Cal. *oblongus, lanatus, cylindraceus,* 10-*anguloso-plicatus, intùs glaber, dentibus* 5 *acuminatis.* Cor. *aurantiaco-coccinea, diametro sesquiunciali vel majori,* limbo *stellato-explanato;* petala *dorso carinata, laminâ cuneato-obcordatâ* 4-*fidâ, lobis inæqualissimis,* mediis 2 *multotiès majoribus distantibus lineari-oblongis obtusissimis apice denticulato-erosis,* lateralibus *duplo brevioribus, angustissimis, lineari-subulatis;* ungue *æquante calycem, intùs margine lanato-ciliato, parùm breviore laminâ.* Corona *pede limbi posita, è paribus* 5 *squamularum dentiformium recumbentium igneo-rutilantium.* Stam. *tubo subinserta, alternà* 5 *tardiora,* 5 *petalis inserta,* 5 *stipite germinis:* anth. *incumbentes, coccineæ.* Styli 5 *simplicissimi, inclusi.* Germ. *viride, glabrum, oblongum columellâ brevi innitens.*

It is not an easy matter to point out in what respects this new and brilliant acquisition is to be discriminated from the well-known "Scarlet Lychnis" (L. *chalcedonica),* if we except the differences of dimension. In *fulgens* the leaves are broader and proportionately shorter, the stem is scarcely one third the height of that of *chalcedonica*; in *fulgens* the flowers are several times larger, and the two outer segments of the petals longer and more perfectly defined than in *chalcedonica,* where they are mere teethlike rudiments; in *fulgens* the branches which support the flowers are greatly more extended, and farther apart, thus giving an incomparably wider breadth to the inflorescence than in *chalcedonica,* where the flowers are nearly sessile, and very compactly

disposed. In all other things the two are extremely alike; flower at the same time in the open ground; and probably belong to the same regions; *fulgens* being specially stated to come from Siberia, *chalcedonica* in a more general way from Russia.

The plant seems to have been originally observed by Dr. Fischer, by whom it was communicated to Professor Sprengel, and by him first published in the tract we have quoted. It was raised by several of our nurserymen the year before last from seed ripened in the Berlin Garden. Plants of the first year seldom produce more than from one to three flowers. The drawing was taken from a plant of two years growth, which flowered in June, in the nursery of Messrs. Colville, in the King's Road, Chelsea.

We should have observed, that the pubescence is softer and more curled in *fulgens* than in *chalcedonica*.



M. Hart. del. Pub by J. Ridgway 170 Piccadilly Sept.r 1. 1820. J. Watts sc.

PANCRATIUM zeylanicum.

One-flowered Sea-Daffodil.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.* Germen inferum.
AMARYLLIDEÆ. *Brown prod.* 1. 296. *Sect. I.*
PANCRATIUM. Suprà vol. 3. *fol.* 221.

Div. I. *Floribus petiolatis v. subsessilibus: limbo radiato: excisuris senis coronæ staminiferis.* Nob. in journ. of scien. and the arts. 3. 317.

P. *zeylanicum,* uniflorum; foliis lorato-lanceolatis, subtùs glaucis; laciniis corollæ longioribus tubo, supernè revolutis; staminibus erecto-incurvescentibus.

Pancratium zeylanicum. *Lin. sp. pl. ed.* 2. 1. 417. *Willd. sp. pl.* 2. 41. *Hort. Kew. ed.* 2. 2. 218. *Nobis in journ. of scien. and the arts.* 3. 317.

Pancratium tiaræflorum. *Parad. londin.* 86.

Narcissus zeylanicus, flore albo hexagono odorato. *Herm. lugdb.* 691. *t.* 693. *Commel. hort. amst.* 1. 73. *t.* 38.

Lilium javanicum. *Rumph. amboin.* 6. 161. *t.* 70. *fig.* 2.

Bulbus *ovato-globosus collo vaginoso, diametro sesquiunciali.* Folia *bifaria,* 3-12 *(in exemplaribus omnibus quæ vidimus* 2-3), 6-12-*uncialia, ubi latiora unciam transversa vel circà, costâ mediâ subtùs prominente.* Scapus *foliis brevior, tereti-subcompressus, striatus, non glaucus.* Flos *albus, gratissimè odorus, amplus, uncias* 4½ *longus v. circà, tenuis, tener, erectus, brevissimè intra spatham pedicellatus.* Spatha *folliculosa (v. latere altero dehiscens), membranacea, lineari-lanceolata, bracteolam pedicello brevi appressam in se continens.* Corollæ tubus *unciam unam parùm excedens, subvirescens,* 3-*plo brevior limbo:* limbus *radiato-revolutus, pro dimidio suo ferè coronæ adnatus, laciniis distantibus, linearibus, lateribus infernè replicatis:* corona *profundè æqualitèrque* 12-*fida, rotata, lobulis per paria contiguis acuminatis sinubus staminiferis latioribus rotundatis distinctis.* Filam. *parùm breviora limbo, multotiès longiora dentibus coronæ, erecto-conniventia.* Germ. *viride, oblongum, duplo brevius tubo, exangulosum, esulcatum, loculis biseriatìm cumulatèque polyspermis:* stylus *longitudine corollæ;* stigma *simplicissimum, puberulum.*

An exceedingly rare plant in our collections, where indeed we had never met with it till this summer, when several samples were in blossom at the same time in Mr. Griffin's hothouse at South Lambeth: where the bulbs had been lately imported from the Island of Ceylon; the country to which the species belongs.

Cultivated by Miller, at the Physic Garden, Chelsea, in 1752; and had been most probably procured from the gardens in Holland.

Bulb ovately round with a sheathy neck, about an inch and a half in diameter. *Leaves* bifarious, lorately-lanceolate, in all the samples we saw from two to three, 6-12 inches long, about an inch broad at the widest part, glaucous at the under side with a projecting midrib. *Scape* one-flowered, shorter than the leaves, round and slightly compressed, streaked, not glaucous. *Flower* white, large, about four inches and a half long, thin and tender, upright, shortly stalked within the spathe. *Spathe* follicular (of one piece and opening on one side), membranous, linearly lanceolate, inclosing a very small closed-pressed bracte. *Tube of the corolla* but little above an inch long, greenish, three times shorter than the limb; *limb* radiate, adhering to the crown for near half its length; segments distant, linear, revolute at the upper part, reflexed along that portion of their sides which adheres to the crown. *Crown* deeply and evenly twelve-cleft, rotate, lobes taper-pointed, contiguous by pairs, each pair separated from the other by a wider rounded stamenbearing sinus. *Filaments* upright, inclining inwards, little shorter than the limb, several times longer than the lobes of the crown. *Germen* green, oblong, twice shorter than the tube of the flower, uncornered, furrowless, with many seeds lying one upon the other in two rows; *style* the length of the corolla; *stigma* a simple bluntish slightly pubescent point.

A very desirable acquisition for the hothouse, where it requires little care, takes up only a small space, lasts some time in beauty, and is very sweet-scented.

Pub by J. Ridgway 170 Piccadilly Sept 1st 1825.

PLUMERIA bicolor.

Bicolor Plumeria.

PENTANDRIA *MONOGYNIA.*

Nat. ord. APOCYNEÆ. *Jussieu gen.* 145. *Div. I.* Germen duplex. Fructus bifollicularis. Semina non papposa.

PLUMERIA. Cal. minimus, quinquefidus. *Cor.* infundibuliformis, tubo tenui tereti; fauce esquamatà; limbo infundibuliformi, quinquepartito, laciniis obliquis. *Stamina* basi tubi corollæ inserta, inclusa, libera: *antheræ* conniventes. *Ovaria (germina)* duo, annulo carnoso immersa: *styli* duo, breves: *stigma* incrassatum, apice emarginatum. *Folliculi* ventricosi, deorsùm flexi: *semina* infernè membranaceo-alata. *Arbores aut arbusculæ lactescentes. Folia magna, alterna, integra et integerrima. Flores speciosi, terminales, corymbosi, incarnati, rosei, albi et lutescentes.* Kunth nov. gen. et spec. 3. 229.

P. *bicolor*, foliis oblongis, acuminatis, marginibus planis, corolla albo-lutea. *Ruiz et Pavon fl. peruv.* 2. 21. *t.* 141.

Plumeria alba; β. *fragrans. Kunth nov. gen. et spec.* 3. 230; (PLUMERIÀ albà *Linnæi toto cælo distans).*

Yuraccarhuas Suche. *Peruvianis.*

Arbor *quinqueorgyalis:* truncus *erectus, teres, cinereus, comâ subrotundâ magnâ:* rami *dichotomi, crassi, medullosi.* Folia *sparsa in summitatibus ramulorum, oblonga, acuminata, integerrima, plana, venosissima.* Petioli *basi biglandulosi.* Pedunculi *terminales, striati, glabri (in nostrâ plantâ lanuginosi v. subvillosi), multiflori,* pedicellis *bracteolis ovatis deciduis suffulti.* Flores *corymboso-umbellati, gemini.* Cal. *viridis, quinquecrenatus.* Cor. *magna, albo-lutescens; tubus curvatus; faux intensè lutea; limbus albo-lacteus.* Folliculi *bipalmares et ultrà, rubro-fusci:* semina *fusca, alâ longâ albicante.* Ruiz et Pavon. loc. cit.

We have been furnished with the sample of this rare plant through the kindness of Mr. Lambert; who has cultivated it for several years in his hothouse at Boyton, in Wiltshire, where it was introduced from Jamaica; most probably from some garden. It is a very different species from the PLUMERIA *alba* of Linnæus, which belongs to that Island. There the leaves are very narrow in proportion to their length, long-pointed, and revolute at the margins. As far as we can judge from the description and figure, we have scarcely a doubt that our plant is the PLUMERIA *bicolor* of the "Flora Peruviana," as well as the plant intended by Messrs. Humboldt and Bonpland in the place we have quoted above. Not having seen the sample while fresh,

nor had an opportunity of comparing it with *rubra*, we are not prepared to say in what respects the two differ beyond colour. However both Mr. Lambert and Mr. Donn his librarian, who have observed them while growing together in the hothouse, believe the two to be essentially distinct.

We should observe, that the stalks of the inflorescence are described as smooth or bare in the *bicolor* of the Flora Peruviana; in our specimen they were slightly villous, or downy, the down being however very slightly attached and tender, probably deciduous?

The blossom is delightfully fragrant.

The shrub, or rather tree, is said to grow to the height of about forty feet in its native place. The young wood abounds with a milky juice, is soft and pithy,

Native of South America.

M. Hart. del. Pub.d by J. Ridgway 170 Piccadilly Sept.r 1.1820. J. Watts. sc.

CALYCANTHUS lævigatus.

Dark-flowered scentless Allspice.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. CALYCANTHEÆ. *Lindley Suprà vol.* 5. *fol.* 404.
CALYCANTHUS. Suprà vol. 5. *fol.* 404.

C. *lævigatus*, foliis oblongis sensìm acuminatis, subrugosis, utrìnque viridibus glabris: ramis strictissimis. *Lindley MSS.*
Calycanthus lævigatus. *Willd. hort. berol.* 1. 80. *t.* 80. *Ejusd. enum.* 1. 559. *Pursh amer. sept.* 1. 358.
Calycanthus fertilis. *Andrews's reposit.* 539; *(pessimè).*
Calycanthus ferax. *Michaux bor. amer.* 1. 305; *(fide Pursh.)*
Frutex CALYCANTHO fertili *(suprà vol.* 5. *fol.* 404.) *simillimus; sed* rami *strictiores*, folia *oblonga, sensìm acuminata, utrìnque viridia nec subtùs glauca;* flores *colore multotiès intensiore, odore tamen æquè carentes;* perianthii *laciniæ angustiores quandòque semiexpansæ.* Fructus *ignotus. Lindley MSS.*

For this very uncommon species of Allspice, we have to thank Mr. Sabine, by whom a sample was obligingly communicated from the garden of his residence at North Mimms, in Hertfordshire.

Native of North America, and very like CALYCANTHUS *fertilis*, which forms the subject of the 404th article of this publication. The principal differences between the two species consist in the leaves of the present plant being much more acuminate (taper-pointed) than those of CALYCANTHUS *fertilis*, and destitute of that glaucous hue, so remarkable on the under side of those of the latter as well as of the well-known Carolina Allspice (CALYCANTHUS *floridus).* The flowers of *lævigatus* are also much darker than in *fertilis*, and the segments much narrower, but in both differ from those of *floridus* in being destitute of all fragrance.

It sometimes happens that the flowers partially expand; but we have never observed them open so completely as they appear to have done in the sample from which the present figure was drawn. *Lindley MSS.*

Smith. del. Pub.d by J. Ridgway 170 Piccadilly Sept.r 1.1820. J. Watts. sc.

TRADESCANTIA fuscata.

Stemless Spiderwort.

HEXANDRIA *MONOGYNIA.*

Nat. ord. COMMELINEÆ. *Brown prod.* 1. 268.

TRADESCANTIA. Cal. 3-phyllus, æqualis, persistens. *Cor.* 3-petala, æqualis. *Stamina filamentorum* pilis articulatis. *Stylus* simplex, *stigmate* tubuloso. *Capsula* supera, trilocularis: *semina* pauca dorso vel latere embrionifera. *Gærtn. sem.* 1. 51.

Herbæ. Folia *basi vaginantia, alterna, nervis parallelis.* Involucrum *conduplicatum foliiforme, inflorescentiam longè exsuperans, v.* bracteola *obsoleta, v. planè nullum.* Flores *ephemeri, modò biseriato-distachyi monostachyive, rarò solitarii:* bracteis *interstincti. Genus omninò extraeuropeanum.*

T. *fuscata,* acaulis, ferrugineo-hirsuta; foliis ellipticis acuminatis pedunculisque 1-3-floris? radicalibus.

Tradescantia fuscata. *Loddiges's bot. cab.*

Acaulis. Folia *plura, lata, crassiuscula, radicalia, ambientia, recumbentia, patentia,* 3-4-*uncialia v. ultrà, lanceolato-elliptica v. ovata, ferrugineo-hispida nervis longitudinalibus utrinque convergentibus, pubescentiâ à prono densiùs hirsutâ:* petioli *breves, canaliculato-convoluti subtùs hispidissimi.* Pedunculi *radicales,* 1-3?-*flori multùm breviores foliis, erecti, hispidi.* Calyx *ferrugineo-hirtus, segmentis oblongis.* Genitalia *alba.*

The *Commelineæ*, of which the present genus is a coordinate, were comprised in the *Junceæ* of Jussieu, but have been since detached by Mr. Brown, and the group defined by the following character. *Calyx* three-parted. *Corolla* of three petals, with the ungues sometimes connate (united). *Stamens* six or sometimes fewer, hypogynous (inserted below the pistil), a part of them often either antherless or with othershaped anthers. *Germen* 2-3-celled, with few-seeded cells: *style* single: *stigma* single. *Capsule* 2-3-celled, 2-3-valved, valves septiferous (partitionbearing) along their middle: *seeds* generally two, and inserted at the inner angle of the cell. *Embryo* trochleate (pullied or like a short cylinder constricted at the middle), sunk in a hollow of the solid-fleshed albumen opposite the umbilicus. All the genera consist of herbaceous plants with leaves that are generally sheathing at the base.

TRADESCANTIA differs from COMMELINA in having six uniform anthers.

Although the type of this singular genus is not represented by one species within the bounds of Europe; yet owing to the long standing popularity of the Common Virginian Spiderwort (Tradescantia *virginica)*, a nearly universal ornament of our flower-borders for almost two centuries, its features are as familiar to Europeans as those of any one of their native flowers.

The present species has been newly observed; being said to have been introduced about three years ago from the Brazils. The drawing was taken the summer before last from a sample that flowered in the hothouse in Mr. Lee's nursery at Hammersmith. It is remarkable for having no appearance of any stem; and being covered throughout (except at the corolla) by a rough tawny-brown fur, thickest at the underside of the foliage. The *leaves* broad, thickish, radical, several, ambiently scattered, recumbent, spreading, about three or four inches long or perhaps more, lanceolately elliptical or ovate, fur rusty-brown, hispid, thickest at the underside of the leaf, nerves longitudinal converging at each end. *Petioles* short, convolutely channelled; peculiarly hispid underneath. *Peduncles* hairy, radical, 1-3?-flowered, upright, much shorter than the leaves. *Calyx* hispid; *segments* oblong. *Stamen* and *pistil* white.

M. Hart. del. Pub.d by J. Sidgwick 170. Piccadilly Sept.r 1.1820. P. Watts. Sc.

ANCHUSA italica.

Italian Bugloss.

PENTANDRIA *MONOGYNIA.*

Nat. ord. BORRAGINEÆ. *Jussieu gen.* 128. *Div. IV.* Fructus gymnotetraspermus. Faux corollæ instructa 5 squamis calcarum instar cavis, intra corollam prominulis in ejusdem laciniarum basi, extrà hiulcis. *Herbæ plerùmque asperifoliæ.*

BORAGINEÆ. *Brown prod.* 1. 492.

ANCHUSA. Cal. 5-fidus s. 5-partitus. *Cor.* infundibuliformis, *fauce* clausa fornicibus erectis, obtusis. *Nuces* 4, uniloculares, turbinatæ, fundo calycis affixæ, basi concavæ perforatæ. *Lehmann asperifol.* 1. 211.

Div. I. Calycibus 5-partitis in fructú erectis; corollis in pluribus inæqualibus. Lehm. l. c.

A. *italica*, caule erecto ramoso, foliis lanceolatis undulatis strigosis lucidis, racemis conjugatis divaricatis paniculatis bracteatis, calycibus tubo corollæ subæqualis longioribus: laciniis subulatis, fornicibus penicilliformibus. *Lehmann asperifol.* 1. 230; *(sub* ANCHUSÂ paniculatâ).

Anchusa italica. *Retz. obs.* 1. 12; *(cujus exemplar prototypum in Herb. Banks.) Trew pl. rar.* 14. *t.* 18. *Willd. sp. pl.* 1. 756. *Ejusd. enum.* 1. 178. *Hort. Kew. ed.* 2. 1. 289.

Anchusa paniculata. *Lehmann loc. cit. exclusis Hort. Kew. synonymisque omnibus ad plantam madeirensem orientalemque referentibus.*

Buglossum foliis linguiformibus asperis, spicis supremis gemellis. *Hall. helv. n.* 599; *(exclusis synonymis).*

Buglossum italicum flore cæruleo Besleri. *Hort. eystet. æstiv. ord.* 8. *fol.* 5.

Buglossa vulgaris. *Ger. emac.* 798; *cum ic.*

Caulis *erectus, strictus, teretiusculus,* 2-3-*pedalis et longior, ramosus, uti tota planta hispidus: pilis patentibus rigidis, tuberculis callosis insidentibus.* Rami *patentes, in racemos abeuntes.* Folia radicalia *et* caulina inferiora *petiolata, in* petiolum *supra planum attenuata, lanceolata, acuta, undulata;* superiora *sessilia;* summa *basi cordato-ovata et ultrà medium in acumen attenuata;* omnia *utrinque strigosa, profundè viridia, sublucida.* Racemi *caulem et ramos terminantes, bipartiti flore centrali in dichotomiâ* bracteis *linearibus longitudine pedicellorum adspersi, laxi, divaricati, in summo caule paniculam constituentes.* Pedicelli *erecto-secundi, distantes.* Calyces *longitudine pedicellorum, piloso-hispidi, usque ad basin 5-partiti: laciniis subulatis inæqualibus.* Cor. *cærulea v. violacea; tubus cylindricus calyce brevior; limbus patens 5-partitus, laciniis inæqualibus obovatis rotundato-obtusis.* Fornices *erecti, penicilliformes.* Nuces 4, *ovato-oblongæ, reticulato-rugosæ, basi margine turgido cinctæ.* Lehmann loc. cit. sub ANCHUSÂ *paniculatâ.*

A species judiciously distinguished from *officinalis* and *angustifolia* by Retzius, whose prototype specimen is preserved in the Banksian Herbarium; where we find also that

from which *paniculata* of the Hortus Kewensis was instituted. The first belongs to the South of Europe, the seed of the latter was brought from the Island of Madeira by Mr. Masson; yet the two have been subsequently united into a same species by Sir James Smith, as editor of the Flora Græca, and by M. Lehmann in a late Monograph of this tribe of plants. In our judgment the Levant plant of the Flora Græca is plainly the same as the Madeira one; but on the other hand both appear to us distinct from *italica*, the European plant, which is taller and of a more succulent habit, with broad upper cauline leaves ovate and conspicuously cordate (indented) at the base, a circumstance which does not belong either to the specimen of the Madeira plant or to the Levant one, if we are to judge from the figure in the Flora Græca, while it is most obvious both in Retzius's specimen and in the excellent figure of *italica* in Trew's work. The distinction relied on by the learned editors of the Hortus Kewensis to separate *paniculata* from *italica*, as well as from all others of the genus, viz. that the segments of the calyx are parted from each other down to the bottom, certainly does not hold good in regard to *italica*, where the calyx is parted as far as in *paniculata*. Notwithstanding this, we have thought it safer to keep the two distinct, because of the other differences we have stated.

We know by Gerarde, that it was cultivated here in 1597.

A hardy biennial plant. *Stem* straight, roundish, from two to three feet high or more, branching, like the rest of the plant covered with a hard bristly fur, the hairs of which are spreading, and stand upon a callous tubercle. *Branches* spreading, terminating in racemes. *Radicle* and *lower cauline leaves* petioled, tapering downwards to a petiole which is flat at the upper side, lanceolate, pointed, undulate; *upper ones* sessile; *topmost ones* cordately ovate at the base and tapering to a point from above the middle; *all of them* stiffly furred, of a deep green, and rather shining. *Racemes* terminal, bipartite with a single flower in the fork, loose, divaricate, forming a panicle at the top of the stem, beset with linear *bractes* of the length of the pedicles; *pedicles* upright and pointing one way, standing wide apart. *Calyx* the length of the pedicle, hispid (stiffly furred), five-parted down to the base; *segments* subulate, unequal. *Corolla*

blue or violet coloured: *tube* cylindrical, shorter than the calyx; *limb* spreading, five-parted, segments unequal obovate, rounded at the end. *The five faucial appendages* upright, pencilled. *Nuts* 4, ovately oblong, reticulately wrinkled, surrounded at the base by a protuberant rim.

M. Hart. del.

Pub by J. Ridgway 170. Piccadilly Sept. 1. 1820.

J. Watts. sc.

GOMPHOLOBIUM grandiflorum.

Large-flowered Air-pod.

DECANDRIA *MONOGYNIA.*

Nat. ord. LEGUMINOSÆ. *Jussieu gen.* 345. *Div. IV.* Corolla irregularis papilionacea. Stamina distincta, aut rarò basi coalita. Legumen uniloculare bivalve. Arbores aut frutices; folia simplicia aut ternata aut imparipinnata.=PAPILIONACEÆ. *Brown in append. to Flind. voy.* 2. 552.

GOMPHOLOBIUM. Cal. 5-partitus, subæqualis. *Cor.* papilionacea, vexillo explanato. *Stigma* simplex. *Legumen* polyspermum, subsphæricum, obtusissimum (glabrum). *Brown in Hort. Kew. ed.* 2. 3. 11.

Frutices *(Australiæ) facie rigidâ atque lævi.* Folia *ternata v. pinnata.* Stipulæ *è foliolis duobus minutissimis planis acutis appressis, nec ut in* PULTENÆÂ *intrafoliaceis, sed petiolum communem utrinque ad basin stipantibus, haud rarò omninò deficientibus.* Flores *flavi (v. purpurascentes,) plerùmque numerosi, ampli, speciosi.* Smith in Rees's cyclop. (ex anglico verso).

G. *grandiflorum*, foliis ternatis, linearibus, rectis, ramis angularibus, glabris; carinâ imberbi. *Smith exot. bot.* 1. 7. *tab.* 5; *(ex angl. vers.)*

Gompholobium grandiflorum. *Smith in trans. linn. soc.* 9. 249. *Id. in ann. of bot.* 1. 505; *et in Rees's cyclop. in loco. Sweet hort. suburb. lond.* 90.

Gompholobium. *Smith in trans. linn. soc.* 4. 220.

Rami *angulosi, glabri, foliosi.* Folia *alterna, ternata, linearia, angusta, revoluta, integra, glabra, stricta, mucronata.* Stipulæ *parvæ.* Flores *lutei, speciosi;* racemi 2-3-*flori, ramorum lateralium terminales,* bracteâ *parvâ concavâ squamiformi ad basin cujusque* pedicelli. Calyx *magnus, coriaceus, glaber, lanâ subtili ciliatus.* Vexillum *amplum.* Alæ carinaque *dipetala plurimùm minores.* Stamina *omnia distincta, simplicia, glabra, longitudine subinæqualia.* Germen *oblongum, glabrum, brevitèr stipitatum.* Stylus *subulatus, simplex, persistens:* stigma *acutum.* Legumen *globosum, rigidum, è valvulis duobus inflatis, loculo unico:* semina *plura, brevitèr pedicellata secùs suturam superiorem annexa.* Smith exot. bot. loc. cit. (ex angl. versum).

"The habit of GOMPHOLOBIUM is marked by the compound (ternate or pinnate) leaves, and a certain aspect of rigidity and smoothness. The stipulas are not intrafoliaceous as in PULTENÆA, but stand on each side of the base of the common footstalk, being a pair of acute flat close-pressed leaves, extremely minute and often altogether wanting. The flowers are yellow (or purple) generally numerous, large and handsome. All the species as far as hitherto known, are natives of New Holland." *Smith in Rees's cyclop. article* GOMPHOLOBIUM.

The technical character of the genus is deduced by Mr. Brown from the five-parted nearly equal *calyx*, flatly extended *vexillum* and subglobular pointless smooth many-seeded *pod*.

The drawing of the present species was made from a plant raised in Mr. Griffin's conservatory at South Lambeth from New Holland seed, and is the first taken in this country. It is not recorded in the last edition of the Hortus Kewensis; and is still exceedingly scarce. We have adopted the following account from Sir James Smith's work, having missed the opportunity of seeing the blossom.

"GOMPHOLOBIUM *grandiflorum*, remarkable for its showy yellow flowers, is a shrub three feet in height, found in a sandy soil and flowering in October. The *branches* are angular, smooth, leafy. *Leaves* alternate, 3 on a footstalk, linear, narrow, revolute, entire, smooth, very stiff and straight, tipped with a sharp straight point. *Stipules* small. *Flowers* 2 or 3 at the end of each lateral branch on simple smooth footstalks, with a small concave scaly bractea at the base of each stalk. *Calyx* large, coriaceous, smooth, except a fine woolly fringe at its edge. *Standard* very large. *Wings* and *keel* very much smaller, of two petals each. *Stamens* all distinct, simple, and smooth, somewhat unequal in length. *Germen* on a short stalk, oblong, smooth. *Style* awl-shaped, simple, with a sharp stigma, permanent. *Pod* globose rigid, of 2 inflated valves, and one cell. *Seeds* several, ranged along the upper suture of short stalks." *Smith exot. bot.* 1. 7.

The GOMPHOLOBIUM *grandiflorum* of Andrews's Repository is the G. *polymorphum* of Mr. Brown in the Hortus Kewensis.

All the species are shrubby greenhouse plants.

Sydt. Edwards. del. Pub.d by J. Ridgway 170. Piccadilly Sept.r 1. 1820. J. Watts. sc.

PÆONIA albiflora. *β. fragrans.*

Double sweet-scented Chinese Pæony.

POLYANDRIA *DIGYNIA; (PENTAGYNIA?)*

Nat. ord. RANUNCULACEÆ. *Decand. syst. nat.* 1. 127. *Div. II.* Ranunculaceæ spuriæ, *Nempè antheris introrsis donatæ.*

PÆONIA. Suprà vol. 5. *fol.* 379.

P. *albiflora*, herbacea, capsulis glabris, recurvatis, foliis biternatìm sectis, segmentis glabris nitidis tripartitis, lobis ovato-lanceolatis. *Decand. syst. nat.* 1. 392.

Pæonia albiflora. *Synonyma suprà vol.* 1. *fol.* 42. *videnda.*

(β) fragrans. *Anderson in Linn. trans.* 12. 260.

Double sweet-scented chinese Pæony. *Sabine in hort. trans.* 2. 278; *cum tab. pict.*

For the general account of this species we shall refer our readers to the first volume of the present publication, where PÆONIA *albiflora* is the subject of the forty-second article.

We are obliged to Mr. Sabine for a sample, and the following account of the variety before us.

" Of the double varieties of PÆONIA *albiflora*, this was the first introduced into this country; it has been cultivated in the Botanic Garden at Kew from 1805, but did not become general in the London nurseries for some years afterwards, and is still the least common of any."

" Another double Pæony, similar to this in colour, was imported from China in 1810 by Sir Abraham Hume. That is a plant altogether of a more robust habit and with leaves more strongly wrinkled than in the one before us. The present however possesses a very pleasing fragrance, reminding us of the Rose, and is so far superior to its rival."

" A single variety has been already figured in the Botanical Register, and notwithstanding the apparent objection to the specific name, from the flower of some of the varieties differing in colour from their prototype sample, I have not changed it; not only in regard to its priority, but also in deference to the authority of the late Mr. George Anderson, in whose elaborate Monograph of the genus, published in the Transactions of the Linnean Society, the original name has been retained. M. De Candolle has also

retained the title *albiflora* for the species in his Systema Naturale Regni Vegetabilis, though he was not aware of Mr. Anderson's Monograph when his work was put to press."

"I have subjoined, from Mr. Anderson's Treatise, an enumeration of all the known varieties of the species."

"PÆONIÆ *albifloræ* varietates adhucdum notæ.

"(α.) vestalis. *Andrews's reposit.* 64.
"(β.) candida.
"(γ.) tatarica. *Suprà vol.* 1. *fol.* 42. *Salisb. Paradisus Lond.* 78.
"(δ.) sibirica.
"(ε.) rubescens.
"(ζ.) uniflora. *Curtis's magaz.* 1756.
"(η.) Whitleji, flore pleno. *Andrews's reposit.* 612.
"(θ.) Humæi, —— —— *Curtis's magaz.* 1768.
"(ι.) fragrans, —— —— *Hort. trans. vol.* 2. *pl.* 18."

Sabine MSS.

Mr. Sabine, from whose plants the descriptions in Mr. Anderson's Treatise were taken, has long cultivated all the known species and varieties of this magnificent genus in his garden at North Mimms, in Hertfordshire; from which source the gardens of his friends and that of the Horticultural Society, have been supplied, and several complete collections derived from the original ones are still in existence.

Thirteen species of the genus have been recorded in the work of Mons. Decandolle. All belong to the northern hemisphere, and are found from Portugal to China, but not where either cold or heat is extreme. America is not known to produce any.

M. Hurst. del.

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J. Watts. Sc.

CACTUS speciosissimus.

Crimson-flowered Torch-thistle.

ICOSANDRIA *MONOGYNIA.*

Nat. ord. CACTI. *Jussieu gen.* 310. *Div. II.* Petala et stamina indefinita.

NOPALEÆ. *Jussieu ined. (fide Decand. théor.* 246. *n.* 65.)

CACTUS. Suprà vol. 2. *fol.* 137.

Div. Cerei; *erecti (stantes per se).*

C. *speciosissimus*, caule erecto, 3-4-gono; angulis dentatis; flore campanulato-patente, genitalibus declinatis. *Desfontaines in mém. du mus. d'hist. nat.* 3. 190. *tab.* 9.

Cactus speciosissimus. *Sweet hort. sub. lond.* 109. *n.* 17.

Cactus speciosus. *Willd. enum. suppl.* 31; *(non aliorum, qui suprà vol.* 4. *fol.* 304. *videndus).*

Caules *plures, recti, carnosi, verticales, trigoni tetragonique, simplices, parùmque divisi, bi-tripedales diametro uni-biunciali crassitudine nequaquam æquabili, faciebus lævibus canaliculato-concavis, angulis subsinuatis dentatis dente quoque aculeis fasciculatis divergentibus inæqualibus lutescentibus nuncve fuscescentibus tomento albo brevi denso cinctis armato.* Flores *inodori, horizontales v. subnutantes, ad angulos caulinos.* Cal. *monophyllus, multipartitus, segmentis ad oram membranosis, in disco virentibus,* exterioribus *ovalibus minoribus,* interioribus *lanceolatis concavis inæqualibus roseo-adumbrati.* Cor. *patens, campanulata, subsesuncialis diametro ferè pari:* petala 20-25, *punicea, summo calyci adnata,* exteriora *lanceolata acuta,* interiora *elongato-ovalia, latiora.* Stamina *numerosa:* filamenta *gracilia, teretia, alba, roseo-adumbrata, declinata, fasciculato-convergentia, uti petala summo calyci adnata, inferiora superioribus sensim longiora petalisque subæqualia:* antheræ *oblongæ, parvulæ, à basi affixæ,* polline *è sphærulis albis granuloso.* Stylus *crassiusculus, roseus, declinatus, teres, staminibus inferioribus brevior;* stigmata 10, *alba, gracilia, paulò patentia, per paria approximata.* Germen *cylindricum, uni-biunciale, obiter sulcatum, ad angulos è squamulis obtusis singulis aculeolarum setacearum fasciculo armatis squarrosum.* Desfontaines loc. cit. (ex gallico versum).

This splendid-flowered plant has been recently added to our collections by the Comtesse de Vandes, and blossomed for the first time in the hothouse of the well-ordered botanic establishment of that lady at Bayswater, where our drawing was made in July last. The flower is not only beautiful, but has the additional advantage of enduring several days in perfection. It is said to have been first procured at Paris from the national garden at Madrid by the Comte de Salm, and is supposed to have been originally derived from Mexico.

The order *Cacti*, of Jussieu, has been lately divided into *Nopaleæ* and *Grossulariæ*.

Stems several from one stock, straight, fleshy, upright, three and four cornered, simple, but little branched, 2-3 feet high, 1-2 inches in diameter, of unequal thickness, sides smooth channelled, angles shallowly sinuous, notched, furnished at the under edge of each notch with a pencil of unequal diverging tawny or brownish spines, set in a short dense cottony tuft. *Flowers* without scent, horizontal or slightly nodding, produced at the angles of the stems. *Calyx* of one piece, multipartite, segments membranous round the periphery, green at the disk, *outer* oval smaller, *inner* lanceolate, concave, of different sizes, shaded with rose-colour. *Corolla* spreading, campanulate, about six inches long and nearly of the same width: *petals* from twenty to twenty-five, crimson, attached to the neck of the calyx, *outer* lanceolate pointed, *inner* long-oval broader. *Stamens* very numerous: *filaments* slender, filiform, white shaded with rose-colour, declining, converging fasciclewise, as well as the petals attached to the neck of the calyx, under ones gradually longer than the upper and about the length of the petals: *anthers* small, oblong, fixed at the base to the point of the filament: *pollen* white, granular, grains globular. *Style* thickish, rose-coloured, declining, cylindrical, shorter than the undermost stamens: *stigmas* ten, white, slender, slightly spreading, disposed in contiguous pairs. *Germen* cylindrical, from one to two inches long, slightly furrowed, beset at the angles with small obtuse slightly raised scales, each of which is furnished with a small pencil of bristlelike spines.

The above description is a version from the excellent one in french by Professor Desfontaines.

M. Hart. del.

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S. Watts. sc.

BERBERIS sibirica.

Siberian Barberry.

HEXANDRIA *MONOGYNIA.*

Nat. ord. BERBERIDES. *Jussieu gen.* 286.

BERBERIS. Cal. 6-phyllus extùs 3-bracteatus. *Pet.* 6 ungue intùs 2-glanduloso, calycinis foliolis opposita. *Stylus* 0; *stigma* latum orbiculatum. *Bacca* parva, ovata aut rariùs subsphericea, 1-locularis 2-3-sperma. *Frutices; folia alterna, sæpè alternatim fasciculata, fasciculo squamis imbricatis basi cincto et subtùs spinâ simplici aut partitâ plerùmque stipato; flores è medio fasciculo spicati, aut rariùs subcorymbosi solitariive ut in Magellanicis Commers., pedicellis basi* 1-*bracteolatis. Staminum filamenta glandulis petalorum implicita elasticè solvuntur.* Juss. l. c.

B. *sibirica,* pedunculis unifloris solitariis, foliis obovatis ciliato-dentatis. *Willd. arb.* 35.

Berberis sibirica. *Pallas itin.* 2. *append.* 737. *n.* 108. *tab.* P. *fig.* 2. *Ejusd. ross.* 2. 41; *(in textú). Murr. in commentat. goett.* 6. (1784) 87. *t.* 6. *Willd. sp. pl.* 2. 229. *Hort. Kew. ed.* 2. 2. 314.

Berberis altaica. *Pallas ross.* 2. 41. *t.* 67; *(in icone).*

Fruticulus *è fissuris rupium excelsarum procrescens, spithamæus v. pedalis, rarò major, nunquam sesquipedali altior, crassitie vix digiti minoris, rigidus, alternè ramosus, erectus,* ligno *citrino, cortice extùs griseo striato, intùs itidem flavissimo, sub singulo ramulo vel gemmâ* spina (stipula spiniformis *Murray.) palmato-ramosa, 5-fida,* 4-*fida v.* 3-*fida, in ramos divaricatos et striatos setaceos rigidos divisa.* Folia *è gemmis v. spinarum alis fasciculata, oblonga, dentibus setaceis distantibus ciliata. In plantis è semine educatis folia longè petiolata, suborbiculata, ciliata.* Flores *inter folia solitarii pedunculo nudo, cernui, subglobosi, majores quàm in* BERBERIDE vulgari. Calyx exterior *triphyllus, virescenti-flavus;* interior *corollâ major et latior, totidem foliolis coloratis.* Cor. *sexpetala intensiùs flava.* Baccæ *cernuæ, majores et majùs ovatæ quàm in* BERBERIDE vulgari, *stigmate fungiformi umbilicatæ, ruberrimæ, gratè acidæ, continentes* semina 5 *oblonga hinc compressa, grisea, gustú acerbo.* Pallas ross. l. c.

A curious species of Barberry, known among the Mogol Tartars by the name of Scharà-módon, or Yellow-Wood, and applied by them to the purposes of both superstition and medicine.

Native of the Altaic Mountains on the confines of China, of Dauria, and other districts of the Oriental portion of the Russian dominions. Said by the Chevalier Pallas to grow from the crevices of the highest rocks, and seldom to exceed a foot in height.

The drawing was taken from a sample which flowered in June last, at the nursery of Messrs. Malcolm and Co. at

Kensington, where it was preserved in a small garden-pot, in a pit.

Introduced by Sir Joseph Banks in 1790.

A stiff upright diminutive shrub, from nine inches to a foot and half high at most: *stem* scarcely of the thickness of the little finger; *branches* alternate; *wood* lemon-coloured; *bark* grey or ash-coloured, deep yellow on the inside. Each branch or bud is subtended by a palmately pronged *thorn (thorny stipule* according to Murray) with 3-4- or 5 divaricated streaked subulate stiff prongs. *Leaves* fascicled, from the axil of the thorns, obovately oblong, widely dentate, ciliate; in young seedling plants suborbicular, long-petioled, and ciliate. *Flowers* between the leaves, solitary, upon a naked peduncle, cernuous, larger than in the Common Barberry. *Outer calyx* (3 *bractes)* of three pieces greenish yellow; *inner (true calyx)* larger and broader than the corolla, consisting of as many leaflets as there are petals. *Corolla* of six deep yellow petals. *Berries* cernuous, larger and of a more ovate form than in the Common Barberry (Berberis *vulgaris)*, surmounted by the permanent mushroom-shaped *stigma*, deep red, of a gratefully acid flavour: *seeds* five, oblong, flattened on one side, grey or ash-coloured, of a rough sour taste.

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Sydenham Edwards. Del.   Pub. by J. Ridgway 170 Piccadilly Oct 1. 1820.   F. Sanſom. Sculp.

PASSIFLORA cærulea.

Common Passionflower.

MONADELPHIA *PENTANDRIA.*

Nat. ord. PASSIFLOREÆ. *Jussieu in ann. du musée.* 6. 102.
PASSIFLORA. Suprà vol. 1. *fol.* 13.

Div. Foliis multifidis.

P. *cærulea*, foliis palmatis quinquepartitis integerrimis, petiolis glandulosis, involucro triphyllo integerrimo, filis coronæ corollâ brevioribus. *Willd. sp. pl.* 3. 623.

Passiflora cærulea. *Linn. sp. pl. ed.* 2. 2. 1360. *Amœn. acad.* 1. 231. *fig.* 20. *Mill. dict. ed.* 8. *n.* 2. *Lamarck encyc.* 3. 39. *Cavan. diss.* 10. 461. *t.* 295. *Curtis's magaz.* 28. *Miss Lawrance's Passionfl. Willd. enum.* 2. 698. *Hort. Kew. ed.* 2. 4. 154.

Granadilla pentaphyllos, flore cæruleo magno. *Duham. arb.* 1. 272. *tab.* 107.

Clematis quinquefolia americana s. Flos Passionis. *Rob. ic.*

We have availed ourselves for the present article of a drawing of this favourite flower, made some years ago by Mr. Sydenham Edwards, for an engraving intended to be distributed amongst his friends, it appearing to us the best representation of the subject to be found in any work of this nature.

Cærulea, the Brazilian species, though now the commonest of all exotic climbers in use for ornament, is of considerably later introduction than *incarnata*, the only other plant of the genus that will live with us in the open air; the earliest notice of the first in this country dating from about 1699, of the latter from as far back as 1629.

The plant by which the type of this curiously configured genus made its first appearance in the south of Europe, some few years before any one had reached our country, we are persuaded from the contemporary figures done in Italy, was that which forms the 152d article of this publication, and belongs to South America, whence it was brought to Naples by a Spanish Viceroy on his return from Peru. The one which first appeared in our gardens, on the other hand, we believe to have been the North American plant of the 332d article of this work. We shall not dispute the propriety of discriminating the two in the way they have been

by Mr. Sabine in the Horticultural Transactions, where the *incarnata* β of this work is denominated PASSIFLORA *edulis*.

Cærulea is a climbing shrub, extending itself (with support) to the height of twenty feet or more: *branches* dark green, cylindrical, smooth, slightly cornered at the upper part. *Leaves* alternate, pretty large, green, smooth, palmate, 5- sometimes 6- and even 7-lobed, lobes ovally oblong, quite entire and bluntish at the top: *petiole* smooth biglandular. *Tendrils* axillary, simple. *Stipules* semilunar, rounded at the outer edge and entire, setaceously mucronate downwards. *Peduncles* axillary, solitary, oneflowered. *Flowers* at least three inches in diameter, subtended by a threeleafletted involucre; *leaflets* oval, concave, entire, pale green. Segments of the *calyx* 5, oblong, mucronate, dark green on the outside, white on the inside. *Petals* white, oblong, of the same size as the calycine segments. *Crown* radiate, not so large as the corolla, blue towards the extremities of its rays, purplish at the base, white in the middle. *Fruit* ovate, about the size of an apricot or large plum, orange-yellow when ripe.

The shrub is covered with a succession of bloom from July till the autumnal frosts set in.

The above description is chiefly from the French of the excellent Encyclopédie of the Chevalier Lamarck.

There is a variety in our gardens with the lobes of the leaves greatly narrower than those of the present. It has been sometimes taken for another species.

Pearsall Acc.1.1820.

MARSDENIA suaveolens.

Sweet-scented Marsdenia.

PENTANDRIA *DIGYNIA.*

Nat. ord. Asclepiadeæ. *Brown in mem. wern. soc.* 1. 19. *et suprà vol.* 2. *fol.* 111. *Div. I.* Asclepiadeæ Veræ. *Brown loccs. cittis.*

MARSDENIA. Cor. urceolata, 5-fida, nunc subrotata. *Corona staminea* 5-phylla, foliolis compressis indivisis, intùs simplicibus. *Antheræ* membranâ terminatæ. *Massæ Pollinis* erectæ, basi affixæ. *Folliculi* læves. *Semina* comosa. *Suffrutices, sæpiùs volubiles. Folia opposita, latiuscula, plana. Cymæ nunc thyrsi interpetiolares. Stigma sæpiùs muticum, quandòque rostratum, rostro indiviso v. bifido.* Brown in loc. cit. 28. et in prod. 460.

Obs. Pergulariæ forsan nimìs affinis, quæ diversa tantummodò foliolis coronæ stamineæ intùs lacinulâ auctis. *Brown l. c.*

Div. I. Stigma muticum. Marsdeniæ veræ.

M. *suaveolens,* caule suberecto, foliis ovali-lanceolatis glabris aveniis, tubo ventricoso, fauce barbatâ. *Brown in mem. wern. soc.* 1. 30.

Marsdenia suaveolens. *Brown prod.* 1. 461. *Rudge in trans. linn. soc.* 10. 299; *tab.* 21. *fig.* 1. *Sweet hort. sub. lond.* 51.

Rami *supernè volubiles.* Fol. *firmula, oblongo-ovata, lanceolata,* 2 *uncias longa v. ultrà latitudine ferè duplo minore, villosiuscula, obsoletiùs nervosa, costâ mediâ pallidâ à supino prominente:* petioli *pluriès breviores laminâ, teretes, villosi.* Cymæ *in ramis plurimæ, pluriforæ, parvæ, breviores foliis, villosæ,* floribus *ochroleucis, parvulis, odoris:* pedunculus *erectus, filiformis, cymâ longior;* pedicelli *villosi, longitudine ferè florum, basi* bracteolis *villosis pluriès brevioribus stipati.* Cal. *villosus, 5-fidus, campanulatus, pedicellorum concolor, duplo brevior corollâ v. magìs, segmentis ovato-acuminatis.* Cor. *unicolor, urceolato-rotata,* limbo *triplo longiore tubo, transversè subbilineari, 5-partito, intùs barbato, laciniis oblongis acuminatis patentibus distantibus.* Pistillum *tubo corollæ æquale:* stigma *pallidum apiculo acuminato bifido.*

The present is the only figure of this new addition to our greenhouses made from the living plant. The fragrance and long enduring succession of the blossom will cause the species to be highly prized. In general appearance, it reminds us of Cynanchum *pilosum,* already given in this work; in the flavour of the perfume, of the popular Heliotropium *peruvianum.*

Native of New Holland, where the species was first observed by Mr. Brown, who in instituting the genus, observes, that the group is perhaps scarcely distinct enough from that of Pergularia, which differs merely by the addi-

tion of a small segmentlike appendicle on the inside of each of the five pieces composing the stamineous crown.

The drawing was taken from a sample which flowered this summer, for the first time, in the greenhouse at the nursery of Messrs. Colville, in the King's Road, Chelsea.

A partly standard and partly twining undershrub, not recorded in the Hortus Kewensis. *Leaves* opposite, oblongly ovate, lanceolate, two inches in length or more, with scarcely half that breadth, slightly villous, obsoletely nerved, with a pale prominent midrib: *petioles* several times shorter than the blade, cylindrical, villous. *Cymes* many along the branches, interpetiolar, several-flowered, small, shorter than the leaves, villous; *flowers* small, cream-coloured; *peduncle* upright, filiform, longer than the *cyme*, *pedicles* villous, about the length of the flower, furnished at the base with several times shorter villous *bractelets*. *Calyx* villous 5-cleft, campanulate, of the colour of the petioles, twice shorter than the corolla or more, segments ovately lanceolate. *Corolla* of one colour, urceolately rotate; *limb* 5-parted, twice longer than the tube, about two lines across; bearded on the inside, segments oblong taper-pointed spreading, standing apart. *Stamineous crown* of five pieces, each piece compressed, undivided, without an appendage on the inside: *anthers* terminated by a membrane: *pollen-masses* upright, fixed at the base. *Pistil* equal to the tube of the corolla; *stigma* pale with a pointed bifid apex. *Follicles* (indehiscent seedvessels) smooth. *Seeds* comose (tufted).

M. Hart. del. Pub.d by J. Ridgway 170 Piccadilly Oct.r 1.1820. S. Watts. sc.

KAULFUSSIA amelloides.

Cape-Asterflowered Kaulfussia.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. CORYMBIFERÆ. *Jussieu gen.* 177. *Div. II.* Recept. nudum. Sem. papposum. Flores radiati, in TUSSILAGINE et SENECIONE partim flosculosi.

KAULFUSSIA. Cal. communis simplex, æqualis, foliolis (13) 14-16 lanceolatis obtusis membranaceo-marginatis costâ validâ herbaceâ obtusâ carinatis, applicatis. *Calathidium (corolla)* radiatum. *Flosculi radii* fœminei, copiosi (in nostrâ plantâ 7-8), contigui, ligulati, tubo filiformi (pubescente), limbo oblongo mox revoluto obtuso apice tricrenato. *Germ.* compressum, cuneiforme, brevissimè pedicellatum, cum pedicello foveis receptaculi arctè inhærens (pubescens) areâ apicali papillatâ. *Stylus* tubo vix longior: *stig.* 2-fidum: *pappus* nullus nisi fimbria pilorum brevissimorum. *Flosc. disci* hermaphr., tubuloso-infundibuliformes, plerique incurvi; tubo pubescente; limbo 5-fido patente. *Anthæ.* coordinatorum, connatæ *(polline* ochroleuco). *Germ.* ut in flosculis radii: *stylus* longitudine tubi antherarum: *stig.* 2-fidum, revolutum: *pappus* è setis rigidulis plumosis longitudine tubi flosculorum. *Recept.* (nudum) convexum, alveolatum. *(Sem.* fusca, obovato-oblonga v. cuneata, complanata, appressè pilosa, marginata margine crassâ concolori).

Differt SENICILLI Gærtn. sem. 2. 453. t. 173. f. 4. *pappi radialis defectú et discoidalis longitudine eximiâ. Ab* AGATHÆÂ Cassinii *(Bulletin de la soc. philom. Nov.* 1817. 183) *pappo difformi, qui in* CINERARIÂ amelloide *genere illius typo, tàm in radio quàm in disco setosus plumosus.* Nees von essenb. in hor. phys. berol. 53.

Kaulfussia amelloides. *Nees von essenb. in hor. phys. berol.* 33 *et* 53. *tab.* 11. *Curtis's magaz.* 2177.

Caulis *à basi ramosissimus, circiter pedalis,* ramis *diffusis, tortuosis, teretibus, punctato-scabris pilisque rigidis patentibus hispidis.* Fol. (2-3-*uncialia) alterna, sessilia, patentia, lanceolato-spathulata, mucronulata, minutissimè remotè denticulata, carinata, utrinque hirta, rigidula.* Flores *terminales, longè pedunculati, cernui, specie et magnitudine florum* CINERARIÆ amelloidis. Pedunculus (2-3-*uncialis) teres, glandulis sessilibus pilisque patentibus inspersus, supernè nudus, infernè foliolis aliquot lanceolatis minoribus præditus.* Cal. *hirsutus.* Radius *cæruleus.* Discus *saturatè violaceus. Planta annua v. biennis.* Id. loc. cit.

A genus lately instituted by M. Nees of Essenbach, in the work we have quoted, and called after Dr. Kaulfuss of Halle. The essential distinction from the immediate relatives, consists in the want of pappus (seedcrown) in the florets of the ray; while the florets of the disk are furnished with a sessile and feathered one. All will be struck with

the resemblance to the well-known Cape Aster (Cineraria *amelloides*), lately separated by M. Cassini from Cineraria by the title of Agathæa *cœlestis*.

M. Nees appears to have some doubt whether our plant may not be the same as the Agathæa *macrophylla* of M. Cassini; but observes that the seed is described as smooth or bare in that, while in the present species it is furred; neither does he think it likely that the peculiar character belonging to the pappus (seedcrown) should have escaped so acute an observer as that botanist.

Native of the Cape of Good Hope. Lately introduced by Mr. Anderson, the superintendant of the physic garden at Chelsea; having been raised from the seed received from Mr. Otto, who has the charge of the botanic garden at Berlin.

Annual or biennial. *Stem* numerously branched from the very base, about a foot high; *branches* widespread, crooked, round, shagreened, with a nap of stiff-spreading hairs. *Leaves* alternate, sessile, spreading, lanceolately spatulate, tipped by a small point, minutely and widely toothletted, keeled, with rough nap on both sides, stiffish. *Flowers* terminal, long-stalked, cernuous. *Peduncle* round, beset with small glandular points and spreading hairs, leafless above, furnished with a few smaller lanceolate leaves below. *Calyx* simple, rough-furred, even; *leaflets* (13) 14-16, lanceolate, obtuse, membranously edged, close-pressed, with a strong keeled herbaceous back. *Corolla* rayed: *florets* of the ray pistilbearing (bright blue), many and contiguous (in the flowers we examined 7-8, and scarcely contiguous), ligulate; *tube* filiform, furred, *limb* oblong, becoming revolute, about ¾ of an inch long, obtuse, triply notched at the end. *Germen* cuneiform (wedge-shaped) compressed, with an extremely short pedicle by which it is secured in the cavities of the receptacle, furred. *Style* hardly longer than the tube: *stigma* forked: *pappus (seedcrown)* none, except an exceedingly short villous fringe. *Florets of the disk* deep violet, bearing both anthers and stigma, tubularly funnelled, most of them inbowed; *tube* furred; *limb* 5-cleft spreading. *Anthers*, like those of the rest of the tribe, connate, dark; *(pollen* cream-coloured). *Germen* like that of the ray; *style* the length of the filaments; *stigma* forked, prongs revolute: *pappus (seedcrown)* of stiff-

feathered bristlelike hairs, the length of the tube of th floret. *Receptacle* naked, convex, alveolate (honeycombed). *(Seeds* brown, obovately oblong or cuneate, flat, close-pressedly furred, with a thick border of the same colour as the disk).

Requires the treatment of a tender annual; that is, to be sown in the spring on a hot-bed. The flowers of the ray roll themselves close up backwards towards evening, and spread again in the morning for several days in succession. The blue of the ray is bright and beautiful.

We have adopted the description given by the framer of the genus; which seems to disagree with our own observations only in the florets of the ray being termed "*copiosi et contigui*," while in our plant they were only 7-8, and scarcely to be called contiguous.

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PHOTINIA arbutifolia.

Californian Hawthorn or Photinia.

ICOSANDRIA *DIGYNIA.*

Nat. ord. ROSACEÆ. *Jussieu gen.* 334. *Div. I.* Germen simplex, inferum, polystylum. Pomum calycino limbo umbilicatum, multiloculare. *Arbores aut frutices.* POMACEÆ.

PHOTINIA. Cal. 5-dentatus. *Petala* reflexa. *Ovarium (germen)* semisuperum, villosum, biloculare. *Styli* duo, glabri. *Pericarpium* biloculare calyce carnoso inclusum. *Testa* cartilaginea.

Arbores *(Asiæ temperatæ et Californiæ).* Folia *simplicia, coriacea, sempervirentia, serrata v. integerrima.* Paniculæ *compositæ, corymbosæ, terminales.* Fructus *parvi, impubes.* Lindley pomac. in trans. linn. soc. 12. 103.

P. *arbutifolia,* foliis oblongo-lanceolatis distantèr dentatis, pedicellis calyce brevioribus. *Lindley pomac. in trans. linn. soc.* 12. 103.

Cratægus arbutifolius. *Hort. Kew. ed.* 2. 3. 202.

Folia sexiès longiora petiolo, margine revoluta: panicula composita, non fastigiata.

A genus established by Mr. Lindley in his "Observations on the natural group of Plants called *Pomaceæ*" forming the first section of the order *Rosaceæ* in Jussieu's Genera Plantarum; a treatise about to appear in the forthcoming volume of the Transactions of the Linnean Society. We have only seen a part of it; whence we have extracted the above generic and specific characters.

PHOTINIA, as far as yet known, includes three certain and one doubtful species, natives of California and the temperate regions of Asia, all hitherto ranking in the genus CRATÆGUS. The limits are technically defined by "a five-toothed calyx: reflex *petals:* a semisuperior villous two-celled *germen:* two smooth *styles:* a two-celled *seed-vessel* enclosed in a fleshy calyx: and a cartilaginous *seedcoat.*" The congeners are all arborescent, with a simple coriaceous evergreen, sometimes serrate, sometimes entire-edged foliage, compound corymbose panicles, and a small smooth-rinded fruit.

Arbutifolia is from California, whence it was introduced by Mr. Archibald Menzies in 1796. It forms a handsome greenhouse-plant; flowers about August, and is distin-

guished from the others of the genus "by oblongly lanceolate widely toothed revolutely edged leaves, by panicles which are not level-topped as in the others, and by pedicles shorter than the calyx."

The drawing was taken at the nursery of Messrs. Malcolm and Co., Kensington, where this scarce plant is very successfully treated.

The MESPILUS *japonica* of the 365th article of this work, ranks according to Mr. Lindley's treatise in his genus ERIOBOTRYA, of which the character will be fully given in the appendix to the present volume of the Register. At one point it comes next to PHOTINIA.

Not having had the opportunity of seeing the plant of the present article in flower, we shall not attempt any further description.

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QUISQUALIS indica.

Amboyna Quisqualis.

DECANDRIA *MONOGYNIA.*

Nat. ord. THYMELEÆ. *Jussieu gen.* 76.

COMBRETACEÆ. *Brown in append. to Flind. voy.* 2. 548; *et suprà fol.* 429.

QUISQUALIS. Cal. longissimus filiformis limbo 5-dentato. *Squamæ (petala)* 5 oblongæ. *Stylus* filiformis: *stigma* obtusum. *Drupa* 5-angularis 1-sperma. *Folia opposita, flores spicati, terminales aut axillares, singuli bracteati.* Jussieu l. c. 78.

Q. *indica,* bracteis oblongis ventricosis: petalis oblongis villosissimis. *Roxburgh flor. ind. ined.*

Quisqualis indica. *Linn. sp. pl. ed.* 2. 1. 556. *Willd. sp. pl.* 2. 579. *Lamarck illustr. t.* 357. *Smith in Rees's cyclop. in loc. Sweet hort. sub. lond.* 94. *Curtis's magaz.* 2033.

Quisqualis pubescens. *Burm. ind.* 103. *t.* 35.

Quis qualis. *Rumph. amboyn.* 5. 71. *t.* 38.

Frutex *robustus scandens, ramis novellis villosissimis.* Fol. *subopposita, brevitèr petiolata, à lato-ovalibus ad oblongo-cordata, integra, villosa, acumine abrupto longiusculo.* Stipulæ *nullæ.* Spicæ *terminales et axillares, villosæ.* Flores *plurimi, oppositi et alterni.* Bracteæ *solitariæ, unifloræ, rhomboideæ, villosæ, ciliatæ.* Cal. *tubo filiformi, proximè infra orificium villosum 5-fidum dilatescens.* Petala *quinque, oblongo-lanceolata, ore calycis inserta, villosissima.* Filamenta *ordine alternè duplo ori calycis circumposita:* antheræ *oblongæ, incumbentes.* Germen *inferum, uniloculare, oblongum;* ovula *sæpiùs* 4, *summo loculo annexa.* Stylus *usque ad stamina cum tubo calycis coadunatus, indè discretus atque in* stigma *majusculum triquetrum perforatum antheris æquale abeuns.* Roxb. in loc. cit. (ex anglico versum).

In the unpublished "Flora Indica" two species of QUISQUALIS are recorded by Dr. Roxburgh as cultivated in the Calcutta Garden; both of a pubescent habit. The one with narrow bractes has been named *villosa* by the Doctor, and is said to be native of Pegu; the other, the present species, with broad bractes, of Amboyna. Loureiro's *indica,* of which we find a prototype specimen in the Banksian Herbarium, is entirely smooth throughout, and we should think distinct from both the above.

We transcribe the following account of the subject of this article from Dr. Roxburgh's manuscript.

" A large climbing *shrub* with the young shoots very downy. *Leaves* subopposite, short-petioled, from round-oval to oblong-cordate, entire, villous, their points triangular and acute. *Stipules* none. *Spikes* terminal and axillary, villous. *Flowers* many, opposite, and alternate. *Bractes* solitary, one-flowered, rhomboidal, villous, ciliate. *Calyx: tube* filiform, widening just below the 5-cleft hairy mouth. *Petals* 5, oblong-lanceolar, inserted on the mouth of the tube of the calyx, very hairy. *Filaments* short, in two alternate rows round the mouth of the tube of the calyx: *anthers* oblong, incumbent. *Germen* inferior, oblong; *ovula* generally 4 attached to the top of the cell: *style* united with the tube of the calyx until it reaches the stamens, where it parts, ending in a large 3-sided *stigma* even with the anthers."

The drawing was taken from a plant which flowered last year in the hothouse, at the nursery of Messrs. Whitley and Co. King's Road, Fulham; where the species was first introduced from the Calcutta Garden.

The corolla varies from white to rose-colour, and even blood red in different stages of the same flower. The fruit is about the size of a filbert and five-cornered. When quite ripe the kernel is said by Rumphius to be eatable. Though the plant is mentioned by Dr. Roxburgh as an aboriginal of Amboyna, other accounts speak of it as only naturalized there, having been derived from Java and the Molucca Islands.

The generic name was combined by Rumphius from *quis* and *qualis*, and intended, as Sir James Smith has it in Rees's Cyclopedia, " to express the singular variableness of the plant, as if nothing could be found like it."

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MESEMBRYANTHEMUM elongatum. β.

Dwarf tuberous Fig-Marygold.

ICOSANDRIA *PENTAGYNIA.*

Nat. ord. FICOIDEÆ. *Jussieu gen.* 315. *Div. II.* Germen inferum. *MESEMBRYANTHEMUM. Suprà vol.* 3. *fol.* 260.

Div. IV. Capitata. *Foliis densè alternèque imbricato-capitatis longissimis, impunctatis; caudice præ foliorum pondere decumbente, petalis angustissimis deorsùm plus minus ciliatis; stylis numerosis, germinibus depressis.* Haworth MSS.

M. *elongatum,* foliis subspithamæis obtusè triquetris semiteretibusve, canaliculatis, glauciusculis, radice tuberosâ carnosâ. *Haworth MSS.*

Mesembryanthemum elongatum. *Haworth mesembr.* 236. *Ejusd. misc. nat.* 40. *et synops. pl. succ.* 228. *Hort. Kew. ed.* 2. 3. 223.

(α) corolla 5-unciali, odore hircino, petalis subcapillaceis pube longâ flexuosâ ciliatis. *Haw. MSS.*

(β) corolla 4-unciali, odore subhircino, petalis exterioribus deorsùm pilis rectis brevibus paucissimis nudo oculo vix manifestis ciliatis. *Haw. MSS.*

Radix *deformis, crassa, sublobata, magnitudine ferè ovi anatini: (è sicco à var. α. in tabulâ delineata).* Caudex *simplicissimus, debilis, flexuosus, erecto-procumbens, simul cum pedunculo terminali dodrantalis v. ultrà, viridi-lutescens, deorsùm foliorum vestigiis subarticulato-circinatus.* Folia *terminalia, ante florescentiam in fasciculum laxiùs congregata, dodrantalia, sæpiùs semiteretia, suprà plùs minùs canaliculato-concava, superiora sensìm minora semipedalia aliquantùmque distantiora: omnia erecto-patentia, deflexo-emarcescentia, neque decidua.* Pedunculus *terminalis, teres æquabilis, debilis, 4-uncialis, purpurascens, basi* bracteis 3 *foliiformibus verticillato-stipatus.* Cal. *subhemisphæricus segmentis 5 subæqualibus, semiteretibus, subuncialibus, deorsùm latescentibus, 2 simplicibus, 2 basi membranâ diaphanâ utrinque auctis, quinto altero tantùm latere membranoso.* Pet. *lutea, nitidissima, numerosissima, multiserialia, calycem longè superantia, sudo cælo post meridiem expandentia, lineari-acuminata, interiora gradatìm decrescentia subconniventia, intima formâ ferè filamentorum è quibus pauca antherâ incompletâ terminata.* Stamina vera *numerosissima, incurvo-conniventia,* filamentis *tenuissimis,* antheris *exiguis,* polline *stramineo-pallido.* Styli *duodenis plures, saturatè flavescentes tortuoso-congesti.* Germen *suprà planum, pellucido-virescens, radiato-striatulum (radii loculos capsulæ futuræ denotantes).* Haworth MSS. (phraseologiâ aliquantulùm mutatâ).

We have to thank Mr. Haworth for the above description of this rare plant, which he considers a variety of *elongatum*, a species seldom known to blossom with us. The sample was communicated to him from Kew Gardens, where it had been raised in 1819, from seed from the Cape of Good Hope. It flowered this summer, and bids

fair to perfect the fruit, but the parent plant, having produced no lateral shoots or suckers (the means by which the species of this section of the genus survive from year to year), will most probably perish.

We are glad to find that Mr. Haworth perseveres with zeal in the study of this race of vegetables, and to hear that he has collected as many as 200 species of the present genus, besides obtaining competent information of nearly 100 more.

Root tuberous, nearly the size of a duck's egg. That shown in our drawing belonged to a dried sample of variety (α.) *Stem* quite simple, weak, flexuose, procumbent, about 9 inches long or more with the terminal peduncle, greenish yellow, ringed by the scars of the fallen foliage, and looking as if jointed. *Leaves* loosishly congregated at the end of the stem, about 9 inches long, mostly semicylindrical, more or less concavely channelled, upper ones gradually smaller (about 6 inches long) and rather farther apart; all uprightly spreading, reflexed as they wither away, but do not fall off at the base. *Peduncle* terminal, round, of one thickness throughout, weak, 4 inches long, tinged with purple, furnished at the base with 3 verticillately disposed *bractes*. *Calyx* hemispherical, segments 5, nearly equal, semicylindrical, about an inch long, widening downwards, 2 simple, 2 membranously winged on both sides, the fifth only on one side. *Flowers* yellow, expanding after mid-day, but only when the sun shines: *petals* bright, very numerous, in many rows, reaching far beyond the calyx, linearly taper-pointed; *inner ones* becoming gradually less; *innermost* (abortive stamens) with the form of the filaments, now and then bearing an imperfect anther. *Perfect stamens* very numerous, incurvedly connivent; *filaments* very slender; *anthers* very small; *pollen* pale straw-coloured. *Styles* more than 12, deep yellow, twistedly crowded. *Germen* flat-topped, of a pellucid green, radiately streakletted (the streaks denoting the number and place of the cells of the future capsule).

Sydn. Edwards. del. Pub. by J. Ridgway 169. Piccadilly Nov. 1. 1820. J. Watts. Sc.

MESEMBRYANTHEMUM capitatum.

Short dagger-leaved Fig-Marygold.

ICOSANDRIA *PENTAGYNIA.*

Nat. ord. FICOIDEÆ. *Jussieu gen.* 315. *Div. II.* Germen inferum.
MESEMBRYANTHEMUM. Suprà vol. 3. *fol.* 260.

Div. IV. Capitata. *Foliis densè alternèque imbricato-capitatis longissimis, absque punctis aut papulis; caudice præ foliorum pondere decumbente, petalis angustissimis deorsùm plus minus ciliatis; stylis numerosis, germinibus depressis.* Haworth MSS.

M. *capitatum*, foliis æquilateri-triquetris glaucescentibus, membranis calycinis pallidis, petalis luteis longitudine calycis, exterioribus purpurascentibus, stylis strictis setaceis. *Haworth misc. nat.* 41.

Mesembryanthemum capitatum. *Hort. Kew. ed.* 2. 3. 223. *Haw. mesembr.* 390. *n.* 227; *et ejusd. synops. pl. succ.* 228. *n.* 58.

Mesembryanthemum pugioniforme. *Lin. sp. pl. ed.* 2. 1. 699. *Mill. dict. ed.* 8. *n.* 46. *Willd. sp. pl.* 2. 1050. *Ejusd. enum.* 1. 538.

Ficoides capensis caryophylli folio, flore aureo specioso. *Bradl. succ.* 2. 5. *t.* 14.

Astero aizoide del Capo di Buona Speranza. *Zanon. ist. bot.* 35. *t.* 13.

Suffrutex *stolonibus perennans radice fibrosâ, caudice simplici, seniori pedali v. ultrà, procumbente.* Folia *summo caudice congregata, interiora erecta, exteriora patentia sesuncialia, subulata, equilateri-triquetra, glauciuscula efflorescentiâ papillosâ nullâ, ad angulos plus minus canaliculata.* Rami *infra folia provenientes, subverticillati foliosi elongati procumbentes.* Pedunculi *ramorum continui, subpaniculati, quadriunciales, obsoletè angulosi, asperiusculi.* Folia ramea *breviora, sæpè remota, terna vel sparsa, bracteacea.* Cal. *amplus, 5-angularis, 5-fidus, segmentis subæqualibus, è basi rotundiusculâ caudato-attenuatis, interioribus ut sæpiùs membranâ latâ instructis.* Cor. *ampla diametro triunciali: petala ordine multiplici numerosa, infra medium subciliata;* exteriora *linearia acuta purpurascentia,* media *lineari-lanceolata lucido-lutea,* intima *capillaria conniventia.* Filamenta *numerosa, à stylis distantia;* anthæ. *luteæ,* polline *luteo.* Germ. *hemisphæricum, depressius quam in speciebus affinibus;* styli 16, *à filamentis distantes, breves, erecti, setacei, lutescentes.* Haw. misc. 41; (phraseologiâ plurimis mutatâ.)

Cultivated here in 1717. Came originally from the Cape of Good Hope. Lasts sometimes from eight to nine years in a warm greenhouse.

The prior name of *pugioniforme* has been transferred by Mr. Haworth from this to the plant constituting the 72d article of the "Plantes Grasses;" differing from *capitatum* in being scarcely more than biennial, in being larger,

and in having a longer and more glaucous foliage, although the flowers are not larger than here.

We submit our opinion entirely to Mr. Haworth in regard to the above synonymy, or else we should not have hesitated to adopt the figure in the "Hortus Elthamensis" (*tab.* 210), usually adduced to this plant.

The drawing was taken two years ago at the nursery of Messrs. Whitley and Co. King's Road, Fulham.

Elongatum, *capitatum*, and *pugioniforme* are extremely near akin, and with two others already known, constitute so distinct a group in Mr. Haworth's view, that they are probably destined to be embodied under a new generic name in some future production of the pen of that indefatigable observer of succulent plants. As the species do not in this section always produce suckers or shoots, the mode by which these plants survive, our chief reliance for their continuation is upon seed; which they produce freely, when placed out of doors from May to September.

Stem about a foot or rather more in length, procumbent owing to the weight of the foliage. *Leaves* collected at the summit of the stem, longest about six inches in length, subulate, equilaterally triangular, inclining to glaucous, without any papillary efflorescence; *branches* procumbent. *Peduncles* on the branches, forming a kind of panicle, about four inches long, slightly roughened. *Flowers* yellow, expanding in the forenoon. *Calyx* large; segments nearly equal, caudately tapered. *Corolla* 3 inches over; *petals* numerous in many rows, very narrow, ciliated below the middle. *Filaments* numerous, innermost (abortive stamens) capillary, connivent, standing wide of the styles. *Germen* hemispherical, more depressed than in the other immediately allied species. *Styles* 16, insulated from the stamens, short, setaceous, upright, yellow.

Flor. W. Herbert. Pub. by J. Ridgway 170 Piccadilly Nov. 1. 1820. J. Watts. sc.

THUNBERGIA grandiflora.

Blue-flowered Thunbergia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. ACANTHI. *Jussieu gen.* 102. *Div. I.* Stam. 4 didynama. ACANTHACEÆ. *Brown prod.* 1. 472.

THUNBERGIA. Cal. duplex, exterior 2-phyllus, interior 12-partitus, brevior, laciniis subulatis. *Cor.* campanulata, tubo ampliato, limbo 5-lobo æquali. *Stigma* bilobum. *Caps.* globosa rostrata loculis dispermis. *Herbæ* BARLERIÆ *affines, caule 4-gono: flores solitarii, axillares.* Juss. loc. cit. 103.

T. *grandiflora,* perennis, scandens; foliis anguloso-cordatis; corollâ campanulatâ; calyce interiore nullo; antheris barbatis, calcaratis. *Roxburgh flor. ind. ined.*

Thunbergia grandiflora. *Carey hort. beng. in loco.*

Radix *perennis, subtuberosa:* caules *frutescentes, volubiles, excelsè scandentes;* rami novelli *villosiusculi, subquadrialati.* Fol. *opposita, petiolata, cordata, sæpè angulari-lobata, acuminata, 5-7-nervia, utrinque pilis minutis rigidis albis hispidiuscula,* 3-8 *uncias longa latitudine ferè pari;* floralia racemorum *parvula, cæterum similia:* petioli *erecti, longitudine ferè folii, propè basin tumidi, canaliculati, scabri.* Stipulæ 0. Pedunculi *axillares, solitarii, vel in* racemis *terminalibus pendulis gemini v. brachiatim gemini v. trini v. bis geminati: axillarum ut* pedicelli *uniflori, teretes, subclavati, petiolum æquantes.* Flores *ampli diametro subquadriunciali, colore cæruleo pulcherrimè nitentes.* Bracteæ 0. Cal. Spatha *bivalvis;* valvæ *oblongæ, obliquatæ à latere inferiore curviores discretæ, à superiore rectiores partim cohærentes interdùm omninò, sæpiùs tantummodò juxta apicem, striatæ, acuminatæ, villosiusculæ, nigro-puncticulatæ, tubum cum simul fauce subæquantes.* Cor. 1-*petala, campanulata, disco annulari glanduloso insidens:* tubus *brevis, conicus,* faux *ampla latere* superiore *elongatim fornicata,* inferiore *palato convexo grandiore lineis cæruleis saturatioribus dilutioribusque alternis picto intùs prominens:* limbus 5-*partitus, laciniis subrotundis,* 2 *superioribus erectis, inferioribus porrecto-patentibus:* discus hypogynus *annularis, carnosus, lobatus germinis basin cingens.* Stam. *fauce inclusa;* fil. 4, *ore tubi inserta, oblongo-ovata, compressa, rugosa, par anticum postico longius, sed ob curvaturam majorem non altius:* anth. *conniventes, æquales, lineares, erectæ, biloculares marginibus barbatis,* anteriorum *loculi utrinque calcari rigido acuto albo aucti,* posteriorum *tantummodò loculus exterior.* Germ. *conicum, subtetragonum:* stylus *longitudine staminum:* stigma *majusculum, foramine pertusum.* Caps. *globosa, rostrata, bilocularis, bivalvis, ab apice dehiscens:* semina *demum tantùm duo in singulo loculo, subrotunda, compressa, margine incisa, latere* extimo *convexa tuberculata,* intimo *concava lævia.*—Roxb. loc. cit. (ex anglico versum).

The drawing of this newly introduced handsome-flowered climber is from the pencil of Mr. Herbert, whose kind communications we have so often had to acknowledge. It

flowered in his hothouse at Spofforth the summer before last for the first time we believe in this country.

The following account of the species is taken from the manuscripts of Dr. Roxburgh:

"Found among bushes, &c. in wild uncultivated spots near Calcutta; where it flowers in the rainy season."

"*Root* perennial, subtuberous. *Stems* woody, winding themselves up high trees, &c.; young shoots a little hairy and slightly 4-winged. *Leaves* opposite, petioled, spreading, cordate, often angularly lobed, pointed, 5-7-nerved; slightly roughened on both sides by small rigid white hairs, 4-8 inches long by nearly the same breadth: *floral ones* like the rest, but small: *petioles* upright, nearly as long as the leaves, swelled near the base, channelled, rough: *stipules* 0. *Peduncles* axillary, solitary or in pairs or threes or double pairs on terminal racemes, which, when unsupported, hang in handsome festoons. *Peduncles* of the axillary flowers and *pedicles* of the racemes, cylindrical, subclavate, the length of the petioles, oneflowered. *Flowers* very large, about 4 inches broad when expanded; of a most beautiful bright blue colour. *Bractes* 0. *Calyx: spathe* bivalved, about as long as the tube and faux of the corolla; *valves* obliquely oblong, rounder and detached at the *under edge*, at the *upper* almost straight and slightly cohering, sometimes for the whole length, though in general only near the summit, streaked, pointed, a little hairy and marked with small black dots. *Corolla* of one piece, campanulate, placed on a large lobate annular disk which surrounds the germen: *tube* short and conical, *faux* large with a long vaulted cavity on the *upper side*, in which the stamens and style are contained, on the *under* with a larger corresponding palate elegantly marked with light and dark blue streaks; *limb* 5-parted, *segments* nearly round, 2 *upper* erect, 3 *lower* spreading. *Stamens* within the faux: *filaments* 4, inserted at the orifice of the tube, *anterior pair* much curved, and although longer than the other pair, yet from the curve in the filaments their anthers are only even with the *posterior pair*, oblongly ovate, compressed, wrinkled: *anthers* converging, equal, linear, upright, bilocular, with bearded edges to the cells as in Acanthus; both cells of the *anterior ones* are furnished with a curved sharp rigid white spur: of the *posterior ones* only the outer cell. *Germen* conical, subqua-

drangular: *style* straight, the length of the stamens; *stigma* large, with an uncommon perforation, which I can only compare to an inverted crescent, with an handle affixed to the centre of its concave arc. *Capsule* globular, beaked, 2-celled, 2-valved, opening downwards from the summit: *seeds* when all come to maturity two in each cell roundish compressed, with a notched edge; tubercled and convex on the outside, concave and smooth on the inner."—*Roxburgh MSS.*

M. Hart. del. Pub.d by J. Ridgway 170 Piccadilly Nov.r 1. 1820. J. Watts. sc.

RUBUS parvifolius.

Crimson-flowered Chinese Bramble.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. ROSACEÆ. *Jussieu gen.* 334. *Div. IV.* Germina plura indefinita verè supera, receptaculo communi imposita, singula monostyla. Semina totidem nuda aut rariùs baccata. *Herbæ aut rariùs frutices.* POTENTILLÆ.

RUBUS. *Suprà fol.* 461.

Div. Frutescentes.

R. *parvifolius*, foliis ternatis (quinatisque) subtùs tomentosis, caule (pedunculis) petiolisque aculeis recurvis. *Lin. sp. pl. ed.* 2. 1. 707; *(excl. syn. Rumph.)*

Rubus parvifolius. *Willd. sp. pl.* 2. 1083. *Smith in Rees's cyclop. in loc. n.* 21; *(non tamen quoad plantam Nepalensem D. Buchanani ibi pro eâdem habitam).*

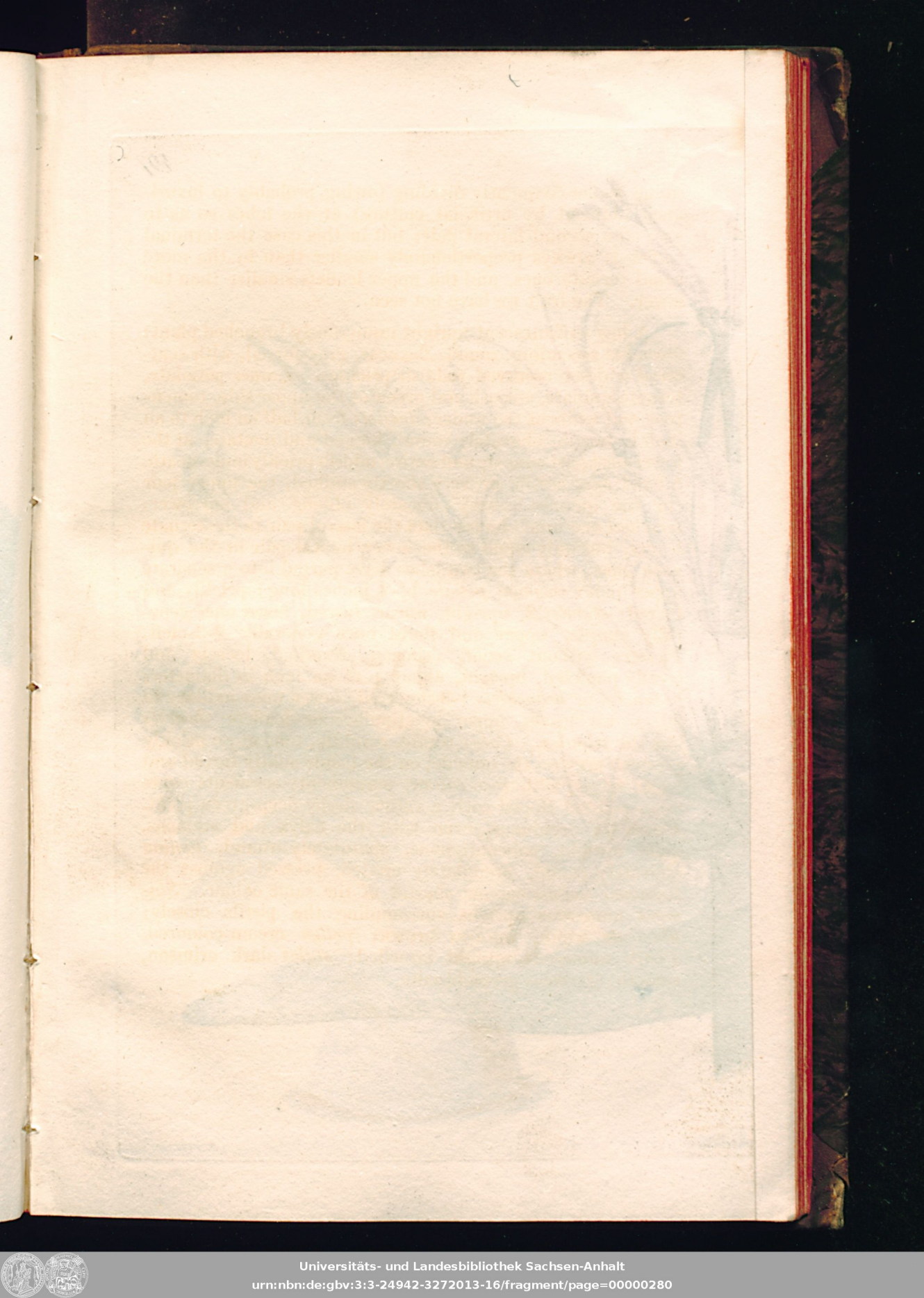
Rubus triphyllus. *Thunb. jap.* 215. *Willd. sp. pl.* 2. 1082. *Smith in Rees's cyclop. in loc. n.* 13.

Suffrutex humilis ramosissimus; rami *aculeati erecti flexuosi teretes villoso-canescentes, aculeis rubidis recurvis sparsis distantibus.* Fol. *petiolato-ternata v. sæpè quinata, suprà glabra, infrà tomentoso-candicantia,* foliola *semuncialia ad uncialia obovato-rotunda inciso-dentata infernè cuneata atque integra nervo medio subtùs roseo-aculeolato,* lateralia *sessilia v. brevissimè stipitata, superiora* 2 *(in quinatis) cuneato-angusta, terminale in ternatis majus trilobo-incisum, in quinatis (ubi lobi in foliolis totidem discedunt) lateralia* 2 *inferiora solummodò æquans;* petiolus communis *sub2uncialis aculeatus:* stipulæ *binæ lineares erectæ pilosæ,* inferiores *sæpiùs simplices,* superiores *et florales sæpiùs bi-trifidæ.* Flores *inodori, roseo-purpurei, terminales, laxiùs paniculati, fastigiantes, erecti,* ½ *unciæ transversi v. circitèr;* pedunculi 1-3-*flori,* inferiores *foliis* superiores *stipulis subfoliaceis axillares:* bracteæ *instar stipularum.* Cal. *rotato-revolutus extùs tomentosus aculeolis muricatus viridi-canescens, intùs sericeus roseo-candicans, persistens, segmentis ovato-acuminatis mucrone carnosulo viridissimo apiculatis.* Pet. 5, *caduca, rosea, calyci genitalibusque æqualia, erectissima, subcontigua, spathulato-rotunda,* laminâ *obovato-rotundâ crenulato-erosâ staminibus appressâ,* ungue *angusto concolori breviore.* Stam. *numerosa erecta pistilla arctè stipantia;* fil. *alba;* anthæ. *fuscæ,* polline *ochroleuco.* Pistilla *numerosa erecta coarctata;* styli *sanguinei, glabri;* germina *virentia hirsuta.*

A small bushy bramble from China; remarkable for the upright petals of the crimson flower and the comparative smallness of the foliage. Lately introduced by the Horticultural Society, at whose garden the present drawing was taken in August. On the native samples in the Banksian and Lambertian Herbariums, the leaves seem to be mostly ternate, on our's many were quinate, the upper ter-

minal leaflet frequently dividing (owing probably to luxuriance induced by artificial culture) at the lobes so as to give off a second lateral pair; but in this case the terminal leaflet is always proportionately smaller than in the more usual ternate ones, and the upper leaflets smaller than the lower. The fruit we have not seen.

A low suffrutescent upright numerously branched plant: *branches* ascending, round, flexuose, grey-furred, with scattered wideset recurved reddish prickles. *Leaves* petiolate, ternate-quinate, smooth and green at the upper side, tomentose and white at the under; *leaflets* from half an inch to an inch in length, obovately round, jagged and dentate, at the lowermost part cuneate and entire, midrib prickly underneath, *lateral ones* sessile or very shortly stalked, the upper pair (in the quinate leaves) cuneately oblong and narrower; *terminal* one much larger than the lateral pair in the ternate leaves, but only equal to the lower lateral pair in the quinate ones, where the two lobes have parted into a separate upper pair: *common petiole* $1\frac{1}{2}$-2 inches long; prickly and furred: *stipules* 2, upright, linear, furred, lower ones generally simple, upper and floral ones generally 2-3-cleft. *Flowers* without scent, crimson, terminal, loosely and levelly panicled, upright, about $\frac{1}{4}$ of an inch in diameter; *peduncles* or *branchlets* 1-3-flowered, lower ones axillary in full-grown leaves, upper in stipulaceous leaflets: *bractes* like the stipules. *Calyx* rotate, revolute, tomentose prickly greenish grey on the outside, on the inside silkily furred and white tinged with rose-colour, permanent; segments ovate taper-pointed tipped with a rather fleshy deep-green point. *Petals* 5, deciduous, even with the calyx and stamens, quite upright, subcontiguous, spatulately round, *lamina* obovately round, crenulately eroded, pressed against the stamens; *unguis* narrow shorter of the same colour. *Stamens* numerous upright surrounding the pistils closely; *filaments* white; *anthers* brown; *pollen* cream-coloured. *Pistils* numerous upright crowded; *styles* dark crimson, smooth; *germens* green hirsute.



M. Hart. del. Pub by J. Ridgway 170 Piccadilly Nov.1.1820. J. Watts. sc.

AMARYLLIS laticoma.

Prince Leopold's Amaryllis.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.* Germen inferum. AMARYLLIDEÆ. *Brown prod.* 1. 296. *Sect. I.* *AMARYLLIS.* *Suprà vol.* 3. *fol.* 226.

Div. VI. Corollæ hexapetalo-partitæ, subrotatæ. Folia bifaria. Nobis in Journ. arts and scien. 2. 362.

A. *laticoma,* foliis lineari-loratis, scapo plano scabro, pedunculis strictis robustis triquetris hispidis divaricatis duplo longioribus flore.

Bulbus *ovato-oblongus, magnitudine ovi anatini v. circitèr, tegminibus fibroso-membranaceis multiplicibus fuscescentibus.* Folia *bifaria, recumbentia, subsena, lorata, lenta, longiora scapo latitudine ⅔ unciæ v. circitèr margine alternè sinistrorsum et dextrorsum subfalcatìm flexa, obtusa, utrinque lucida.* Scapus *viridissimus, complanatus, subuncialis latitudine subsemunciali v. magis, tuberculato-scaber, erectus.* Umbella *multi-* (17)*-flora, ordine triplo alterna, remota, divaricata, hemisphærica, ramentis bracteaceis:* spatha *bivalvis, sphacelata, subrosea, ter brevior pedunculis, valvis lanceolatis refractis:* pedunc. *stricti, robustissimi, triquetri, pube brevi glandulosá hispidá cinerascentes, 4-unciales.* Cor. *nutans, roseo-alba, inodora, sexpartita, irregularis, turbinato-rotata;* laciniis *omnibus collaterali-ascendentibus v. nunc unâ remotâ genitalibus subtensâ, subæqualibus angustiùs ligulatis albis cum lineâ roseâ medio-longitudinali, infernè versùs convoluto-unguiculatis, conniventibus, brevissimè connexis, supernè recurvis, non undulatis,* 2 *lineas latis v. circitèr, acutis.* Stam. *declinato-assurgentia, corollæ æqualia, alternè longiora,* 3 *præcociora:* fil. *rosea fundo brevissimè tubuloso corollæ adnata:* anth. *oblongæ, vibratiles, atropurpureæ,* polline *ochroleuco.* Germ. *oblato-rotundum, rubido-virescens, subtrilobum;* loculi *pleni, biseriato-subpentaspermi,* ovula *globosa;* stylus *albus, stamina subexsuperans:* stig. *patens, pruinosum,* 3*-fidum lobulis rotundatis.*

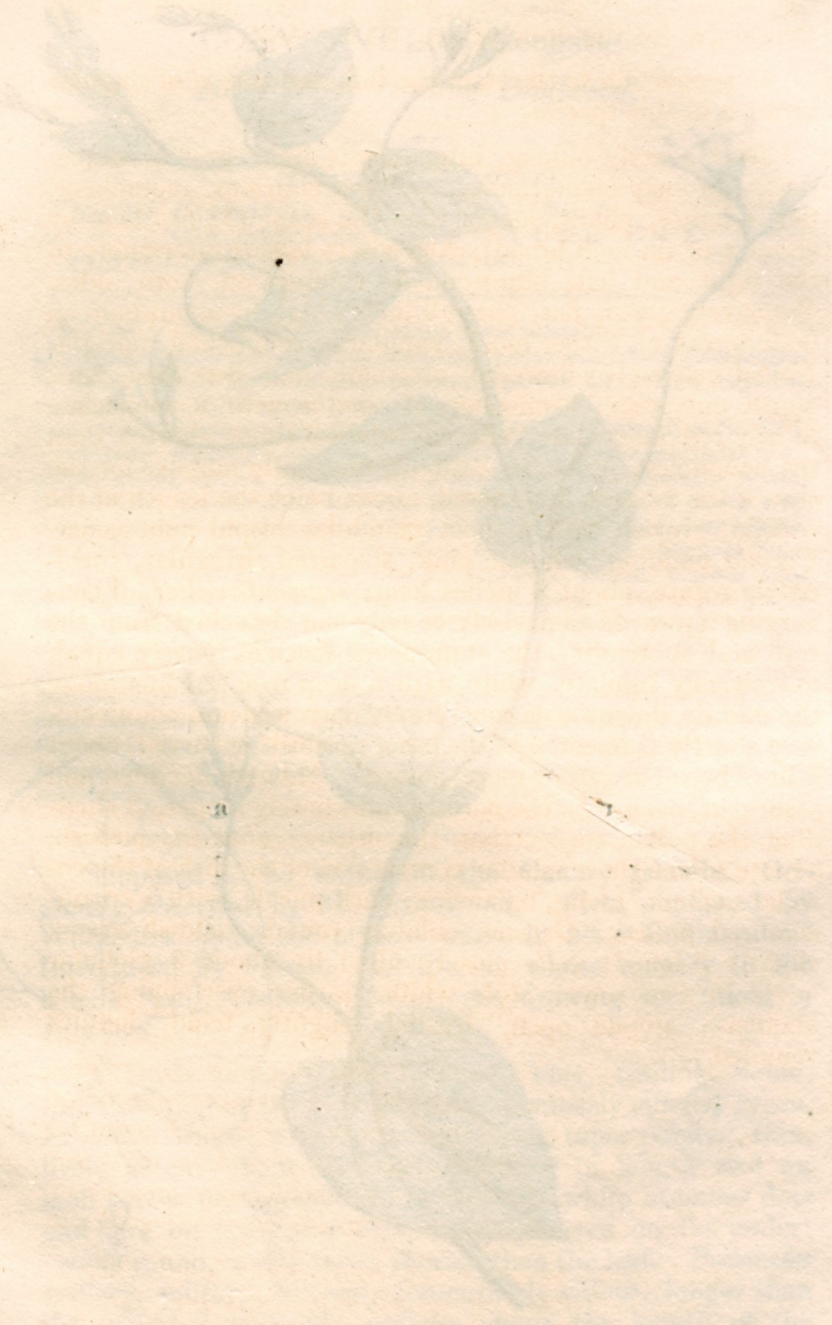
An unrecorded and singular species, by which the transition from AMARYLLIS to BRUNSVIGIA is rendered still narrower than by AMARYLLIS *flexuosa* of the 172d article of this publication, which we once deemed the probable connecting link of the two genera at one point. *Laticoma* has the fructification of AMARYLLIS and the herb of BRUNSVIGIA. The rough flat stem and proportionately massive three-cornered peduncles are anomalies in the genus. The leaves are not blistered nor the segments of the corolla undulate as in *flexuosa.*

The bulb came from the Cape of Good Hope, and flowered, most probably for the first time in Europe, in the collection of H. R. H. Prince Leopold of Saxe-Cobourg, at

Claremont, in August last, when we were favoured with the sample for the drawing.

In proportion to the stem the inflorescence is of singular breadth in this species.

Bulb ovately oblong, integuments light brown, numerous, fibrously membranous. *Leaves* bifarious, recumbent, (six?) lorate, pliant, longer than the scape ($1\frac{1}{2}$ feet long by about $\frac{3}{4}$ of an inch broad), edgewisely falcate alternately to the right and left, blunt-ended, shining on both sides. *Scape* very green, flat, about 9 inches high by about half an inch across or rather more, papillarily roughened, upright. *Umbel* many-(17)-flowered, alternate and 3-ranked, wide apart, outspread, hemispherical: *spathe* with 2 sphacelate faintly red lanceolate reflexed valves 3 times shorter than the peduncles: *peduncles* straight, unusually massive for the size of the flowers, 3-cornered, about twice the length of the corolla, greyish with a short glandular hispid pubescence. *Corolla* nodding, whitish pink, sixparted, irregular, turbinately rotate, about 2 inches long; *segments* either all converging upwards edgewisely or only one detached from the rest and subtending the stamineous fascicle, nearly equal, narrowishly ligulate, white with a deep rose-red line along the middle, downwards convolutely narrowed and connivent, very shortly connected at the base, upwards recurved, about 2 lines broad or rather more, pointed. *Stamens* declined and assurgent, even [illegible] n the corolla, alternately longer, 3 shedding the pollen earlier than the others; *filaments* pinkish, adnate to the short tubular contraction of the disk of the corolla: *anthers* oblong, balancing, dark purple, with a cream-coloured *pollen*. *Germen* oblately round, reddish green, slightly 3-lobed; *cells* closely filled by about 5 globular *ovula* in two rows: *style* white, rather overtopping the stamens: *stigma* open, frosted, slightly trifid, lobules rounded.



M. Hart. del. Pub.by J. Ridgway 170 Piccadilly Nov.1.1820. P. Watts. sc.

CONVOLVULUS elongatus.

Broussonet's trailing Bindweed.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULI. *Jussieu gen.* 132. *Div. I.*
CONVOLVULACEÆ. *Brown prod.* 1. 481. *Sect. I.*
CONVOLVULUS. Suprà vol. 2. *fol.* 133.

Div. Caule prostrato s. non volubili.

C. *elongatus*, foliis cordato-ovatis cuspidatis, pedunculis bifloris folio longioribus, bracteis lineari-subulatis pedunculo partiali brevioribus, calycibus subciliatis. *Willd. enum.* 1. 205.

Convolvulus pseudo-siculus. *Broussonet MSS. (fide Willdenovii in loc. cit.)*

Annuus. Caules *teretes elongati prostrati, nunc supernè subvolubiles, tomentoso-villosi, virides.* Fol. *alterna, distantia, cordata, acuminata, tenuia, lætè virentia, sesquiuncialia latitudine unciali v. circitèr, suprà atomis albis crebris conspersa, subtùs villosiuscula:* petiolus *teres multotiès brevior laminâ.* Pedunculi *axillares, solitarii, filiformes, tomentoso-villosi, longiores folio, 1-2-flori:* pedicelli *calyci subæquilongi, crassiores, singuli* bracteis *binis lanceolato-linearibus herbaceis erectis oppositis ad basin.* Flores *pro genere parvi, albi:* cal. *infundibuliformis viridis;* foliola *æquilonga, obovato-oblonga, acuminata, supernè ciliata,* 2 *interiora angustiora.* Cor. *subrotata, profundiùs quinqueloba, lobis rotundatis, subtùs villosiusculis.* Stamina *plurimùm breviora corollâ:* fil. *basi latiora, imo corollæ disco subtubuloso-contracto atque lutescente adnata, glabra.* Stylus *albus, erectus,* 2-3*plo brevior* stigmatibus *binis filiformibus, robustis, erectis, albidis.* Germ. *pallidum, subrotundum.* Caps. *globosa, Piso mediocri minor, glabra;* semina 3, *subrotunda, scabra.*

Supposed to be native of the Canary Islands. Originally observed by M. Broussonet. First published by Willdenow under the present name in his "Enumeratio." Introduced by Messrs. Colville, at whose nursery in the King's Road, Chelsea, the present drawing was taken in July last.

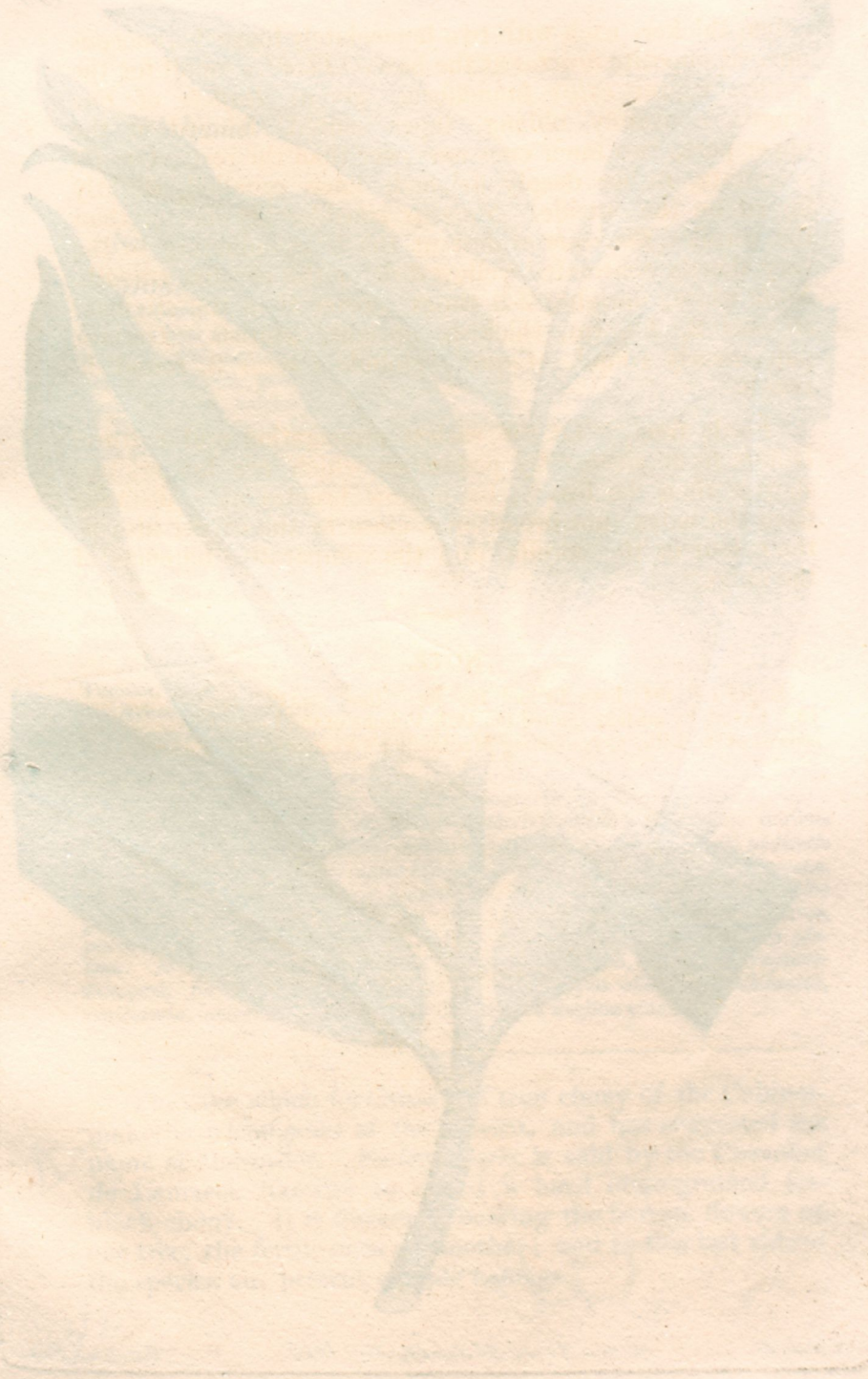
A hardy annual. *Stems* round, long, trailing, sometimes twining at the upper part, tomentosely villous, green. *Leaves* alternate, wide asunder, cordate, taper-pointed, thin, lively green, about an inch and half in length and an inch across or thereabouts, beset with white atomous dots and bare on the upper side, slightly furred on the under: *petiole* round, many times shorter than the leaf. *Peduncles* axillary, solitary, filiform, tomentosely villous, longer than the leaf, 1-2-flowered: *pedicles* about the length of the

calyx, thicker, each with two lanceolately linear herbaceous upright opposite *bractes* at the base. *Flowers* small for the genus, white: *calyx* funnelform, green; *leaflets* of one length, obovately oblong, taper-pointed, fringed at the upper part, two inner ones narrower than the rest. *Corolla* subrotate, rather deeply 5-lobed, lobes rounded, slightly furred on the outside. *Stamens* considerably shorter than the corolla: *filaments* widest at the base, adhering to the very shortly contracted yellow disk of the corolla, smooth. *Style* white, upright, 2-3 times shorter than the stigmas: *stigmas* 2, filiform, thickish, upright, whitish. *Germen* pale, nearly round. *Capsule* globular: *seeds* 3, roundish, rough.

Seeds freely. Of the easiest propagation and culture. Differs from *siculus* by peduncles which are longer, not shorter than the leaves, by narrow bractes at a distance from the calyx, not broad ones close to the calyx; also in the colour of the corolla, and the comparative bareness of the calyx.

NOTE.

Suprà fol. 491; lines 13 and 16; for "*linn. soc.* 12." read "*linn. soc.* 13;" having by mistake quoted the 12th Volume of the Linnean Transactions instead of the 13th, as containing Mr. Lindley's treatise on the *Pomaceæ*.



M. Hart. del. Pub. by J. Ridgway 170 Piccadilly Nov.1.1820 P. Watts Sculpt.

DIOSPYROS Embryopteris. *Femina.*

Polyandrous Date-Plum. Fertile-flowered.

POLYGAMIA *DIŒCIA (v. DIŒCIA POLYANDRIA.)*

Nat. ord. GUAIACANÆ. *Jussieu gen.* 155. *Div. I.* Stamina definita. EBENACEÆ. *Brown prod.* 1. 524.

DIOSPYROS. Flores polygami (in *Embryopteri* dioici). *Cal.* profundè 4-(nunc 3- v. 6-) fidus. *Cor.* urceolata, 4-(nunc 3- v. 6-) fida. MASC. *Stamina* basi corollæ inserta, ejusdem lacinis dupla (in *Embryopteri* quadrupla). *Filamenta* duplicata. *Rudimentum* pistilli. HERMAPH. FEM. *Stamina* effœta, pauciora. *Germen* 8-12-loculare, loculis monospermis. *Bacca* globosa, calyce patenti demùm reflexo. *Brown prod.* 1. 525.

EMBRYOPTERIS *Gærtn.* et *Roxb.* differt solùm staminibus ratione laciniarum corollæ quadruplis. *Brown l. c.*

D. *Embryopteris*, foliis lanceolato-oblongis, floribus axillaribus polyandris, bacca octosperma. *Persoon syn.* 2. 624.

Embryopteris glutinifera. *Willd. sp. pl.* 4. 836. *Roxburgh corom.* 1. 49. *t.* 70. *Hort. Kew. ed.* 2. 5. 407.

Embryopteris peregrina. *Gært. sem.* 1. 145. *t.* 29. *fig.* 2.

Mabola des Philippines. Cavanillea philippensis. *Lamarck encyc.* 3. 663. *Jussieu in ann. du mus.* 5. 418.

Tumika. *Telingis.* Mangostan-utan. *Malaicis.* Lym appel. *Batavis.*

Arbor *mediæ magnitudinis, rectus,* cortice *glabriusculo fusco-ferruginoso,* ramis *sparsis, patentibus (novellis glabris).* Fol. *bifaria, alterna, linearioblonga, acuminata, lucido-glabra, coriacea, sesuncialia latitudine biunciali (è culturâ exoticâ nobis duplo minora v. magìs) novella tenera atque rubra:* pet. *brevis:* stipulæ *solitariæ, vaginosæ, evolvente folio disruptæ exindèque caducæ.* MAS. Pedunc. *axillaris, solitarius, nutans,* floribus 3-4-*v. pluribus, parvulis, albis:* bracteæ *parvulæ, caducæ, singulo pedicello subtensæ.* Fil. 20 *v. circà, apice bifida:* anth. 40 *v. circa, lineares, erectæ.* FŒMINA. Pedunc. *axillaris, solitarius, simplex, uniflorus,* flore *albo plantæ masculæ plurimùm majore.* Fil. 1-4, *parva, brevia:* anth. *lineares, parvæ, cassæ.* Germ. *globosum:* styli 4: stig. *sæpiùs trifida.* Bacca *globosa. Malum mediæ magnitudinis subæquans, pulposa, matura ferrugineolutescens, ferrugineo-farinosa:* sem. 8, *raro aliqua abortiva, nidulantia, reniformia, aciem versus attenuata.* Roxb. (ex anglico versum).

The tree which furnishes the true ebony of the Cabinet-maker is a congener of the present, and has suggested the name of the order. *Embryopteris* is said by the Chevalier de Lamarck likewise to afford a hard close-grained jet-black ebony. It is dioicous, bearing the barren flowers on one tree, the fertile ones on another; and to this last side of the species our present sample belongs.

The drawing was taken in Mr. Kent's hothouse at Clapton, where the plant has now flowered, as we understand, for the first time in this country; though introduced in 1796 by Mr. Peter Good.

"A middle-sized tree, growing in India in the moist vallies among the mountains of the Circars; where it does not shed its foliage; and flowers in March and April. The fruit is eaten by the natives, but I cannot say that it is palatable: it is strongly astringent."

"*Trunk* straight, upright: *bark* pretty smooth, dark, blackish rust-colour; *branches* spreading, scattered, young shoots smooth. *Leaves* alternate, short-petioled, bifarious, linear-oblong, pointed, smooth, firm, shining, when young soft and red; six inches long by two broad: *stipule* single, sheathed, bursting and falling off when the leaf begins to expand. BARREN-TREE. *Peduncle* axillary, single, bowed, bearing 3, 4, or more small white flowers: *bractes* small, deciduous, one below each *pedicle*. *Filaments* about 20, bifid at the point: *anthers* about 40, linear, erect. FERTILE-TREE. *Peduncle* axillary, single, undivided, bearing one white flower, which is considerably larger than the barren ones. *Filaments* 1, 2, 3 or 4, small, short: *anthers* linear, small, sterile. *Germen* globular: *styles* 4, spreading: *stigmas* branched, generally 3-cleft. *Berry* globular, the size of a middling apple, pulpy, rusty-yellow when ripe and covered with a rust-coloured farina: *seeds* 8, which generally all ripen, immersed in pulp, kidney-form, edge thin." *Roxburgh.*

Dr. Roxburgh, speaking of the true Ebony (DIOSPYROS *Ebenum*), remarks that it is only the heart of the tree that is black and valuable, and that the quantity is in proportion to the age of the tree. The outside is white and soft and soon decays.

Gærtner mistook the bottom for the top in his figure and description of the fruit of *Embryopteris*.

M. Mark. del. Pub. by J. Hatchard 190. Piccadilly Dec. 1. 1820. J. Watts. sc.

ROYENA pubescens. *Fœmina.*

Jacquin's Royena. Fertile-flowered plant.

DECANDRIA *DIGYNIA.* v. POLYGAMIA *DIŒCIA.*

Nat. ord. GUAIACANÆ. *Jussieu gen.* 155. *Div. I.*
EBENACEÆ. *Brown prod.* 1. 524.

ROYENA. Cal. urceolatus 5-fidus. *Cor.* imo calyci inserta, urceolata brevis 5-loba. *Stam.* 10, filamentis brevibus corollæ insertis. *Germ.* superum desinens in *stylos* 2; *stig.* 2. *Caps.* supera 4-sulca 1-loc. 4-valv.; *nuces* 4 trigonæ *arillo* obvolutæ. *Arbusculæ; flores axillares sæpè pedunculati interdùm fœminei antheris effœtis.* Juss. l. c. 156.

ROYENA *à* DIOSPYRO *distinguenda floribus hermaphroditis sæpiusque 5-fidis, filamentis simplicibus; variat ovario 4-6-8-loculari:* DIOSPYROS lyciodes *et* hirsuta *Defontaines à* ROYENÂ *itaque vix separandæ solummodò propter ovarium 6-8-loculare, sed hujus Pericarpium cortice capsulari 5-valvi secundum* Jacq. fragm. 1. t. 1. fig. 2. ROYENA polyandra *aliaque subsimilis inedita Africæ australis, distinctum genus constituunt, ob flores polygamos; masculorum stamina laciniis 4-pla, filamentis duplicatis, antheris barbatis; ovarium 4-6-loculare.* Brown prod. 1. 526; *in obs.*

R. *pubescens*, (polygama, monogyna stigmatibus 5:) foliis obovato-lanceolatis pubescentibus. *Willd. enum.* 1. 457.
Royena pubescens. *Sweet hort. sub. lond.* 97.
Royena hirsuta. *Jacq. coll.* 5. 110. *t.* 13. *fig.* 1. *Ejusd. fragm. t.* 1. *fig.* 2; *(non aliorum, neque synonymorum in loc. cit.).*

Frutex 3-*pedalis v. ultra erectus ramosus cortice badio-fuscescente:* rami *summi* ramulique *appressè villosi teretes foliosi florigeri ascendentes.* Fol. *obversè v. obovatè lanceolata utrinque appressè villosiuscula, apice obtusula v. cum brevi acumine, infrà longè in petiolum attenuata, margine brevè revoluta, suprà nitida, infrà opaca, uncialia ad triuncialia v. ultrà,* juniora *acumine breviore, sericea, mollia,* adulta *subcoriacea subdepilia acumine longiore.* HERMAPH. FŒM. Pedunc. *solitarii, axillares, ramulis et supernè in ramis racemosè digesti, sæpisssimè* 1- *rariùs* 2-3-*flori, recurvi, teretes, pilos sericeos viridi-translucentes, plurimùm breviores foliis, uniflori* bracteâ *foliaceâ supra medium, triflori eâdem pedicellis lateralibus subtensâ, alterâ minimâ flori medio vicinâ.* Cal. *persistens coriaceo-herbaceus sericeus, citra medium usque partitus, ex campanulato atque triplo breviore corollâ in amplissimum stellato-explanatum procrescens, segmentis oblongo-acuminatis margine reflexis.* Cor. ARBUTI Unedonis *magnitudine vix æquans, ochroleuco-flavescens, opaca, urceolata, citra medium usque 5-fida, extùs obsoletè villosa;* tubus *brevis, oblato-ventricosus;* limbus 5-*partitus, contortus, infrà constrictiùs connivens, supernè reflexus, laciniis oblongis obtusis cum brevi acumine.* Stam. 10, *effœta, germini appressa atque æqualia:* fil. *duplicata? brevissima, carnosa, robusta, viridia, glabra, imâ margine tubi inserta:* anth. *cassæ, erecto-continuæ, lanceolatæ, appresso-hirsutæ, plurimùm longiores filamento.* Germ. *ovato-rotundum, villoso-canescens:* stylus *brevis, sericeus, columellaris, in* stigmata 5 *filiformia ipso subæquilonga glabra apice dilatata discedens.*

" *Cal.* persistit cum foliolis 5 reflexis et virentibus. Pericarpium subro-
" tundum ferè uncialis diametri, ad tactum holosericeum, coriaceo-carnosum,

" flavescens, unilocularis, 5-valvis, *valvis* lanceolatis acutis patentissimis. " *Sem.* oblonga, subteretia, exiguo mucrone terminata, nitida, castanei " coloris, à maculâ nigrâ supernè notata, numero quidem naturali 10, sed " plerumque pauciora, dum quædam abortant, inclusa et involuta singula " in proprio glutine dulci fatuo et odore subnauseoso, quod forti frictione " inter digitos abscedit. Istiusmodi lobi glutinosi sunt 10 contigui sed " sejuncti, et facile ab invicèm separantur haud alitèr atque arilli in MALVIS. " Hi qui semine carent supernè et infernè corpusculum castaneum inclusum " habent; rudimentum opinor seminis. Medio fructû ex *receptaculo com-* " *muni* columna attollitur 5-sulcata pallidè flava apice 5-dentata et patula, " cui lobi glutinosi adhæsêre." *Jacq. frag. loc. cit.*

A species judiciously separated by Willdenow in his " Enumeratio" from *hirsuta*, with which it had been very generally confounded.

Native of the Cape of Good Hope. The drawing was taken at the nursery of Messrs. Colville, in the King's Road, Chelsea; where the plant flowers late in the autumn, and is kept in a warm greenhouse.

The genus does not appear to be even yet satisfactorily combined, nor its limits clearly distinguished from DIOSPYROS, a species of which forms the subject of the preceding article.

We have not met with the barren-flowered plant of *pubescens;* where perhaps the flowers and stamens are more numerous than in the present. We apprehend that plants of it are occasionally polygamous, bearing some flowers, with perfect stamens and pistils, as well as others with either only perfect stamens or else perfect pistils. The number of the parts of the pistils seems to vary much in the different species in the genus.

An upright ascendingly branching shrub, three feet high or more, with a reddish brown bark: the tops of the branches and the branchlets villous, round, leafy, flower-bearing. *Leaves* obversely or obovately lanceolate, with a slight close-pressed nap on both sides, either obtuse or with a short point, long-tapered towards the petiole, shallowly revolute at the edge, shining above, opaque underneath, from one to three inches long or more; young ones silky soft with a shorter point, old ones somewhat coriaceous, almost without a nap and having a longer point. FERTILE-FLOWERED PLANT. *Peduncles* axillary, racemously disposed

on the branchlets and tops of the main branches, generally one sometimes 2-3-flowered, recurved, round, appearing green through a silky nap, much shorter than the leaves, with a foliaceous *bracte* above the middle, in the three-flowered ones with a bracte subtending each of the side-pedicles, and another just below the middle flower. *Calyx* permanent, coriaceo-herbaceous, silky, 5-cleft to beyond the middle, from campanulate and three times shorter than the corolla growing out into a very large flat star, with taper-pointed oblong segments reflexed along the edge and at last turned back from the seedvessel. *Corolla* hardly as big as that of the common ARBUTUS, pale-yellow, opaque, ceolate, 5-cleft to below the middle, obsoletely villous on the outside; *tube* short, oblately ventricose; *limb* 5-parted, twisted, constricted at the lower part, reflexed at the upper, segments oblong obtuse with a short point. *Stamens* 10, abortive, even with and pressed close to the germen: *filaments* in pairs? very short, fleshy, robust, green, smooth, inserted round the edge of the bottom of the tube: *anthers* empty, continuously upright, oblong, taper-pointed, hirsute, much longer than the filaments. *Germen* ovately round, grey, and villous: *style* short, silky, columnar, parting into 5 filiform smooth *stigmas* as long as itself and widened at the end.

The following account of the fruit is from Jacquin's Fragmenta.

" *Calyx* permanent, with five green reflexed segments. *Seedvessel* nearly round, not much less than an inch in diameter, velvetty, with a partly fleshy and partly coriaceous rind, reddish yellow, one-celled, 5-valved, valves lanceolate pointed opening extendedly. *Seeds* oblong, roundish, terminated by a very small mucro (distinct sharp point), shining, chestnut-brown, marked at the upper part with a black spot, natural number when complete 10, though they are usually fewer, as some miscarry, each enveloped in its peculiar covering of a glutinous insipidly sweet and rather offensively smelling substance, which comes off by rubbing. The number of these glutinous lobes is ten; they are contiguous, but detached and easily separated from one another, nearly in the way of the separate capsules (or as children call them the cheeses) of the fruit of the Mallow. Those that are without seed, enclose a chestnut-coloured corpuscle at both their upper and lower parts,

which I take to be the rudiments of seeds. In the centre of the fruit rises, from the *common receptacle*, a 5-furrowed pale red-yellow column 5-toothed and spreading at the top, to which the glutinous lobes have at one time adhered."

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HOVENIA acerba.

Crab Hovenia.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RHAMNI (RHAMNEÆ). *Jussieu gen.* 376. *Div. IV.* Stamina petalis opposita. Fructus tricoccus.

HOVENIA. Cal. 5-fidus. *Petala* 5 convoluta. *Stamina* petalis obvoluta. *Stylus* 1; *stigmata* 3. *Caps.* pisiformis 3-sulca 3-locularis 3-valvis 3-sperma, basi calycis persistente infrà cincta. (*Sem.* in loculamento unicum, glaberrimum, rubrum). *Arbor; folia alterna (stipulacea?); pedunculi axillares et terminales dichotomi multiflori, apice post florescentiam divaricati, incrassati et carnosi edules sapore dulci, pedicellis brevibus linearibus uniforis, flores caduci, interdùm 4-petali 4-andri.* Juss. loc. cit. 381.

Hovenia *acerba,* foliis opacis pubescentibus integerrimis. *Lindley MSS.*

Arbuscula *gracilis* ramis *virgatis divaricatis.* Folia *ovato-lanceolata, acuminata, integerrima, opaca, paulò rugosa, utrinque pubescentia, subtùs glaucescentia.* Flores ..... Fructus *ruber* è pedunculis *incrassatis,* HOVENIÆ dulcis *multotiès minor, sapore acerbo.* Lindley MSS.

"For this unpublished species of HOVENIA we are obliged to Mr. Lambert, in whose greenhouse at Boyton, it flowered last spring. The fruit (see the detached figure of it in the annexed plate) of which only a single sample had ripened in August, has an austere flavour very unlike that of HOVENIA *dulcis,* which is reported to be exceedingly grateful and similar in taste to a Bergamot Pear."

"There is some uncertainty about the native country of the present species. Mr. Lambert's plant is supposed to have been raised from fruit introduced from California. But we should rather consider it a native of the East Indies or China, both which countries produce HOVENIA *dulcis*; we have also noticed in Mr. Cattley's hothouse at Barnet, young plants of an HOVENIA probably not essentially distinct from our present subject, and the seeds from which they have been raised were undoubtedly received from Calcutta." *Lindley MSS.*

In the above observations the term fruit is used, not in the technical or restricted signification of seedvessel, but in its more general sense, when applied to the esculent part of a plant, which in this genus happens to be the forked

general footstalk (peduncle) on which the short partial ones (pedicles) of the seedvessel stand. This enlarges in *dulcis* after the flower decays into an unevenly roundish oblong fleshy red fruit, which is eaten both in China and Japan.

We had no opportunity of describing the flowers of the present plant after the draughtsman had done with the specimen.

NOTE.

In a recent number of Curtis's Botanical Magazine we find that the PRUNUS *japonica* of the 27th article (Volume I.) of this work, is asserted to be the AMYGDALUS *pumila* of Linnæus; and the stone of the fruit to have the character which marks it for a congener of AMYGDALUS, and not of PRUNUS. On both these points we shall make some remarks in the Appendix to the present Volume.

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DIOSMA dioica. *Mas.*

Dioicous Diosma. Barren-flowered plant.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RUTACEÆ. *Jussieu gen.* 269. *Div. III.* Genera Rutaceis affinia.
DIOSMEÆ. *Brown gen. rem. in append. to Flind. voy.* 2. 545.
DIOSMA. Suprà vol. 5. *fol.* 366.

Div. Agathosma. *Corona è filamentis* 5 *alternis sterilibus cochleari-petaloideis.*

D. *dioica* (mas), foliis lanceolatis, glabris, superioribus verticillato-trinis; floribus axillaribus aggregato-trinis, pedunculis 2plo brevioribus folio.

Frutex *prolifero-ramosus,* 2-3-*pedalis;* rami *subvertillati, foliosi teretes villosi virgato-adscendentes, cortice rubro-fusco rimis striato.* Fol. *coriaceo-firma, patentissima, angusta, lanceolata,* ¾ *unciæ longa latitudine lineari v. sesquilineari suprà obscuro-virentia lævia, subtùs punctata pruinoso-pallentia, margine deflexa punctisque glandulosis denticulata, apice glanduloso acutulo, costâ suprà obsoletiusculâ, infrà immersâ saturatiùsque virente,* inferiora *subdecussato-opposita,* superiora *(floralia) subverticillato-trina:* petiolus *brevis, appressus.* MAS. Flores *inodori, axillares, per trinos aggregati;* fasciculi *solitarii, numerosi, infrà summos ramos racemoso-digesti:* pedunc. *filiformes, uniflori,* 2plo *ferè breviores folio, glanduloso-papillosi,* bracteis *pluribus imbricatis minutis crassis ovatis glandulosis ad basin cincti.* Cal. *pedunculi continuus similitèrque papillosus, crassiusculus campanulato-patens ter v. ultrà brevior corollâ semi5fidus segmentis angulari-ovatis.* COR. pet. 5 *alba, disco supernè erubescentia, fundo calycis inserta, patentia, oblonga, obtusa, apice inflexa:* corona *triplo ferè brevior corollâ, connivens, ex lamellis (staminibus abortivis)* 5 *oblongis albis villosis tenuibus glandulâ virescente capitato-apiculatis.* Fil. *setacea, exserta, erecto-patentia, æqualia ante anthesin à medio duplicatìm retrofractæ, exindèque erecto-explicandæ:* anth. *parvulæ, oblongæ, obversè subsagittatæ, ante anthesin luteo fuscoque rufescentes.* PIST. *obsoletum.*

We do not trace our plant in any published species; nor find it in the Banksian or Lambertian Herbariums. It is said to be of very late introduction from the Cape of Good Hope. The flowers, in all the plants we examined, were provided with only a slight rudiment of a pistil in the midst of the natural quota of perfect stamens; whence we have assumed them to belong to individuals of the barren side of a dioicous species, and of which the fertile plant is still unknown to us, affording, as far as our acquaintance with the subject extends, an anomalous instance in the genus.

The foliage when handled diffuses the resinous smell which belongs, under various modifications, to all the genus.

The drawing was taken at Messrs. Colville's nursery in the King's Road; where the plant is kept along with the Cape Heaths.

An upright proliferously branched leafy shrub, about 3 feet high; *branches* subverticillate leafy round villous ascending rodded with a brown streakily cracked rind. *Leaves* substantial, widespread, linearly lanceolate, about ¾ of an inch long and about a line or a line and a half broad, dark green and smooth above, frosted and pale underneath, deflexed along the edge with glandular specks as if denticulated, somewhat ovate at the base, slightly pointed at the top, midrib obsolete above, underneath deep green and sunken; *lower leaves* decussately opposite, *upper* (floral) in whorls of three; *petiole* very short. Barren plant. *Flowers* without scent, axillary, congregated in threes; *fascicles* solitary numerous racemosely disposed along the branches below the top: *peduncles* filiform, oneflowered, about twice shorter than the leaves, papulously glandular, environed at the base with several minute thick ovate glandular *bractes*. *Calyx* continuous with the peduncle and similarly papulous, thickish, campanulate spreading thrice shorter than the corolla or more, half 5-cleft, segments angularly ovate. *Petals* of the *corolla* white tinged at the upper part of the disk with pink, inserted at the bottom of the calyx, spreading, oblong, obtuse, inflected at the top: *crown* (abortive stamens) nearly thrice shorter than the corolla, converging, of 5 laminar oblong white villous thin pieces surmounted by a green gland. *Filaments* setaceous, protruded, uprightly spreading, equal, before complete expansion doubled close back from about the middle, gradually extending themselves: *anthers* small, oblong, obversely sagittate, before they shed their pollen reddish and variegated with yellow and brown.

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CYRTANTHUS odorus.

Sweet-scented Cyrtanthus.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.*
AMARYLLIDEÆ. *Brown prod.* 1. 296. *Sect. I.*

CYRTANTHUS. Spatha uniflora *v.* umbellato-multiflora, *Cor.* nutans *v.* cernua, elongato-oblonga, tubulato-infundibuliformis, curva, *limbo* regulari subæquali, *laciniis* oblongis *fauce* brevioribus. *Fil.* brevia, fauce longè supra tubum inserta. *Sem.* numerosa, biseriato-cumulata, paleaceo-compressa, *testâ* fuscatâ.

Cætera omninò AMARYLLIDIS; *undè discrepat* limbo *breviore* fauce, *non longiore,* filamentis fauce *longè supra tubum insertis, non ore* tubi *infra faucem.*

C. *odorus,* pauci (4?) flora; corolla rectiuscula subnutante, fauce angustè turbinata, limbi laciniis subdistantibus: antheris fauce inclusis, alternis 3 cæteris pro duplo eorum longitudinis demissioribus: foliis non glaucis.

Fol. 2-3, *angusta, lineari-lorata, deorsùm attenuata, longitudine scapi, non glauca.* Umbella *floribus pluribus* (4) *odoratis punicantibus:* pedunc. *pluriès breviores floribus, vel subnulli, virentes:* spatha *sphacelata, lanceolata, triplo ferè brevior umbellâ.* Cor. *angustè tubata, unciis* 2 *longior, curvo leni obsoletiore nutans;* tubus *gracilis, rotundatè trigonus in faucem æquabilitèr transeuns;* faux *angustè turbinata;* limbus *tubo cum fauce* 4-*plo fermè brevior, patens, laciniis subdistantibus lineari-oblongis planis obtusulis exterioribus subangustioribus acutioribusque.* Stam. *fauce inclusa:* fil. *brevia, conniventia, subulata, alterna* 3 *brevissima fauci proximè infra limbum inserta antheris incumbentibus,* 3 *altera plurimùm demissiora antheris erectis:* anth. *oblongæ,* polline *flavo.* Germ. *oblongum, minimum, fusco-virens,* ovulis *numerosis compressis biseriato-cumulatis:* stylus *filiformis, medium attingens limbum, suprà roseus:* stig. 3.

An unrecorded species, introduced about two years ago from the Cape of Good Hope, by Messrs. Colville of the Chelsea-Nursery, in the King's Road, where the drawing was taken. It differs from all the species we are acquainted with, by the deep crimson hue and fragrance of the flowers: specially from *collinus* (see v. 2. fol. 162) by a foliage which is not glaucous, by a fewer-flowered more upright umbel, longer less curved slenderer corolla, more narrowly turbinate faux, less contiguously spreading segments, and essentially by having 3 alternate stamens placed lower than the others by twice the length of their anthers (when they have shed the pollen); whereas in *collinus* the tips of these reach to the base of the three upper, and rather above;

nor are there in *odorus* the six white parallel lines which in *collinus* traverse the germen and corolla longitudinally at equal distances. The differences of *angustifolius* are too manifest to require to be particularized.

Leaves 2-3, narrow, linear-lorate, tapered downwards about the length of the scape. *Umbel* several-(4-)flowered; *flowers* sweet, deep crimson: *peduncles* several times shorter, sometimes scarcely any, green: *spathe* sphacelate, lanceolate, nearly 3 times shorter than the umbel. *Corolla* narrow trumpet-shaped, more than 2 inches long, nodding with a gentle bend; *tube* slender with 3 rounded corners, passing insensibly into the faux; *faux* narrowly turbinate; *limb* nearly 4 times shorter than the tube and faux together, spreading, segments standing apart, linearly oblong flat bluntish, outer ones rather narrower and more pointed. *Stamens* enclosed within the faux; *filaments* short, converging, subulate, 3 alternate ones very short, inserted close below the limb, with incumbent anthers, the other 3 inserted pretty far below these, with upright anthers: *anthers* oblong; *pollen* deep yellow. *Germen* oblong, very small, brownish green; *ovula* numerous flattish, piled one upon the other in two rows: *style* filiform, reaching to the middle of the limb, pinkish above: *stigmas* 3.

It should be sheltered during the winter in a frame or greenhouse. Flowers in July or August.

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CALOTIS cuneifolia.

Lachlan Calotis.

SYNGENESIA *POLYGAMIA NECESSARIA.*

Nat. ord. COMPOSITÆ. *Adanson fam.* 2. 103.
CORYMBIFERÆ. *Jussieu gen.* 177. *Div. II.* Recept. nudum. Semen papposum. Flores radiati.

CALOTIS. Recept. epaleatum. *Achenia* coronata paleis duabus oppositis aristisque 1-3, glochidatis. *Involucrum* subæquale, simplici vel duplici serie polyphyllum. *Brown MSS.*

Herbæ *ramosæ, pilosiusculæ.* Folia *alterna.* Involucra *ramos terminantia, solitaria, planiuscula, foliacea.* Ligulæ *fœmineæ, numerosæ, imbricatæ, cæruleæ, post anthesin spiralitèr revolutæ et diù persistentes.* Flosculi *masculi, quinquefidi, flavi,* antheris *basi muticis.* Achenia (semina *Linn.*) *verticalitèr compressa, cuneata.* Pappus *persistens,* è paleis *lateralibus, dilatatis, latioribus quàm longis, auriculiformibus; et* aristis *longioribus sæpiùs duabus (anticâ et posticâ), extra medium vel apice solum aculeolis reversis.* Receptaculum *scrobiculatum vel subalveolatum convexum.* Brown MSS.

Calotis *cuneifolia,* foliis cuneatis apice inciso-dentatis. *Brown MSS.*

Ramuli *graciles erecti strictiusculi remotè foliosi.* Folia *sessilia, patentia,* $\frac{2}{3}$ *unciæ longa v. circa, dentibus v. lobulis* 3-5. Flores *foliis remoti, diametro subsesquiunciali, radio violaceo-pallente.* Involucr. (cal. *Linn.*) *radiato-divaricatum, foliolis subbiseriatis oblongis lanceolatisque, acutulis obtusulisque, albo-lineolatis.* Ligulæ (flosc. radii) *angustæ, lanceolato-lineares, extùs pilosiusculæ, tubo viridissimo piloso:* stigmata *tenuissima:* germ. *margine virescens,* aristis *bis brevius:* flosc. disci *pilosi,* tubo *gracili pallido virescenti,* fauce *subæquante* limbum *recurvum:* anth. *luteæ, suturis 5 fulvo-fuscescentibus,* polline *albido;* germ. *vertice mutico.* Recept. *virens.*

The character of CALOTIS was formed, but not published, by Mr. Brown about fifteen years ago, from C. *dentex,* a species first observed by himself in New Holland, where it is not uncommon in the neighbourhood of Port Jackson. The present has been since found, during an expedition into the interior of the above country, growing on the banks of the river Lachlan, in 1817 by Mr. Allan Cunningham, who is commended by Mr. Brown, as "an indefatigable collector and acute observer." It was introduced in 1819 at the Physic Garden, Chelsea.

The generic name has been derived from the two membranous earshaped *paleæ* of the seedcrown, which are constant in number and form in the only two certain species yet

known, and constitute the most important character of the genus.

The following is the version of Mr. Brown's valuable definition of this curious genus.

Receptacle chaffless. *Seeds* crowned by two opposite chaffs, and from one to three barbed awns. *Calyx* nearly equal, of many leaflets in one or two ranks. The species are herbaceous branching and slightly furred. *Leaves* alternate. *General calyxes* at the end of the branches, solitary, nearly flat, foliaceous. *Florets of the ray* fertile, numerous, imbricated, blue, rolled back spirally after expansion, and lasting for a considerable time: *florets of the disk* barren, 5-cleft, deep yellow. *Anthers* blunt at the base: *seeds* vertically compressed, cuneate. *Seedcrown* permanent, consisting of 2 dilated earshaped lateral *chaffs (paleæ)* broader than they are long, and of longer *awns*, generally two in number (one in front, the other opposite) and armed with small reversed prickles, either all the way from above the middle or only at the top. *Receptacle* pitted or lightly honeycombed, convex.

Cuneifolia is distinguished from *dentex* by cuneate leaves deeply indented at the top.

The drawing was made last summer from a plant at Messrs. Colville's, in the King's Road, which had been raised by Mr. Anderson in the greenhouse of the Physic Garden at Chelsea.

M. Hart. del. Pub.d by J. Ridgway 170 Piccadilly Dec.r 1. 1820. J. Watts Sc.

JASIONE perennis.

Perennial Sheep's-bit.

PENTANDRIA *MONOGYNIA.* (MONADELPHIA *PENTANDRIA. Persoon syn.)*

Nat. ord. CAMPANULACEÆ. *Jussieu gen.* 163. *Brown prod.* 1. 559.

JASIONE. Cal. 5-fidus. *Cor.* rotata, tubo brevissimo, laciniis 5-longis linearibus. *Stam.* 5, antheris in tubum coalitis. *Stig.* bifidum. *Caps.* 5-gona, 2-locularis, calyce coronata. *Flores* aggregati in calyce communi polyphyllo supra receptaculum nudum. *Caules sæpè simplices. Capitula terminalia solitaria: flores centrales sæpè abortivi stigmate indiviso. Habitus* SCABIOSÆ. Juss. loc. cit. 166.

J. *perennis,* foliis linearibus sublævibus planis obtusiusculis. *Lamarck encyc.* 3. 216. *illustr.* 724. *fig.* 2.

Jasione perennis. *Persoon syn.* 2. 215. *Lam. et Decand. flor. franç.* 3. 717. *Sweet hort. sub. lond.* 37.

Jasione montana (β.) *Willd. sp. pl.* 1. 888.

Jasione montana (β.) *radice perenni. Lin. suppl.* 392.

Jasione montana. *Villars dauph.* 2. 670; *(fide Decandollæi.)*

Caulis *erectus simplicissimus v. de basi ramosus, in plantâ hortensi glaber in spontaneâ pubescens, pedalis v. plurimùm altior, infra medium foliis crebris vestitus.* Fol. *numerosa, sparsa, exactè linearia, sesquiunciam ad* 2 *uncias cum dimidio longa latitudine subbilineari, obtusiuscula, integra, plana, in plantâ cultâ subglabra, in spontaneâ hispidiùs pubescentia.* Capitula *congesta, cærulea solitaria,* montanæ *majora,* pedunculis *aphyllis* 6-8 *uncialibus v. circà insidentia.* Involucrum è foliolis 12-13 *planis horizontalibus margine acutè at rarè dentatis.* Lam. loc. cit.; (ex gallico versum).

A species first distinguished from *montana* by the Chevalier de Lamarck, who observes that it not only differs in being perennial instead of annual, but likewise in having strictly linear leaves, which neither taper downwards nor are waved or curled at the edge. It is not noticed in the late edition of the Hortus Kewensis, though stated in Sweet's Hortus Suburbanus Londinensis to have been cultivated in our gardens in 1787. Native of the South of France.

The drawing was taken at the nursery belonging to Messrs. Colville, in the King's Road, Chelsea, where the plant is cultivated in a warm border in the open ground.

The following description is the English of an article of the ingenious and diligent Lamarck, in his Encyclopédie Botanique.

Stem upright, either simple or at times branching from the base, bare in the garden plant, hairy in the wild one, thickly leaved at the lower half, a foot or much more in height. *Leaves* numerous, scattered, exactly linear or straight-sided, from an inch and a half to two and a half long, about two lines broad, slightly blunted, entire, flat, nearly bare in the cultivated plant, slightly furred or hispid in the other. *Flowers* crowded into terminal solitary blue *heads* rather larger than those in *montana*, each head borne on a leafless *peduncle* about 6 or 8 inches long. *Involucre* of 12-13 flat horizontal leaflets with a few sharp teeth round the edge.

As yet rare in our flower-borders, though a free and abundant flowerer, of long duration and very ornamental.

M. Bauer. del. Pub.d by J. Ridgway 170 Piccadilly Dec.r 1.1820. J. Watts. sc.

VANDA Roxburghii.

Chequer-flowered Vanda.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDEÆ. *Jussieu gen.* 64. *Brown prod.* 1. 309. *Div. IV. Anthera* terminalis mobilis decidua. *Massæ pollinis* demùm cereaceæ. *Brown in Hort. Kew. ed.* 2. 5. 205.

VANDA. Labellum calcaratum, cum basi simplici (breviusve productâ) *columnæ* apteræ continuum, trifidum, lobo medio carnoso. *Petala* patentia, distincta. *Massæ pollinis* 2, obliquè bilobæ. *Brown MSS.*

OBS. AERIDES paniculatum, *(suprà v.* 3. *f.* 220.*) generis pristini species impar nimìs huic (monente D. Brown) aptè satìs associari potest. Parasiticæ ambæ.*

Vanda *Roxburghii,* ovariis contortis, petalis oblongo-obovatis undatis, foliis obliquè tridentatis. *Brown MSS.*
Cymbidium tesselloides. *Roxburgh MSS. cum icone ined.*
Vandá. *(Sir William Jones in) asiat. res.* 4. 302.

The generic character now given has been formed by Mr. Brown, so as to include AERIDES *paniculatum,* published provisionally by that generic name in our third Volume (fol. 220); but now it will be seen that this species is not a very close congener of the one before us. The CYMBIDIUM *tessellatum* of Roxburgh is not included in the present genus.

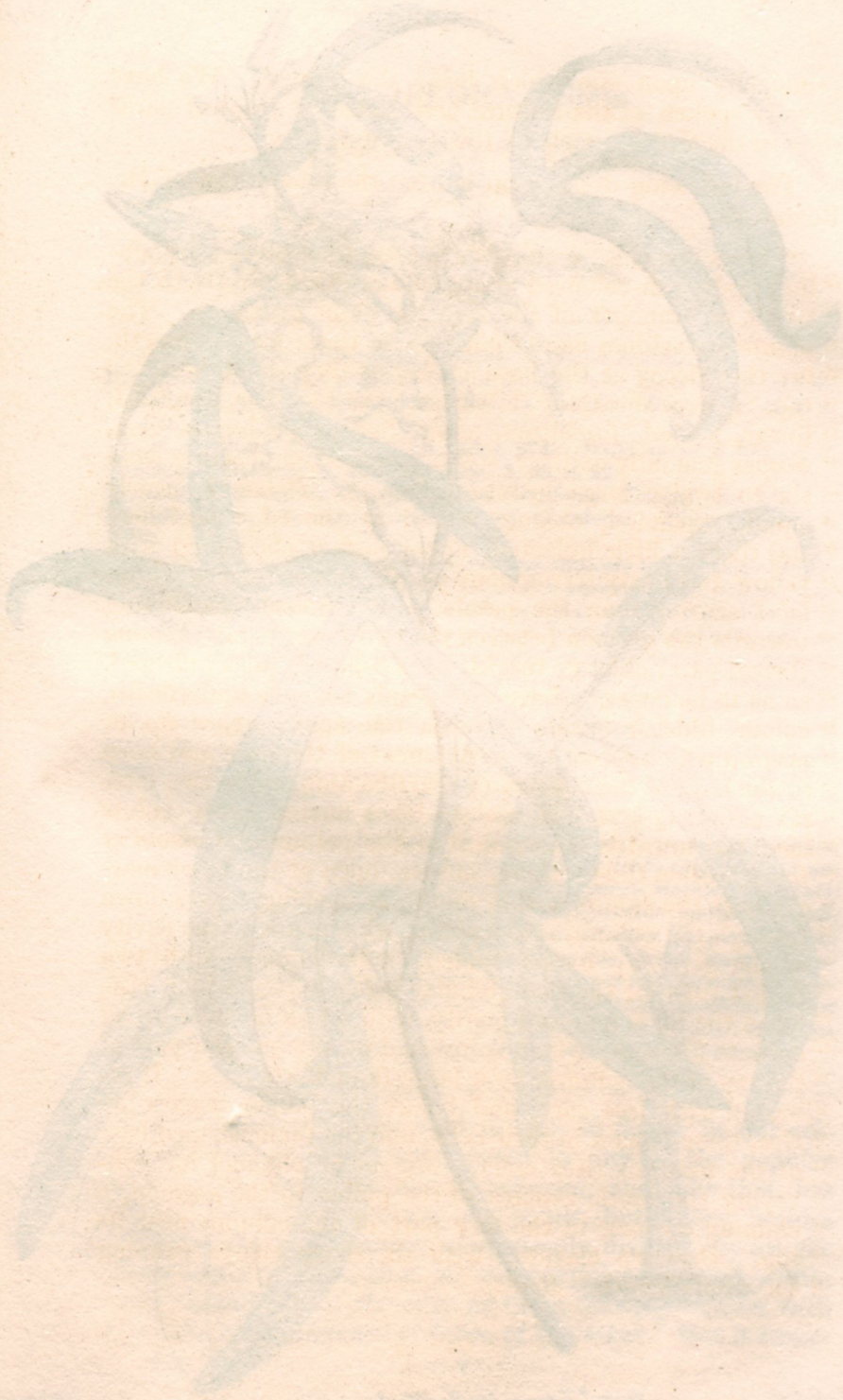
Mr. Brown had some scruples in not ranking the group under ANGRÆCUM of M. Du Petit-Thouars (of which a species is given in voy. de Bory de St. Vincent. 1. 359. tab. 19.), not being able from want of sufficient detail in the description of the structure of the parts of that genus, to decide satisfactorily, whether he ought to do so or not; and has at last been determined principally by the *label* in ANGRÆCUM being undivided and probably membranous, while in VANDA it is three-lobed and fleshy. He expects that several species of Swartz's genus LIMODORUM will be found to rank under the present.

This beautiful parasitic plant was imported by Sir Joseph Banks, and flowered last autumn in the hothouse at Springrove, now belonging to Lady Banks. It is common in most parts of Bengal, and grows on various trees, but

principally upon one which bears the Mango. We have already spoken of the culture best suited to tropical parasites in the 220th article of this Register.

The following description is from the manuscript of Dr. Roxburgh.

" *Stem* creeping, sending forth long thick round branch-
" ing fleshy ash-coloured *roots*, which fasten firmly to the
" trunk or branches of the tree the plant grows on. The
" plants are seldom more than two or three feet in length,
" for they decay at the base as fast as they shoot from the
" top. *Leaves* sheathing, bifarious, near together, recurved,
" linear, keeled, forebitten, about five or six inches long.
" *Scapes* generally axillary, solitary, naked, supporting from
" six to twelve large beautiful flowers. *Petals* 5, nearly
" equal, expanded, oblong, waved at the edge and here
" and there a little inflected, upper surface chequered with
" yellow and dusty ferruginous purple, under surface white:
" *label* shorter than the petals; *spur* conical, protruding
" towards the germen between the two lower petals; *lamina*
" (broad part) oblong, turgid, apex 3-lobed, sides inflected,
" so as to be convex above and deeply concave underneath,
" colour blueish purple towards the apex: *upper lip* or
" portion which forms the attachment of the base and horn
" to the base of the column of fructification, with two late-
" ral obliquely broad lanceolate lobes having acute points
" incurved towards the summit of the column. *Column of*
" *fructification* thick, short, obtuse, open at the inner mar-
" gin next the summit; this mouth or opening tapers down
" through the column into a point, which ends in the cavity
" of the germen; *anther* lidded, suborbicular, with two
" lidded cells for the two globular *pollen masses* which rise,
" when the lid is removed gently, with a jerk on their broad
" cordate filament, which is inserted on the anterior part of
" the top of the column, by a large funnelform base. If re-
" moved with less care, and before the pollen masses are
" ripe, these remain in their cells, and the funnelshaped base
" of the filament rises erect. *Stigma* or channel for con-
" veying the subtle essence of the pollen to the germen, a
" clammy opening in the fore part of the column near its
" top. *Pericarp* clavate, with six sharp ridges running
" the whole length." *Roxb.*



M. Hardi. del. Pub.d by J. Ridgway 170 Piccadilly Janv.1.1821. J. Watts. sc.

PASSIFLORA peltata.

Peltate Passionflower.

MONADELPHIA *PENTANDRIA.*

Nat. ord. PASSIFLOREÆ. *Jussieu in ann. mus.* 6. 102.
PASSIFLORA. Suprà vol. 1. *fol.* 13.

Div. (Ebracteatæ: apetalæ). Foliis trilobis.

P. *peltata* foliis peltatis profundè trilobis glabris, lobis lineari-lanceolatis divaricatis, petiolis biglandulosis, floribus apetalis. *Hort. Kew. ed.* 2. 4. 152.

Passiflora peltata. *Cavan. diss.* 10. 447. *t.* 274. *Willd. sp. pl.* 3. 617.
Passiflora hederacea; γ. *Lamarck encyc.* 3. 38. *n.* 22.
Grenadilla folio angusto tricuspidi, fructû olivæformi. *Tournef. inst.* 240.
Clematis indica, folio angusto trifido, fructû olivæformi. *Plum. amer.* 70. *t.* 85.

Fruticosa, depilis, caule *infernè suberoso-corticato indè* ramisque *fusco-rubentibus subque lente puncticulis flavis crebrè aspersis.* Fol. *peltata, subcoriacea, obscuro-viridia,* 3-*nervia, nitida, margine subdeflexa lineáque fuscá tenui circumscripta;* superiora *majora palmato-triloba, lobis distantibus ad petiolum ferè usque discretis elongato-lanceolatis, medio submajore* 3-4-*unciali;* inferiora *minora, breviùs divisa lobis ovato-acuminatis:* pet. *læves subunciales, ad medium circa urceolato-biglandulosi:* stipulæ *erectæ, plano-subulatæ:* cirrhi *axillares, nunc flores intercipientes.* Flores *apetali absque omni bracteâ vel involucro, chloroleuci, inodori, gemini, axillares, nutantes, diametro fermè biunciali:* pedunc. *fusco-purpureus, filiformis, duplo ferè brevior graciliorque petiolo, paulò suprà medium articulatus indèque crassior.* Invol. 0. Cal. *stellato-partitus disco plano subtùs subintruso atque decem-toroso:* segmenta *distantia, recurvo-patentia, à basi latá lineari-attenuata, firmula, obtusula.* Cor. 0. Corona *duplex bis fermè brevior limbo calycis;* radii *numerosi,* exteriores *viridi-lutescentes lineolis fuscis paucis maculati, elongato-teretes, obtusi:* interiores *alterni capillares, longitudine tantùm operculi, fusco-purpurei, albo variegati obtusi:* operculum *plicatum purpurá varium;* nectarium *simplex planum:* septo *interiori brevi erecto, crasso, margine pruinoso, nigroque-maculato.* Pist. *calycem æquans:* stipes *teres coronam subexcedens pallidus lineolis interruptis fuscis punctatus:* fil. *ligulata, pallida,* antheris *oblongis viridibus longiora.* Germ. *ellipticum glabrum viride:* styli *cum stigmatibus clavati, virides, longiores germine;* stig. *subgloboso-convexa.*

This pretty species is seldom seen in flower in our collections; nor has it been figured in any of the popular publications. It comes near to *suberosa,* and, like that, has neither involucre or bractes, nor petals, but differs, besides in having the upper leaves more deeply divided, by all the leaves being peltate, that is, with petioles inserted within the disk and not at the edge as there, and by flowers with twice the circumference of those of the other. But it comes

still nearer to *hederacea*, where the leaves are likewise peltate, but larger, and more shallowly divided.

Native of the West Indies; whence it was introduced in 1778. A plant flowered in September in the hothouse at the Chelsea Nursery belonging to Messrs. Colville, in the King's Road; where the drawing was taken.

The species has been enumerated in Mr. Pursh's Flora of North America as a native of Virginia and Georgia; but the prototype sample in Mr. Lambert's Herbarium, consists of a single detached leaf, procured from some other collection, and does not we suspect even belong to the species.

A smooth twining shrub: *stem* coated below with a pale corky rind, above and at the branches dark red and thickly besprinkled with minute yellow dots, scarcely perceptible without a glass. *Leaves* peltate, subcoriaceous, of a dark shining green, 3-nerved, deflexed towards the edge, and bordered with a fine dark line, *upper ones* palmately 3-lobed, lobes wide asunder, separated almost to the petiole long-lanceolate, the middle one rather the largest, 3-4-inches in length; *lower ones* smaller, more shallowly divided, lobes ovate taper-pointed; *petiole* smooth, about an inch long, with two small dark red opposite lateral cupped glands; *stipules* subulate, flat, upright; *tendrils* axillary, sometimes one betweeu the two flowers. *Flowers* without either involucre or bracte, or corolla, whitish green, scentless, in axillary pairs, nodding, almost 2 inches in diameter: *peduncle* dark red, filiform, nearly twice shorter and slenderer than the petiole, jointed a little above the middle and thickest beyond the joint. *Calyx* stellately five-parted, slightly dinted underneath the disk with a circle of ten shallow nodules: *segments* wide asunder, recurvedly spreading, linear and tapered from a broad base, rather substantial, bluntish. *Crown* of two rows, twice shorter than the limb of the calyx; *outer rays* numerous greenish yellow and slightly marked with dark broken linear stains, filiform, obtuse; *inner ones* alternate with the outer, capillary, only as long as the lid of the nectary, dark purple mottled with white, obtuse: *lid* (of the nectary) plaited, mottled purple; *nectary* simple, flat, inner wall short upright thick frosted and stained with black at the edge. *Pistil* even with the calyx: *shaft* round, rather taller than the crown pale, spotted with small dark broken lines: *filaments* ligulate, pale, longer than the oblong green *anthers*. *Germen* elliptical, smooth green: *styles* clavate, green, longer than the germen; *stigmas* subglobularly convex, green.

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HELIANTHUS atrorubens.

Shagreen-leaved Sunflower.

SYNGENESIA *POLYGAMIA FRUSTRANEA.*

Nat. ord. COMPOSITÆ. *Adanson fam.* 2. 103.

CORYMBIFERÆ. *Jussieu gen.* 177. *Div. VI.* Receptaculum paleaceum. Semen apice dentatum aut paleaceum. Flores in plurimis radiati, in paucis flosculosi. *Receptaculum* HELENII *subnudum.*

HELIANTHUS. Flores radiati, flosculis medio ventricosis (tubo brevissimo angusto) ligulis neutris. *Cal.* magnus imbricatus squarrosus. *Sem.* apice 2-paleacea paleis acuminatis deciduis. *Recept.* planum. *Herbæ sæpe altissimæ; folia aspera, opposita, aut alterna, flores axillares aut terminales, interdùm maximi, disco nonnunquam subfusco.* Juss. loc. cit. 189.

H. *atrorubens,* totus hispidus; caule supernè nudiusculo laxè paniculato, foliis spathulatis ovatis crenatis triplinervibus scabris, squamis calycinis ovato-lanceolatis longitudine disci atropurpurei. *Pursh amer. sept.* 2. 570.

Helianthus atrorubens. *Lin. sp. pl. ed.* 2. 2. 1279. *Mill. dict. ed.* 8. *n.* 9. *Willd. sp. pl.* 3. 2245. *Michaux bor. amer.* 2. 140. *Hort. Kew. ed.* 2. 5. 129. *Nuttall gen.* 2. 177.

Helianthus missuricus. *Sprengel cent. spec. minùs cognit.* 21. *n.* 44.

Helianthus diffusus. *Curtis's magaz.* 2026.

Helianthus foliis ovatis crenatis 3-nerviis scabris, squamis calycinis erectis, longitudine disci. *Gron. virg. ed.* 2. 128.

Corona Solis minor disco atrorubente. *Dill. eltham.* 111. *t.* 94. *f.* 110.

Corona Solis caroliniana, parvis floribus, folio tinervi amplo aspero, pediculo alato. *Mart. cent.* 20. *t.* 20.

Planta *aspera, perennis, floribunda, subtripedalis radice repente:* caules *plurimi, teretes, strigosi, rigidi, ramosi;* rami *elongati, divisi, remotissimè alternèque foliosi corymboso-fastigiantes,* ramuli *axillares suboppositi* pedunculo *longo subaphyllo strictissimo strigilloso anguloso-striato unifloro sæpè rubescente (haud rarò cum folio prope florem posito) terminati.* Fol. *sessilia, subopposita, rariùs verticillato-trina, cinereo-virentia, opaca, utrinque punctis callosis setiferis asperrima;* inferiora *oblongo-ovata v. elliptico-lanceolata, infra cuneato-attenuata atque integra, supra appressè serrata,* media *oblonga, infernè attenuata,* summa *spathulato-oblonga, alterna, integra: majora* 5-7-*uncialia latitudine* 2-3-*unciali.* Cal. *campanulatus, atrovirens, glabriusculus, alternè sub4seriatus, arctè imbricatus, brevior disco,* foliolis *ovato-lanceolatis, ciliolatis concaviusculis.* Corolla *diametro* 3-4-*unciali v. majore:* radius *neuter, aureo-flavescens* flosculis *à* 16 *ordine simplici ad numerosos ordine duplice, elongato-oblongis ab unciâ brevioribus ad sesquiunciâ longiores, plicato-striatis, acutulis:* discus *hermaphroditus diametro subunciali, atro-rubens;* flosc. *flavi limbo ustulato-rubente, villosi,* tubo *brevissimo,* fauce *longâ basi ventricosâ,* limbo 4-*plo breviore patente laciniis ovatis;* germ. *cuneato-oblongum, sub4gono-compressum villosum album;* pappus *paleæ* 2 *oppositæ lanceolatæ bis breviores flosculo, ramentis brevissimis intermediis connexæ;* stig. *vitellina, linearia, revoluta:* anth. *ustulato-fuscæ,* polline *flavo.* Recept. *convexum, paleaceum,* paleis *navicularibus albo-striatis, carinâ ciliatis, apice purpureo-virentibus fornicatis villosis ciliatis.*

Helianthus, with the exception of one or two of the species, is confined to North America. The present species, in our view, is one of the most attractive of the hardy ornaments of the pleasure-ground, being neither so tall nor heavily leaved as the others, and producing from its numerous subdivided stems a profusion of the gayest coloured blossom that suffers no intermission from August to October. It seems to do best in a strong clayey soil. Mr. Nuttall found it all over Upper Louisiana, others in Pensylvania and Carolina. The root is creeping, and affords the easiest means of propagation. The flowers vary much in size, and are seen from about $2\frac{1}{2}$ to near 5 inches in diameter, even on the same plant, having sometimes a small spatulate leaf on the peduncle just below the calyx, at other times none within a foot or more of the flower. The foliage, which grows chiefly on the lower part of the plant, is of an opaque dull dusty green, with a surface as rough as shagreen, and nearly as hard as emery paper, and makes but little appearance; the branches, the divisions of which are terminated by long oneflowered straight upright generally leafless peduncles, present a loose spreading corymb of flowers at the height of about 3 feet or more.

Cultivated by Dr. Sherard, in the celebrated garden at Eltham, before 1732; but seems to have become rare, till lately introduced by Mr. Lambert, who raised his plants from Louisiana seed. The drawing was taken at the collection of Comtesse de Vandes, Bayswater.

The *Compositæ* (commonly called Syngenesious plants) form the tenth class of Jussieu's arrangement, and are divided into three orders; *viz. Cichoraceæ*, *Cinarocephalæ*, and *Corymbiferæ*. Since this division, the study of the class has occupied much of the attention of Messrs. Cassini and Brown; but no definite arrangement has been given to the public, since that of Jussieu.

The following valuable observations are from Mr. Brown's Remarks upon the Congo Herbarium.

"Compositæ. It is unnecessary here to enter into the question whether this family of plants, of which 3000 species are already known, ought to be considered as a class or as an order merely; the expediency of subdividing it, and affixing proper names to the divisions, being generally ad-

mitted. The divisions or tribes proposed by M. Cassini, in his valuable dissertations upon this family, appear to be the most natural, though as yet they have not been very satisfactorily defined."

"Baron Humboldt has stated, that *Compositæ* form one sixth of the Phænogamous plants* within the tropics, and that their proportion gradually decreases in the higher latitudes, until in the frigid zones it is reduced to one thirteenth. But in the Herbarium from Congo *Compositæ* form only one twenty-third, and both in Smeathman's collection from Sierra Leone, and in Dr. Roxburgh's Flora Indica, a still smaller part, of the Phænogamous plants. In the northern part of New Holland they form about one sixteenth; and in a manuscript catalogue of plants of equinoctial America, in the library of Sir Joseph Banks, they are nearly in the same proportion."

"In estimating the comparative value of these different materials, I may, in the first place, observe that though the herbarium from Congo was collected in the dry season of the country, there is no reason to suppose on that account that the proportion of this family of plants, in particular, is materially or even in any degree diminished, nor can this objection be stated to the Sierra Leone collection, in which its relative number is still smaller."

"To the *Compositæ* in Dr. Roxburgh's Flora Indica, however, a considerable addition ought, no doubt, to be made; partly on the ground of his having apparently paid less attention to them himself, and still more because his correspondents, whose contributions form a considerable part of the Flora, have evidently in a great measure neglected them. This addition being made, the proportion of *Compositæ* in India would not differ very materially from that of the north coast of New Holland, according to my own collection, which I consider as having been formed in more favourable circumstances, and as probably giving an approximation of the true proportions in the country examined. Baron Humboldt's herbarium, though absolutely greater than any of the others referred to on this subject, is yet, with rela-

* That portion of the vegetable creation where the stamen and pistillum are manifest, as distinguished from Cryptogamous and Agamous plants, where the existence of these parts is either only presumed from analogy, as in the first of the two, or denied altogether, as in the latter.

tion to the vast regions whose vegetation it represents, less extensive than either that of the north coast of New Holland, or even of the line of the Congo. And as it is in fact as much the Flora of the Andes as of the coasts of intratropical America, containing families nearly or wholly unknown on the shores of equinoctial countries, it may be supposed to have several of those families which are common to all such countries; and among them *Compositæ*, in very different proportion. At the same time it is not improbable that the relative number of this family in equinoctial America, may be greater than in the similar regions of other intratropical countries; while there seems some reason to suppose it considerably smaller on the west coast of Africa. This diminished proportion, however, in equinoctial Africa would be more remarkable, as there is probably no part of the world in which *Compositæ* form so great a portion of vegetation as at the Cape of Good Hope."

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HÆMANTHUS carneus.

Hairy pink Hæmanthus.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.* Germen inferum. AMARYLLIDEÆ. *Brown prod.* 1. 296. *Sect. I.* Radix bulbosa. Flores spathacei umbellati, rarò solitarii.

HÆMANTHUS. Suprà vol. 3. *fol.* 181.

OBS. *In* germine HÆMANTHI carnei *ovula inversa summo angulo loculamentorum affixa. Vix character in genere constans?*

H. *carneus*, foliis 2 rotundo-ovatis acuminatis capoque pilis retrorsis undique hirsutis, spatha sphacelata reflexa umbella breviore, staminibus inclusis.

Bulbus *è laminis imbricato-bifariis introrsum gradatìm longioribus compresso-conicus.* Fol. *scapo tardiora duploque breviora, erecto-divergentia pubescentiam canam viridi-translucentia.* Scapus *(subspithamæus) compresso-columnaris robustus, marmoratìmpur purascens, retrorsìm pilosus.* Spatha *imparitèr plurivalvis sphacelato-membranacea, valvis reflexis lanceolatis:* umbella *laxiùs multiflora,* pedicellis *teretibus subrubentibus glabris:* cor. *lætè carnea, semunciam circitèr longa, turbinata;* tubus 3-4*plo brevior* limbo *patente æquali;* laciniæ *ovali-v. obverso-oblongæ.* Stam. *erecta;* fil. *duplo breviora limbo, disco tubuloso corollæ adnata, alternè sublongiora, alba, stricta, subulata, crassiuscula:* anth. *erectæ, introrsæ, ovali-oblongæ, breves, mucronato-apiculatæ, ab imo dorso affixæ,* polline *flavo.* Germ. *subrotundum exsulcum estriatum parvulum semine Sinapeos vix majus glabrum rubido-virescens;* loculamenta *monosperma,* ovulis *oblongiusculis summo angulo loculamenti affixis.* Caps. *subglobosa, lutescens, magnitudine Pisi vel circitèr.*

An unpublished species, agreeing with *lanceæfolius* in several peculiarities which distinguish that species among its congeners, but differing specially from it by shorter and broader leaves shaggily furred on both sides, and by stamens shorter than the corolla instead of overtopping it. Its involucre or spathe is not coloured, nor disposed in the upright posture, that affords the corollalike appearance observable in the majority of this genus, as far as yet known.

The three ovula of the germen of our plant were attached each to the upper corner of its cell and pointed directly downwards. We are not aware how far this circumstance extends in the genus, but shall attend to the investigation of the circumstance.

Introduced about two years ago from the Cape of Good Hope by Messrs. Colville, at whose nursery in the King's Road the present drawing was made the summer before last.

Bulb compressedly conic, laminæ bifarious imbricated, inner ones longer. *Leaves* two, opposite, round-ovate, with a short point, coming up after the scape, shaggily and reflexly furred on both sides, twice shorter than the scape. *Scape* about 7 inches long, compressedly columnar, purplish, mottled, reflexedly hairy. *Spathe* of several unequal lanceolate valves, aridly membranous, reflexed. *Umbel* loosely manyflowered: *pedicles* smooth, filiform, reddish: *corolla* brightish pink, about half an inch long, turbinate, *tube* 3 times shorter than the spreading equal *limb*, *segments* ovally or obversely oblong. *Stamens* upright; *filaments* twice shorter than the limb, adhering to the short tubularly contracted disk of the corolla, white, stiff, subulate, thickish, alternately longer: *anthers* upright, ovally oblong, short, mucronate (tipped with a short distinct point), fixed on near the base at the back; *pollen* deep yellow. *Germen* roundish furrowless streakless, not much bigger than a grain of mustard-seed, smooth, green tinged with red; *cells* oneseeded, *ovula* somewhat oblong, turned downwards. *Capsule* about the size of a pea, of a yellowish dingy green colour.

M. Hart. del. Pub by S. Ridgway 170 Piccadilly Jan. 1. 1821. S. Watts. sc.

PLUMERIA tricolor.

Tricolor Plumeria.

PENTANDRIA *MONOGYNIA.*

Nat. ord. APOCYNEÆ. *Jussieu gen.* 146. *Div. I.* Germen duplex. Fructus bifollicularis. Semina non papposa.

PLUMERIA. Suprà fol. 480.

P. *tricolor*, foliis oblongis acutis acuminatisque, marginibus planis corollis tricoloribus. *Ruiz et Pavon fl. peruv.* 2. 20. *t.* 139.

Plumeria tricolor. *Persoon syn.* 1. 268.

Yuracppaco Suche. *Peruvianè.*

Arbor 6-*orgyalis lactifera:* truncus *erectus teres cinereus, comâ magnâ subglobosâ:* rami *dichotomi tortuosi fragiles medullosi crassi petiolorum vestigiis cicatriculati.* Fol. *sparsa oblonga utrinque acuta, integerrima, marginibus planis, venoso-reticulata, venis majoribus horizontalibus vix incurvis rubris:* petioli *ad basin internam glandulis duobus connexis.* Pedunculi *striati rubicundi pubescentes umbellato-cymosi multiflori;* pedicelli *gemini uniflori,* bracteolâ *ovatâ concavâ caducâ suffulti.* Cal. *rubicundus quinquecrenatus pubescens.* Cor. *odoratissima, pollicaris:* tubus *rectus ruber:* faux *crocci coloris:* limbus *patens, intùs albo-roseus, extùs dimidiatìm ruber et albus.* Folliculi *spithamæi, fusci:* sem. *fusco-pallentia.* Ruiz et Pavon loc. cit.

This is the second species of this fine genus, for the introduction of which we are obliged to Mr. Lambert, by whom the sample for the drawing was kindly sent, from his collection at Boyton-house, where the plant flowered this summer. It was raised from seed from the West Indies; and requires to be kept in the hothouse.

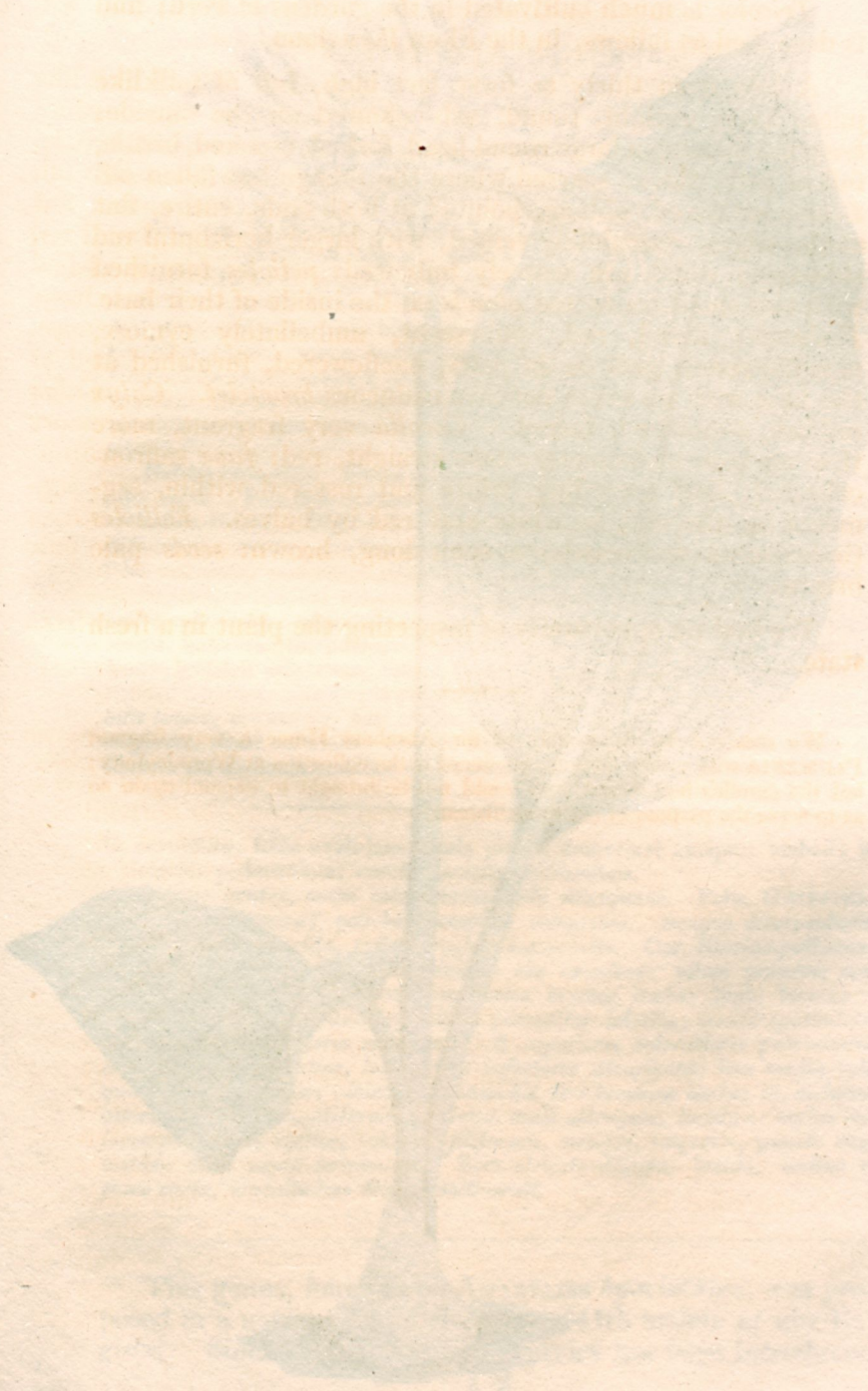
As far as we can judge from the figure of PLUMERIA *tricolor* in the Flora Peruviana, and the prototype sample received from M. Pavon, now included in Mr. Lambert's Herbarium, we should think our plant of that species. It is extremely difficult however to distinguish between *carinata* and *tricolor* of the above Flora, owing to the dilapidated state of the samples, as well as the pointless descriptions and indifferent figures. The flowers of both are described of the same colour. The petioles of the leaves indeed seem throughout much longer in *tricolor* than in *carinata*; and it is this circumstance that has chiefly decided our opinion in regard to the present plant.

Tricolor is much cultivated in the gardens of Peru; and is described as follows, in the Flora Peruviana.

A tree from thirty to forty feet high, full of milklike juice: *stem* upright, round, ash-coloured on the outside; *branches* forming a large round head, forked, crooked, brittle, full of pith, thick, scarred where the foliage has fallen off. *Leaves* scattered, oblong, pointed at both ends, entire, flat at the edges, reticulately veined, with larger horizontal red side-veins which are scarcely imbowed: *petioles* furnished with two small connected *glands* on the inside of their base. *Peduncles* fluted, red, pubescent, umbellately cymose, manyflowered; *pedicles* in pairs, oneflowered, furnished at the base with an ovate concave caducous *bractelet*. *Calyx* reddish, 5-notched, furred. *Corolla* very fragrant, more than an inch in diameter: *tube* straight, red: *faux* saffron-coloured: *limb* spreading, white and rose-red within, segments on the outside white and red by halves. *Follicles* (indehiscent seedvessels) a span long, brown: *seeds* pale brown.

We had no opportunity of inspecting the plant in a fresh state.

We received by the civility of Sir Abraham Hume a very fragrant PLUMERIA with yellow flowers, produced in the collection at Wormleybury; but the corollas had closed, and could not be brought to expand again so as to serve the purpose of our draughtsman.



M. Hart. del. Pub. by J. Ridgway 170 Piccadilly Jan. 1. 1821. J. Watts. sc.

GRIFFINIA parviflora.

Small-flowered Griffinia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. NARCISSI. *Jussieu gen.* 54. *Div. II.*
AMARYLLIDEÆ. *Brown prod.* 1. 296. *Sect. I.*

GRIFFINIA. Nobis suprà fol. verso 444. *in notâ.* Spatha bivalvis *umbellâ* polyanthâ brevior. *Cor.* infundibuliformis, nutans; *tubus* brevis; *limbus* 6-partitus inæqualis bilabiato-campanulatus. *Fil.* summo tubo inserta, alternè longiora, unum assurgens, cætera declinata: *anth.* incumbentes. *Germ.* 3-loculare; *ovulis* 2 parallelo-erectis imo cujusque loculamenti angulo annexis. *Stylus* tristriato-filiformis: *stig.* simplex. *Capsula* pedunculata, membranacea: *sem.* subsolitaria, obovata, nitida, apice chalazâ fuscâ insignita.

Bulbus *tunicatus.* Flores *scapum subcylindricum terminantes, violaceo et albo varii.* Fol. 2-3, *coriacea, petiolata, laminâ oblongâ costato-nervosâ, reticulato-venosâ. Differt* AMARYLLIDE stamine *uno cæterorum directione deflectente;* ovulis *parallelo-gemellis erectis fundo loculamentorum insitis;* foliis *petiolatis, cum nervis pluribus longitudinalibus costato-prominentibus.*

Semina, *secundùm observationes Dom.* Brown, *obovata, ventricosa, nitentia ochroleuca;* umbilicus *basilaris: apex* chalazâ *fuscâ insignitus;* raphe *tenuis, immersa:* integumentum *duplex,* exterius *membranaceum nitens, per lentem pulchrè areolatum, ventre longitudinaliter incrassatum, præsertim in regione umbilici;* membrana propria *tenuissima, albumini adhærens, separabilis tamen, evasculosa, basi chalazæ inserta cæterùm libera:* albumen *semini conforme, densè carnosum:* embryo *axilis, longitudine dimidii albuminis, cylindraceus;* radicula *umbilico approximata, apice exserto.* Brown MSS.

G. *parviflora,* foliis ovali-lanceolatis petiolo transversè ancipiti; umbella insigniùs pedunculata; corollæ laciniis uniformibus.

Bulbus *ovatus, ovum columbinum mole subæquans.* Folia GRIFFINIÆ hyacinthinæ *minora;* petiolo *transversè compresso.* Scapus *tereti-subcompressus.* Spatha *arida, reflexa, valvis lanceolatis.* Cor. *lilacino-pallescens, turbinato-rotata,* ¾ *unciæ longitudine vix excedens:* tubus *germinis concoloris isoperimetri continuus, multotiès brevior limbo:* limbi *laciniæ* 5 labium superius *constituentes, altera porrectior* inferius; *omnes spathulato-lanceolatæ,* 3 *exteriores mucronatæ,* 3 *superiores coloratiores proximiores, summa media sublatior, laterales* 2 *inferiores divaricatæ, ima media reliquis plurimùm minor, albicans.* Stam. *bis ferè breviora limbo:* fil. *violaceo-albicantia, subulato-filiformia.* Germ. *ovali-oblongum, lucidum:* stylus *violaceo-pallescens, rectior, subulato-filiformis, strictus, triqueter, puncto* stigmatoso *nudo acuto terminatus.* Sem. *obovato-oblonga, lucida, melino et fusco varia, magnitudine Pisi grandiusculi.*

This genus, founded on AMARYLLIS *hyacinthina,* was proposed in a note at the end of the 444th article of our Register. Since then the present species has been introduced

from Bahia in the Brazils, by the gentleman whose liberal exertions in favour of Botany are intended to be commemorated by the generic name. It flowered last autumn in the hothouse at South Lambeth.

The principal points by which GRIFFINIA is distinguished from AMARYLLIS, are, the having one stamen which assumes a different direction from the other five; a germen in which every cell contains two upright parallel *ovula* affixed to its lower corner; and by the petioled prominently ribbed foliage.

In a plant of GRIFFINIA *hyacinthina*, that flowered last summer at Mr. Griffin's, we were made to observe a thick brownish crenulated cartilaginous ridge or margin that ran along opposite sides of the scape, overlooked by us when we described the plant, and of which there is no appearance in G. *parviflora*. If this circumstance is constant, and we have been assured it is, it forms a curious specific mark.

Bulb in *parviflora* tunicated and about the size of a pigeon's egg. *Leaves* 2-3 much smaller than those in *hyacinthina*; *petiole* transversely compressed and two-edged; *blade* ovally lanceolate. *Scape* cylindrical, compressed. *Spathe* sphacelate, reflexed, valves lanceolate; *umbel* many-flowered, stalked. *Corolla* of a very pale violet colour, turbinately rotate, scarcely above $\frac{3}{4}$ of an inch long: *tube* continuous with the germen and of the same diameter and colour, many times shorter than the limb: segments of the *limb* nearly uniform, 5 forming the upper lip, a single one the lower; the whole of them spatulately lanceolate, three outer ones tipped with a distinct point (mucronate), 3 upper ones deeper coloured and nearer to one another, the upper middlemost one rather the broadest, two lateral ones wider spread, the lowermost one of all much smaller and paler than any. *Stamens* almost twice shorter than the limb: *filaments* of a diluted violet colour, taperingly filiform. *Germen* ovally oblong, shining: *style* nearly the colour of the filaments, straighter than them, subulately filiform, 3-cornered stiff; *stigma* a simple smooth terminating point.

We are to thank Mr. Brown for the description of the seed of this genus; the nature of which had been misconceived until the present subject was submitted to the test of his accurate and skilful investigation.

M. Hurst. del. Pub. by J. Ridgway 170 Piccadilly Jan. 1. 1821. J. Watts. sc.

ARUM tenuifolium.

Grass-leaved Italian Arum.

MONŒCIA *POLYANDRIA.*

Nat. ord. AROIDEÆ. *Jussieu gen.* 23. *Div. I.* Spadix spathâ involutus. AROIDEÆ (includentes tàm *Typhas* quàm *Aroideas* Jussieuii). *Brown prod.* 1. 333. *Sect. I.* Flores declines; Perianthio (Calyce) nullo. *Aroideæ veræ.*

ARUM. Suprà fol. 450.

Div. Acaulia, foliis simplicibus.

A. *tenuifolium,* acaule; foliis (tardioribus scapo) angusto-lanceolatis, spatha subrecurva, spadice longo vermiformi acuto declinato. *Lamarck encyc.* 3. 10. *n.* 10.

Arum tenuifolium. *Linn. sp. pl. ed.* 2. 2. 1370. *Mill. dict. ed.* 8. *n.* 5. *Willd. sp. pl.* 4. 486. *enum.* 2. 986; *(excluso passim synon. Gron. orient. ad* ARUM gramineum. *Russell alepp.* 2. 264. *pertinente). Hort. Kew. ed.* 2. 5. 309.

Arisarum angustifolium Ornithogali lutei facie. *Lobel adv.* 260, 261.

Arisarum angustifolium. *Clus. hist.* 2. 74.

Folia *tardiora flore, radicalia, angusta, lanceolata, graminis vel Scorzoneræ penè instar, glabra viridia* 7-8-*uncias longa, deorsùm subattenuata, basi equitantia.* Caulis *brevissimus vaginâ membranaceâ inclusus:* spatha *elongata, acuminata, recurvula:* spadix *longus, gracilis, vermiformis, acutus, rubens, extra spatham inclinatus.* Lam. loc. cit. (ex gall. vers.)

Native of Italy; and said to have been cultivated here in 1570; though we had never met with a plant of it till last summer, when an imported one, from Italy, flowered in the greenhouse of Mr. Griffin at South Lambeth, where the drawing was made.

The species has been inserted in some of the Floras of France, as native of that country; but in the sixth Volume or Supplement of the Flore Françoise by M. de Candolle, we are told it is not a plant of that country, and has been enumerated as such through mistake.

The ARUM, generally adduced for this species from the "Flora Orientalis" (a work compiled by Gronovius from the Herbarium collected in the Levant by Rauwolf) is very different from *tenuifolium,* and belongs to ARUM *gramineum* of Dr. Russell's Natural History of Aleppo, as is proved by samples preserved in the Banksian Herbarium. In that the spathe is far broader and shorter, the spadix upright and

clavate (not inclined and tapered), the leaves much narrower, and not produced after the flower has faded, but in perfection at the same time with it; and is on this account we believe different also from the ARUM *gramineum* of Lamarck's Encyclopédie.

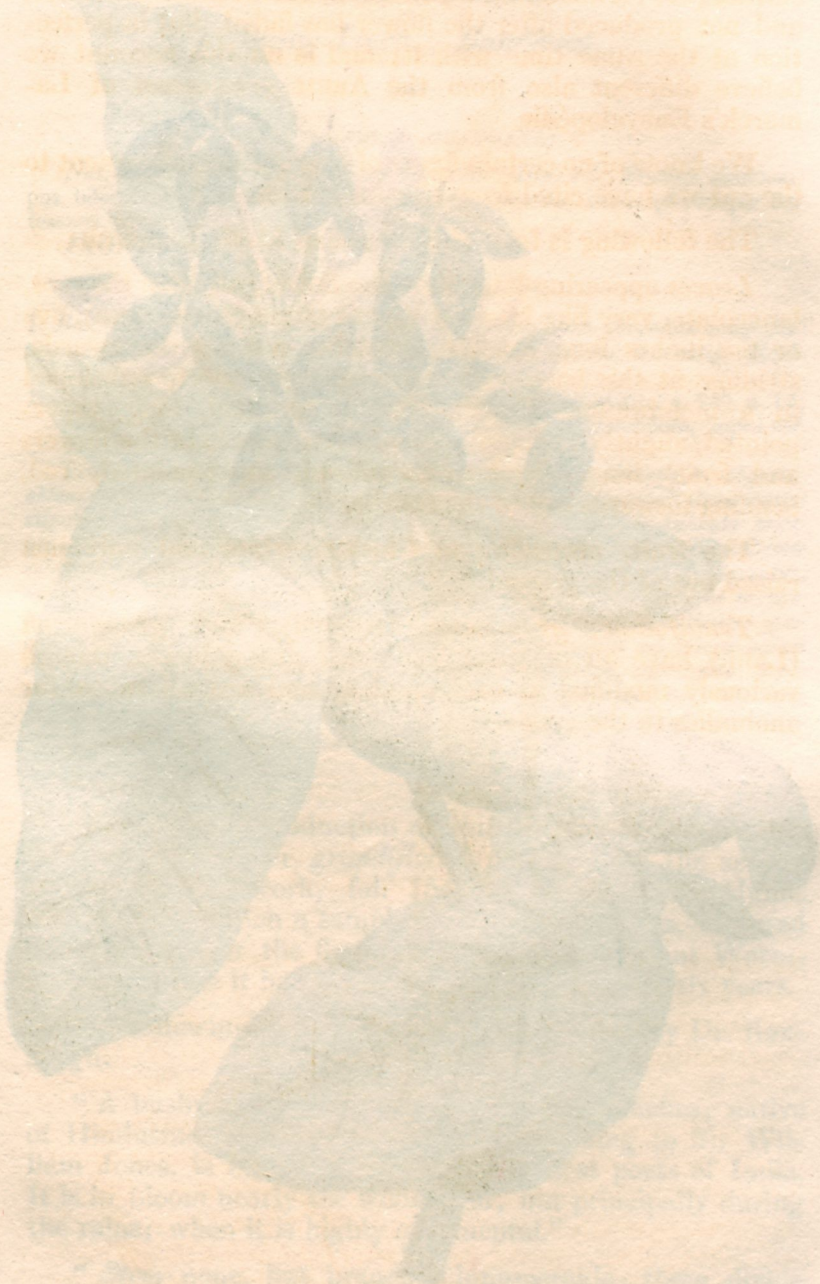
We know of no certain figure of *tenuifolium* subsequent to the cut we have cited from Clusius's work.

The following is from the French of M. de Lamarck:

Leaves appearing later than the flower, all upon the root, lanceolate, very like those of Viper's Grass (Scorzonera), five or ten inches long, smooth, tapering a little downwards, striding at the base. *Stem* exceedingly short, enveloped in a membranous sheath. *Spathe* terminal, long, taper-pointed, slightly recurved. *Spadix* (receptacle of the flowers and fruit) long, slender, vermiform, taper-pointed, red, bending forwards out of the spathe.

The fruit, according to Clusius, white and only just raised out of the ground.

Tenuifolium, *gramineum* (Russell), and *gramineum* (Lam.) have all of them undivided grassy leaves, though variously modified in each species, and are all in so far anomalies in the genus.



M. Hart. del. Pub. by J. Ridgway 170 Piccadilly Jan. 1. 1821. J. Watts. sc.

IXORA Bandhuca.

Bushy Ixora. Bandhuca.

TETRANDRIA *MONOGYNIA.*

Nat. ord. RUBIACEÆ. *Jussieu gen.* 196. *Div. VI.* Fructus monocarpus bilocularis dispermus. Stam. 4. Folia opposita, caulis plerùmque frutescens.

IXORA. Suprà vol. 2. *fol.* 100.

I. *Bandhuca*, fruticosa; foliis ovalibus amplexicaulibus corymbis congestis: corollæ laciniis ovatis obtusis, baccis calyce patente coronatis. *Roxb. flor. ind.* 1, 386; *(ex angl.)*.

Bandhuca. *(Sir William Jones in) asiat. res. (Calcutta edit.)* 4. 250. *n.* 13; *(excluso synonymo* IXORÆ coccineæ *Linn. quæ est* grandiflora, *suprà vol.* 2. *fol.* 154.*)*

Frutex *dumosus, ramis numerosis flexuosis.* Fol. *oblonga v. obovato-oblonga, obtusa acumine brevi nervis lateralibus horizontali-divaricatis:* stipulæ *utrinque bracteæque subulato-cuspidatæ cum apiculo rubente lanuginoso;* bracteæ *summæ angustiores calyci subtensæ triploque breviores.* Cymæ *subfoliosæ confertæ subdivisæ, pedicellis unifloris brevissimis.* Cal. *parvulus, ovatus, obsoletè lanuginosus,* limbus *erectus tubo subarctior triploque brevior segmentis ovato-acuminatis coloratis.* Cor. *extùs lanugine minutissimâ opacata,* limbus *plus duplo brevior tubo,* lac. *ovatis obtusulis ad latera baseos deflexis brevèque unguiculatas simulantibus.* Fil. *colorata, subrobusta,* 3*-plo ultràve breviora* antheris *flavis lanceolatis mucronatis atque basi utrinque glandulâ obtusâ productis.* Stigma *exsertum, oblongum, bilobo-partitum.* (Bacca *calyce patenti-persistente coronata.)*

We owe the introduction of this fine species, as well as that of its congener *grandiflora* (published in the second Volume of this work, fol. 154), to Sir Abraham Hume. The plant, of which a sample was imparted to us, flowered this summer (for the first time) in the hothouse at Wormleybury, where it had been cultivated for at least six years.

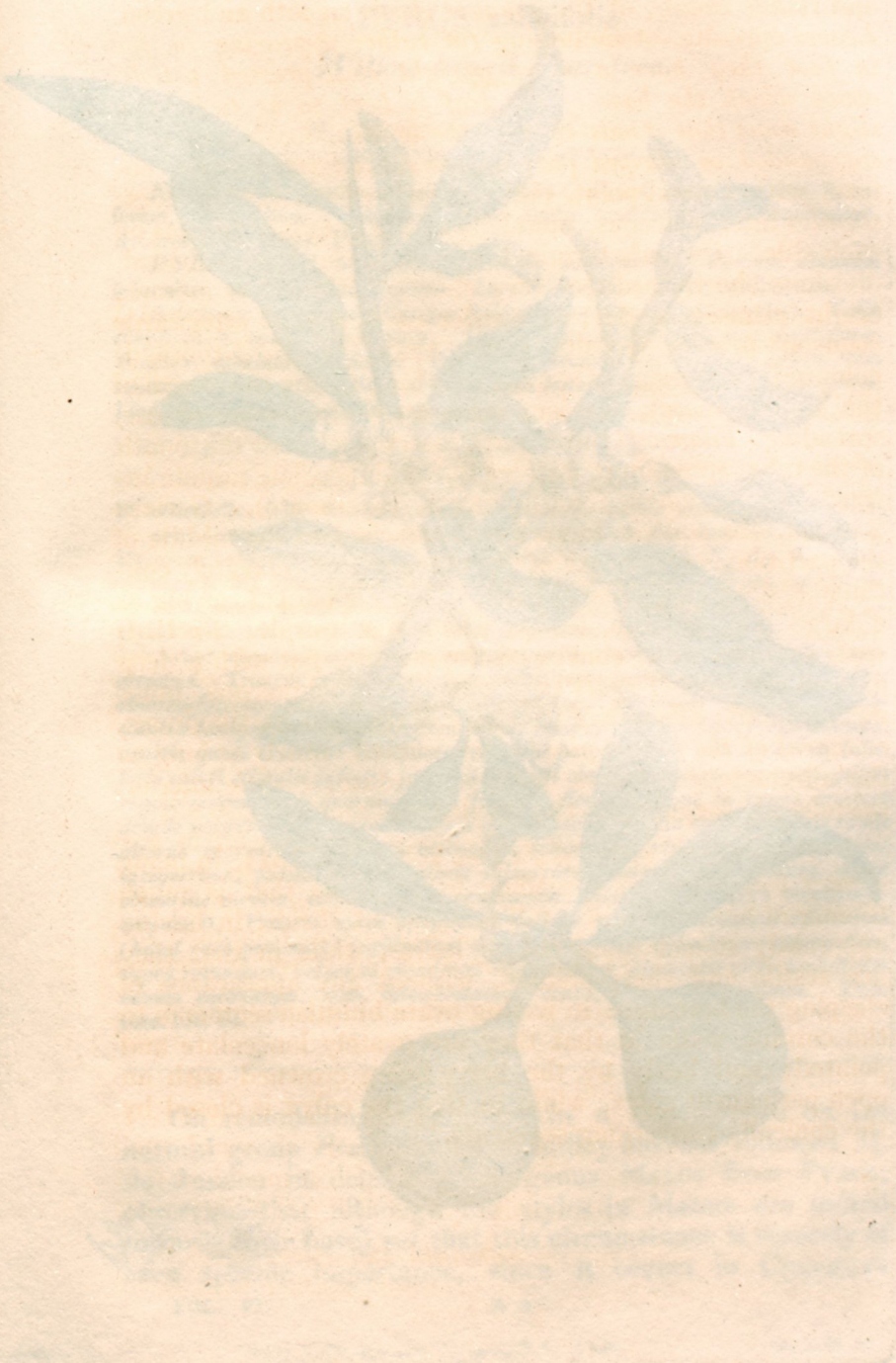
The following is the account of the species by Dr. Roxburgh.

"A bushy shrub, uncommonly full of branches; native of Hindustan, the flower of which, according to Sir William Jones, is often alluded to by the best poets of India. It is in bloom nearly the whole year, but principally during the rains; when it is highly ornamental."

"*Stem* none, but branches innumerable; these divide much and feather down to the ground, forming a large

hemispherical bush: *bark* of the *older branches* dark brown and rather rough, of the *younger shoots* smooth and green. *Leaves* opposite, stemclasping *(or rather appearing so, for in fact they have a short upright close-pressed petiole, above which the base of the leaf is bent so as to form a slight sinus that stands close to the branch, looking as if it surrounded or clasped part of one side of it)*, oblong, obtuse, with a small point, entire, firm, smooth on both sides: *stipules* interfoliaceous, annular, with a subulate process on each side. *Corymbs* terminal, crowded, repeatedly divided, divisions short, (pedicles very short). *Flowers* numerous, bright crimson-scarlet; or scarlet at first and afterwards crimson: *bractes* opposite, conic, acute. *Calyx* 4-toothed, coloured, permanent. *Corolla: tube* long (twice the length of the limb or more), slender; *segments* ovate, rather obtuse, spreading. *Filaments* short (red), inserted without the mouth of the tube, spreading: *anthers* linear (lanceolate adnate inwards, thrice longer than filaments, mucronate). *Germen* 2-celled, one *ovulum* in each cell attached to the middle of the partition: *style* length of the tube; *stigma* (clavately continuous, deep red, oblong) bifid. *Berry* spherical, as big as a large pea, smooth, fleshy, when ripe purple, 2-celled: *seeds* solitary, oval, convex on the outside, flat with a deep dint on the inside; *coats* two, outer nucamentaceous, inner membranous; *albumen* of the shape of the seed, cartilaginous, *rudiment of the future plant* erect, curved, nearly as long as the albumen: *cotyledons* uniform, cordate; *radicle* inferior, cylindrical, longer than the cotyledons."

" Differs from *grandiflora* (see vol. 1. fol. 154), in being a very full-branched spreading bush; while that is much thinner of branches and a tall arborescent shrub; in having apparently stemclasping obtuse leaves, while in that they are sessile and sharp-pointed, without any appearance of clasping the branches; in having ovate bluntish segments to the corolla, while in that they are ovately lanceolate and pointed; and lastly by the berry being crowned with an open permanent calyx, while in that the calyx is closed by the conically converging segments."



M. Hart. del. Pub by J. Ridgway 170 Piccadilly Feb.1.1821. J. Watts sc.

PYRUS salicifolia.

Willow-leaved Pear-tree.

ICOSANDRIA *PENTAGYNIA.*

Nat. ord. ROSACEÆ. *Jussieu gen.* 334. *Div. I.* Germen simplex, inferum, polystylum. Pomum calycino limbo umbilicatum, multiloculare. *Arbores aut frutices.* POMACEÆ.

PYRUS. Cal. 5-dentatus. *Petala* subrotunda. *Pomum* clausum 5-loculare, putamine cartilagineo. *Loculi* dispermi, *Testa* cartilaginea.

Arbores *v.* arbusculæ *(Europæ Asiæ et Americæ septentrionalis).* Folia *simplicia v. composita serrata.* Cymæ *patentes, terminales, multifloræ.* Bracteæ *subulatæ, deciduæ.* Petala *subrotunda, patentia, v. erecta, tum concava, conniventia.* Styli *glabri v. basi lanati, liberi v. partim coherentes.* Lindley pomac. in trans. linn. soc. 13. 97.

Div. I. Folia simplicia.

P. *salicifolia*, foliis lineari-lanceolatis utrinque acutis subcrenulatis pubescenti-canis, floribus corymbosis. *Marsch. à bieb. flor. taur. cauc.* 1. 390.

Pyrus salicifolia. *Linn. suppl.* 255. *Pall. it.* 3. 734. *t.* N. *fig.* 3. *Pall. ross.* 1. 20. *t.* 9. *Hort. Kew.* 2. 176. *ed.* 2. 3. 210. *Willd. sp. pl.* 2. 1020. *enum.* 1. 527.

Pyrus sylvestris orientalis, folio oblongo incano. *Tournef. cor.* 43.

Arbor *dumosa, orgyalis v. sesquiorgyalis, ramosissima, è radice succrescens.* Truncus *rarò diametro sesquipollicari crassior,* cortice *tenui extùs cinereo-fuscescente subfissili,* ligno *albo uniformi durissimo osseæ instar substantiæ lævigando.* Rami extremi *rigidi recti epidermide lævi fusco-testacea, canitie quasi obducta:* antiquiores *ramulis patentissimis spinescentibus foliiferis veluti stimulis infesti;* juniores *alternis obsiti turionibus seu apophysibus rugoso-verrucosis è quorum apice folia et flores, quæque in ramos crescere deinde pergunt.* Fol. *circa turiones quasi fasciculata, in spinescentibus ramis alterna sparsa, in petiolum attenuata, lanceolata, rigidiuscula, plerùmque integerrima, passim versus apicem subserrata, tomento lævi obducta, suprà obscuriùs viridia, subtùs glauco-canescentia, simillima* SALICIS incubaceæ. Stipulæ 0. Pomum *apice apophyseos foliosæ sessilis, plerùmque solitarium (haud rarò geminum) turbinatum subvillosum, basi cylindraceo-attenuatum, suprà rotundum, calyce et staminum rigescentium filamentis circa umbilicum cavum coronatum;* sem. *luteo-testacea, ovata, acuta, hinc plana.* Pall. ross. loc. cit.

On remodelling the genera in a late treatise on the natural group *Pomaceæ*, Mr. Lindley has not followed M. de Jussieu in detaching the genus MALUS from PYRUS; observing that although the styles in MALUS are united towards their base, yet that this circumstance is scarcely of even specific importance, since it occurs in CRATÆGUS

Oxyacantha, which has commonly separate styles, and is variable in Chænomeles and Amelanchier *Botryapium*.

The Willow-leaved Pear was introduced by Chevalier Pallas in 1780; and does well with us in the open ground. It has been observed wild in Persia, in Iberia, in the vicinity of Tifflis, on the plains of Mount Caucasus, in Siberia, on the banks of the Terek, and in the Levant. We have no figure of it in any of our popular publications.

The fruit shown in our plate is of the full size; though it finally turns brown. The flesh is thin, granulated, and of a stony hardness. The tree is bushy and grows to the height of from six to twelve feet, with a stem that seldom exceeds two inches in diameter, the wood of which is exceedingly hard, white, and close-grained, being said to polish nearly as well as ivory. The flowers grow many together in a corymb; but scarcely ever more than two, and generally only one, in each corymb, produce fruit even on the native tree.

The author of the Flora Taurico-caucasica distinguishes the species of this article from P. *elæagrifolia* of the same regions, by the narrower slightly undulated leaves with a thinner silvery fur, and by the same being sometimes glandularly, though faintly, crenate, as well as by a style longer than the stamens.

The following is our english version of Mr. Lindley's restricted character of the genus: " *Calyx* 5-toothed. *Petals* nearly round. *Fruit (Pome)* closed at the top, 5-celled, with a cartilaginous shell or cell-case *(putamen)*. *Cells* 2-seeded. *Seedcoat* cartilaginous."

The genus is arranged under three divisions, and is composed at present of 24 certain and 3 doubtful species, to which, Mr. Lindley says, several undescribed ones from India, in the Banksian and Lambertian Herbariums, are to be added, as well as one from Mexico in Mr. Lambert's possession.

Pyrus, under this limitation, does not appear to have any recorded representative of the type, either in South America or in South Africa.

Syd.ᵗ Edwards Del. Pub.ᵈ by J. Ridgway 170 Piccadilly Feb.ʳ 1. 1791.

CORRÆA alba.

White Correa, or Botany-Bay Tea-tree.

OCTANDRIA *MONOGYNIA.*

Nat. ord. DIOSMEÆ. *Brown in append. to Flind. voy.* 2. 545.
CORRÆA. Suprà vol. 1. *fol.* 3.

C. *alba,* foliis ovato-rotundatis in petiolum attenuatis; floribus solitariis pluribusve in cymam; corolla turbinato-reflexa: petalis discretis, margine inflexis.

Corræa alba. *Andrews's reposit.* 18. *Ventenat malm.* 13. *Desfont. in ann. du mus.* 2. 32. *Willd. sp. pl.* 2. 324. *Hort. Kew. ed.* 2. 2. 349.

Corræa cotinifolia. *Parad. lond.* 100.

(β) color intensiùs rubigineus; folia minora; flores solitarii v. gemini.

Corræa rufa. *Labillardière voy. à la réch. de la Pérouse.* 2. *app.* 120. *Ventenat loc. cit. Persoon syn.* 1. 419.

Mazeutoxeron rufum. *Labillardière loc. cit.* 2. 11. *t.* 17.

Frutex *dumosus, erectus, pube compositâ, rufescente;* rami *parùm divergentes.* Folia *subuncialia, coriacea, patentia;* juniora *rubigineo-pubentia;* seniora *prolapsis villis suprà glanduloso-puncticulata comparentia, obscurè venosa, fusco-virentia, subtùs tomentoso-candicantia,* petioli 2-3-*lineares.* Pedunculi *petiolis breviores, nunc bi-trichotomi,* 3-5-*flori;* pedicelli *breves sæpiùs juxta florem bibracteati.* Cal. *cupulatus, repando-dentatus, brevis.* Cor. *semunciam exsuperans, albida, extùs tomentosa, intùs glabrata, rugosa, erubescens;* pet. *soluta, ligulato-oblonga, acuta, canaliculata.* Stam. *erecto-patentia, corollam æquantia, alternè subbreviora:* fil. *è basi subclavatâ sulcatâ setacea:* anth. *incumbentes, antè anthesin sanguineæ.* Germ. *hirsutum sulcis octonis impressum:* stylus *setaceus:* stig. *obsoletè* 4. Flores *inodori, fundo nectarifero.*

The whole shrub, except the bloom, has a dusky appearance, and when drawn through the hand diffuses a refreshing fragrance, resembling that of the Myrtle in bloom. It belongs to New South Wales, where the leaves have been often used by the colonists as a substitute for Tea; and Mr. Brown tells us, that he has prepared it so as to have been drank by some of his European guests for good Chinese Tea. The art is to adapt the infusion so as to prevent too great a degree of bitter. In this country it varies much in the size of the leaf, which we have seen from half an inch to one and a half long, and more than one broad. We have sometimes perceived on these what appeared to us an oily secretion, seemingly exsuded from

minute glands on their upper surface. The compound hairs are far less conspicuous than in *virens*, and shorter.

The Banksian Herbarium contains spontaneous specimens of the present plant; as well as of *rufa* of Labillardière from Van Diemen's Land, which we have subjoined as a variety or subspecies; not being able to discover any other marks of distinction than those we have stated in distinguishing the variety β.

This species was introduced by Sir Joseph Banks in 1793; and has become very common in our greenhouses; being of easy culture, and quickly multiplied by cuttings. It blossoms in autumn and winter.

The drawing was made in the Botanical Garden of Comtesse de Vandes at Bayswater, three or four years ago.

M. Hart. del. Pub.d by J. Ridgway 170 Piccadilly Feb.y 1. 1821. F. Watts sc.

STRELITZIA parvifolia; β. *juncea*.

Rush-leaved Strelitzia.

PENTANDRIA *MONOGYNIA*.

Nat. ord. MUSÆ (MUSACEÆ). *Jussieu gen.* 61.

STRELITZIA. Spatha universalis terminalis, monophylla, canaliculata, acuminata, patenti-declinans, basin florum involvens. *Partiales* lanceolatæ, floribus breviores. *Perianthium* nullum. *Cor.* irregularis: *pet.* 3, lanceolata, acuta: *inferius* naviculare; *superiora* obtusè carinata. *Nectarium* triphyllum. *Foliola* 2 *inferiora* petalis paulò breviora, è latâ basi subulata, margine undulata, complicata, includentia genitalia, versùs apicem posticè aucta appendice crasso, formâ dimidiæ sagittæ. *Foliolum inferius* breve, ovatum, compressum, carinatum. *Fil.* 5, filiformia, receptaculo insidentia: 3 altero foliolo nectarii, 2 cum stylo altero foliolo inclusa. *Anth.* lineares, erectæ, filamentis ferè longiores, inclusæ. *Germ.* inferum, oblongum, obtusè 3-gonum. *Stylus* filiformis, longitudine staminum: *stig.* 3, subulata, petalis altiora, erecta, initio florescentiæ conglutinata. *Caps.* subcoriacea, oblonga, obtusa, obsoletè trigona, 3-locularis, 3-valvis: *sem.* numerosa, conceptaculo centrali duplici ordine adhærentia. *Solander in schreb. gen. pl.* 2. 796.

S. *parvifolia*, scapo longitudine petioli vicesies longioris folio lineari-lanceolato. *Dryander in Hort. Kew. ed.* 2. 2. 56.
Strelitzia Reginæ; γ. *parvifolia. Smith in Rees's cyclop. in loco.*
(β) *juncea*; petiolis sæpiùs aphyllis.

In the last edition of the Hortus Kewensis we find six species of this splendid genus, characterized by the late excellent Mr. Dryander with his usual ingenuity and precision. They are all natives of the Cape of Good Hope.

Our plant will appear at once to differ from *parvifolia*, by the footstalks being without any leaf at all; yet they are said to be now and then furnished with one like that of *parvifolia*, even while cultivated in the collections of this country; where however the plant is very rare and scarcely ever seen in blossom. We have not separated it from *parvifolia*, not being aware of any difference beyond what we have stated.

The drawing was made in Sir Abraham Hume's hothouse at Wormleybury, in September last. The footstalks, we understand, were about three feet high, all without any leaf; the flower-stalk shorter than these.

The plant seems to be included by Sir James Smith, with *ovata*, *angustifolia*, and *parvifolia*, in *Reginæ;* of which species he speaks as follows, in the place we have cited in the synonymy;

" Sir Joseph Banks, for nearly 50 years indefatigable in enriching the gardens of this country, is recorded as having introduced this superb flower in 1773. Its habit resembles a MUSA or CANNA, except in the want of a *stem*. The *leaves* are smooth, rigid, and coriaceous, erect, on long, straight, stout nearly cylindrical, smooth, radical *footstalks*, sheathing at the base. The form of the *leaf* itself is usualy ovate, acute, entire; wavy or crisped at the base, especially on one side; furnished with a long midrib, which sends off several simple, oblique, parallel, transverse veins. *Sheaths* one or two, at the top of the cylindrical simple *flower-stalk*, nearly horizontal, thick and rigid, purplish and thin at the edges, acute, 4 or 5 inches long, each containing many *flowers*, which expand in succession. The orange-coloured petals, 3 or 4 inches long, are strikingly contrasted with the blueish purple *nectary*, both together composing one of the most brilliantly coloured flowers in nature."

" We presume to think that S. *ovata* of *Hort. Kew.* does not deserve to be marked even as a variety, nor do the figures quoted answer to the character. The *angustifolia*, recorded as having been cultivated by the Marquis of Rockingham in 1778, we can aver to be a mere variety of *Reginæ*. If we mistake not, it was given to the Marquis by Mr. Bamber Gascoyne. Of this we are certain, that offsets of the original root, in the stoves of the late Marchioness, where for many successive years we have observed them, gradually diminishing in the size and breadth of their leaves, became first S. *angustifolia*, and then *parvifolia*, of *Hort. Kew.* Similar varieties may indeed have been fresh imported from the Cape, but this does not prove their specific difference. In some specimens the leaf dwindles to a point." *Smith loc. cit.*

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MUSSÆNDA frondosa.

Burmann's Mussænda.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RUBIACEÆ. *Jussieu gen.* 196. *Div. IV.* Fructus monocarpus bilocularis polyspermus. Stam. 5. Fol. opposita, caulis sæpè frutescens.

MUSSÆNDA. Cal. 5-fidus laciniis linearibus. *Cor.* infundibuliformis, tubo longo vix suprà dilatato, limbo plano 5-partito. *Anth.* oblongæ intra tubum subsessiles, non exsertæ. *Caps.* ovata membranacea, apice nuda aut coronata, 2-locularis polysperma, receptaculo seminifero elevato loculos bipartiente; *sem.* ideo quadrifariàm disposita, numerosa minutissima. *Frutices plerique hirsuti: flores sæpè corymbosi, terminales, bracteati; corolla sæpè extùs hirsuta. Hic sola sistenda* MUSSÆNDA frondosa Lin. *cujus insuper lacinia una calycina persistens cæteris deciduis, producta in folium amplum petiolatum caulinis conforme sed discolor et* 5-7-*nerve.* Juss. loc. cit. 200.

M. *frondosa*, ramis foliisque villosis, tubo corollæ paulò longiore laciniis calycinis. *Dryander in MSS. biblioth. banks.*

Mussænda frondosa. *Linn. sp. pl. ed.* 2. 1. 251. *Vahl symb.* 3. 37. *Willd. sp. pl.* 1. 997. *Roxburgh MSS.*

Mussænda pubescens. *Curtis's magaz.* 2099; *(non Dryandri Hort. Kew.)*

Mussænda zeylanica, flore rubro, fructû oblongo, folio ex florum thyrso prodeunte albo. *Burm. zeyl.* 165. *t.* 76.

Frutex *altiusculus, villosissimus, ramis teretibus erectis canis remotè foliosis.* Fol. *opposita, ovali-lanceolata acuminata, infrà densiùs villosa;* petiolo *brevi hirsuto,* stipulâ *herbaceâ erectâ hirsutâ utrinque stipato.* Cymæ *terminales, subtrichotomæ, foliolorum pare subtensæ:* pedunculi *vix longiores petiolis, teretes, villosi, pluriflori;* pedicelli *robusti brevissimi v. subnulli uniflori:* bracteæ *stipulis similes, calyci appressæ.* Germ. *subrotundum hirsutum, disco glanduloso glabro umbilicato coronatum.* Cal. *marginis germinis continuus, campanulato-patens;* foliola *herbacea distincto-distantia, subulata hirsuta, vix duplo breviora tubo corollæ, decidua, præter unum in flore uno cymularum aliquarum primariarum cujusque cymæ in folium candidum petiolatum subviridi-nervosum villosum formâ aliorum foliorum at majus et nervis* 3-5 *præditum procrescens.* Cor. *flava erecta extùs villosa;* faux *paulò amplior* tubo, *intùs albo-barbata;* limbi laciniæ *convexissimæ.* Antheræ *lineares, fauce demersæ.*

Upon referring to Hermann's Herbarium, the source of MUSSÆNDA *frondosa*, the samples representing it will be found to belong in reality to two species, the present, and that which has been proposed by Mr. Dryander in the last edition of the Hortus Kewensis, under the name of *pubescens*, differing from the one before us in many essential points, and remarkably in having the tube of the corolla

several times longer than the calyx, while in the plant before us the corresponding part is little more than one third longer than the calycine leaflets.

We have omitted the standing synonyms from the works of Van Rheede and Rumphius; the *Belilla* of the former from want of likeness in the figure to our plant, as well as from want of agreement with the description in the text; and the *Folium Principissæ* of the latter, because it appears to be the MUSSÆNDA *glabra* of Vahl (probably the same with *corymbosa* of Roxburgh MSS.). Burmann's plant we have no doubt belongs to the same species as the subject of this article.

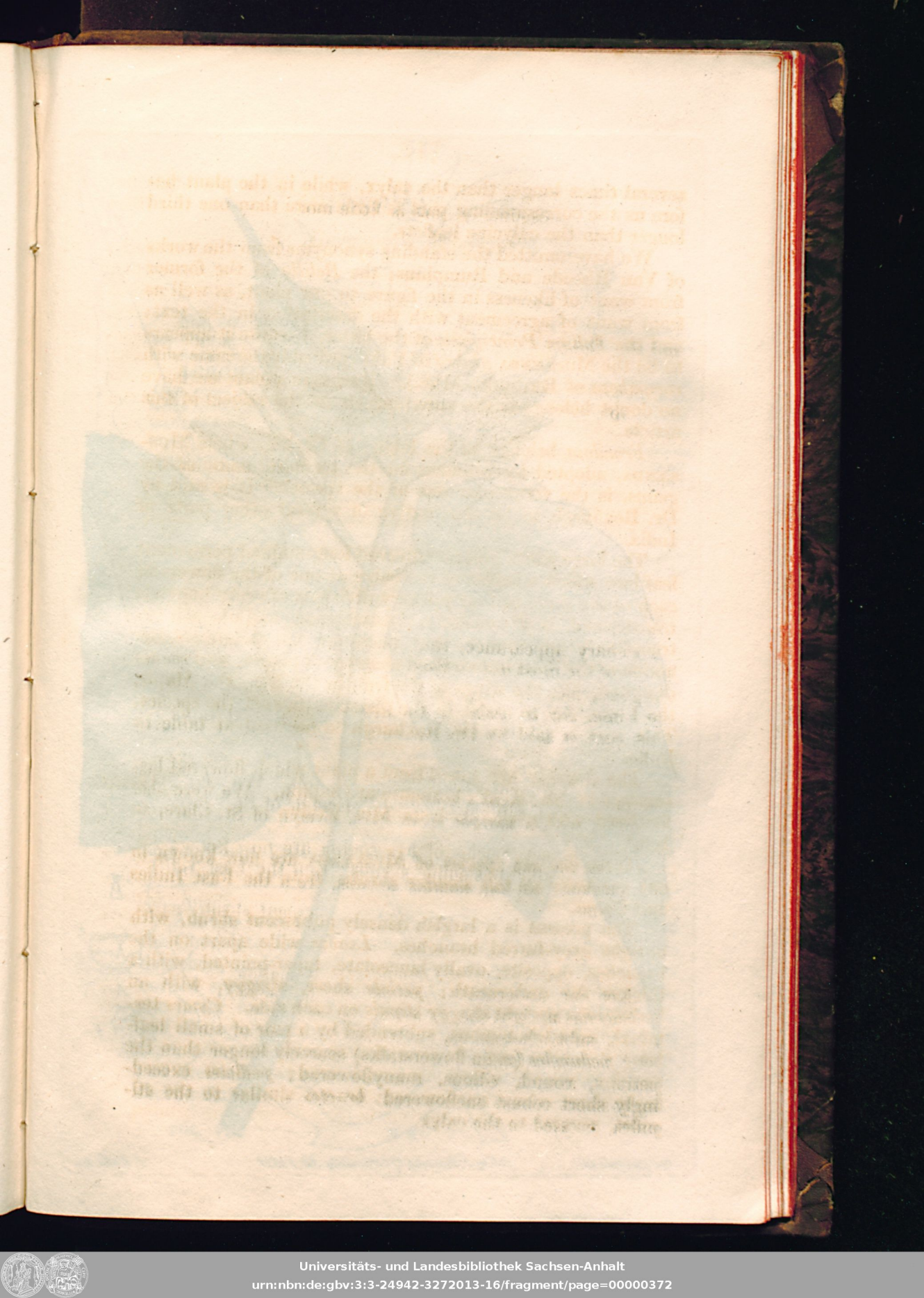
Frondosa belongs to the Island of Ceylon, where MUSSÆNDA, adopted by Linnæus for the technical name of the genus, is the vernacular one of the species. It is said by Dr. Roxburgh to be also native of several other parts of India.

The large white greenish-nerved long-stalked permanent leaf into which a leaflet of the calyx of one of the flowers in each of the three or four primary divisions of every bunch is transformed, is so unusual a circumstance, and of such extraordinary appearance, that it cannot fail to attract the notice of the most unpractised observer of plants, and seems designed, like the wings of the fruit in the Ash, the Maple, the Lime, &c. to assist in the dissemination of the species. This part is said by Dr. Roxburgh to be used at table in India.

The drawing was taken from a plant which flowered last summer in Mr. Kent's hothouse at Clapton. We were also favoured with a sample from Mrs. Evelyn of St. Clare, in Kent.

Three distinct species of MUSSÆNDA are now known in our gardens; all tall slender shrubs, from the East Indies and China.

The present is a largish densely pubescent shrub, with upright grey-furred branches. *Leaves* wide apart on the branches, opposite, ovally lanceolate, taper-pointed, with a thicker fur underneath; *petiole* short, shaggy, with an herbaceous upright shaggy *stipule* on each side. *Cymes* terminal, subtrichotomous, subtended by a pair of small leaflets: *peduncles* (main flowerstalks) scarcely longer than the petioles, round, villous, manyflowered; *pedicles* exceedingly short robust oneflowered: *bractes* similar to the stipules, pressed to the calyx.



Sydt. Edwards del. Pub. by J. Ridgway 170 Piccadilly Feb. 1. 1821. S. Watts sc.

ABROMA augusta.

Smooth-stalked Abroma.

POLYADELPHIA *DODECANDRIA.*

Nat. ord. MALVACEÆ. *Jussieu gen.* 271. *Div. V.* Stamina basi in urceolum sessilem connata, sterilia fertilibus intermixta, definita aut rariùs indefinita.

ABROMA. Cal. 5-partitus persistens. *Pet.* basi fornicata (nectarium *Linn. suppl.*) apice 10-fidum, laciniis 5 brevibus 3-fidis 3-antheriferis, 3-alternis sterilibus erectis linearibus apice recurvato-fornicatis. *Styli* 5 approximati; *stig.* 5. *Caps.* oblonga truncata mucronata, 5-alata, 5-locularis, suprà dehiscens, polysperma; *sem.* numerosa (nigra scabra ovato-globosa) *receptaculis* barbatis utrinque adhærentia, incompletè arillatâ. *Frutex, flores* (THEOBROMÆ) *axillares (rectiùs oppositifolii); fructus* HIBISCI. Juss. l. c. 276.

A. *augusta,* ramis tomentosis lævibus, foliis adultis subtùs pube simplicissimâ, capsulæ alis apice truncatis: angulo exteriore acutiusculo. *Brown in Hort. Kew. ed.* 2. 4. 409.
Abroma augusta. *Linn. suppl.* 341. *Willd. sp. pl.* 3. 1424.
Abroma augustum. *Salisb. parad. lond.* 102; *absque icone.*
Abroma Wheleri. *Retz. obs. bot.* 5. 27. *Willd. sp. pl.* 3. 1425.
Abroma fastuosum. *Jacq. hort. vindob.* 3. 3. *t.* 1; *(non aliorum).*
Ambroma angulata. *Lamarck encyc.* 1. 126.
Theobroma augusta. *Linn. syst. nat. ed.* 13. 233. *J. Miller illustr. cum tab.*
Gossipium demonis. *Rumph. amboin.* 4. *t.* 14; *(monente D. Roxburgh).*

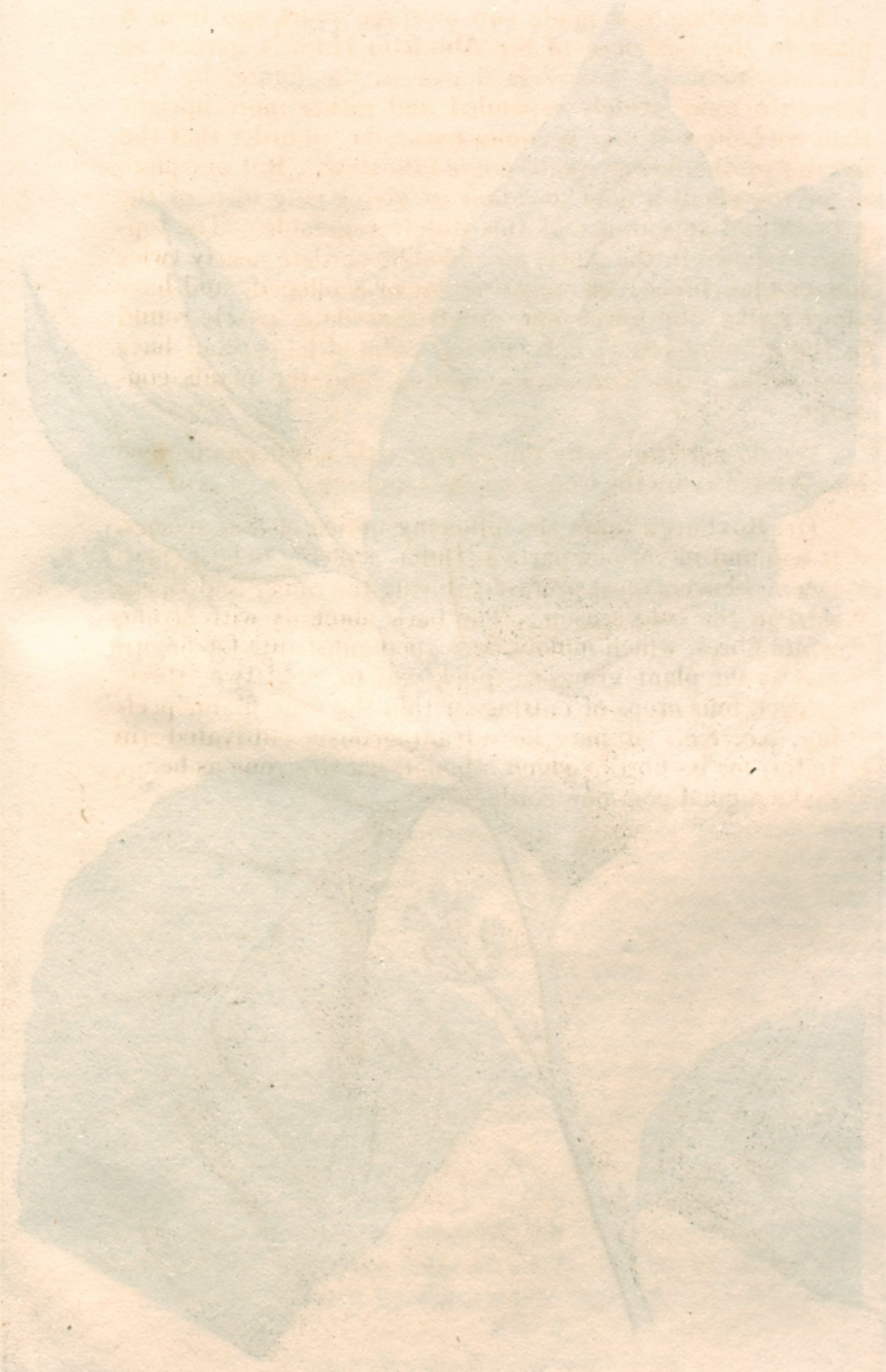
*(Arborescens, sub*12*pedalis):* caules *plures, lignosi, medullosi, erecti, cylindracei, supernè foliosi.* Fol. *alterna, magna, basi cordata, subpalmato-lobata, angulosa, remotè dentata, mollia, virentia, subtus pubescentia,* petiolis *longis;* inferiora *angulis* 5-7 *profundis nervisque totidem primariis,* superiora *minora angulis sæpiùs quinque supernis, ad basin bilobato-rotundata.* Paniculæ *breves ramulorum, superiorum in axillis positorum caulisque terminales,* floribus *brunneo-purpurascentibus:* bracteæ 2 *angustæ acuminatæ ad basin* pedunculi communis *panicularum, aliæ* 4 *involucrorum instar ad bases divisionum.* Lamarck loc. cit. (ex gallico versum.)

ABROMA was formerly included in the same genus with the Chocolate-Tree (THEOBROMA *Cacao);* but has been since detached, and we believe consists as yet of only two recorded species, the subject of this article and *fastuosum,* the latter found in New South Wales and the Moluccas, and distinguished by the long prickly stalks and elongated taper-pointed angles of the summit of the capsule; in *augustum* the stalks are smooth and the top-corners of the capsule short-pointed.

The drawing was made two or three years ago from a plant in the hothouse of Sir Abraham Hume's garden at Wormleybury. A flower is shown in the figure, by Mr. Edwards, more widely expanded and rather more upright than we believe it ever becomes naturally, in order that the interior of the flower might come into view. But our plate is far too small a field to admit of giving any idea of the growth and appearance of this stately vegetable. The top-leaves (shown in the plate) are oblongly cordate nearly twice longer than broad, scarcely angular or scolloped, and have short stalks, the lower ones oblately cordate, nearly round in the circumference, cut into 5-7 pointed lobes, and have long stalks. The corolla is nodding, and the petals converge.

We do not know why the generic title has been changed into AMBROMA by the Chevalier de Lamarck.

Dr. Roxburgh takes the following notice of this species. "It is found in various parts of India, growing to be a small "tree. Flowers most profusely during the rains, and ripens "seed in the cold season. The bark abounds with strong "white fibres, which make a very good substitute for hemp; "and as the plant grows so quickly as to yield two, three, "or even four crops of cuttings within the year fit for peel-"ing, &c. &c.; it may be advantageously cultivated (in "India) for its fibres, which, though not so strong as hemp, "make a good common cordage."



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HOMALIUM racemosum.

Bunch-flowered Homalium. Acomas.

POLYANDRIA *TRIGYNIA.*

Nat. ord. ROSACEÆ. *Jussieu gen.* 334. *Div. VIII.* Genera Rosaceis affinia.

HOMALINÆ. *Brown's botany of Congo.* 19.

HOMALIUM. Cal. basi turbinatus semisuperus, limbo patens 6-7-partitus, laciniis persistentibus. *Pet.* persistentia, 6-7, laciniis calycinis majora. *Glandulæ (nectaria* Jacq.) 6-7, unguibus laciniarum calycis insidentes. *Stam.* plurima (18-24) perigyna, 3 aut 4 congenita ex basi cujusque petali: *anth.* subrotundæ. *Germ.* semiinferum apice desinens in *stylos* 3-4; *stig.* 3-4, simplicia. *Caps.* semiinfera, limbo calycis petalisque patentissimis coriaceis cincta, 1-loc., apice 3-4-valvis aut non dehiscens, intùs polysperma; *sem.* pauca parietibus affixa. *Arbores aut frutices;* fol. *alterna stipulacea;* flores *spicato-paniculati axillares, divisuris paniculæ bracteolatis, pedicellis medio articulatis. An* Rhamnis *affinius; an embryo absque albumine?* Juss. l. c. 343.

H. *racemosum*, foliis serratis, racemis axillaribus terminalibusque, floribus pedunculatis. *Swartz prod.* 86.

Homalium racemosum. *Jacq. amer.* 170. *t.* 183; *fig.* 72. *Willd. sp. pl.* 2. 1225. *Richard in actes de la soc. d'hist. nat. de Paris* 112. *Swartz fl. ind. occid.* 2. 989.

Acomas à grappes (Homalium racemosum). *Lamarck encyc.* 1. 32.

Arbor 10-15 *pedalis, s. arbuscula, s. frutex:* rami *patuli, subdivisi, inermes, ramulis demùm tenuissimis rigidiusculis.* Fol. *petiolata,* 2 *pollic., oblonga, utrinque acuminata, obtusè serrata, nervosa, venosa, tenuiora, utrinque glabra:* pet^l. *breves glabri.* Racemi *axillares, rariùs terminales, solitarii, erecti, simplices,* 3-5-*pollic., multiflori;* flores *brevitèr pedicellati, alterni, approximati, albidi, magnitudine* HYPERICI perforati; pedic. 1-*flori.* Cal. *semisuperus, basi turbinatus,* 6-7-*partitus;* lac. *lineari-lanceolatis, patentibus, sesquilinearibus, villosiusculis.* Pet. 6-7, *fauci calycis inserta, laciniis calycinis alternantia et majora, ovato-oblonga, patentia, utrinque subtomentosa s. sericea, ex albido lutescentia:* glandulæ 6-7, *ad basin petalorum positæ, subglobosæ, villosiusculæ, albæ.* Fil. 18-21, *inter singulam glandulam tria omnia distincta, basi petalorum calycisque inserta, filiformia:* anth. *subrotundæ, sanguineæ.* Germ. *medio calyce cinctum, supra faucem in formam conicam elevatum, hirsutum:* styli 3, *filiformes, longitudine staminum, glabri;* stig. *simplicia.* Caps. *semiinfera, dura, ovato-acuminata,* 1-*loc., apice* 3-*valv., infernè* 3 *lineis elevatis villosis notata, polysperma:* sem. *aliquot, fusca, parietibus affixa. Numerus partium variat.* Swartz fl. ind. occ. l. c.

The species was observed by Dr. Swartz, growing in meadows and at the sides of rivers, in the northern part of Jamaica, where it becomes a tree from 10 to 15 feet high.

The drawing was made at Mr. Kent's at Clapton; a plant having flowered in that gentleman's hothouse in September last, and is probably the first ever introduced into this country.

The genus had been consigned by M. de Jussieu to a group appended, as a division of doubtful affinity, to his *Rosaceæ*. A further research into its structure, as well as that of some kindred genera, has suggested to Mr. Brown a different notion of their position in the vegetable system; and determined their combination into a separate order, to which HOMALIUM, as the main type, has communicated the technical denomination.

We regret to find ourselves obliged, from want of room, to refrain from extracting the whole of the instructive remarks that accompany the project and definition of this new order, and to confine ourselves to the passage which contains its character.

"The distinguishing characters (of the order *Homalinæ*) are the segments of the perianthium (calyx and corolla of Jacquin and Swartz) disposed in a double series or an equal number of segments nearly in the same series; the want of petals; the stamina being definite and opposite to the inner series of the perianthium, or to the alternate segments where they are disposed apparently in a simple series; the unilocular germen (generally in some degree coherent with the calyx) having three parietal placentæ (receptacles of the ovula), with 1, 2, or even an indefinite number of ovula; and the seeds having albumen, as inferred from a genus from Congo. The cohesion of the germen with the tube of the perianthium, though existing in various degrees in all the genera we have enumerated, is probably a character of only secondary importance in *Homalinæ*. For an unpublished genus found by Commerson in Madagascar, which in every respect agrees with this family, has germen superum. This genus at the same time seems to establish a considerable affinity between *Homalinæ* and certain genera, either absolutely belonging to *Passifloreæ*, especially PAROPSIA of M. du Petit Thouars, or nearly related to them, as ERYTHROSPERMUM well described and figured by the same excellent botanist." *Brown's botany of the Congo*. 19.

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SEDUM cæruleum.

Barbary Stonecrop.

DECANDRIA *PENTAGYNIA.*

Nat. ord. SEMPERVIVÆ. *Jussieu gen.* 307.
SEDUM. Suprà vol. 2. *fol.* 142.

Div. Teretifolia.

S. *cæruleum,* foliis oblongis alternis obtusis basi solutis, cymâ bifidâ glabrâ. *Vahl symb.* 2. 51.

Sedum cæruleum. *Willd. sp. pl.* 2. 766.

Sedum azureum. *Desfont. flor. atl.* 1. 362.

Sedum vermiculare pumilum glabrum, floribus parvis cæruleis. *Shaw specimen.* 46. *n.* 550. fig. 550.

Caulis *sæpè procumbens,* 3-4-*uncialis teres lineolis rubris interruptis crebris pictus, nunc ramosissimus ramis adscendentibus.* Flores *parvuli, violaceo-pallentes, numerosi, paniculato-racemosi;* racemi *ramulorum terminales, infernè subfoliosi,* pedicellis *alternis unifloris filiformibus patentissimis subæquantibus flores:* bracteolæ *caducæ, membranaceæ, rubræ, subulatæ, minutæ.* Fol. *teretiuscula, subspathulato-oblonga, obtusa, lineolis rubris punctata, suprà versùs basin concava v. canaliculato-depressa.* Cal. *crassus, cupulatus, virens, punctis linearibus rubris aspersus, duplo brevior corollâ,* 7-*fidus, persistens, segmentis obtusis.* Petala 7, *oblonga, obtusula, patentia, caduca, siccatione intensè cærulescens:* glandulæ *crystallinæ, minimæ, oblatæ, bilobo-emarginatæ, singula basi cujusque germinis inserta.* Pistilla 7, *æqualia corollæ;* germ. *oblonga incurvescentia, dorso planiuscula indè introrsùm in aciem attenuata, primò albo-micantia, indè herbaceo-virentia atque lineolis rubris punctata, infernè intùs glanduloso-muricata,* stylo *albo continuo setaceo-rostrata.* Stam. *corollæ æqualia, patentia;* fil. *setiformia, alba:* anth. *atro-violaceæ, oblato-subrotundæ, didymæ, à dorso infixæ.*

A diminutive species observed at different periods in the clefts of rocks on the Coast of Barbary by Messrs. Shaw, Vahl, and Desfontaines; perhaps the smallest in the genus, where it is remarkable for the pale violet-colour of the corolla, which turns, when dry, to a full bright blue.

It is not recorded in the Hortus Kewensis; and has been probably now first introduced by Mr. Kent, in whose collection at Clapton it flowered last summer in the greenhouse.

Stem sometimes lying along the ground, 3-4 inches long, round, smooth, in some cases very much branched, dotted with shortly broken thickset tile-red lines. *Flowers* numerous, small, paniculately racemose, *racemes* termi-

nating the branchlets, sometimes partially leaved at the lower part, *pedicles* alternate, oneflowered, filiform, outspread, about equal to their flower: *bractes* membranous, minute, red, subulate, caducous and seldom found on the plant. *Leaves* subcylindrical, subspatulately oblong, obtuse, marked with red linear dots, hollowed or channelled on the inside near the base. *Calyx* cupular, 7-cleft, green with red linear dots, twice shorter than the corolla, persistent, segments obtuse. *Petals* 7, oblong, bluntish, spreading, caducous: *glandule* crystalline, very small, oblate, indented at the top with a deepish sinus, one at the base of every germen. *Pistils* 7, even with the corolla. *Germens* 7, slightly inbowed, broad and flattish at the back, tapering inwards to an edge, at first white and glittering, at last of the substance and colour of the foliage, glandularly muricated at the base on the inside, beaked at the top by the white continuous *style*. *Stamens* 14, even with the corolla spreading; *filaments* setaceous, white; *anthers* dark-purple, twin, roundish.

NOTES.

Prunus *japonica*. *Vol.* 1. *fol.* 27.

It is asserted, in a late fasciculus of Curtis's Botanical Magazine (fol. 2176), that the plant of the above article is the undoubted AMYGDALUS *pumila* of Linnæus, and the stone of its fruit of the nature of that ascribed to AMYGDALUS as distinguished from PRUNUS, while it is suggested that our plant may not even belong to the species we have given it for.

In regard to the nature of the fruit-stone, we have only to observe that we found it decidedly of the kind proposed as the distinguishing characteristic of PRUNUS, being granularly roughened, but neither pitted, punctured, nor scored as in AMYGDALUS. This state of the stone was also observed by Mr. Lindley. The fruit has moreover the long pliant stalk of PRUNUS, not the short rigid one of AMYGDALUS.

If our plant is to be the AMYGDALUS *pumila* of Linnæus, it must be so in defiance of an important character attributed to that species in the description of it; namely, "a sessile flower," since in our plant the flower has a stalk sometimes little less than an inch in length, and always longer than the flower itself. Linnæus has also drawn a character for that species from the "petals being longer than the tube of the calyx;" but in our plant there exists no proportion between those parts which can suggest such point of comparison. It is true that a figure is cited by Linnæus from Plukenet for a synonym, where the flowers are really stalked, and which figure probably represents a variety of our plant. This we believe is the only circumstance that ever suggested the idea of the plant being the Linnean AMYGDALUS *pumila*. But then a species from Hermann is also cited as a correlative synonym; and his figure represents a plant with sessile flowers, and his description tells us, that the fruit is downy and like a small peach, while that of our plant is smooth and like a small plum or sloe. It is also true that a sample of our plant is to be found in the Banksian Herbarium inscribed AMYGDALUS *pumila*; but then it is not one of those which are marked as having been determined by collation with the Linnean Herbarium, and can only speak the opinion of the person who inscribed the name. If actually there, at the time the two Herbariums were collated, the want of that mark would indeed go to prove that the identity of the two was not satisfactory even to the person who put the title on the sample. We lay little stress upon the plants of Linnæus, Plukenet, and Hermann, being considered as African, though our plant is known to be Chinese, as that is a circumstance very liable to mistake.

It is possible that our plant may be the PRUNUS *sinensis* of Persoon; because it is a true PRUNUS and from China; but that author could have no other foundation for believing it the AMYGDALUS *pumila*, than Plukenet's figure.

As to the objection to our plant being the PRUNUS *japonica*, because Thunberg has described the leaves of that species as "smooth" *(glabra)*, while in our plant they are wrinkled *(rugosa)*; we shall only remark that the term used is "*utrinque glabra*," and that in leaves of this nature it is evident the epithet *glabra* so qualified can only apply to pubescence; and the leaves of our plant have none.

Upon the whole however it appears to us that the following synonyms may be added to the above article, although, excepting that from Hortus Kewensis, they are very questionable.

Prunus sinensis. *Persoon syn.* 2. 36? *(vix tamen quoad synonyma).*

Amygdalus pumila. *Hort. Kew. ed.* 2. 3. 195; *(fide Herb. Banks.)*; *vix tamen Linnæi?*

Amygdalo-Persica nana, flore carneo pleno, africana. *Pluk. phyt. t.* 11. *fig.* 4?

Our plant was certainly imported by the late Mr. Charles Greville from China.

Rosa *provincialis; β. (muscosa fl. simpl.)* *Vol.* 1. *fol.* 53.

This species is very reasonably supposed to be the ROSA *centifolia* of Linnæus by Mr. Lindley in a Monograph of the Roses; to which we shall refer.

Ixora *blanda.* *Vol.* 2. *fol.* 100.

In the first published volume of Roxburgh's Flora Indica, the species stands under the title IXORA *alba:* with the observation that it is a Chinese plant, and possibly a mere variety of IXORA *stricta* (the IXORA *coccinea* of Hortus Kewensis, but not of Linnæus, which is the IXORA *grandiflora, vol.* 2. *fol.* 152, *of this Register).*

Ixora alba. *Roxb. fl. ind.* 1. 389. *(non aliorum.)*

Rosa *provincialis; β. (muscosa fl. albo).* *Vol.* 2. *fol.* 102.

The last observation but one applies equally to the subject of this article.

Hedychium *angustifolium.* *Vol.* 2. *fol.* 157.

The synonym of HEDYCHIUM *coccineum*, a Nepaul plant, belongs, we understand, to a species distinct from *angustifolium*, and should be expunged from the above article.

Astragalus *caryocarpus.* *Vol.* 2. *fol.* 176.

Since the above article was published, this species has appeared as follows.

Astragalus carnosus. *Nuttall gen.* 2. 100; *(non tamen Pursh amer. sept.* 2. 740).

It is said to grow on the plains of the Missouri, from the confluence of the river Platte to the mountains; and that the pods are about the size of ordinary plums, and have a considerable resemblance, as to form, with those of ASTRAGALUS *physodes.* The plant described for it by Mr. Pursh was a species of SOPHORA, to which he has, by mistake, applied the fruit of ASTRAGALUS *caryocarpus.*

Jasminum *revolutum.* *Vol.* 3. *fol.* 178.

The following synonym has appeared since the publication of the above article.

Jasminum chrysanthemum. *Roxb. flor. ind.* 1. 98.

The plant has been found in Nepaul by Dr. Buchanan, as well as by Colonel Hardwick in the place stated in our article.

It is said to acquire, after seven or eight years' growth in the botanic garden at Calcutta, a stem as thick as a man's leg.

Aerides *paniculatum.* *Vol.* 3. *fol.* 220.

This species has been lately included by Mr. Brown in his genus VANDA.

(See VANDA *Roxburghii*, fol. 506 of the present Volume). So that the above article should be now inscribed

VANDA paniculata.

The germen is not twisted, nor the corolla reversed, as in *Roxburghii*.

Mespilus *japonica*. *Vol. 5. fol.* 365.

Since the publication of that article, the division of the natural order to which this species belongs, has been recast by Mr. Lindley, in a treatise on *Pomaceæ* in the 13th volume of the Linnean Transactions; where our plant ranks in a new genus, named and defined as follows;

ERIOBOTRYA. Cal. lanatus, obtusè 5-dentatus. *Pet.* barbata. *Stam.* erecta, dentium longitudine. *Styli* 5, filiformes, inclusi, pilosi. *Pomum* clausum, 3-5-loculare. *Chalaza* nulla. *Radicula* inter bases cotyledonum inclusa.

Arbores *mediocres (Asiæ temperatæ* et *Peruviæ)*. Ramuli *tomentosi*. Folia *simplicia, serrata, infrà lanata*. Racemi *compositi, terminales, lanati*. Bracteæ *subulatæ, deciduæ*. Lindley in trans. linn. soc. 13. 102.

Eriobotrya *japonica*, foliis lanceolatis serratis. *Id. loc. cit. Synonyma ut suprà vol. 5. fol.* 365; *ubi addi potest;*

Mespilus japonica. *Jacq. fragm.* 85. *t.* 136. *f.* 2.

ERIOBOTRYA consists at present of two certain and two doubtful species, the former from China and Nepaul, the latter from Peru. For the knowledge of the true nature of the fruit Mr. Lindley desires that he may be considered indebted to Mr. Brown.

In MESPILUS, as restricted by the definition in the above mentioned treatise, the top of the *fruit (Pomum)* is open, not closed, as in ERIOBOTRYA.

Viburnum *rugosum*. *Vol. 5. fol.* 376.

The following synonym belongs to that species.

Viburnum rigidum. *Ventenat malm. t.* 98; *(excl. syn.)*

Jasminum *undulatum*. *Suprà* 436.

Dr. Roxburgh has added JASMINUM *undulatum*, as a probable synonym, to the single-flowered variety of JASMINUM *Sambac*. Possibly he has in view a different plant from the *undulatum* of the above article, which is however the true Linnean NYCTANTHES *undulata*. He says his plant is one of the most common in every forest of the Coast of Coromandel. Our plant is native of China.

Jasminum Sambac; *var. α.* (Which I *(Dr. Roxburgh)* suppose to be JASMINUM *undulatum)*. *Roxb. flor. ind.* 1. 37.

Tsjiregam Mulla. *Rheede malab.* 6. 97. *t.* 55.

Of the single-flowered plant the Doctor mentions two varieties, a smaller and a larger one. If our plant is the same as either, and we doubt if it is, it must be the smaller.

Begonia *pauciflora*. *Suprà fol.* 471.

Mr. Haworth tells us that this is not the species he intended by BEGONIA *patula*; therefore that synonym, which has been added with a quære, should be finally rejected.

Amaryllis *laticoma*. *Fol.* 497.

Mr. Herbert has been so good as to inform us that this curious plant was brought over by Mr. Burchell from the Cape of Good Hope, where it was found in the country that lies behind the Snowy Mountains. He adds, that the following notice of it (which we now insert entire) should have been adverted to in our account of the species.

"An NERINE *lucida? Burchell. Species nondum herbariis inveni-*
"*enda: foliis angustis nitidis persistentibus.* I am inclined to think that
"this will belong to the same genus as *coranica* and *falcata*. *Herbert in*
"*Curtis's Magazine, fol. verso* 2124."

Considering the nature of the above notice we cannot be expected to take to ourselves any great degree of blame in not having discovered our plant through its means.

We confess we do not agree in Mr. Herbert's proposed alterations in regard to the genus AMARYLLIS. We have however always thought that the species it contains of the European type, might perhaps be separated without inconvenience into a genus of which the *strophiolated seeds* would form an important characteristic.

From a drawing we have lately seen of IRIS *reticulata*, we should judge it clearly distinct from *tuberosa*, to which it had been added in the Enumeration of the genus IRIS, in the Appendix to Volume V.

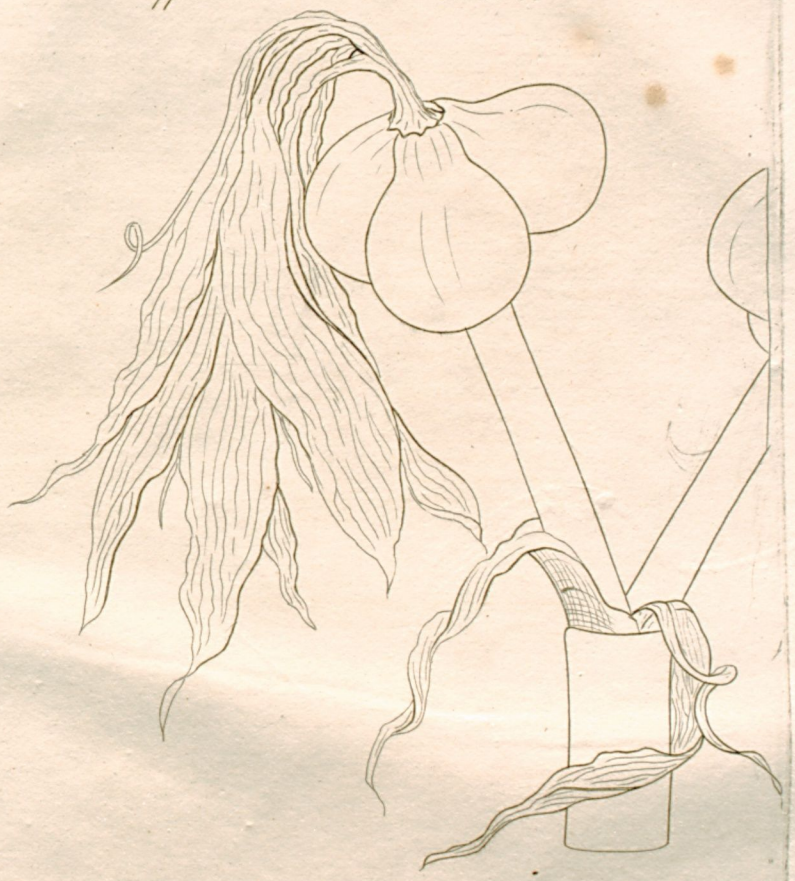
GENERAL ALPHABETICAL INDEX TO VOLUMES I. II. III. IV. V. AND VI.

References to Enumerations of the species of particular Genera in the present work.

END OF VOL. VI.

S. Gosnell, Printer, Little Queen Street, London.

An extra Plate to be placed at the end of the Notes-
-appended to Volume 6.



A ripe Capsule of Amaryllis Aulica. Supra fol. 444. Ripened in-
-Mr. Griffin's Garden South Lambeth.

A ripe Capsule of Griffinia Parviflora. Supra
fol 511. with two Seeds.

Ripened in Mr. Griffin's Garden.
South, Lambeth.

Pub by S. Ridgway 170 Piccadilly Feb. 1821.