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EDWARDS'S
BOTANICAL REGISTER:

OR,

**ORNAMENTAL FLOWER-GARDEN
AND SHRUBBERY:**

CONSISTING OF

**COLOURED FIGURES OF PLANTS AND SHRUBS,
CULTIVATED IN BRITISH GARDENS;**

ACCOMPANIED BY THEIR

History, Best Method of Treatment in Cultivation, Propagation, &c.



CONTINUED

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&c. &c. &c.

VOL. XVIII. ☐

pls. 1477-1564

—viret semper—nec fronde caducâ
Carpitur. MISSOURI
BOTANICAL
GARDEN.

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APHELÁNDRA* cristáta.

Crested Aphelandra.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. ACANTHACEÆ Juss. (Introduction to the natural system of Botany, p. 233.)

APHELANDRA R. Brown. — Calyx 5-partitus inæqualis. Corolla bilabiata. Antheræ uniloculares. Capsula bilocularis, bivalvis: dissepimento contrario. Semina retinaculis subtensa. Hort. Kew. ed. 2. vol. 4. p. 55.

A. cristata; foliis ellipticis oblongisve acuminatis, spicis tetragonis, bracteis ovatis integerrimis, corollis glabris. *Ibid.* Bot. mag. t. 1578.

Justicia arborea. Mill. dict. ed. 8.

Justicia tetragona. Vahl. symbol. 3. p. 5. Willd. no. 20.

Justicia pulcherrima. Willd. no. 22.

Justicia cristata. Jacq. hort. schænbr. 3, p. 38. f. 320.

Ruellia cristata. Andrews' reposit. 506.

Frutex atroviridis, densè foliosus. Rami teretes, glabri. Folia oblongo-lanceolata, subcrenata, in petiolum longum alatum angustata, subundulata, acuta, utrinque glabra; aliquandò pedalia. Spicæ terminales et axillares, densè aggregatæ, tetragonæ, 4-6-unciales. Rachis lanuginosus. Bracteæ anticæ ovatæ, concavæ, glabræ, basi lanuginosæ, margine ciliatæ; laterales lanceolatæ v. subulatæ, lanuginosæ. Sepala 5, glabra, bracteis paulò longiora, æquilonga, interioribus angustioribus. Corolla coccinea, 2-uncialis, tubo arcuato, sensim ampliato, limbo bilabiato, labio superiore lanceolato, erecto, bifido, inferiore lanceolato, recurvo, integerrimo, laciniis duabus lateralibus nanis, rotundatis. Stamina 4, didynama, è basi tubi orta, rudimento quinto nullo. Antheræ semisagittatæ, uniloculares, labio superiore corollæ involutæ, connectivo flocculoso. Styli coccinei, post decessum corollæ longè penduli; discus annularis, inconspicuus.

This beautiful plant is a native of the West Indies, and of the American continent near the line. It has been almost a century in our Gardens, and yet is now scarcely ever seen in any but Botanical collections, where, if it flowers, it generally produces its blossoms so sparingly,

* So named from ἀφελῆς, simple, and ἀνήρ, a man, or, in Botanical language, anther; in allusion to the anthers being unilocular.

that those who cultivate it are disappointed in the expectations they had formed of its appearance.

The noble specimen from which the accompanying drawing was made by Miss Drake, was kindly forwarded to us by the Right Hon. the Earl of Shrewsbury, in whose Conservatory, at Alton Towers, it bloomed in August last. We were not so fortunate as to see it in full perfection; but we understand that at one time all those parts of the spikes which in the figure are naked, were densely covered with blossoms, so that the inflorescence was a compact mass of crimson, forming a tuft measuring 8 or 9 inches every way. In this state it was a most splendid object for several days; between eight and nine hundred flowers contributing to its dazzling brilliancy.

It is a tender stove plant, easily propagated by cuttings, like all the rest of its tribe. Lord Shrewsbury procured his plant from the Garden of the Grand Duke of Tuscany, at Florence, in 1829; but the species was originally sent to Miller by Houstoun in 1733. It should be grown in peat, loam, and sand, in a high temperature, with an atmosphere well filled with moisture.

A dark-green bush, closely covered with leaves. *Branches* taper, smooth. *Leaves* oblong-lanceolate, somewhat crenated, tapering into a long narrow petiole, somewhat wavy, acute, smooth on both sides, sometimes as much as a foot long. *Spikes* terminal and axillary, densely crowded, 4-cornered, from 4 to 6 inches long. *Rachis* woolly. *Anterior bractæ* ovate, concave, smooth, woolly at the base, ciliated at the edge; the lateral lanceolate or subulate, downy. *Sepals* 5, smooth, rather longer than the bractæ, all of the same length, but the inner ones narrowest. *Corolla* scarlet, 2 inches long; tube curved, gradually widening; limb bilabiate, the upper lip lanceolate, erect, bifid, the lower lanceolate, recurved, entire, the two lateral segments dwarf and rounded. *Stamens* 4, didynamous, arising from the base of the tube, with no rudiment of a fifth. *Anthers* semisagittate, 1-celled, enwrapped in the upper lip of the corolla; the connectivum a little fleecy. *Styles* scarlet, hanging down after the first fall of the corolla; disk annular, inconspicuous.

J. L.



Fl. Brit. Mus. Bot. 10 y. Sc. 1111 y. March. 1. 1832.

J. Watts. sc.

POTENTILLA* laciniósa.

Jagged-leaved Cinquefoil.

ICOSANDRIA POLYGYNIA.

Nat. ord. ROSACEÆ Juss. (Introduction to the natural system of Botany, p. 81.)

§. *Potentilleæ* Jussieu.

POTENTILLA.—*Suprà, fol. 1379.*

P. laciniosa; foliis 7natis 5natisque, foliolis oblongis laciniato-pinnatifidis utrinque viridibus patentipilosis, stipulis omnibus profundè laciniatis, petalis obcordatis calycem superantibus. *Sadler flora Pesth. 2. 31.*

P. laciniosa. Kitaib. Lehm. potent. 86. t. 9. Spreng. syst. 2. 536.

P. hirta n. *De Cand. prodr. 2. 579.*

Caulis strictus, 1½-pedalis, patentim pilosus. Folia quinata et septenata, pilosa, foliolis obovato-lanceolatis, pinnatifidis: laciniis incis; radicalium stipulæ subulatæ, caulinarum dilatatæ, incisæ v. integræ. Flores dichotomè paniculati, corymbosi, laxi. Bracteæ incisæ v. integræ, sepalorum longitudine. Petala lutea, obcordata, calyce duplò longiora.

A hardy herbaceous plant, native of dry sandy fields in the southern part of the district of Pesth, in Hungary, especially about Czegléd and Szolnoki, where it grows in company with *Potentilla canescens*, flowering in June and July.

Our drawing was made in the Garden of the Horticultural Society, where it had been raised from seed communicated by Baron Jacquin in 1829.

According to M. Séringe, this is a variety of *P. hirta*; we, however, prefer following those who consider it distinct, especially Professor Lehmann, whose accurate knowledge of this genus gives great authority to his decisions.

J. L.

* See fol. 1379.



Phlox paniculata L.

H. Kuhn del.

ŒNOTHÉRA* anisóloba.

White Upright Evening Primrose.

OCTANDRIA MONOGYNIA.

Nat. ord. ONAGRARIÆ Juss. (*Introduction to the natural system of Botany*, p. 56.)

* Tribus *Onagræ* De Cand.

ŒNOTHERA.—*Suprà*, vol. 2. fol. 147.

Œ. *anisoloba*; caule stricto leviter pubescente, floribus solitariis axillaribus foliis inæqualiter inciso-pinnatifidis brevioribus, calycis tubo petalis venosis rotundatis subtriplo longiore, stigmatè 4-partito.

Œ. *anisoloba*. *Sweet's flower-garden*, 105.

Caulis erectus, herbaceus, subsimplex, pallidus, pube levissimâ vestitus, 1½-2-pedalis. Folia minutissimè pubescentia, radicalia spatulata, dentata, caulina sensim magis divisa, superiora inæqualiter inciso-pinnatifida, floribus longiora, laciniis acuminatis, incis, dentatis, baseos minoribus. Flores albi, speciosi, deflorati roseo-purpurei. Calycis tubus teres, albidus, levissimè pubescens, 6 uncias longus, basi paululùm incrassatus. Petala subrotunda, venis valdè conspicuis, 2 uncias longa. Stigmatis lobi lineares, cruciati. Ovarium breve, pedunculatum, angulis 4 acutè gibbosis.

Although this species is a native of the island of Chiloe, some degrees to the southward of Valparaiso, yet it proves more tender than *Œnothera acaulis*, from the last-mentioned place; so little does latitude often indicate the power of a plant to resist frost.

In our Gardens it grows 1½ or 2 feet high, forming a neat, bright-green, very erect, herbaceous bush, which puts forth from its summit beautiful white blossoms, of an unusually large size, expanding at the close of day, and filling the evening air with their mild fragrance.

If great care be taken to protect this plant by covering

* See fol. 1220.

it with dry straw, or some such substance, during winter, it may be cultivated in the open borders; but without this it will not bear our frost. It blossoms in July and August, and lasts till October. Seeds, which it ripens readily, are usually employed as the means of its propagation.

The down upon the leaves, stem, and calyx, is so exceedingly fine, that it cannot be represented in a drawing without giving the surface too great an appearance of pubescence; it is, in fact, so fine as not to be visible to the naked eye.

J. L.

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FUCHSIA* bacilláris.

Rod-branched Fuchsia.

OCTANDRIA MONOGYNIA.

Nat. ord. ONAGRARIÆ Juss. (Introduction to the natural system of Botany, p. 56.)

FUCHSIA.—Suprà, vol. 10. fol. 847.

F. bacillaris; ramulis glabris, foliis ovatis v. ovato-lanceolatis denticulatis deciduis glabris, foliis axillaribus geminis ternatisve foliis longioribus, calycis tubo subcylindræo: laciniis subulatis petalisque retusis integerrimis patentibus, staminibus inclusis, stigmatis lobis linearibus cruciatis. Frutex jam in viridario 3-pedalis, verosimiliter orgyalis, ramis erectis, gracilibus, bacilliformibus. Folia pallidè viridia, tenuia, decidua. Flores rosei. Calycis laciniæ angustissimæ, subulatæ.

The name of Fuchsia carries a charm with it that causes the addition of any new species to be received with peculiar delight by all lovers of gay flowers. That which is now published was raised from Mexican seeds, communicated by J. S. Mill, Esq. to Mr. Barnard, and by that gentleman presented to the Horticultural Society in 1829.

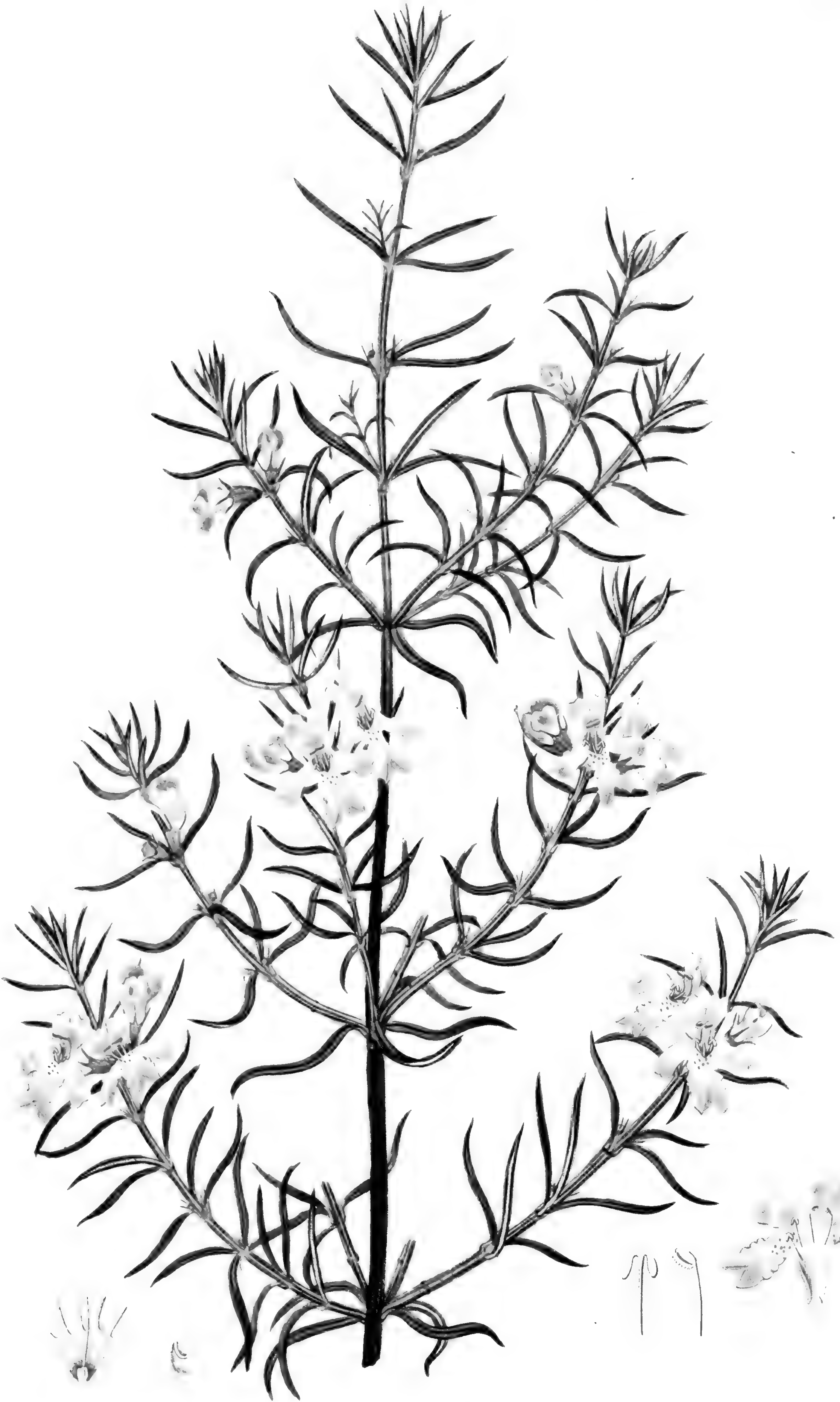
An elegant deciduous shrub, apparently more hardy than any other species that we cultivate; but this is a point upon which we are not yet able to speak positively, the plant having been too recently introduced to have been the subject of experiment. It blossoms all the summer long till November, grows freely in any kind of light soil, and is propagated by cuttings as readily as other Fuchsias.

Its nearest Botanical affinity is with the pretty *F. microphylla*, from which it may be distinguished by its smooth

twigs, deciduous leaves, paler flowers, taller growth, the slender tube of its calyx, narrow lobes to the stigma, and many other characters of less moment.

At present this shrub has not attained the height of more than 3 feet; but it has the appearance of being likely to arrive at a more considerable stature. Its branches are erect, slender, and rod-like; its leaves pale-green, thin, and deciduous. *Flowers* bright rosy red. *Segments* of the *calyx* very narrow, and subulate.

J. L.



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WESTRINGIA* longifolia.

Long-leaved Westringia.

DIDYNAMIA GYMNOSPERMIA.

Nat. ord. LABIATÆ Juss. (*Introduction to the natural system of Botany*, p. 239.)

Tribus 2. SATUREINÆ Bentham. *Suprà*, fol. 1289.

WESTRINGIA Smith.—*Calyx* æqualis, 5-nervis, 5-dentatus. *Còrolla* tubo calycem subæquante, bilabiata: labio superiore erecto subplano emarginato v. bifido, inferiore patente trifido. *Stamina* 4, distantia. *Antheræ* superiorum dimidiatæ, inferiorum 2-partitæ, cassæ. *Stylus* apice subæqualiter bifidus. *Bentham l. c.*

W. longifolia; foliis ternis linearibus margine recurvis adultis suprà scabris: subtùs calycibusque pilosiusculis viridibus: dentibus longitudine tubi. *Brown prodr.* 501.

Rami *graciles, subtetragoni, pilosiusculi*. Folia *ternatim verticillata, linearia, apice mucronata, suprà scabra, subtùs viridia, pilosiuscula*. Flores *pallidè cærulei, axillares, solitarii, sessiles, pubescentes*.

A pretty little shrub, having the habit of some slender variety of our Rosemary. It is a Greenhouse plant, native of New Holland, where it was found near Port Jackson both by Mr. Brown and Dr. White.

It should have a situation in an airy part of the Greenhouse, where it will thrive in any light soil.

Our drawing was made in Mr. Knight's Nursery in November last.

Branches slender, somewhat 4-cornered, slightly hairy. *Leaves* in whorls of threes, linear, mucronate at the apex,

* So named by Sir James Smith, in honour of Dr. John Peter Westring, author of several useful papers upon Lichens.

scabrous above, green and somewhat hairy beneath.
Flowers pale blue, axillary, solitary, sessile, downy.

According to Sir James Smith, some wild specimens have the leaves 4, or even 5, in a whorl: we have not observed a greater number than 4.

J. L.

1. 189



PYRUS* salvifolia.

Sage-leaved Pear.

ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. POMACEÆ Juss. (*Introduction to the natural system of Botany*, p. 83.)

PYRUS.—*Suprà*, vol. 6. fol. 514.

P. salvifolia; foliis lanceolatis integerrimis subtùs gemmisque tomentosis junioribus supernè velutinis adultis glabris. *De Cand. prodr.* 2. 634.

Arbor parva, ramis brevibus, contortis, corrugatis, abbreviatis, gemmis nascentibus albolanatis. Folia juniora petiolata, oblonga, tomentosa, adulta oblonga v. oblongo-lanceolata, utrinque acuta, leviter crenulata, suprà glabra, subtùs cinereo-tomentosa. Corymbi tomentosi, multiflori. Flores Pyro communi minores, albi. Fructus turbinato-oblongus, viridi-fuscus, durus, austerus; putrescens, sapidus.

This, the Poirier à feuille de Sauge of the French, is found wild about Orleans, where it is also cultivated for making perry. It is a small, inelegant tree, with short crooked branches, and gray leaves, gay with blossom in the spring, and laden with greenish, hard, austere fruit, ripe in the month of October, but in the intermediate season by no means an attractive object.

Like *P. amygdaliformis*, *elæagnifolia*, and *sinaica*, it is probably not distinct from *Pyrus nivalis*, which seems to have contributed largely to the parentage of many of our cultivated Pears.

The fruit, notwithstanding its austereness when first gathered, nevertheless acquires a sweetish and rather pleasant taste when it is softened by decay, and has arrived at that state of decomposition in which we eat the Medlar.

Quite hardy. Propagated by grafting or budding either upon the common Pear or the Quince. J. L.

* See fol. 1196.

1. 5. 3



BARLÉRIA* lupulína.

Hop-flowered Barleria.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. ACANTHACEÆ Juss. (Introduction to the natural system of Botany, p. 233.)

BARLERIA.—Suprà, vol. 3. fol. 191.

B. lupulina; foliis lineari-lanceolatis integerrimis, spinis simplicibus divaricatis, spicis ovatis, bracteis ovatis concavis ventricosis imbricatis.

Dicliptera spinosa. *Hort.*

Frutex 2-pedalis, ramosissimus, ramis glabris, subtetragonis, purpureo-viridibus. Folia angustè lanceolata, integra v. denticulata, mucronulata, glabra, costá suprà sanguineá venis inconspicuis. Spinæ intra-axillares, geminæ, divaricatæ, rigidæ, cinereæ, pungentes. (OBS. spinæ nihil aliud sunt quàm folia primordialia gemmæ abortivæ; gemmæ adsunt duæ in omni axillá, quarum altera folio proxima abortat, altera evolvitur.) Spicæ terminales, ovatæ, v. oblongæ, lupulinæ, è bracteis constantes ovatis, concavis, pallidè viridibus, nunc fusco-purpureo marginatis, levissimè pubescentibus, densè imbricatis. Calyx tetraphyllus, pubescens; bracteis subulatis, squamiformibus; sepalis duobus proximis ovato-oblongis, concavis (anticis et posticis), duobus intimis lineari-lanceolatis, acuminatis; omnibus atomis quibusdam pellucidis solidis conspersis. Corolla lutea, unciam longa, tubo recto, cylindraceo, pubescente, limbo glabro, valdè inæquali, laciniis quatuor oblongis subæqualibus, quintá (labio inferiore) à vicinis profundius divisá, brevior. Stamina 4; quorum duo laciniæ quintæ corollæ contermina exserta, recta, antheris oblongis, bilocularibus, glabris, duo superiora nana, antheris subrotundis, filamentis ciliatis; rudimentum st. 5^o nullum. Ovarium ovatum, disco annulari membranaceo circumdatum, 2-loculare, loculis dispermis. Stigma simplex, subconicum, truncatum.

A native of the Mauritius, whence it was sent to Europe some years since by C. Telfair, Esq. It is a very handsome stove plant, almost always in flower, and particularly

* Named after James Barrelier, a French Botanist of considerable reputation, born in 1606, and died in 1673. His work was edited by Antoine de Jussieu.

remarkable for its rich deep-green leaves marked with a bright red midrib.

It forms a bush, about 2 feet high, very compact, and leafy. None of the insects so common in hothouses like to attack it; bad cultivation affects it but little: it thrives in almost any soil, and is very readily increased by cuttings.

Our drawing was made in the Garden of the Horticultural Society in August 1829.

Stem about 2 feet high, with smooth, somewhat 4-cornered, purplish-green branches. *Leaves* narrow-lanceolate, entire or toothletted, mucronulate, smooth. *Spines*, which are nothing but the starved leaves of an abortive axillary bud, divaricate, simple, pungent. *Spikes* terminal, ovate or oblong, with large, convex, bright-green, ventricose bractæ, forming a head like that of the Hop. *Flowers* yellow, fugitive, but produced in a long succession.

J. L.



PYRUS* nivális.

The Snow Pear.

ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. POMACEÆ Juss. (*Introduction to the natural system of Botany*, p. 83.)

PYRUS.—*Suprà*, vol. 6. fol. 514.

P. nivalis; foliis ovalibus integerrimis obtusis subtùs albido-sericeis, corymbis terminalibus, fructibus globosis. *De Cand. prodr.* 2. 634.

P. nivalis. *L. fil. suppl.* 253. *Jacq. fl. austr. t.* 107.

Arbor parva, comâ tortuosâ compactâ, defoliatâ *Oxyacanthæ* cujusdam facie. Rami juniores tomentosi, cinerei. Folia surculorum obovato-lanceolata, tomentosa, præsertim subtùs, nunc utrinque acuminata, nunc apice, nunc basi obtusa; ramulorum minora, ferè semper obtusa, juniora albiora, adulta ferè glabra. Corymbi terminales, incano-tomentosi. Styli sæpiùs quinque. Fructus parvus, depresso-sphæricus, olivaceus, lapideus; putrescens dulcis, sapidus.

A native, according to Jacquin, of the Alps of Austria; but Host asserts that this is not the case, and that it is only cultivated in orchards and vineyards, where it is propagated by grafting, like the Apple and Pear. The Austrian Gardeners call it Schnee-Birne (Snow Pear), because in the beginning of winter, when gardens, vineyards, and meadows, are covered with snow, the fruit becomes soft, and may be eaten. It is a very common inhabitant of our Gardens, where it is often called *Pyrus præcox*; a name the authority for which can be no where traced.

It is very like *Pyrus salvifolia*, tab. 1482, the remarks upon which apply almost equally to it. Although the leaves are narrower, more obtuse, and perhaps white beneath, yet there are so many cases in which the two plants pass, as it were, into each other, that they are most likely the same natural species.

J. L.

* See fol. 1196.



AERIDES* cornútum.

Horn-flowered Air-plant.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDEÆ Juss. (Introduction to the natural system of Botany, p. 262.)

§ *Vandæe Lindley.*

AERIDES.—*Suprà, vol. 3. fol. 220.*

A. cornutum; foliis coriaceis apice obtusis obliquis, racemis pendulis multifloris foliis longioribus, labelli cucullati infundibularis laciniis lateralibus erectis cuneatis rotundatis: intermediâ ovatâ acutâ inflexâ: calcare incurvo.

A. cornutum. *Roxb. hort. beng. p. 63.*

Caulis ramosus, crassus, lætè viridis, radices longas aereas tortuosas emittens. Folia coriacea, 6-7 uncias longa, apice obliqua, obtusa, lætè viridia, subdisticha. Bracteæ ovatæ, rigidæ. Flores carnei, fragrantissimi. Sepala patentia; inferiora ovata, latâ basi columnæ pedi adnata, supremum ovatum, basi paululùm angustatum, obtusum. Petala sepalo superiori subconformia, patentia. Labellum infundibuliforme, cum pede columnæ articulatam, 3-lobum, laciniis conniventibus: lateralibus erectis, cuneatis, rotundatis, intermediâ lineari-lanceolatâ; calcaratum, calcare conico, incurvo, apice viridi. Columna brevis, basi valdè producta, canaliculata, intra lacinias labelli abscondita. Clinandrium rostratum, acutum, ad caudiculam subulatam pollinis recipiendam. Anthera ovata, rostrata, basi bilocularis. Massæ pollinis duæ, globosæ, intùs sulcatæ; glandula obovata.

This most lovely plant was originally obtained by Dr. Roxburgh from Dacca, and must have been sent many years since to the Garden at Kew; for a blossom of it was brought to us on the 8th of July, 1822, at which time it was flowering in great beauty.

Subsequently Dr. Wallich obtained it from Noakote,

* So called from the power that this, like many other Orchideous genera, possesses of living almost entirely upon the matter it absorbs from the atmosphere, into which it emits its long tortuous absorbent roots.

where it grows upon trees, blossoming in June. In the Botanic Garden, Calcutta, it is cultivated successfully; and has there gained the name of the Jamaica pomatum plant, from the rich fragrance of its flowers resembling the unguent so called. For ourselves, we compared it rather to the odour of the Tuberose.

It is certainly the most interesting of its tribe that has yet been introduced, whether we consider the great mass of its blossoms, their curious form, or delicate colour, or long duration, or delicious perfume. It flourishes in a very damp Hothouse, planted in moss in a pot suspended from the rafters; but, as it branches rather unwillingly, it is slow of propagation.

Our drawing was made last August in the Garden of the Horticultural Society, from a plant that had been brought to England by Dr. Wallich, and presented by the Hon. Court of Directors of the East India Company.

J. L.



CAMÁSSIA* esculénta.

Eatable Quamash.

HEXANDRIA MONOGYNIA.

Nat. ord. ASPHODELEÆ Juss. (Introduction to the natural system of Botany, p. 273.)

CAMASSIA.—*Bulbus tunicatus. Flores cærulei, v. purpurei. Perianthium explanatum, hexaphyllum, foliolis quinque superioribus ascendentibus, sexto decurvo. Stamina sex, hypogyna, æqualia; filamenta glabra, ascendentia. Ovarium 3-loculare polyspermum. Stylus declinatus. Stigma obsolete 3-dentatum. Capsula chartacea, 3-locularis, 3-valvis, loculicidodehiscens. Semina cuique loculo sex, subrotunda, nigra, nitida, raphe et chalazâ corrugatis.*

C. esculenta.

Phalangium Quamash. Pursh fl. am. sept. 1. 226.

Bulbus ovatus, tunicatus, nucis avellanæ magnitudine, atrofuscus. Folia linearia, acuminata, canaliculata, lætè viridia, scapo breviora, recurva, v. medio quasi refracta ob debilitatem. Scapus pedalis v. bipedalis, teres, glaucus, versùs apicem purpurascens. Bracteæ subscariosæ, ovatæ, cum acumine, pedicellis longiores, infimæ sæpiùs vacuæ. Pedicelli filiformes, semunciam longi, ascendentes. Perianthium explanatum, diametro ferè biunciali, hexaphyllum, diù persistens; foliolis atropurpureis, lanceolatis, 5 superioribus ascendentibus, sessilibus, sexto unguiculato, decurvo. Stamina sex, hypogyna, æqualia; filamenta glabra, ascendentia, perianthio breviora.

This very beautiful plant was sent some years since from North-west America to the Horticultural Society by Mr. Douglas, but did not flower till the month of July in last year. A few flowering spikes then appeared, of which that represented was the finest. We scarcely remember to

* An alteration of the Indian name Quamash, or Camass. "This plant is known among the natives by the name Quamash; and the bulbs are carefully collected by them and baked between hot stones, when they assume the appearance of baked pears, and are of an agreeable sweet taste. They form a great part of their winter stores. Though an agreeable food to Governor Lewis's party, they occasioned bowel complaints if eaten in any quantity."—Pursh.

have seen a more strikingly handsome bulbous plant: no art can do justice to the rich colour of the flower, which, although of the most intense purple, yet is so relieved by the satiny sparkling lustre of the cuticle, as to have quite a light and elegant effect.

It has been hitherto cultivated in a peat border, under a north wall, where it grows freely, proving perfectly hardy: a few seeds were produced; and it is probable that when the bulbs are stronger, it will increase readily in that manner.

That this is the real Quamass or Camass root of the North-west American Indians, we know upon the authority of Mr. Douglas, who found it in the greatest profusion on alluvial, grassy, and partly overflowed soils on the Columbia, in 1825. He also met with a white variety, or rather perhaps species, of which specimens are in his Herbarium.

It is no doubt also the *Phalangium* Quamash of Pursh, whose description is as applicable to the plant as could be expected from its having been drawn up from a dried specimen. But we are by no means of opinion that it is the same as a supposed synonym, the *Phalangium* esculentum of Nuttall, which that author discovered near the confluence of Huron river with Lake Erie, and near St. Louis, Louisiana, and which he also describes as common on the lowest banks of the Ohio. On the contrary, it can scarcely be doubted that both Mr. Nuttall and Dr. Torrey, as well as others who have copied them, apply the name to the pale blue-flowered *Scilla* esculenta; a most undoubted *Scilla*, well figured in the *Botanical Magazine*, t. 1574. This eastern plant has probably been supposed to be the same as the western species, in consequence of its bulbs also being edible, and because Pursh describes the flowers of the Quamash as pale blue; an error that was easily made in drawing up a description from a dried specimen, the only materials in his possession.

In *Scilla* esculenta the leaves are glaucous; the flowers pale blue, and much smaller; the segments have a uniform direction and expansion; the stamens are shorter, and spread equally round the pistillum, which is straight. In none of these important characters does the plant now

represented accord : its leaves are bright green ; the flowers deep purple ; 5 of the segments have a direction upwards, while the sixth is bent down ; the stamens are ascending, and the style is declinate. No doubt, therefore, can exist, not only of their specific, but even of their generic difference.

In deciding to what genus to refer this plant, we have felt a difficulty that must have been experienced by all who have ever studied the group of *Asphodeleæ*, to which it no doubt belongs ; viz. that the genera *Scilla*, *Ornithogalum*, *Anthericum*, and their allies, are characterised so loosely that one can never tell their precise limits. This arises from two circumstances ; the first of which is, that the hybernaculum, which in these plants is an organ of primary importance, is not taken as an essential character of genera ; and the second is, that too many anomalies are suffered to enter into the most recent arrangements of the species. In tribes of plants so simple in structure and so very uniform as *Asphodeleæ*, it is, as in *Umbelliferæ*, *Cruciferæ*, and other *Dicotyledonous Orders* of a like nature, indispensable that the genera should be confined within the most exact limits ; and it is far better that this should be effected by the creation of many new genera, than that it should not be done at all. For this reason, we formerly separated *Barnardia* from *Scilla* and *Ornithogalum* ; and now propose the genus *Camassia*, which we conceive to be distinctly separated from *Czackia* and *Anthericum* (the *Phalangium* of Jussieu) by its bulbs ; and from *Scilla*, *Albuca*, and the like, by the 5 ascending segments of its perianthium, ascending stamens, and declinate style. It is probable that other species now referred to *Anthericum* may also belong to this genus ; but upon that inquiry our leisure does not at present permit us to enter.

Bulb ovate, tunicated, dark brown, about the size of a hazel-nut. *Leaves* linear, acuminate, channelled, bright green, shorter than the scape, curved, or as it were broken back in the middle in consequence of their weakness. *Scape* 1 or 2 feet high, taper, glaucous, purplish towards the extremity. *Bracteæ* somewhat scarious, ovate, with a long point, longer than the pedicels, the lowest often empty. *Pedicels* filiform, half an inch long, ascending.

Perianthium spreading quite open, nearly two inches in diameter, 6-leaved, not readily falling away; the segments deep purple, lanceolate, the five upper ones ascending, sessile, the sixth unguiculate and curved downwards.

J. L.



ÁSTER* coridifólius.

The Coris-leaved Starwort.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (Introduction to the natural system of Botany, p. 197.)

§ Corymbiferæ Juss. Asteræ Cassini.

ÁSTER.—Suprà, vol. 3. fol. 183.

Sect. B. 9. *Herbacei; foliorum venæ primariæ divergentes v. evanescentes; involucri campanulata, squamis exterioribus sensim minoribus magis minusve squarrosis.*

A. coridifolius; glaber, ramis intricatissimis, foliis superioribus depauperatis squamiformibus, capitulis terminalibus subsolitariis, flosculis radii acutis, pappo flosculis disci æquali, ovario glabro.

A. coridifolius. Mich. fl. bor. amer. 2. p. 112.

Caulis 2-3-pedalis, ramis angulatis, gracilibus, glabriusculis, quàm maximè intertextis, quasi aphyllis, ob folia suprema minima, glabra, patentia, squamiformia. Folia radicalia lineari-lanceolata, acuminata, inferiora caulina lineari-oblonga, obtusa, sursùm sensim in squamulas mutata. Radii pallidè carnei, imbricati.

We have been enabled to determine this very rare and little-known Aster by comparison with an authentic specimen out of Michaux's Herbarium, for which we are indebted to M. Achille Richard. Formerly we supposed it to be a new species, and called it *A. intricatus*; under which name a few plants have been distributed from the Horticultural Society's Garden, the only collection in which, as far as we are aware, it exists. It was brought thither some years since by Mr. George Don, upon his return from New York; and was probably found by him in the vicinity of that city. It flowers in October.

No species can be more distinctly characterised than

* So called from the starry appearance of the flowers.

this. Its almost leafless, deep green, entangled branches, which form a compact roundish bush, 2 or 3 feet high, and its few, scattered, solitary, inconspicuous heads of pale flesh-coloured or pink flowers, will at once distinguish it from all other kinds except the rare *Aster squarrosus*, with which, however, it is not likely to be confounded.

We dare not quote a single synonym beyond that of Michaux. The *A. coridifolius* of Willdenow's *Species Plantarum* is described with leaves hispid at the margin; Nees von Esenbeck, who probably had the same sort in view, changes the term *hispidus* to *ciliato-scaber*; Pursh copies Willdenow, and confirms the statement of that Botanist, that the flowers are bright blue; Nuttall reduces *coridifolius* as a variety to *A. foliolosus*, with which the true *coridifolius* has but little affinity; and finally, Sprengel joins with it *A. obliquus* of Nees, a totally different plant. Probably at least three distinct species are comprehended among these synonyms, which we confess we have not the skill to disentangle, even if it were worth the while.

J. L.



Linum catharticum April 1822.

S. W. G. S.

LÓTUS* arenárius.

Sand Lotus.

DIADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ Juss. (*Introduction to the natural system of Botany*, p. 87.)

LOTUS L.—*Calyx* tubulosus, 5-fidus; *alæ* vexillum subæquantes; *carina* rostrata. *Legumen* cylindræum, v. compressum, apterum; *stylus* rectus; *stigma* oculo nudo subulatum.—Herbæ. *Folia* palmatim 3-foliolata. *Stipulæ* foliaceæ. *Pedunculi* axillares, 1-6-flori, folio florali apice stipati, flavi, rariùs albi aut rosei. De Cand. prodr. 2. 209.

L. arenarius; caulibus procumbentibus ramosis pubescentibus, ramis pedunculisque erectiusculis, foliolis acutiusculis cuneatis, stipulis ovatis, capitulis 5-10-floris, bracteis sublanceolatis calyce minoribus, calycibus subbilabiatis, dentibus duobus superioribus longioribus, leguminibus teretibus glabris. D. C. l. c.

L. arenarius. Brotero fl. lusitan. 2. p. 120.

Herba annua, pubescens, caulibus prostratis, teretibus, pallidè viridibus; ramuli pedunculique ascendentes. Foliola incana, cuneato-obovata, sessilia, petiolo communi stipulis cordato-ovatis foliolis minoribus æquali. Capituli subsexflori, basi folio minore sessili exstipulato stipati. Calyx pallidè luteo-viridis, tubo laciniis paulò longiore. Flores lutei, vexillo basi limbi striis 5 minutis penicillato.

* A name which has been more variously applied, and of which perhaps more has been written, than of any other plant. Those who have sought for its origin in the Greek language have found nothing nearer than *λω*, to will, or desire; alluding, as they suppose, to the plant being greatly esteemed. Others have thought, with more probability, that *λωτος* of the Greeks, and *Lotus* of the Latins, had one common Egyptian origin, its etymology being therefore, of course, inscrutable to us. All that can be said of the application of this name, at various times and in various languages, is, that it has always been used for some plant eminently useful as food for man or beast. Thus it has been appropriated to the *κναμος*, or sacred bean of India, and to its Egyptian substitute, the *Nymphæa*; to some African fruit on which certain people have chiefly depended for support; and to several herbaceous plants essential to the maintenance of domestic cattle in countries sparingly furnished with grass. In this last sense it is finally retained as a generic appellation by modern Botanists.—*Smith in Rees's Cyclop.*

Found originally in Portugal by Professor Brotero, on the sandy sea-coast of Trafaria, at the mouth of the Tagus: it has subsequently been met with in sandy places near Tangier, by Salzmann, from whom we have a specimen.

It approaches the common *Lotus corniculatus* in some respects: it is, however, not only known by its more hoary, downy leaves, and deeper yellow flowers, but also by the bidentate stigma.

It is an annual, and no doubt hardy; the plants from which our drawing was taken were raised from seed collected in Teneriffe by Philip Barker Webb, Esq., from whose Garden at Milford, near Godalming, specimens were communicated in April 1831, by Mr. Young.

It may perhaps be worth remarking, that this is one of the instances where plants that are natives of the north of Africa, or of the southern countries of Europe, spread northwards on the west of the European continent exclusively.

J. L.



HÁKEA* lineáris.

Linear-leaved Hakea.

TETRANDRIA MONOGYNIA.

Nat. ord. PROTEACEÆ Juss. (Introduction to the natural system of Botany, p. 68.)

HÁKEA.—Suprà, vol. 6. fol. 475.

§. *Folia omnia plana, aliqua v. omnia dentata v. incisa.*

H. linearis; foliis lineari-oblongis sessilibus impunctatis spinuloso-dentatis mucronatis junioribus integerrimis, ramulis glabris, corymbis axillaribus foliis brevioribus.

H. linearis. *R. Brown prodr.* 384. *Römer et Schultes syst. veg.* 3. 421. *Sweet. fl. australas.* 43.

Frutex sempervirens, dumosus, ramis ramulisque glabris, viridi-castaneis; his angulatis. Folia plana, nitida, glaberrima, sessilia, lineari-oblonga, spinuloso-dentata, mucronata, juniora integerrima; omnia impunctata, avenia, costá obscurá evanescente. Flores albi, leviter odorati, corymbis axillaribus folio brevioribus, congesti; rachis glabra, alba; pedicelli clavati, glabri; bracteæ minimæ, squamiformes. Calyx 4-phyllus, sepalis linearibus, apice recurvis, glabris, subcampanulatis. Ovarium glabrum. Stylus filiformis, sepalis longior, apice recurvus; stigma simplex, subdilatus.

A native of the barren plains of Lewin's Land, on the south-west coast of New Holland.

In this country it forms a very beautiful evergreen bush, remarkable for the glossiness and rich deep bright green of the leaves. The flowers are produced in great abundance. As a species it stands next *H. florida*, from which it is readily known by its leaves not having the little impressed dots, nor its branches the hairs, to be seen in that species.

Our drawing was made in August last, in the Nursery

* So named by Professor Schrader, in compliment to Baron Hake, a patron of the Botanic Garden at Hanover.

of Mr. Low, at Clapton, who informs us that it is a hardy greenhouse plant, requiring no particular treatment beyond that required by other New Holland Proteaceæ, and increased by cuttings of the wood just ripened.

J. L.



GOMPHOLÓBIUM* marginátum.

Thick-edged Gompholobium.

DECANDRIA MONOGYNIA.

Nat. ord. LEGUMINOSÆ Juss. §. Papilionaceæ. (*Introduction to the natural system of Botany*, p. 87.)

GOMPHOLOBIUM.—*Suprà*, vol. 6. fol. 484.

G. marginatum; foliolis 3 obovatis marginatis planis, stipulis petiolum æquantibus, corollâ longitudine calycis. *De Cand. prodr.* 2. 105. *R. Brown in Hort. Kew. ed. 2. v. 3. p. 11.*

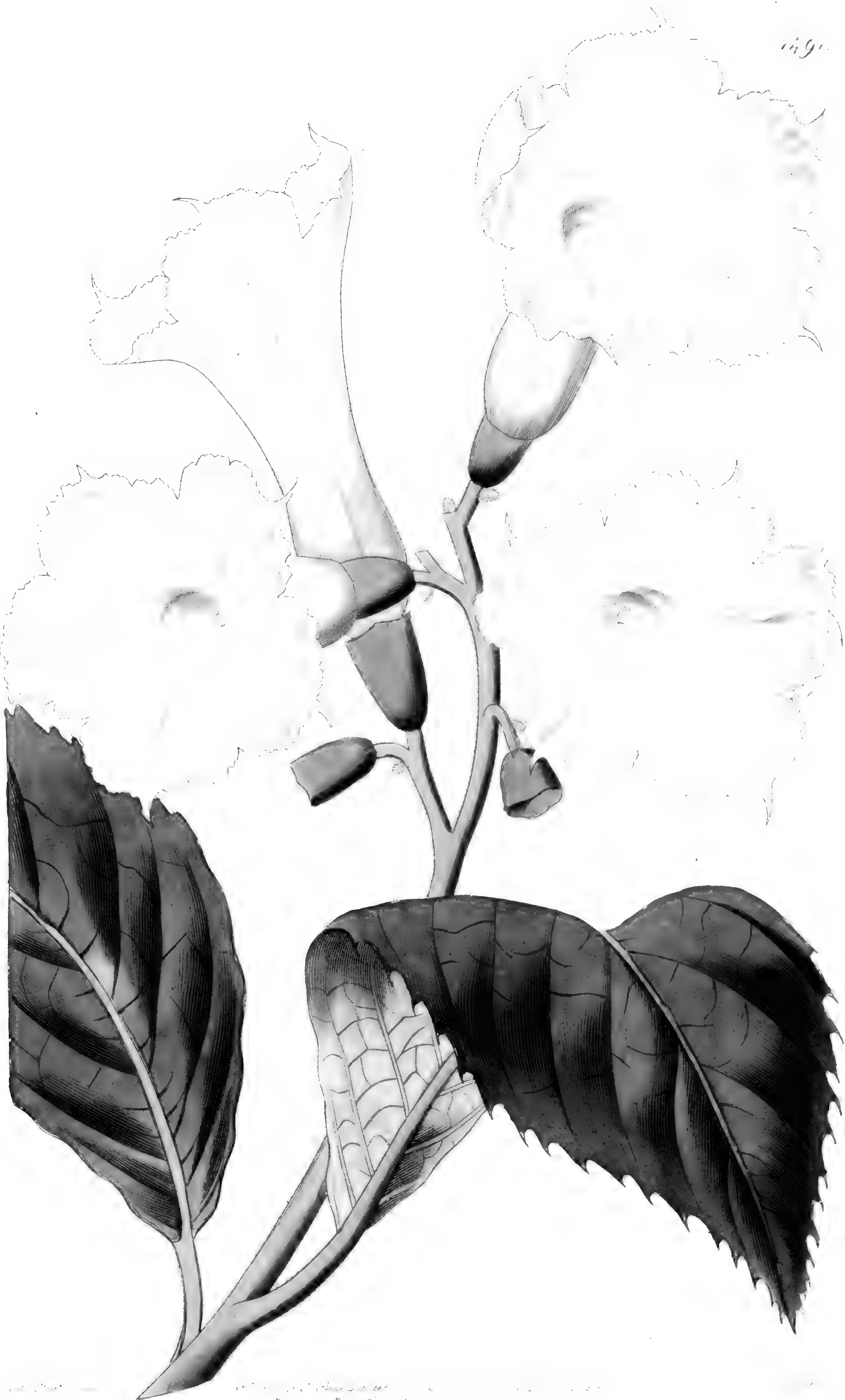
Fruticulus spithamæus, ramosus, erectus, ramulis subteretibus, gracilimimis, glabris. Folia trifoliolata, subnitida, glabra, glaucescentia; foliola in petiolum brevem subsessilia, cuneato-obovata, mucronata, venis primariis obliquis rectis excurrentibus, in margine incrassato evanescentibus; stipulæ subulate, petiolo æquales. Pedicelli axillares, solitarii, filiformes, cernui, versùs basin bracteolis quibusdam minutis squamati. Sepala viridia, corollâ paulò breviora. Petala utrinque lutea, unicolora. Legumen oblongum, ventricosum, polyspermum, fragile. Semina reniformi-oblonga, parva, pallidè testacea.

A native of the South-western coast of New Holland, whence seeds were brought by Mr. William Baxter to Mr. Knight, in whose Nursery, in the King's Road, our drawing was made in August last. It is a neat little plant, requiring the same treatment as *Gompholobium tomentosum*, already figured at tab. 1474 of this work.

A small *shrub*, about a span high, branched, erect, with roundish, slender, smooth shoots. *Leaflets* shining, smooth, somewhat glaucous, cuneate-obovate, mucronate; their primary veins straight, oblique, running out to the edge, which is remarkably thickened; *stipules* subulate, as long as the petiole. *Pedicels* axillary, solitary, filiform, drooping, covered towards the base with a few scale-like bractææ. *Sepals* green, rather shorter than the corolla. *Petals* yellow on each side. *Pod* ventricose, oblong, many-seeded, brittle. *Seeds* reniform-oblong, small, pale brownish.

J. L.

* See fol. 1468.



CÓRDIA* grandiflora.

Large-flowered Cordia.

PENTANDRIA MONOGYNIA.

Nat. ord. CORDIACEÆ R. Br. (Introduction to the natural system of Botany, p. 243.)

CORDIA L.—*Calyx* tubulosus, 5- rarò 4-dentatus. *Corolla* infundibuliformis, limbo 5-4-fido. *Stamina* numero laciniarum, rarò plura. *Stylus* dichotomus. *Stigmata* 4. *Drupa* calyce partim v. omninò tecta, putamine 4-loculari, abortione 1-3-loculari. *Cotyledones* plicatæ.—Arbores v. Frutices. *Folia integerrima, v. incisa.* Inflorescentia terminalis, paniculata, corymbosa, v. spicata, ebracteata.—Brown prodr. 498.

C. grandiflora; foliis oblongo-lanceolatis dentato-serratis basi integerrimis, calyce pubescente subtruncato lævi, corollis campanulato-infundibularibus calyce 5-6-plò longioribus: laciniis cuspidatis.

Our drawing of this plant was made in August 1828, in the stove of Mr. Lee, of Hammersmith, where it was said to have been raised from South American seeds.

Owing to some accident no specimen was preserved, and we now find that the plant has disappeared; so that we are in possession of no information relating to it beyond what the drawing affords.

Upon shewing it to Mr. Don, who has made several of the orders of arborescent monopetalous Dicotyledons his particular study, he suggested that the plant was probably a *Cordia*; a view which the serrated alternate leaves, and plaited corolla, with cuspidate segments, renders extremely probable. Mr. Don has not, however, succeeded in dis-

* So called after Euricius and Valerius Cordus, father and son, both among the regenerators of Botany in Germany in the sixteenth century: of the former the *Botanologicon*, of the latter the *Historia Plantarum*, are the works that are best known.

covering any thing similar to it in the vast South American Herbarium of Mr. Lambert; nor have we ourselves been able to detect it in our own Herbarium, or in books.

It is a very fine species; and we hope that the publication of the figure may prove the means of recovering the plant.

J. L.



POTENTILLA* viscosa.

Viscid Cinquefoil.

ICOSANDRIA POLYGYNIA.

Nat. ord. ROSACEÆ Juss. (Introduction to the natural system of Botany, p. 81.)

§. *Potentilleæ Jussieu.*

POTENTILLA.—*Suprà, fol. 1379.*

P. viscosa; caule erecto, foliis pinnatifidis viscido-pubescentibus: caulinis 3-5-pinnatisectis, lobis lanceolatis inciso-serratis, floribus numerosis paniculatis, laciniis calycinis subæqualibus ovatis acuminatis, bracteolis linearibus, petalis obcordatis longitudine calycis, receptaculo piloso, carpellis lævibus. *De Cand. prodr. 2. 581.*

P. viscosa. Donn. hort. cant. Lehm. potent. 57.

P. hispida. Nestl. potentill. 36. nec Willdenovii.

A hardy, herbaceous plant, native, according to different authors, of Davuria, Siberia, and Arabia. It is nearly related to *P. pennsylvanica*, from which it is known by its green, not hoary, aspect, by its long spreading hairs, shorter deep-yellow petals, and by the viscid glands that are scattered among the pubescence, and from which the species derives its name.

Grows readily in any common soil, and blossoms in the months of June, July, and August.

Our drawing was made in the Garden of the Horticultural Society in 1830. J. L.

* See fol. 1379.



SCUTELLARIA* alpina ; var. lupulina.

Alpine Scutellaria; hop-flowered variety.

DIDYNAMIA GYMNOSPERMIA.

Nat. ord. LABIATÆ Juss. (*Introduction to the natural system of Botany*, p. 239.)

SCUTELLARIA Linn.—*Calyx* campanulatus, bilabiatus: labiis integris (nempè sepalo supremo excluso squamæformi, binis lateralibus in labium superius, 2 infimis in inferius coalitis,) post anthesin clausis, demùm ad basin fissis, superiore dorso squamigero ad maturationem deciduo inferiore persistente. *Corolla* tubo longè exserto, adscendente, bilabiata: labio superiore galeato, inferiore convexo, lobis lateralibus nunc liberis, sæpiùs cum labio superiore rarissimè cum inferiore coalitis. *Stamina* 4, sub galea adscendentia, didynama. *Antheræ* ciliatæ, staminum inferiorum longiorum dimidiatæ, superiorum breviorum cordatæ, biloculares, oculis divaricatis, dorso sub oppositis. *Styli* lobus superior sæpiùs brevissimus, lobusque inferior acuti apice minutè stigmatiferi. *Ovarium* gynophoro incurvo elevatum, obliquum. *Achenia* sicca, nuda, tuberculoso-rugosa.—*Herbæ annua, vel perennes, rariùs suffrutices, caule non nunquam subvolubili scandente. Pedunculi in axillis foliorum floralium solitarii, uniflori.* Benth. MSS.

S. alpina; caule procumbente, foliis subsessilibus v. breviter petiolatis ovatis serrato-crenatis concoloribus: floralibus membranaceis junioribus imbricatis, spicis tetragonis. Benth. MSS.

S. alpina. Linn. *Suprà*, fol. 1460.

S. variegata. Spreng. *fil. tentamen.*

S. altaica. Fisch. *cat. hort. Gorenhi*, 39. *Sw. brit. fl. gard.* 1. t. 45.

β. lupulina; floribus flavis, caule foliisque glabrioribus. Benth.

S. lupulina. Linn. *Willd. sp. pl.* 3. 172.

S. verna. Besser *prim. fl. gal. par.* ii. 43.

S. no. 52. Gmelin *fl. sibir.* 3. 229. t. 48.

A hardy, prostrate, herbaceous, perennial plant, found in the south-eastern parts of Europe, and in Asiatic Russia. Siberia and Tartary are named as its countries by Willdenow; Besser obtained it from the neighbourhood of Tyra, in Galicia; and Gmelin found it in the mountains of the country watered by the river Jaik.

* See fol. 1460.

In habit and period of flowering it corresponds exactly with *S. alpina*, already figured at fol. 1460 of this work: in our Gardens it differs chiefly in its flowers being pale yellow, without any stain of violet, and in the flower-heads having a less disposition to elongate, so that the bracteæ have pretty constantly that compact arrangement to which the name hop-headed owes its origin; the leaves are also generally larger, more obtuse, and perhaps less sessile. The character in the inflorescence just alluded to, appears, however, to be lost in a wild state, as is evident from Gmelin's plate, which Besser has rightly referred to this species. We therefore cannot but adopt Mr. Bentham's opinion, that *Sc. lupulina* is a mere variety of *S. alpina*, into which it may be traced even from its best-defined state.

To the kindness of this gentleman we owe not only the corrected generic and specific characters given above, but also the following valuable enumeration of all the species comprehended in the genus.

“ § 1. *Spicatae*; foliis floralibus membranaceis, floribus tetragono-spicatis.

1. *S. orientalis* (Linn. spec. 834).—*Hab.* in Græciâ, Armeniâ, et Caucaso (v. s. sp.)
2. *S. grandiflora* (Sims. bot. mag. 17. t. 635).—*Hab.* in Sibirîâ.
3. *S. alpina* (Linn. sp. 834).—*Hab.* in Pyrenæis, et in alpihus Europæis, Altaicis, et Tauro-Caucasicis.
4. *S. linearis* (Benth. ! in Wall. pl. as. rar. 1. 66).—*Hab.* in alpihus Kamaonensibus Indiæ Orientalis (v. s. sp.)

§ 2. *Racemosæ*; foliis floralibus herbaceis parvis vel caulinis difformibus, floribus secundis racemosis.

* *Floribus sparsis.*

5. *S. longifolia*, glabra, caule erecto, foliis petiolatis ovato-lanceolatis acuminatis remotè dentatis basi rotundato-cuneatis: floralibus linearibus minutis deciduis, racemis elongatis subramosis, floribus secundis sparsis, corollis calyce glabro octuplò longioribus.—*Hab.* in Novâ Hispaniâ, Moçino et Sessé (v. s. sp. in herb. Lambert.)

6. *S. multiflora*, caule erecto tenuiter pubescente, foliis petiolatis ovatis acuminatis obtusè sinuato-dentatis basi rotundato-truncatis: floralibus lanceolato-linearibus calyce sublongioribus, racemis elongatis simplicibus, floribus secundis sparsis, corollis calyce villoso quintuplò longioribus.—*Hab.* in Novâ Hispaniâ, Moçino et Sessé (v. s. sp. in herb. Lambert.)

7. *S. breviflora*, glabra, caule erecto, foliis petiolatis ovatis acuminatis obtusè sinuato-dentatis basi rotundato-truncatis: floralibus lanceolato-linearibus calyce sublongioribus, racemis elongatis simplicibus laxis, floribus secundis sparsis, corollis calyce glabro subtriplò longioribus.—*Hab.* in Peruviâ, Pavon. (v. s. sp. in herb. Lambert.)

8. *S. atriplicifolia*, tenuiter cano-pubescentibus, foliis petiolatis lato-ovatis obtusiusculis subintegerrimis repandisve basi truncatis subcordatis subcarnosis: floralibus ovatis acuminatis calyce sublongioribus, racemis elongatis simplicibus, floribus secundis sparsis.—*Hab.* in Peruviâ? Pavon. (v. s. sp. in herb. Lambert.)

9. *S. coccinea* (Kunth nov. gen. et sp. 2. 325).—*Hab.* in Americæ Meridionalis regno Granatense.

10. *S. tubiflora*, caulibus adscendentibus ramosis pubescentibus, foliis petiolatis ovatis obtusis grossè crenatis basi rotundatis suprâ hispidulis subtùs molliter pubescentibus: floralibus ovatis ante anthesin imbricatis, racemis simplicibus, floribus secundis sparsis, corollis calyce septuplò longioribus.—*Hab.* in Brasiliâ Meridionali, Sello (v. s. sp. in herb. reg. Berol.)

11. *S. discolor* (Colebr. in Wall. pl. as. rar. 1. 66). *S. indica*, Don prod. fl. nep. 109, non Linn.—*Hab.* in montibus Napaliæ et Silhet Indiæ Orientalis (v. s. sp.)

** *Floribus oppositis.*

12. *S. fruticosa* (Desf. in Pers. syn. 2. 136).—*Hab.* in Persiâ et Syriâ (v. s. sp.)

13. *S. versicolor* (Nutt. gen. 2. 38). *S. cordifolia*, Muhl. cat.—*Hab.* in Louisianâ et Ohio Americæ Borealis (v. s. sp.)

14. *S. Columnæ* (All. ped. 1. 40. t. 84. f. 2). *S. peregrina*, Sibth. et Sm. fl. gr. 6. 66. t. 582, non Linn.—*Hab.* in Galliâ, Italiâ, Germaniâ, Græciâ (v. s. sp.)

15. *S. Tourneforti*, glaberrima, caule erecto ramoso, foliis petiolatis ovatis vel ovato-lanceolatis grossè crenatis, infimis basi latè subcordatis, superioribus rotundato-truncatis: floralibus ovato-lanceolatis calyce fructifero subbrevioribus, racemo elongato laxo glabro, floribus oppositis secundis, calycibus pedicello longioribus, fructiferis maximis glabris, corollis calyce sextuplò longioribus.—*Hab.* in Persiâ, Tournefort (v. s. sp. in herb. Lambert.)

16. *S. altissima* (Linn. spec. 836). *S. peregrina*, Waldst. et Kit. pl. rar. hung. 2. 154. t. 125, non Linn.—*Hab.* in Europâ Austro-orientali, in Tauriâ, et in Caucaso (v. s. sp.)

17. *S. Felisberti* (Mart. ex Spr. syst. cur. post. 226).—*Hab.* in Brasiliâ.

18. *S. purpurascens* (Sw. fl. ind. occid. 2. 1013).—*Hab.* in Indiâ Orientali (v. s. sp.)

19. *S. violacea* (Heyne, Wall. pl. as. rar. 1. 66). *S. indica*, Roxb. hort. beng. 44, non Linn.—*Hab.* in Indiæ Orientalis Peninsulâ et in Ceylonâ.

20. *S. oblonga*, caule adscendente pubescente, foliis petiolatis oblongo-ellipticis acutiusculis apice subserratis basi rotundatis integerrimis glabriusculis: floralibus ovatis minutis, racemo laxo simpliciusculo, floribus oppositis secundis, calycibus pedicellum æquantibus, fructiferis maximis glabriusculis, corollæ labio inferiore latissimo.—*Hab.* in Ceylonâ, Macrae (v. s. sp. in herb. Lindley.)

21. *S. Wightiana* (Benth. in Wall. pl. as. rar. 1. 67).—*Hab.* in Indiæ Orientalis Peninsulâ et in Ceylonâ (v. s. sp.)

22. *S. Colebrookeana* (Wall. ! pl. as. rar. 1. 67).—*Hab.* in Indiæ Orientalis Peninsulâ (v. s. sp.)

23. *S. indica* (Linn. ! spec. 836, non Don).—*Hab.* in Chinâ et Japoniâ (v. s. sp.)

24. *S. albida* (Linn. ! mant. 248). *S. pallida*, Bieb. fl. tauro-cauc. 2. 65. *S. nigrescens*, Spr. syst. 2. 702?—*Hab.* in Europâ Austro-orientali, Tauriâ, et Sibiriâ Australi (v. s. sp.)

25. *S. hirta* (Sibth. et Sm. fl. gr. 6. 66. t. 583). *S. utriculata*, Labill. ic. syr. pl. rar. 4. 11. t. 6.—*Hab.* in Cretâ et Syriâ.

26. *S. peregrina* (Linn. ! spec. 836). *S. rubicunda*, Hornem. hort. Hafn.—*Hab.* in Caucaso (v. v. c.)

27. *S. serrata* (Andr. ! bot. rep. t. 494).—*Hab.* in Americâ Boreali (v. s. c.)

28. *S. canescens* (Nutt. gen. 2. 38). *S. serrata*, Spr. syst. 2. 703, et auct. plur. non Andr. *S. pubescens*, Muhlenb. cat. ?—*Hab.* in Canadâ? Ohio et Louisianâ superiore Americæ Borealis (v. s. sp.)

29. *S. pilosa* (Mich. fl. bor. amer. 2. 11). *S. caroliniana*, Walt. fl. carol. 163. *S. elliptica*, Muhlenb. cat. ?—*Hab.* in Americâ Boreali à Pennsylvaniâ ad Georgiam (v. s. sp.)

30. *S. villosa* (Elliott bot. 2. 90?).—*Hab.* in Americâ Boreali, in Georgiâ, et Novo Aureliano (v. s. sp.)

31. *S. integrifolia* (Linn. ! spec. 836). *S. hyssopifolia*, Linn. ! spec. 836. *S. caroliniana*, Lam. dict. 7. 706. Illustr. t. 515. f. 3. *S. ovalifolia*, Pers. syn. 2. 136. ?—*Hab.* in Americâ Boreali à Novo Eboraco ad Georgiam (v. s. sp.)

32. *S. incurva* (Wall. pl. as. rar. 1. 67).—*Hab.* in Indiæ Orientalis regno Avano (v. s. sp.)

33. *S. macrantha* (Fisch. ! MSS.)—*Hab.* in Asiâ Orientali, in Dahuriâ, et Chinâ (v. s. sp.)

34. ? *S. racemosa* (Pers. syn. 2. 136).—*Hab.* in Monte Video Americæ Australis.

§ 3. *Axillares*, foliis floralibus herbaceis caulinis subconformibus, floribus axillaribus vel supremis subracemosis.

35. *S. antirrhinoides*, caule diffuso ramoso glabro, foliis breviter petiolatis ovatis obtusis integerrimis basi angustatis crassiusculis glabris vel tenuissimè pubescentibus: floralibus conformibus, supremis sterilibus, floribus axillaribus oppositis secundis, calycibus pedicello brevioribus.—*Hab.* in Americâ Boreali-occidentali ad ripas fluminis, Columbiâ prope arcem Vancouver, Scouler (v. s. sp. in herb. Hooker.)

36. *S. angustifolia* (Pursh ! fl. amer. sept. 2. 412).—*Hab.* in Americâ Boreali-occidentali (v. s. sp.)

37. *S. scordifolia* (Fisch. ! in Spr. syst. 2. 225). *S. Adamsii*, Spr. syst. 2. 701?—*Hab.* in Asiâ Boreali-orientali in Camtchatkâ et Dahuriâ, et ad lacum Baikal? (v. s. sp.)

38. *S. galericulata* (Linn. ! spec. 835).—*Hab.* in Europâ totâ, Asiâ Rossicâ, et Americâ Boreali.

39. *S. hastefolia* (Linn. ! spec. 835).—*Hab.* in Sueciâ, Galliâ, et Germaniâ (v. s. sp.)

40. *S. rivularis* (Wall. ! pl. as. rar. 2. 66). *S. barbata*, Don prod. fl. nep.—*Hab.* in Napaliâ Indiæ Orientalis, et in Chinâ Australi (v. s. sp.)

41. *S. havanensis* (Jacq. obs. 2. 5. t. 29).—*Hab.* in Cubâ.

42. *S. rumicifolia* (Kunth nov. gen. et sp. 2. 324).—*Hab.* in Americâ Meridionali, Mexico, Columbiâ, Brasiliâ, Chili, &c. (v. s. sp.)

43. *S. microphylla* (Moç. et Sessé, MSS.), pubescens, caule diffuso humili ramoso, foliis petiolatis inferioribus rotundatis sinuato-crenatis, superioribus ovatis, supremis subintegerrimis utrinque angustatis, floribus parvis axillaribus oppositis secundis, pedicellis

calyce longioribus.—*Hab.* in Novâ Hispaniâ, Moçino et Sessé (v. s. sp. in herb. Lambert.)

44. *S. humilis* (Br. prod. 507).—*Hab.* in Novâ Hollandiâ, in Terrâ Diemenicâ (v. s. sp.)

45. *S. minor* (Linn. ! spec. 835).—*Hab.* in Angliâ, Galliâ, et Germaniâ (v. s. sp.)

46. *S. parvula* (Mich. fl. bor. amer. 1. 12).—*Hab.* in Americâ Boreali à Canadâ ad Virginiam et regione Illinoensium (v. s. sp.)

47. *S. gracilis* (Nutt. gen. 2. 37).—*Hab.* in Americâ Boreali prope Philadelphiam et ad West Chester (v. s. sp.)

48. *S. nervosa* (Pursh ! fl. bor. amer. 2. 412). *S. ambigua*, Nutt. gen. 2. 37.—*Hab.* in Americâ Boreali ad Ohio (v. s. sp.)

49. *S. cœrulea* (Moç. et Sessé, MSS.), caule simpliciusculo pubescente, foliis breviter petiolatis ovato-rhomboideis obtusis crenatis basi rotundatis: floralibus subconformibus angustioribus, supremis lanceolatis subintegerrimis, omnibus suprâ pubescentibus, floribus oppositis secundis axillaribus vel supremis subracemosis, corollis calyce subsessili sextuplò longioribus. Var. β foliis utrinque pubescentibus.—*Hab.* in Mexico, Moçino et Sessé; var. β in montibus prope Tlalpuxahua, G. J. Graham (v. s. sp. α in herb. Lambert. β comm. à cl. Graham.)

50. *S. mollis* (Br. prod. 507).—*Hab.* in Novâ Hollandiâ (v. s. sp.)

51. *S. malvæfolia* (Kunth nov. gen. et sp. 2. 235).—*Hab.* in Americæ Meridionalis regno Novo-Granatense.

52. *S. cumanensis* (Kunth nov. gen. et sp. 2. 325).—*Hab.* in Americâ Meridionali prope Cumana et Bordones.

53. *S. volubilis* (Kunth nov. gen. et sp. 2. 325).—*Hab.* in Americâ Meridionalis regno Novo-Granatense.

§ 4. *Laterifloræ*. Foliis floralibus herbaceis infimis caulinis conformibus, floribus oppositis secundis plerumque in racemos axillares terminalesque dispositis.

* *Caule subvolubili scandente.*

54. *S. grossa* (Wall. pl. as. rar. 1. 67).—*Hab.* in Indiæ Orientalis montibus Kamaonensibus (v. s. sp.)

55. *S. repens* (Hamilt. in Don prod. fl. nep. 110). *S. cana*, Wall. pl. as. rar. 1. 67.—*Hab.* in Indiæ Orientalis montibus Napalensibus, Kamaonensibus, et Avensibus (v. s. sp.)

56. *S. scandens* (Don prod. fl. nep. 110). *S. angulosa*, Benth. in Wall. pl. as. rar. 167.—*Hab.* in Indiæ Orientalis montibus Napalensibus et Kamaonensibus (v. s. sp.)

** *Caule erecto.*

57. *S. lateriflora* (Linn. ! spec. 835).—*Hab.* in Americâ Boreali, vulgaris ab Oceano Atlantico ad Pacificum (v. s. sp.)

58. *S. cretica*. Linn. ! spec. 836, est *Teucrium Arduini*."

J. L.



ERÁNTHEMUM* fœcúndum.

Ever-blowing Eranthemum.

DIANDRIA MONOGYNIA.

Nat. ord. ACANTHACEÆ Juss. (Introduction to the natural system of Botany, p. 233.)

ERANTHEMUM.—Suprà, vol. 10. fol. 867.

E. *fœcundum*; foliis subsessilibus oblongo-lanceolatis acuminatis integerimis junioribus pubescentibus, bracteis minimis, corollæ laciniis obtusis tubo arcuato brevioribus, spicis terminalibus subsimplicibus.

Caulis fruticosus, erectus, tetragonus, ad nodos tumidus, pedalis sesquipedalisve, parùm ramosus. Folia atroviridia, suprà glaberrima, subconcava, brevius petiolata; subtùs petiolis ramulisque pubescentibus. Bracteæ subulatæ et sepala pubescentia. Corolla lilacina.

Our drawing of this species was made in the Garden of the Horticultural Society in September last, from a plant said to have been sent from Brazil by the Right Hon. Robert Gordon. It requires the heat of a stove, and a good deal of atmospheric moisture, when it readily increases by cuttings, and flowers almost all the year round.

What is most remarkable in it is its unusual disposition to form flower-buds instead of leaf-buds. If any thing occurs to check its growth, such as a dry atmosphere, or repotting, or exposure to sudden cold, it is directly thrown so abundantly into a blossoming state, that young plants will often commit a sort of vegetable suicide, killing themselves by their excessive fecundity.

If well managed, encouraged to form leaf-buds, and maintained in a steady and uniform rate of growth, it forms a neat little bush, the ends of all the branches being covered by short spikes of lilac blossoms. J. L.

* Literally Love-flower; few of the species deserve the title better than this.



ÁSTER* cyáneus.

Glaucous Aster.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (*Introduction to the natural system of Botany*, p. 197.)

§. Corymbiferæ Juss. Asteræ Cassini.

ASTER.—*Suprà*, vol. 3. fol. 183.

Sect. B. 8. *Herbacei; foliorum venæ primariæ divergentes, v. evanescentes; involucra campanulata, squamis exterioribus sensim minoribus appressis v. erectis.*

A. *cyaneus*; purpurascenti-glaucus glaber, foliis inferioribus ovato- v. oblongo-lanceolatis basi petiolatim angustatis: superioribus subamplexicaulibus oblongis v. ovatis acutis: supremis minoribus, squamis acutis basi albidis, pappo flosculis disci æquali, ovariis glabris.

A. *Novi Belgii* β. glaucus. *Ait. Kew. ed. 1. vol. 3. p. 206.*

A. *cyaneus*. *Hoffm. phytogr. blätt. 1. t. B. f. 1. Nees monog. ast. herb. p. 23.*

A. *glaucus*. *Nees l. c. p. 23.*

A. *bupleuroides*. *Hort. monsp.*

A. *mutabilis*. *Hort. berol.*

Omni parte herbacæ glaucus, purpureo magis minusve tinctus. Caulis erectus, in cultâ 2-3-pedalis, in spontaneâ sæpè multò demissior. Folia radicalia nunc subsessilia, basi angustata, serrata, nunc longè petiolata, quibusdam subcordato-oblonga serrata, aliis ovato-lanceolata integerrima; caulina cum figurâ tum margine pariter variantia, sæpiùs acuta, aliquandò obtusa, semper subamplexicaulia; suprema nunc sensim nunc abruptè minora, caulinis conformia. Capitula nunc apice ramorum solitaria, nunc geminata, nunc in ramos racemosa, rariùs corymbosa; involucra campanulata, squamis erectis, imbricatis, acutis, apice herbaceis, basi albidis, margine submembranaceo, exterioribus multò minoribus. Flosculi radii magis minusve intense cyanei, involucro longiores, disci lutei submutabiles.

This appears to be an extremely common North American plant, for it forms a part of almost every collection from the midland districts of the United States. It has been a

* See fol. 1487.

long time in our Gardens, where it is a great ornament of the outskirts of Shrubberies from September to the end of November, increasing rapidly by its spreading roots, which will soon overrun a considerable patch of ground. It is on this account that, like many others of its tribe, it is unfit for cultivation among delicate plants, or in situations where great order should be maintained.

Than this we could scarcely select a better instance of the variable character of the species of this intricate genus. In stature it varies from a foot or fifteen inches to three or four feet in height; its stems are sometimes, as in *A. bupleuroides*, deep purple, in others they are scarcely stained; its leaves are sometimes all serrated, occasionally all entire, more commonly serrated at the lowest part of the stem only; sometimes scarcely any footstalk can be discovered in a specimen, in other cases all the lowest leaves are furnished with petioles, almost as long as the laminæ; even the outline of the latter is subject to considerable variation, some specimens having the lower leaves almost cordate, while others have them gradually tapering to the base. The characteristic marks of the species are to be sought in the purplish glaucous colour of the stems and leaves, the amplexicaul base of the latter upon the upper parts of the stem, and in the large bright blue rays of the flower-heads.

There can be no doubt that the synonyms above quoted are certain ones; if we have not increased the list, it is because, although we can scarcely doubt that several more reputed species are also reducible hither, we have not at present the same absolute certainty in regard to them.

In the Gardens this is sometimes called *A. phlogifolius*, *A. mutabilis*, and even *A. concolor*; while Pursh has evidently confounded it with *A. Novæ-Angliæ*, a totally different species.

J. L.



Russell's POTENTILLA.*

ICOSANDRIA POLYGYNIA.

Nat. ord. ROSACEÆ Juss. (Introduction to the natural system of Botany, p. 81.)

§. *Potentilleæ.*

POTENTILLA.—*Suprà, fol. 1379.*

GARDEN VARIETY.

This *Potentilla*, which is generally known in our Gardens by the name of *P. Russelliana*, is one of the most remarkable productions that the art of hybridising has yet produced among herbaceous plants.

It was raised by Mr. Russell, of Battersea, between *P. atrosanguinea* and *P. napalensis*, and it is as nearly as possible intermediate between those two most truly distinct species. Its flowers rival those of the former in size and depth of colour, while their richness is strikingly increased by an infusion of the purple-carmine ground of the petals of the latter; the foliage partakes almost equally of either parent:

“The monster offspring heirs the father's pride,
Mark'd in the damask beauties of the bride.”

It is a perfectly hardy perennial plant, increased with facility by the division of its crown; and flowering most part of the summer.

J. L.

* See fol. 1379.



COBÚRGIA* fúlva.

Tawny Coburgia.

HEXANDRIA MONOGYNIA.

Nat. ord. AMARYLLIDÆ Brown. (*Introduction to the natural system of Botany*, p. 259.)

COBURGIA.—*Germen* ovale, trisulcum. *Tubus* curvatus, cylindricus, subventricosè ampliatus; *limbus* tubo brevior, æqualis, semipatens, cernuus; *filamenta* æqualia, recta, vix conniventia, membranâ tubulosâ extra tubum connexa; *antheræ* erectæ; *stylus* recurvatus; *stigmatè* obtuso. *Ovula* biserialim confusa. *Scapus* solidus.—*W. H.*

C. fulva; bulbo ovato, foliis subglaucis pedalibus, apice subacuto, scapo 15-unciali compresso viridi; spathâ latâ viridi bracteâtâ, umbellâ 5-6-florâ, pedunculis brevibus, germine viridi, tubo 3¼-unciali fulvo, limbo 1¼-unciali: laciniis latis obtusis fulvo-miniatis apicem versùs viridi striatis, nectario semunciali: dentibus inter stamina binis viridibus extrorsùm curvatis, filamentis limbo brevioribus, antheris aureis, stylo filamentis longiore, ovulis in loculo quoque viginti quatuor.—*W. H.*

For the drawing, characters, and following history of this very pretty bulbous plant, we are indebted to the Hon. and Rev. William Herbert, in whose rich collection at Spofforth it has first appeared.

“ This beautiful South American bulb flowered in the stove in February. It is closely allied to *Coburgia incarnata* of Sweet’s *Flower-Garden*, which is *Pancratium incarnatum* of Humboldt, and *Pancratium Trichroma* of De la Llave and Llexarza. *Coburgia fulva* does not appear to have been described. The bulbs of this genus are hardy greenhouse plants; they may be kept dry in the winter, and planted out in the spring; but they will not endure the winter out of doors, except near the wall of a stove.

* Named in compliment to his Majesty Leopold I., king of the Belgians.

They produce abundance of offsets, which is probably the cause of their rarely flowering with us. Perhaps a strong and richly manured loam would promote their blossom. Bulbs of *Coburgia incarnata* have been received from Mexico, where it is cultivated in pots; but it is a native of the vicinity of Quito."

J. L.

- a. The germen.
- b. The denticulated membrane uniting the filaments, shewing the posture of the style.
- c. One cell opened, shewing 24 ovules in two irregular rows.



SOULÁNGIA* rúbra.

Red Soulangia.

PENTANDRIA MONOGYNIA.

Nat. ord. RHAMNEÆ Juss. (Introduction to the natural system of Botany, p. 113.)

SOULANGIA.—*Calyx* tubo obconico ovario adnato. *Petala* cucullata. *Stamina* inclusa, antheris reniformibus unilocularibus. *Discus* epigynus, pentagonus, carnosus. *Ovarium* calycis tubo adnatum et æquale, triloculare. *Stylus* simplex. *Fructus* inferus, areolâ magnâ superiùs notatus, tricoccus. *Semina* podospermio brevi carnosio suffulta.—*Adolphe Brongniart, mémoire sur les Rhamnées, p. 70.*

S. rubra; ramis pubescentibus, foliis ovato-linearibus acutis suprâ glabris lucidis subtùs incanis margine subrevolutis, capitulis terminalibus multifloris lanuginosis foliis longioribus.

Phylla rubra. Willd. *reliq. in Römer et Schultes, 5. 491. De Cand. prodr. 2. 37.*

Frutex sempervirens, foliis superioribus sensim minoribus. Calyx extùs lanuginosus, intùs lateritius. Petala purpurea.

A native of the Cape of Good Hope, from whence its seeds were received a few years since by Messrs. Rollisson of Tooting, by whom the specimens here figured were communicated in December last.

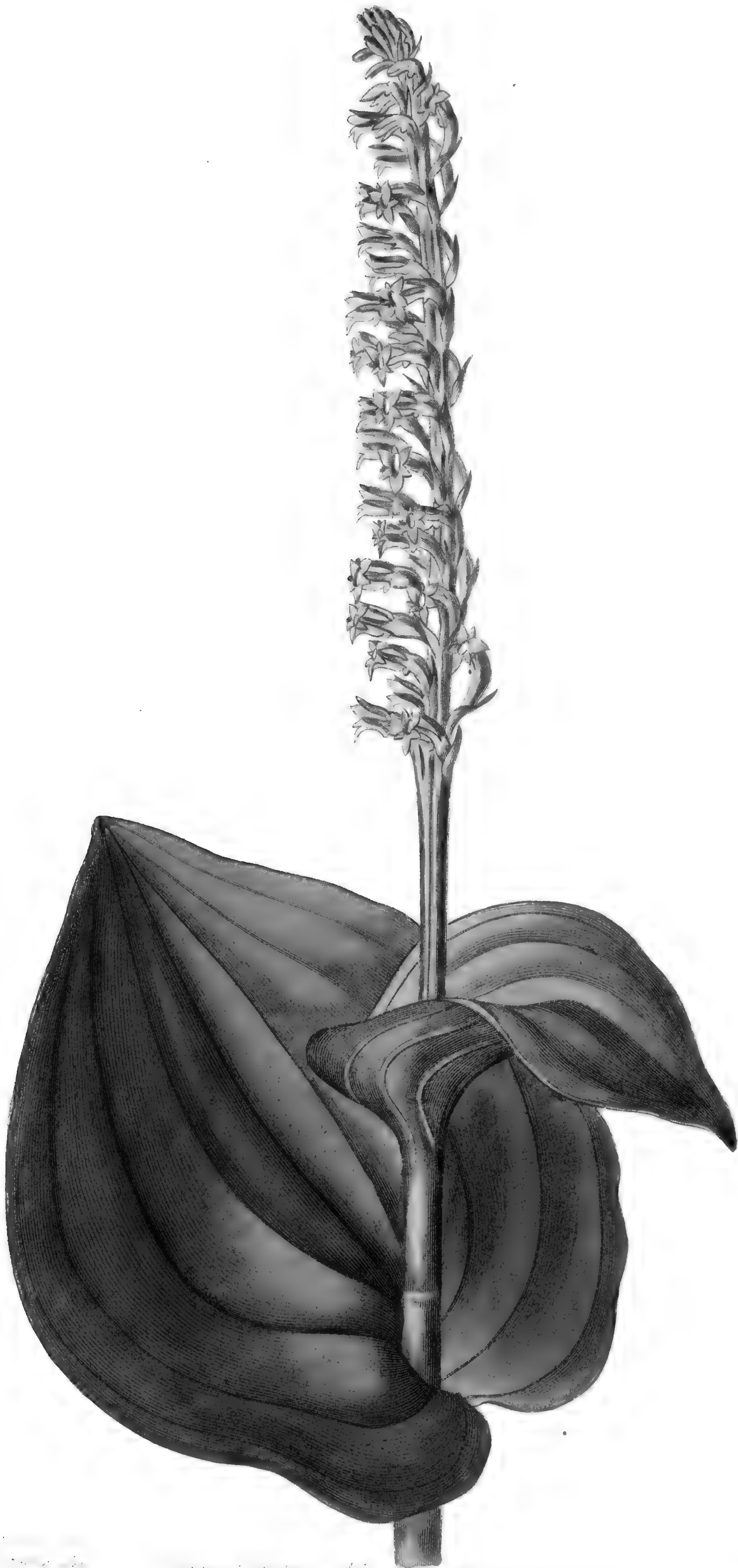
It is a hardy greenhouse plant, extremely neat in its foliage, and rather pretty when its brick-red flowers, nestled in down, make their appearance.

Very near *Soulangia thymifolia*, from which it differs chiefly in its branches being more downy, and its flowers much larger and more woolly.

We have specimens from the Cape of Good Hope, for which we are indebted to the kindness of Mr. Reeves.

J. L.

* Named by Mons. Adolphe Brongniart in compliment to the Chevalier Soulangie-Bodin, the spirited proprietor of the Jardin de Fromont, near Paris, an establishment justly celebrated in the annals of French Horticulture.



HERMINIUM* cordatum.

Heart-leaved Herminium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ Juss. Sect. Ophrydeæ Lindl. (Introduction to the natural system of Botany, p. 262.)

HERMINIUM R. Br.—*Sepala et petala patentia v. conniventia subæqualia. Labellum vix sepalis longius, tridentatum trifidum integrumve, basi nunc planiusculum, sæpiùs saccatum v. gibbosum; saccus v. apertus v. ore constricto vesiciformis. Anthera erecta, minuta, loculis basi divergentibus, polliniorum glandulis nudis, sæpiùs utrinque squamâ (antherâ sterili) instructa. — Herbæ; radicibus carnosis fasciculatis, lobo uno alterove incrassato. Flores sæpiùs herbacei, nunc albi.—Obs. Gymnadeniæ et Platantheræ quàm maximè affinis, illâ loculis antheræ basi divergentibus, hâc labello ealcarato tantùm saccato, difficillimè distinguendum.*

H. cordatum; caule diphylo, foliis cordatis acutis, spicâ secundâ, sepalis petalisque ovato lanceolatis acutis subæqualibus, labello trilobo basi saccato, squamis antheræ lateralibus elongatis clavatis.

Satyrium diphyllum. Link in Schrad. diar. 1799. p. 323.

Orchis cordata. Willd. sp. pl. 4. 28.

Habenaria cordata. Br. prodr. p. 312. Spreng. syst. v. 3. 691. Hooker in bot. misc. v. 1. p. 270. t. 55. Bot. mag. 3164.

A native of the north-west of Africa and south-west of Europe; Link and Brotero have found it in Portugal; we have specimens from shady hills near Tangier, collected by Salzmann; and the Rev. Mr. Lowe found it on walls and rocks in Madeira. For the specimen from which our drawing was taken, we are obliged to the Rev. Mr. Berkeley, at whose request it was forwarded to us from the rich collection of Lord Milton, by Mr. Joseph Henderson. To the latter excellent cultivator we are indebted for the following note upon its habits:—

* An unexplained name of Linnæus, mentioned in his *Philosophia Botanica*, under the head of words derived from the titles of divinities; from which it is to be supposed that it has some reference to the god Mercury; but, as far as we know, not applied by that Botanist.

“ The plant grows very well in the Greenhouse; but it requires a little more heat at this season, which seems to be its flowering season (November), than the Greenhouse affords; and I find that it flowers best in the coolest part of the stove.”

The genus *Habenaria* was first separated from *Orchis* by Willdenow, who limited it to those remarkable West Indian plants, *Orchis Habenaria* and *monorhiza* of Swartz, in which the cells of the anther are distinct from the elongated lateral processes of the stigma. In this limitation he was wrong, as there are several of the species still retained by him in *Orchis*, to which the characters of those species equally apply.

Afterwards Dr. R. Brown separated from *Orchis* all the species in which the glands of the pollen-masses are naked, referring the greater part of them to *Habenaria*, in two distinct sections, and indicating the existence of the genus now called *Gymnadenia*. The same learned Botanist also separated from the genus *Ophrys*, as it stands in Willdenow, the *O. monorchis* and *alpina*; to which he afterwards applied the unappropriated Linnean name *Herminium*.

At a subsequent period the late M. Richard restored the genus *Habenaria* as it was originally understood, referred the greater part of Dr. Brown's *Habenarias* to a genus he called *Platanthera*, and distinguished *Ophrys alpina* under the name of *Chamorchis*.

If particular species be taken as the types of these genera, as, for example, *Orchis monorhiza* of *Habenaria*, *O. bifolia* of *Platanthera*, *O. conopsea* of *Gymnadenia*, and *Ophrys monorchis* of *Herminium*, there can be no difficulty in understanding the differences upon the existence of which these genera are established. But if a more extended view is given to the subject, the differences insensibly vanish, till at last it becomes doubtful whether the whole of the genera do not rather belong to a single one.

Thus *Gymnadenia* is said to be the same as *Orchis*, except that its pollen-glands are naked; that is, it has the cells of the anther parallel, and approximated at their bases; but then Dr. Brown excludes from it the old *Satyria viride* and *albidum*, while Richard refers those species to it; and in the numerous Indian plants of a similar structure, it is

often extremely difficult to say whether the cells are parallel, or diverging at the base.

Habenaria has its cells with their bases more or less separated from the stigmatic processes; but so many degrees of adhesion and separation occur, that this is by no means a precise character.

Platanthera is said to differ from Herminium in nothing except the presence of a spur; but *Herminium monorchis* has a bag to its lip, almost as deep as that of the subject of our plate; and yet the latter, with all the habit of Herminium, and with no tangible differences in its structure, except that its lip is a very little more bagged, is referred to Habenaria or Platanthera.

Taking these and many more circumstances into consideration, it has appeared to us that it is absolutely necessary to recast the genera of Ophrydeæ with naked pollenglands, in the following manner: —

HABENARIA. *Loculi* antheræ basi producti, à processibus stigmatibus elongatis soluti. *Labellum* calcaratum.

PLATANTHERA. *Loculi* antheræ basi divaricati, stigmatibus adnatis. *Labellum* calcaratum, sepalis longius.

HERMINIUM. *Loculi* antheræ basi divaricati. *Labellum* basi planum, gibbosum v. saccatum.

GYMNADENIA. *Loculi* antheræ basi approximati. *Labellum* calcaratum (v. saccatum?).

To which are to be added the very distinct Bonatea, and the following remarkable genus in Dr. Wallich's Indian Herbarium, with a horizontal anther, the bases of which are exceedingly divaricated, and connected by a broad erect membrane, opposite which is an erect fleshy body proceeding from the mouth of the spur.

DIPLOCHILOS. *Loculi* antheræ basi divaricati, stigmatibus dilatato bilabiato soluti. *Labellum* calcaratum.

Thus limited, the genus Herminium will consist of at least the following species, to which will possibly have to be added some Gymnadenias, when they shall have been more completely examined. The Benthamia of M. Achille Richard is clearly an Herminium, the pollen and anther of which have been altogether misunderstood by that Botanist, although they have been correctly figured by Du Petit Thouars. There also seems to be no difference of any moment between Chamorchis and Herminium.

HERMINIUM.

1. *Herminium monorchis* (*R. Br. in Hort. Kew.* 5. 191).
Ophrys monorchis. L.
 Hab. in pratis Europæ. (v. v. sp.)
2. *Herminium congestum* (*Lindl. in Wall. cat. no. 7068*); foliis erectis oblongis apice latioribus spicæ densæ subæqualibus, bracteis squamæformibus ovario brevioribus, sepalis ovatis obtusis, petalis ovalibus subæqualibus, labello ovato integro basi gibboso et marginato.
 Hab. in Napaliâ, *Wall.* (hab. s. sp. è museo Anglo-indico).
3. *Herminium latifolium.*
Satyrium latifolium. Thouars orch. t. 10.
Benthamia latifolia. Ach. Rich. orch. maur. t. 7. no. 2.
Habenaria chlorantha. Spreng.
 Hab. in Borboniâ, *Thouars*; Mauritio, *Bouton.* (hab. s. sp.)
4. *Herminium cordatum.* (*Suprà.*)
5. *Herminium plantagineum*; foliis (3) erectis oblongo-lanceolatis acutis spicæ ferè æqualibus, sepalis ovatis, petalis subrotundis obtusis, labello rotundato obtusè tridentato, sacco sphæroideo.
 Hab. in Zeylonâ, *Macrae.* (hab. s. sp.)
6. *Herminium Hamiltonianum* (*Lindl. in Wall. cat. no. 7069*); foliis (pluribus) lanceolatis acuminatis spicâ longioribus, bracteis acuminatis floribus longioribus, sepalis petalisque obtusis conformibus æqualibus, labello rotundato tridentato, sacco subrotundo.
 Hab. in collibus Morang Indiæ orientalis, *Hamilton.* (hab. s. sp. è museo Anglo-indico.)
7. *Herminium constrictum*; foliis pluribus oblongo-lanceolatis scapo brevioribus, sepalis lineari-lanceolatis petalis duplò angustioribus, labello trifido: laciniis lateralibus angustioribus et longioribus.
 Hab. in Napalia, *Wallich.* (hab. s. sp. è museo Anglo-indico et v. ic. pict.)
8. *Herminium goodyeroides* (*Lindl. in Wall. cat. no. 7066*).
Habenaria goodyeroides. Don prodr. fl. nap. 25.
 β floribus minoribus, spicis foliisque brevioribus.
Habenaria affinis. Don l. c.
 Hab. in Napalia, *Wallich.* (hab. s. sp. α , è museo Anglo-indico; β comm. cel. Lambert).
9. *Herminium alpinum.*
Ophrys alpina. L.
Chamorchis alpina. Rich. annot. p. 35.
 Hab. in alpibus Europæis. (hab. s. sp.)
10. *Herminium reniforme* (*Lindl. in Wall. cat. no. 7067*); folio solitario suborbiculato cordato, sepalo supremo petalisque conniventibus: inferioribus subparallelis porrectis, labello lineari esaccato.
 Hab. in Napaliâ, *Wallich* (hab. s. sp. et ic. pict.)

The only known species of *DIPLOCHILUS* are the following:—

1. *Diplochilos hirsutum* (*Lindl. in Wall. cat. no. 7065*), caule monophyllo unifloro, folio oblongo hirsuto, calcare incurvato.
2. *Diplochilos longifolium* (*Lindl. in Wall. cat. no. 7064*), caule 2-3-phylo subunifloro, foliis ensiformibus glabris, calcare recto.

J. L.



ÁSTER* lævis.

Smooth Aster.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (*Introduction to the natural system of Botany*, p. 197.)

§. Corymbiferæ Juss: Asteræ Cassini.

ASTER.—*Suprà*, vol. 3. fol. 183.

Sect. B. 8. *Herbacei; foliorum venæ primariæ divergentes, v. evanescentes; involucra campanulata, squamis exterioribus sensim minoribus, appressis v. erectis.*

A. lævis; glaber, viridis, foliis angustè lanceolatis sæpiùs integris basi angustatis acuminatis: superioribus subamplexicaulibus: supremis minoribus, involucris obconicis: squamis lineari-lanceolatis, pappo flosculis disci æquali, ovariis glabris.

A. lævis. *Linn. sp. pl.* 1230. *Hort. kew. ed. 1. 3.* 206. *Willd. sp. pl.* no. 80. *Nees monogr. p.* 24.

Ab Astere cyaneo differt tantùm omnis glaucedinis absentid, foliis magis acuminatis margine asperioribus: radicalibus angustioribus (serratis v. integris), involucris obconicis nec campanulatis: squamis basi multò minùs pallidis, demùm flosculis radii pallidè cæruleis.

This is so nearly the same as *A. cyaneus*, that if it were not for its constantly green appearance, and want of glaucous bloom, we should be tempted to consider it a mere variety. It, however, may be further distinguished by its narrower radical leaves, by the more decided acumination of all its leaves, by the involucra being obconical rather than campanulate, and by the scales having a much less pale base. The latter characters especially are those which enable us to distinguish the two in a dried state.

That it is the *A. lævis* of the first edition of the *Hortus Kewensis* we have no doubt, both from the characters

* See fol. 1487.

assigned to it in that work by the accurate Solander, and also from our having some years since been favoured with a specimen from the Kew Garden, under the name of *A. lævis*. What we have seen in the Garden of the Horticultural Society from the Berlin Garden, under the name of *A. lævis*, was, however, nothing but a large-flowered state of *A. cyaneus*.

Nees von Esenbeck places this in a different section from *A. cyaneus*, upon the ground of its branches being racemose, and not panicled. We are, nevertheless, persuaded that very little value really attaches to such a distinction.

We have here another case of serrated and entire leaves in the same species; some specimens being in one state, others in another.

Native of North America. Flowers in August and September. A hardy perennial.

J. L.



四十二

CAMELLIA japonica; var. Reevesiana.

Mr. Reeves's Crimson Camellia.

MONADELPHIA POLYANDRIA.

Nat. ord. TERNSTRÖMIACEÆ Mirbel. (Introduction to the natural system of Botany, p. 43.)

CAMELLIA.—Suprà, vol. 1. fol. 22.

GARDEN VARIETY.

This is certainly one of the most striking Camellias hitherto imported, its richness of colour far surpassing any that we yet have seen.

The foliage has a remarkably curled appearance, which is faithfully represented on our Plate.

The drawing was made in the Nursery of Mr. Tate, by whom the plant was imported from China. From the bamboo tally that accompanied it, numbered, in Chinese characters, 42, it is probable that it was originally procured in China, either from Mr. Beale or Mr. Reeves, those two gentlemen exclusively using such tallies.

We have named it in compliment to Mr. Reeves, to whom this country is under the greatest obligations for the zeal and liberality with which he devoted himself, during a long residence in China, to the collection and transmission to England of all that is rare, beautiful, or useful, in the Flora of the Celestial Empire.

Mr. Tate states that the flowers are very variable.

J. L.



CHRYSANTHEMUM* *indicum*; *var. plenum*.

Double yellow Indian Chrysanthemum.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (Introduction to the natural system of Botany, p. 197.)

CHRYSANTHEMUM.—*Suprà, vol. 1. fol. 4.*

GARDEN VARIETY.

The single state of this plant has already been published at fol. 1287 of the present work. The Double yellow variety is not much cultivated, because of its not flowering except after very hot and dry summers, such as the last. But when its blossoms are produced they are extremely neat, and form a striking addition to the few flowers that December will produce.

The plant bloomed freely in the Garden of the Horticultural Society: we also saw very fine specimens that had been obtained in the Nursery of the Messrs. Young, of Epsom, and in the Garden of Louis Weltje, Esq., of Hammersmith, a handsome plant from whom formed part of the exhibition at the meeting of the Horticultural Society on the 6th December, 1831.

J. L.

* See fol. 1287.



M. Hart del.

Tab by S. Ridgway 169 Sicadilly June. 1 1857

S. Smith sc.

DELPHINIUM* speciósum.

Shewy Delphinium.

POLYANDRIA MONO-TRI-PENTAGYNIA.

Nat. ord. RANUNCULACEÆ Juss. (Introduction to the natural system of Botany, p. 6.)

DELPHINIUM.—Suprà, vol. 4. fol. 327.

§. 3. Delphinastrum. Ovaria 3-5; petala libera, inferiora in disco barbata bifida; calcar elongatum, interdùm dipetalum. Species perennes. De Cand. prodr.

D. speciosum; petiolis basi non dilatatis, foliis pubescentibus 5-lobatis: lobis inciso-serratis, bracteis lanceolatis villos-viscosis, calcare curvulo, capsulis glabris. De Cand. prodr. 1. 56.

D. speciosum. Bieb. fl. taur. cauc. 2. p. 12. Delessert icones, v. 1. t. 62.

Planta bipedalis. Caulis villosus, striatus. Folia ferè Aconiti Lycoctoni, pubescentia. Racemi villos-viscosi. Flores omnium congenerum maximi, Aquilegiæ vulgaris ferè magnitudine. Bracteæ villos-viscosæ, lanceolatæ ad basin pedunculorum, et binæ minores sub flore. Petala valdè hirsuta, cærulea: summi galeâ reflexo-patulâ, calcare apice curvulo. Nectaria atro-fusca: galeâ glabrâ, obtusè bidentatâ, labello unguiculato: laminâ latâ bipartitâ, laciniis rotundato-ovatis inæqualibus, disco villis flavis, margine pilis albidis. Capsulæ glabræ.—Bieberstein.

A hardy and handsome perennial, native of high elevations of the Caucasus. It flowers from June to September, and is increased by division of its roots, or by seeds.

The plant from which our drawing was taken was raised in the Garden of the Horticultural Society in 1829, from seeds received from Dr. Fischer, of the Imperial Botanic Garden, St. Petersburg.

No one would suppose from Von Bieberstein's description, that this could be his plant; for he describes the

* From *δελφίν*, a dolphin; between which and the petals of this genus it is said that some resemblance can be traced.

flowers as equalling the common Columbine in size. Nevertheless we are assured by genuine Caucasian specimens from Mr. Prescott, by the authority of Dr. Fischer, by a figure in Gmelin to which Von Bieberstein refers, and by that published by De Lessert in his *Icones selectæ*, that what is now represented was intended by the description above quoted.

J. L.



collected by J. Hodgson at 169 Piccadilly June 1. 1832.

J. Watts. sc.

SELÁGO* Gillii.

Dr. Gill's Selago.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. SELAGINEÆ Choisy. (Introduction to the natural system of Botany, p. 238.)

SELAGO.—Suprà, vol. 3. fol. 184.

§. *Calyce regulari 3-partito. Choisy.*

S. Gillii; caule subangulato pubescente, foliis oppositis alternisque angustè ovatis acutis glabris, corymbis terminalibus multifloris, calyce tripartito pubescente.

S. Gillii. Hooker in bot. mag. 3028.

Suffrutex erectus, ramosus, ramis levissimè pubescentibus, junioribus subangulatis. Folia angustè ovata, acuta, subcarnosa, glabra, nunc opposita, sæpiùs alterna. Corymbi multiflori, terminales, bracteis parvis, ovato-subulatis, pubescentibus. Calyx 3-partitus, pubescens, laciniâ intermediâ duplò angustiore. Corolla purpurea, hypocrateriformis, tubo subincurvo, limbo patente 5-partito, laciniis linearibus obtusis. Stamina 4, didynama, paulò exserta; antherarum loculis divaricatissimis, glabris. Ovarium oblongum, biloculare, ovulis solitariis; stylus rectus, subglaber; stigma simplicissimum.—Obs. Analysis partium malè repræsentatur, incuriâ pictoris.

A native of the Cape of Good Hope, where it was originally found by Dr. Gill, whose name it bears. By

* “An ancient generic name in the works of Pliny, who observes, that the plant so called was in great repute among the Celtic nations; its juice being expressed and used by the Druids as a remedy for many disorders, especially for diseases in the eyes. The name indeed (says De Théis) is expressive of this latter quality, being derived from the Celtic words *sel*, sight, and *jack*, good or salutary. The celebrated hall of Fingal, recorded in Ossian's poems, owes its appellation to the same source; *Selma* meaning beautiful to behold, *belle-vue*. *Selago* has also been thought to be derived from *selego*, to choose; the Druids having gathered or selected it both for medicinal and religious purposes. It is impossible to make out the reasons which induced Linnæus to apply this name to the genus under consideration, which appears to have nothing in common with the celebrated succulent Selago of the ancients.”—*Smith in Rees.*

Dr. Beck it was then sent to the Glasgow Botanic Garden, whence it has been communicated to the collections of this country.

Our drawing was made in the Nursery of the Messrs. Rollissons, of Tooting, in March last.

A very pretty greenhouse plant, requiring a good airy situation in winter; but during the summer well adapted for the open border. Like the others of its kindred, we presume it may be easily propagated by ripened cuttings struck under a bell-glass.

J. L.



OXALIS* variabilis.

Variable Oxalis.

DECANDRIA PENTAGYNIA.

Nat. ord. OXALIDÆ De Cand. (*Introduction to the natural system of Botany*, p. 140.)

OXALIS.—*Suprà*, vol. 2, fol. 117.

§. Acetosellæ, acaules aut substipitatæ, foliis petiolatis trifoliolatis, petiolis immarginatis, foliolis subtus non glandulosis, scapis unifloris. De Cand.

O. *variabilis*; acaulis, puberula, foliolis subrotundis medio basi cuneato, pedunculis unifloris, staminibus basi tuberculatis.

α *floribus albis.*

O. *variabilis* α. Jacq. *monogr. oxal.* t. 52. Willd. no. 19. De Cand. *prodr.* no. 108. Spreng. no. 17.

O. *grandiflora*. Jacq. t. 54. Willd. no. 20. Spreng. no. 35.

O. *laxula*. Jacq. t. 57.

? O. *breviscapa*. Jacq. t. 58. Willd. no. 23. D. C. no. 106. Spreng. no. 38.

O. *rigidula*. Jacq. t. 59.

O. *suggillata*. Jacq. t. 61.

β *floribus rubris.*

O. *variabilis* β. Jacq. t. 53.

O. *purpurea*. Jacq. t. 56. Willd. no. 22. D. C. no. 109. Spreng. no. 18.

O. *speciosa*. Jacq. t. 60. Willd. no. 24. D. C. no. 107. Spreng. no. 39.

Of the two Oxalises now figured, the white one is *O. grandiflora* of Jacquin, the other the red *O. variabilis* of the same author. It can scarcely be necessary to do more than place them side by side to shew that they are both the same species. And we scarcely anticipate any objection to the union of all the other supposed species mentioned in our list of synonyms, after the following very

* See fol. 1249.

sensible remarks of the late Sir James Smith upon another species shall have been considered.

Speaking of *O. monophylla*, he says, *O. lepida* and *O. rostrata* seem too nearly related to the above. There is, in fact, not the least difference between any of them except in the stamens and styles. In *lepida* five of the stamens are extremely short, and the rest only half the length of the styles, which in this species are remarkably long, straight, and perfect, covered, like the longer stamens, with glandular hairs; their stigmas large and bearded. In *rostrata* the styles are extremely short, smooth, and turned out horizontally between the stamens; the five shortest of which rise far above them, and the five largest, which are hairy, more than twice as far, ending in a very peculiar glandular tip above each anther.—It may be conjectured that the two species of *Oxalis* in question may be sexual varieties; in one of which, effectually male, *rostrata*, the stamens are most perfect; in the other, *lepida*, the pistils. Experience only can settle this curious question, which appears not to have entered into the mind of their cultivator and describer Jacquin. *O. monophylla* seems to be the natural or ordinary state of the same plant, in which the stamens and styles bear that due proportion to each other observable in other species.

To this we think it is impossible not to assent. The paragraph seems to have escaped the notice of all those who have subsequently written upon the genus *Oxalis*; and consequently we still find, even in the most respectable modern enumerations, the spurious species of Jacquin preserved without much change.

In the present case, *O. purpurea*, *laxula*, and *breviscapa*, are bisexual; *variabilis* and *grandiflora* male; and *rigidula*, *speciosa*, and *suggillata*, female.

A native of the Cape of Good Hope, It will thrive in any sunny situation to which frost has no access; but, like the rest of the Cape species, requires to be kept quite dry when at rest.

Our drawing was made in the Nursery of Messrs. Rol-
lissons, of Tooting.

J. L.



Handwritten annotations in the lower-left corner, including a large number '26' and a smaller number '11' below it.

EÚRYCLES* Cunníngghámii.

Mr. Cunningham's Eurycles.

HEXANDRIA MONOGYNIA.

Nat. ord. AMARYLLIDÆ R. Br. (*Introduction to the natural system of Botany*, p. 259.)

EURYCLES.—*Perianthium* hypocrateriforme, limbo sexpartito. *Stamina* faucialia, filamentis dilatatis coronam mentientibus utrinque unidentatis; *antheræ* versatiles. *Ovarium* 3-loculare; ovulis geminis collateralibus appensis. *Capsula*. *Semina* testâ carnosâ.

E. Cunninghamii; foliis oblongis cordatis, umbellâ subsexflorâ, perianthii laciniis oblongo-lanceolatis, dentibus staminum lateralibus subulatis subbilobis intermedio subæqualibus.

Bulbus subrotundus, apice virescens. Folia plurima, petiolata, oblonga, basi subcordata, apiculata, curvivenia, venulis propriis furcatis. Scapus pedalis. Involucrum diphyllum, subæquale, floribus brevius. Flores pedicellati, albi, perianthii laciniis ovato-oblongis, patentibus, planis, tubo brevioribus. Stamina 6, fauce inserta; filamenta tridentata, dentibus lateralibus patentibus, cornutis, nunc bilobis, intermedio antherifero paulò brevioribus. Ovarium 3-loculare; ovula gemina, collateralia, appensa. Stylus filiformis, rectus, perianthii longitudine.

A native of New Holland, whence its bulbs were sent to Mr. Knight, of the King's Road Nursery, by Mr. Baxter. It is a greenhouse plant, flowering in March and April, and increased either by seeds or by offsets.

From *E. sylvestris* and *australis* it differs in having the flowers much smaller, and less numerous in the umbel, and in the lateral teeth of the filaments being very much elongated, and sometimes 2-lobed.

It was received from the collector under the name of *Calostemma Cunninghamii*; but it is certainly a *Eurycles*, which is positively distinguished from *Calostemma* in having three cells in the ovarium, while *Calostemma* has but one cell.

J. L.

* From εὐρύς, broad, and κλείω, to close up; in allusion to the dilated state of the stamens, which close up, as it were, the opening of the tube of the perianthium.



Herb. del.

Del. by J. Ridgway 109 Piccadilly July 1. 1832.

ASPHODELUS* luteus; var. sibiricus.

Siberian Yellow Asphodel.

HEXANDRIA MONOGYNIA.

Nat. ord. ASPHODELEÆ Juss. (Introduction to the natural system of Botany, p. 273.)

ASPHODELUS Linn.—Perianthium concolor, hexaphyllum, patulum, subinæquale. Filamenta subulata, arcuata, 3 sæpius breviora, basi dilatata in fornices ovarium tegentes. Stylus subarcuatus. Perianthium baccatum, 3-loculare, subtrivalve, succo luteo scatens. Semina triquetra, subsolitaria. —Herbæ caulescentes, radicibus fasciculatis, caulibus foliosis.

A. luteus; caule toto foliis subulato-triquetris vaginato simplici, bracteis basi membranaceis dilatatis apice subulatis pedicellos æquantibus.

A. luteus. Linn. et aliorum.

β sibiricus; bracteis minoribus brevioribus, caule humiliore, floribus præcocioribus pallidioribus.

“? Asph. sibiricus. H. Wiln. 1824,” ex R. et Sch.

The Yellow Asphodel, a native of both shores of the Mediterranean, of Dalmatia and Tauria, is the queen of

* That so beautiful a flower as this should have been chosen by the Grecian poets to adorn the plains inhabited by departed spirits, is not surprising. When Mercury conducted the souls of Penelope's suitors to their final abode,

“ they reach'd the earth's remotest ends;
And now the gates where evening Sol descends,
And Leucas' rock, and Ocean's utmost streams,
And now pervade the dusky land of Dreams;
And rest at last, where souls unbodied dwell
In ever-flowering meads of ASPHODEL.”

It appears, however, that the ἀσφόδιλος of Homer was *A. ramosus* rather than *A. luteus*; the latter of which is rare in Greece, and unknown in Spain as a wild plant; while the former is to this day called ἀσφόδιλα in the Peloponnesus, where it is one of the most common plants, and where its roots are manufactured by the Turks into a paste called *kerish*: it is also abundant in the south of Spain, and near the Leucadian rock (Gibraltar). Ecluse and Löfling found vast plains covered with it in that country. The roots of *A. ramosus* were eaten by the ancient Greeks, and formed a part of the usual food of Pythagoras and his disciples.—See Spreng. hist. r. herb.

European Monocotyledonous plants ; and affords the inhabitants of the north a striking idea of the splendour of those graceful and majestic trees, which are seen only by the traveller in tropical regions.

The variety now represented is, we presume, a native of more northern latitudes than that which has for so many years contributed to the beauty of our cottage gardens. Its seeds were received from Dr. Fischer, under the name of *A. sibiricus* : it differs from *A. luteus* in its dwarfer stature, earlier and paler flowers, more glaucous leaves, and shorter bractæ ; we cannot, however, on these accounts, consider it more than a variety of that species.

It is a perfectly hardy perennial, and requires to be treated precisely in the same way as *A. luteus*.

J. L.



CYRTOPODIUM* Woodfordii.

Woodford's Cyrtopodium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ Juss. Sect. Vandæe Lindl. (Introduction to the natural system of Botany, p. 262.)

CYRTOPODIUM. — Labellum ungue geniculato; lamina 3-partita. Petala 5, distincta. Massæ pollinis 2 posticè bilobæ. — R. Brown in Hort. Kew. 5. 216.

C. *Woodfordii*; bracteis subulato-lanceolatis, sepalis lanceolatis patentibus secundis, petalis oblongis conniventibus brevioribus, labello basi saccato: lobis lateralibus rotundatis intermedio emarginato basi bicorni.

C. *Woodfordii*. Bot. mag. 1814.

Caulis 2-3-pedalis, fusiformis, carnosus, succo scatens viscido ad calceos agglutinandos utili. Folia basi vaginantia, plurima, lanceolata, 1½-2-pedalia, plicata, glabra. Scapus radicalis, 2-3-pedalis, teres, squamis elongatis plicatis vaginatus. Racemus elongatus, multiflorus. Bracteæ subulato-lanceolatæ, ovario longiores. Sepala angustè lanceolata, pallidè viridia, secunda. Petala breviora, viridi-fusca, oblonga, obtusa, erecta, apice conniventia. Labellum basi lividum, apice roseo-purpureum, ventricosum, basi saccatum, 3-lobum, lobis lateralibus rotundatis abbreviatis, intermedio obtuso, undulato, emarginato, disco glanduloso basi bicorni.

This beautiful plant is a native of the island of Trinidad, of Guiana, and of Brazil, where it grows in shady damp places, rooting among the mass of decayed vegetable soil with which the earth is thickly covered in such places. It is easily cultivated in a good stove, but very seldom flowers. The specimen from which the accompanying figure was taken, was produced in the Garden of the Horticultural Society, in September last, upon plants sent from Rio Janeiro by the Right Hon. Robert Gordon. It is increased by the separation of the thick spindle-shaped stems with a portion of the rooting Rhizoma attached, or even by cuttings

* So called from *κυρτός*, curved, and *πούς*, a foot; in allusion to the curved stalk of the labellum of *Cyrtopodium Andersonii*.

of the stems themselves ; the latter must, however, be well dried before they are planted, or they will absorb moisture by their wounded extremity with much greater rapidity than they can part with it by perspiration, and will perish from a sort of vegetable dropsy.

This is no *Cyrtopodium*. Nevertheless we have left it with the name already given to it; because all the genera allied to it, viz. *Eulophia*, *Cymbidium*, *Lissochilus*, *Maxillaria*, and the like, required to be very carefully studied before their real limits can be precisely determined. In all such cases, an old name, although incorrect, is preferable to a change, which may be premature, and may only lead to further changes.

J. L.



ASTER* pállens.

Pallid Aster.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (*Introduction to the natural system of Botany*, p. 197.)

§. Corymbiferæ Juss. Asteræ Cassini.

ASTER.—*Suprà*, vol. 3. fol. 183.

Sect. B. 8. *Herbacei; foliorum venæ primariæ divergentes v. evanescentes; involucra campanulata, squamis exterioribus sensim minoribus, appressis v. erectis.*

A. pallens; ramulis pubescentibus, foliis ovato-lanceolatis acuminatis in petiolum decurrentibus altè serratis: superioribus subsessilibus supremis integris, involucris glabris campanulatis: squamis omnibus erectis linearibus acutis pedicellorum distantibus v. nullis, pappo flosculis disci æquali, ovariis glabris.

A. pallens. Willd. *enum. suppl.* 58. *Nees monogr.* p. 16.

Caulis 4-5-pedalis, versus fastigium flexuosus, angulatus, pubescens. Folia sæpiùs glabra, nunc levissimè pubescentia; radicalia oblongo-lanceolata, acuminata, in petiolum decurrentia, altè serrata; proxima ovato-lanceolata; superiora subsessilia; suprema integra. Inflorescentia paniculata, nunc subcorymbosa, magis minusve divisa, semper laxa. Pedunculi uniflori, nunc nudi, nunc subsquamosi. Involucra glabra, foliolis erectis angustis viridibus apice subcoloratis. Flosculi radii pallidè lilacini, disci lutei.

We have not succeeded in determining with what other species this well-marked Aster is confounded by American Botanists. It is neither in Pursh, Michaux, nor Nuttall, as far as we can discover; and yet it must have been known to some one at least of those writers. The only wild specimens we have seen were communicated to us by Dr. Torrey from the western parts of the state of New York.

It forms a sort of transition from the tall, erect, autumnal species to the dwarfer, cordate-leaved, corymbose kinds,

* See fol. 1487.

and is distinctly characterised by its erect habit, deeply-serrated acuminate leaves, and downy branches, along with smooth involucra.

It is so very nearly the same as the genuine *A. tardiflorus* of Linnæus, that it may be doubted whether it is not a mere variety of that species. Should this really be the case, it will be necessary to change its name, although that of *tardiflorus* seems to have originated in some misconception.

We have had it under several erroneous names from different Gardens, especially under those of *A. pubescens* and *A. Cornuti*.

The plant from which the figure was taken had been received from the Garden of Berlin as the *A. pallens* of Willdenow. It flowers in September and October; but is by no means one of the late species.

J. L.



MAXILLÁRIA* víridis.

Green Maxillaria.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDEE Juss. Sect. Vandee Lindl. (*Introduction to the natural system of Botany*, p. 262.)

MAXILLARIA.—*Suprà*, vol. 11. fol. 897.

M. viridis; pseudo-bulbis nullis, foliis lanceolatis undulatis plicatis, floribus solitariis radicalibus globosis, sepalis petalisque subrotundis obtusis, labello brevi: lobo medio transversè rhomboideo unguiculato medio refracto. Flos radicalis, solitarius, globosus. Sepala subrotunda, ovata, obtusa, viridia, immaculata. Petala minora, conformia, purpureo intùs confertissimè punctata. Labellum cum basi parùm productá columnæ elasticè articulatum, unguiculatum, trilobum, medio refractum, lilacinum, lobis lateralibus minoribus erectis, intermedio transversè rhomboideo plano. Columna libera, semiteres, basi producta. Stigma subrotundum, excavatum. Anthera carnosà, bilocularis; loculorum valvulis transversè dehiscentibus. Pollinia 4, albida, geminata, caudiculá sulcatá, fuscá!, utrinque alatá, dorso purpurascete, viscido, prominulo.

A native of Rio Janeiro, whence it was sent by the late Sir Henry Chamberlain. Our drawing was made in the stove of the Horticultural Society's Garden in May 1831.

It is rather a weak-growing plant, requiring shade, much moisture to its leaves, and little to its roots, together with a high temperature and decayed vegetable mould. It seems to have no tendency to form those pseudo-bulbs which are generally so characteristic of the genus.

J. L.

* Some of the species have flowers the segments of which gape like the open jaws, *maxillæ*, of some grinning animal.



ŒNOTHÉRA* glauca.

Glaucous Œnothera.

OCTANDRIA MONOGYNIA.

Nat. ord. ONAGRARIÆ Juss. (Introduction to the natural system of Botany, p. 56.)

ŒNOTHÉRA.—*Suprà, vol. 2. fol. 147.*

Œ. *glauca*; caule erecto glabro, foliis latè ovatis subdentatis glaucis, calycis limbo tubo longiore, staminibus petalis brevioribus, fructibus tetraquetris obovatis pedunculatis.

Œ. *glauca*. *Mich. fl. bor. am.* 1. 224. *Pursh fl. amer. sept.* 1. 262. *Bot. mag. t.* 1606. *De Cand. prodr.* 3. 50.

One of the handsomest of those perennial Œnotheras, with the habits of Œ. *fruticosa*, with which our Gardens now abound. It is a wild and legitimate species, inhabiting the banks of the Mississippi in Illinois, and on the Peaks of Otter in Virginia, where it has been recognised by all the North American Botanists since the days of the elder Michaux.

Its deep rich green glaucous leaves, and very brilliant yellow flowers, render it a valuable plant for the ornament of the Flower-garden in the autumn, and till the arrival of frost.

It grows readily in any common garden soil, and may be easily multiplied by division of the crown of its roots. But to be preserved in a healthy state, it should not be much mutilated for the purpose of multiplication; a caution that may be given not only with respect to this, but to a great many other plants, which eagerness to increase either

* See fol. 1142.

deprives of a large proportion of the matter that is requisite to ensure their abundant and vigorous blossoming, or which are forced by the same cause into an excessive development of leaf-buds instead of flower-buds, which is equally fatal to their beauty.

J. L.



Arctostaphylos uva-ursi L. *Arctostaphylos uva-ursi* L. *Arctostaphylos uva-ursi* L.

HÓVEA* villósa.

Shaggy Hovea.

MONADELPHIA, OR DIADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ. Trib. Lotææ D. C. (*Introduction to the natural system of Botany*, p. 86.)

HOVEA.—*Suprà*, vol. 4. fol. 280.

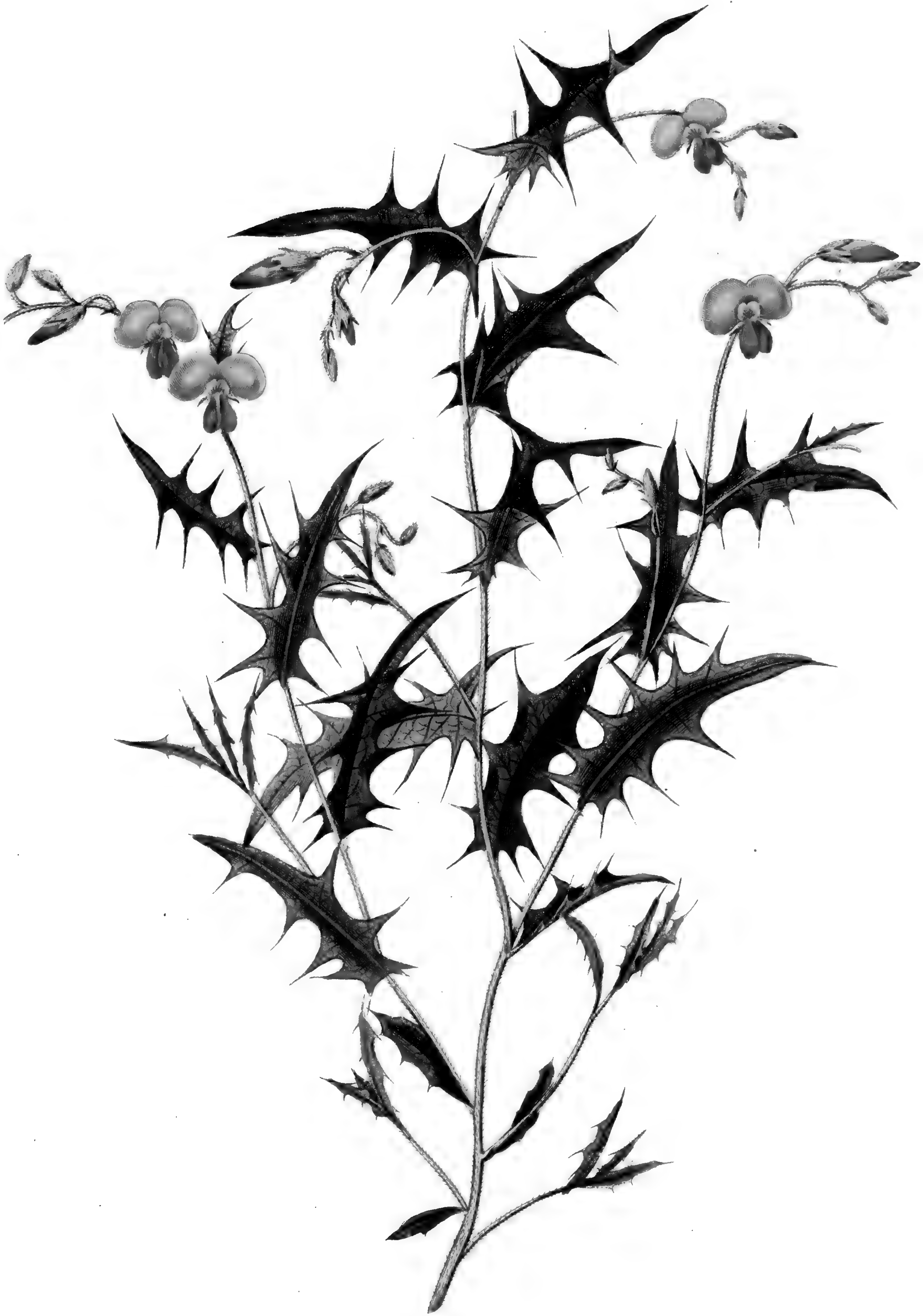
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- H. *villosa*; foliis lineari-oblongis obtusis mucronulatis suprà glabris reticulatis subtùs ramisque villosissimis, pedicellis petiolo brevioribus geminis calycibusque villosis.
- H. *purpureæ similis*. *Diversa videtur foliis majoribus, marginibus magis parallelis, et foliorum paginâ inferiore, ramis, pedicellis, calycibusque pilis longissimis intricatis instructis.*
-

This pretty species of Hovea has been sent us from the Nursery of the Messrs. Rollissons, of Tooting. Like the others of the same genus, it is a native of New Holland, and requires in this country an airy Greenhouse. It flowers in April, and is easily propagated by cuttings.

Its nearest relationship is with *H. purpurea*, from which it differs in being excessively shaggy, instead of being merely covered with a very short dense pubescence. The reticulations of the leaves are also much larger and more distinct in *H. villosa* than in *H. purpurea*.

J. L.

* See fol. 1423.



Opuntia echinocarpa (Mill.) Griseb. July 1. 1872.

S. P. H. 4

CHORÓZEMA* trianguláre.

Triangular Chorozema.

DECANDRIA MONOGYNIA.

Nat. ord. LEGUMINOSÆ Juss. §. Sophoræ D. C. (*Introduction to the natural system of Botany, p. 87.*)

CHOROZEMA.—*Suprà, vol. 12. fol. 986.*

C. triangulare; foliis subhastatis pinnatifidis spinosis acumine integro laciniis longiore, bracteolis ad apicem pedicelli.

Frutex habitu *C. nani*. Differt foliis pinnatifidis, laciniis divaricatis spinosis triangularibus: supremá longiore, nec non bracteolis pedicelli calyci proximis nec intervallo quodam distantibus. Vexillum lateritio-coccineum, basi maculá viridi. Alæ sanguineæ.

A native of the south-west coast of New Holland, where its seeds were found by the collector Baxter.

It differs from *C. nanum* in having its leaves much more deeply pinnatifid; the segments all very much divaricated, that of the apex about twice as long as the others, and the lowest proceeding from so near the base as to give the leaf a hastate appearance. We also find that the bracteolæ, which in *C. nanum* are at a small distance from the calyx, are in this species immediately at the base of the calyx.

“ M. Labillardière originally discovered this genus upon the south-west coast of New Holland, at the foot of the mountains, in a loamy soil, near the spot where, after having been tantalised with finding many salt springs, his party had just met with an ample supply of fresh water. This welcome refreshment, of which he speaks feelingly in his book, seems to have suggested a name for this plant, which he had properly determined to constitute a new genus. He called it *Chorozema*, evidently from χορος, a dance, or joyous assembly, and ζυμα, a drink; in allusion to the circumstance just mentioned.”—(*Smith.*)

A delicate greenhouse plant, requiring a very airy dry shelf in the winter, and increased by cuttings.

Our drawing was made in Mr. Knight's Nursery in April last.

J. L.



DILLWYNIA* glycinifolia.

Glycine-leaved Dillwynia.

DECANDRIA MONOGYNIA.

Nat. ord. LEGUMINOSÆ Juss. §. Sophoræ De C. (*Introduction to the natural system of Botany*, p. 86.)

DILLWYNIA Smith. — *Calyx* 5-fidus, bilabiatus, basi attenuatus. *Petala* medio tubi calycis inserta; *vexilli* lamina duplò et ultrà latior quàm longa, divaricato-biloba. *Ovarium* 2-spermum. *Stylus* uncinatus. *Stigma* capitatum. *Legumen* ventricosum. *Semina* strophiolata. — Suffrutices Australasici. *Folia* simplicia. *Flores* flavi, breviter pedicellati. *Stipulæ* 0, aut minutissimæ.—De Cand. prodr. 2. 108.

D. glycinifolia; floribus racemosis, foliis ovatis linearibusque revolutis reticulatis.—De Cand. prodr. 2. 109.

D. glycinifolia. Smith in trans. Linn. soc. 9. p. 264.

Caulis fruticosus; ramis filiformibus debilibus prostratis v. subscandentibus. *Folia* alterna, simplicia, linearia, acuminata, breviter petiolata, subtùs subpilosa, venis transversis parallelis subsimplicibus notata, marginibus revoluta. *Stipulæ* setaceæ. *Racemi* axillares et terminales, laxi, 2-6-flori; pedunculis capillaribus dependentibus. *Calyx* pilosus, basi bibracteolatus, subcampanulatus, bilabiatus: labiis ferè æqualibus, superiore 2-, inferiore 3-fido. *Vexillum* bilobum, transversum, aurantiacum, erectum; alæ roseæ, parallelæ, obtusissimæ; *carina* alba, alis brevior. *Stamina* 10, libera. *Ovarium* villosum; *stylus* incurvus, teres, glaber; *stigma* subcapitatum.

A beautiful greenhouse plant, native of the south-west coast of New Holland, where it was originally found in King George's Sound by Mr. Menzies; and more recently by the collector Baxter.

Our drawing was made last April in Mr. Knight's Nursery.

We have carefully compared it with the specimens in Smith's Herbarium, and we perceive no difference what-

* Named in compliment to Lewis Weston Dillwyn, Esq., a learned British Botanist, and illustrator of the tribe of Confervæ.

ever. Its genus, however, is to us, as it was to Smith and De Candolle, a matter of uncertainty, which, unfortunately for science, seems little likely to be cleared up, although it is now nearly thirty years since materials for the completion of the Flora of New Holland were furnished by the liberality of the British government. It is time that this were looked to; and much to be wished that some enterprising naturalist would convert to an useful purpose the rich stores of information regarding Australasian Vegetation procured at the national expense, and now open to all inquirers, which are lying unemployed at the British Museum.

When we see the fate of the plants collected in Flinders's expedition, and in the fatal journey up the Congo by the lamented Christian Smith, we can scarcely wonder that a wise and careful government should object to pay the expenses of scientific expeditions.

J. L.



SPHENÓTOMA* capitátum.

Long-leaved Sphenotoma.

PENTANDRIA MONOGYNIA.

Nat. ord. EPACRIDÆ R. Br. (*Introduction to the natural system of Botany*, p. 183.)

SPHENOTOMA. — *Calyx* bibracteatus. *Corolla* hypocrateriformis, tubo gracili, fauce coarctatâ, limbo 5-partito, obtusissimo, patente, imberbi. *Stamina* epipetala. *Squamulæ* 5, hypogynæ. *Capsula* placentis ab apice columnæ centralis pendulis, solutis. — Frutices, ramis dum denudatis annulatis. *Folia* imbricata, basibus cucullatis, semivaginantibus. *Spica* simplex, bracteis subtendentibus persistentibus. — Sweet fl. austr. 44.

S. capitatum; ramis floriferis spicâ ovatâ multoties longioribus, foliis caulinis ensiformi-lanceolatis erectiusculis: rameis adpressis. — R. Brown prodr. 556, sub *Dracophyllo*.

Frutex suberectus, ramosus, sempervirens. *Folia* ensiformi-lanceolata, basi vaginantia, acuminatissima, striata; caulina erecta v. subpatentia, pilosa, ramea minora, appressa, glaberrima. *Spica* ovata, brevis. *Flores* albi, bracteis 2 navicularibus glabris suffulti. *Calyx* 5-phyllus; sepalis oblongis, concavis, imbricatis, glabris; exterioribus obtusis. *Corolla* hypocrateriformis, laciniis cuneatis subundulatis. *Stamina* 5, epipetala; antheris linearibus, unilocularibus, longitudinaliter dehiscentibus.

A native of the south-west coast of New Holland, whence its seeds were obtained by Mr. Knight, in whose Nursery, in the King's Road, our drawing was made in April last.

It is a pretty greenhouse plant, requiring the same treatment as the Epacrises, Styphelias, and other well-known plants of the same natural family.

A somewhat erect, evergreen *shrub*, much inclined to branch. *Leaves* between sword-shaped and lanceolate,

* Derived, we suppose, from σφην, a wedge, and τέμνω, to cut; in allusion to the wedge-shaped segments of the corolla.

sheathing at the base, very taper-pointed, striated; *those of the stem* erect, or somewhat spreading, and hairy; *of the branches that bear the flowers* smaller, quite smooth, and pressed close to the axis. *Spike* ovate, short. *Flowers* white, supported by two navicular smooth bracteæ. *Calyx* 5-leaved; *sepals* oblong, concave, imbricated, smooth; the outer obtuse. *Corolla* hypocrateriform, with cuneate, somewhat wavy segments.

J. L.



SOLÁNUM* *crispum*.*Crimped-leaved Solanum.*

PENTANDRIA MONOGYNIA.

Nat. ord. SOLANÆ Juss. (Introduction to the natural system of Botany, p. 231.)

SOLANUM.—Suprà, vol. 1. fol. 71.

S. crispum; caule fruticoso, foliis ovatis subcordatisque undulato-crispis acuminatis, floribus corymbosis. *Römer et Schultes sp. pl.* 4. 595.

S. crispum. Fl. peruv. 2. 31. t. 158. f. a. *Dunal. solan.* 159. *Syn.* p. 16. n. 78.

Caulis suffrutescens, latè diffusus, cæcio-viridis, pulverulentus, ramis herbaceis. Folia omnia simplicia, indivisa, ovata v. cordata, acuminata, petiolata, margine leviter crispa, juniora pulverulenta, adulta glabra. Cymæ multifloræ, terminales; omnibus partibus pulverulentis. Bracteæ nullæ. Calyx brevis, 5-dentatus. Corolla plumbeo-cærulea, mediocris; antheris æqualibus luteis.

Found in the island of Chiloe by Mr. Anderson, and by Ruiz and Pavon commonly in waste places in Chile; also abundantly in hedges near the city of Concepcion, and in the districts of Carcamo and Palomares.

It appears likely to be a hardy plant, in which case it will be very ornamental. If tied to a stake, and thus forced to grow erect, it will throw out a great number of lateral branchlets, at the end of every one of which is a bunch of flowers. In this state it was exhibited by Mr. Lowe, of Clapton, at a meeting of the Horticultural Society in April

* The first use of the word Solanum occurs in the writings of Tragus, who applied it to *Chenopodium hybridum*. It is said to be derived from *solari*, to console. The Greeks called our European Solanums *στρέχνοι*, a name which Linnæus transferred to the genus of tropical shrubs to which the *nux vomica* belongs.

last, and was greatly admired. No doubt it will strike root very freely in the state of cuttings.

It will grow readily in any common soil.

The name that has been given it by Ruiz and Pavon has reference to a very slight degree of undulation at the margin of the leaves; a character that is scarcely perceptible in their figure, and never, as far as we have observed, more marked than in the accompanying plate.

J. L.



ÁSTER* amygdalínus.

Almond-leaved Aster.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (Introduction to the natural system of Botany, p. 197.)

§ *Corymbiferæ Juss. Astereæ Cassini.*

ÁSTER.—Suprà, vol. 3. fol. 183.

Sect. B. 8. *Herbacei; foliorum venæ primariæ divergentes v. evanescentes; involucra campanulata, squamis exterioribus sensim minoribus, appressis v. erectis.*

A. amygdalinus; caule scabriusculo subsimplici, foliis lanceolatis integerrimis scabris petiolatis; omnibus uniformibus, floribus corymbosis, pedicellis pubescentibus v. scabriusculis, squamis involucris subciliatis pedicellorum nullis, pappo flosculis disci æquali, ovariis pilosiusculis, radiis demùm recurvis.

A. amygdalinus. Lam. encycl. 1. 305. Mich. fl. bor. am. Pursh fl. am. sept. 2. 549.

A. umbellatus. Ait. Kew. ed. 1. 3. 199. Willd. sp. pl. 3. 2030. Nees monogr. 17.

About this well-marked species, of which, however, we find no figure, there can be no doubt. It is very common in the northern parts of North America. We have specimens out of Michaux's Herbarium, which we owe to the kindness of Mons. Achille Richard; and also from Lake Michigan and New York from Dr. Torrey. Its corymbose white flowers, with a reflexed ray, at all times distinguish it.

A hardy handsome perennial, in the Gardens 5 or 6 feet high, but much smaller when wild; flowering in September, and readily propagated by division of its roots.

J. L.

* See fol. 1487.



SALPIGLÓSSIS* atropurpúrea.

Dark-purple Salpiglossis.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. SCROPHULARINÆ Juss. (*Introduction to the natural system of Botany*, p. 228.)

SALPIGLOSSIS.—*Calyx* 5-partitus, subinæqualis. *Corolla* infundibuliformis, limbo 5-lobo. *Filamentum* quintum sterile. *Stylus* apice dilatatus. *Capsula* bilocularis, dissepimento valvulis parallelo.—*Hooker in bot. mag.* 2811.

S. atropurpurea; foliis lanceolato-ellipticis convexis sinuatis superioribus integerrimis linearibus, stylo edentulo.—*Graham in bot. mag.* 2811.

This beautiful species of a beautiful genus is remarkable for the intense blackish purple colour of its flowers, which, when produced by very vigorous plants, are not unfrequently much larger than those now represented. But they are sometimes so exceedingly small as to have neither colour nor beauty, being rather in a rudimentary state, as those of the *Viola* and other genera sometimes are: this deformity is, however, scarcely apparent, except in plants in pots kept in a greenhouse, and flowering in the early months of the year.

This, like the other species, *S. picta* and *straminea*, is a biennial. Its seeds should be sown in the summer, so that the young plants may be well established by the end of autumn. They should then be kept in a good airy greenhouse during the winter, and afterwards be either shifted into large pots for flowering under glass in the succeeding summer, or transferred to the open ground at the same time, and in the same manner as tender annuals.

* So named from *σάλπιγξ*, a trumpet, and *γλῶσσα*, a tongue; "because of the style representing a little trumpet-shaped tongue."

When grown in the open border they are very apt to die suddenly, so that only a few plants will sometimes remain out of a whole bed. This is probably owing to the soil in such instances being too light, and therefore subject to sudden dryness; a condition which their tender roots are not formed by nature to endure. In Chile, where all the species of *Salpiglossis* grow, they are found springing from the sides of dry clay banks baked hard by the scorching sun of that climate; a situation in which the moisture that the earth contains is parted with with great difficulty, and very slowly.

This genus has been referred either to *Bignoniaceæ* or to *Solaneæ*; but surely its real affinity is with *Digitalis*, and those other alternate-leaved *Scrophularineæ* which form the transition from the latter order to *Solaneæ*.

J. L.



Helianthus scaberrimus (L.) DC. var. *scaberrimus* (L.) DC. *Helianthus scaberrimus* (L.) DC. *Helianthus scaberrimus* (L.) DC.

HELIÁNTHUS* tubæfórmis.

Trumpet-stalked Sun-flower.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Nat. ord. COMPOSITÆ Juss. §. Helianthæ Cassini. (Introduction to the natural system of Botany, p. 197.)

HELIANTHUS.—Suprà, vol. 6. fol. 508.

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- H. *tubæformis*; foliis longè petiolatis ovatis acuminatis basi cuneatis subseratis triplinerviis villosis, pedunculis solitariis elongatis apice fistulosis villosissimis, anthodio foliaceo patulo elongato. *Spreng. syst.* 3. 616.
 H. *tubæformis*. *Jacq. hort. Schönbr.* 3. p. 65. t. 375. *Willd. sp. pl.* 3. 2238.
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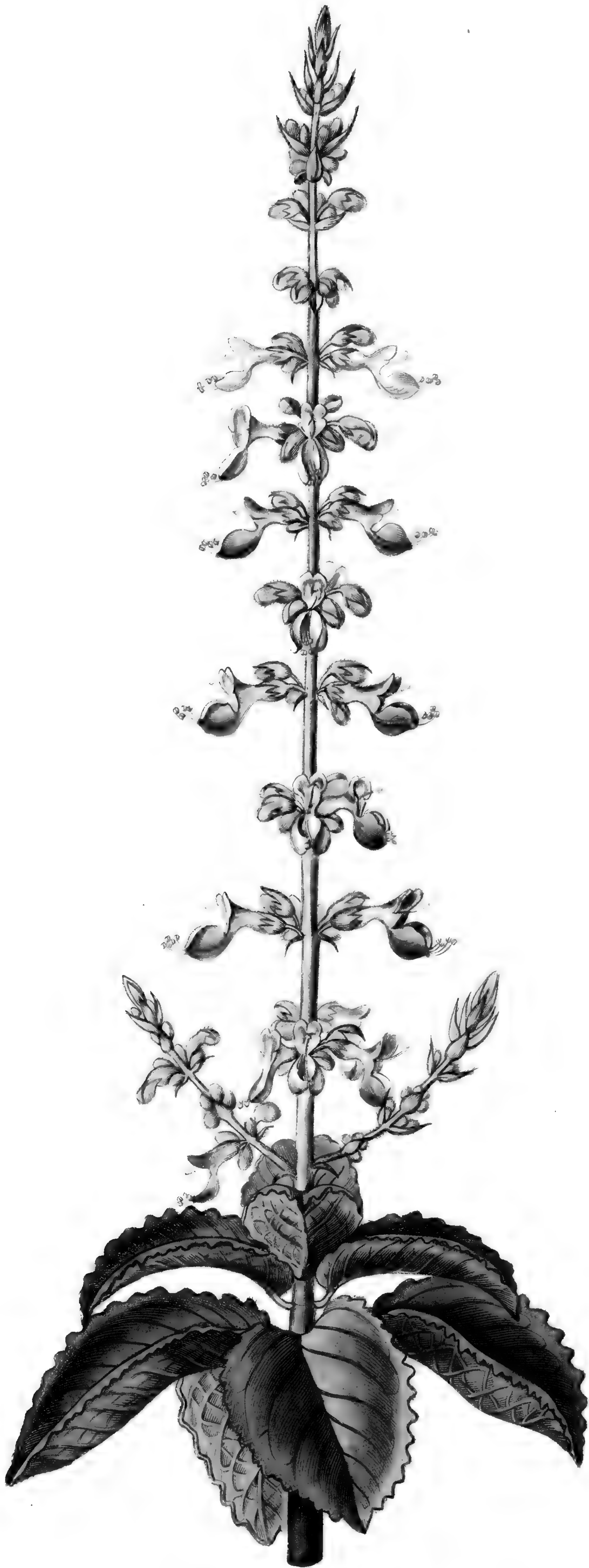
The accompanying figure was taken from a potted plant that had been raised in the Garden of the Horticultural Society, from Mexican seeds presented by John Bid-dulph, Esq. It flowered in the Greenhouse in August last; and in that situation did not acquire a stature exceeding 2 feet: but if grown in the open ground, as a hardy annual, it is said to arrive at the height of 8 or 9 feet.

It is chiefly remarkable for the very much thickened peduncle, which becomes quite hollow, although the stem itself, from which it proceeds, is perfectly solid.

The involucre, or anthodium, as some prefer to call it, is very leafy, and covered with a silky hairiness. The leaves of the involucre are very unequal in size; some of them being nearly as long as the florets of the ray.

J. L.

* See fol. 1265.



COLEUS* aromáticus.

Sweet-scented Coleus.

DIDYNAMIA GYMNOSPERMIA.

Nat. ord. LABIATÆ Juss. §. Ocymoides Benth. (Introduction to the natural system of Botany, p. 239.)

COLEUS Lour.—*Calyx* ovato-campanulatus, fructifer erectus, declinatus vel reflexus, quinquedentatus, dente supremo ovato-membranaceo, inferioribus angustioribus, liberis vel infimis inter se connatis. *Corolla* tubo exserto defracto bilabiata, labio superiore obtusè 3-4-fido, inferiore integro elongato concavo sæpiùs cymbiformi. *Stamina* 4, didynama. *Filamenta* edentula basi in tubum stylum vaginantem connata. *Antheræ* ovato-reniformes, loculis confluentibus. *Stylus* apice subulatus, æqualiter bifidus, *stigmatibus* subterminalibus.—*Herbæ suffruticesve Indicæ vel Africanæ. Verticillastri 6-8-flori, nunc densè globosi, nunc cymis utrinque elongatis laxissimi, in racemos terminales simplices vel rariùs ramosos dispositi. Folia floralia bracteiformia ante anthesin ad apicem racemorum subcomosa, per anthesin sæpiùs decidua.*—Bentham MSS.

Sect. 2. Aromaria. Verticillastri densè subglobosi multiflori. Calyx fructifer vix declinatus, fauce intùs nudâ. *Benth. ined.*

C. aromaticus; ramis erectis tomentoso-pubescentibus hispidisve, foliis petiolatis lato-ovatis crenatis basi rotundatis cordatisve crassissimis utrinque hispidis vel cano-villosis, floralibus calycem vix æquantibus, racemis simplicibus, verticillastris remotis globosis multifloris, calycibus suberectis tomentosis, fauce intùs nudâ, dente supremo ovato oblongo membranaceo non decurrente, inferioribus brevioribus setaceis subæqualibus.—*Benth. Lab. gen. et sp. ined.*

Plectranthus aromaticus. Roxb. ! hort. beng. 45.

Coleus aromaticus. Benth. in Wall. pl. as. rar. 2. 15.

Coleus amboinicus. Lour. fl. cochinch. 372?

Marrubium album amboinicum. Rumph. herb. amb. 5. 295. t. 102. f. 2?

Plectranthus amboinensis. Spr. syst. 2. 690?

Caules crassi, carnosos-vasculosi, fragiles, basi sublignosi, in hortis Indicis procurrentes, ramosissimi, radicanes. Rami 1-1½-pedales, erecti, sæpiùs breviter hispidi. Folia 1-2-pollicaria, in vivo crassissima viridia cellulosa rugosa, siccitate albicantia, pilis brevibus densissimè obsessa, floralia parva acuminata, per anthesin reflexa, demùm decidua. Verticillastri 20-30-flori et ultrâ. Calyces breviter pedicellati, parvi, albo-tomentosi, fructiferi vix aucti. Corolla pallidè violacea; tubus calyce subduplò longior ad medium defractus; faux inflata; labium superius breve quadridentatum, inferius tubo æquale extùs pubescens, parùm dilatatum, cymbiforme. Genitalia breviter exserta. Achenia subrotundo-compressa, brunnea, lævissima, lucida.—Benth.

* So named by Loureiro from *κολιός*, a sheath; because the filaments are united into a tube, which surrounds the style like a sheath.

“ This plant appears to be very commonly cultivated in Indian gardens, chiefly on account of its great fragrance. The leaves are frequently eaten with bread and butter, or bruised and mixed with various articles of food, drink, or medicine. It is probably also indigenous in that country; but in all the East Indian collections which I have seen, the specimens are taken from gardens, unless those marked as gathered at Patna in Hamilton’s Herbarium be really wild. Roxburgh, in his MS. Flora, obligingly communicated to me by Dr. Wallich, speaks of this plant as common in almost every garden, where, however, it seldom flowers. A species closely allied to it (my *C. crassifolius*) was gathered by Dr. Wight in the mountains of Dindygul, in the southern parts of the Peninsula. Loureiro’s *C. amboinicus*, the original type of the genus, appears to be certainly referable to one of the above species, and probably to this one; and he gives as its locality, ‘in hortis Cochinchinæ et in variis Indiæ locis præsertim humidis.’ It is not impossible that the *C. aromaticus* and *crassifolius* may be but varieties of the same, and that Loureiro’s *C. amboinicus* includes them both; but I have at present scarcely data sufficient to determine this point. The descriptions both of Loureiro and Rumphius agree very well with the *C. aromaticus*.

“ The cultivated specimens of this plant often afford a remarkable instance of a return to the normal structure of the sexual organs of the Labiatae, and confirm the theory stated by De Candolle, in his observations on the *Salvia cretica*, in the *Quatrième Notice sur les Plantes rares du Jardin de Genève*. The style of this *Coleus* is frequently divided into 3, 4, or even 5, in which case the ovaria are constantly double the number of the divisions of the style; and by their disposition shew that two of them always belong to each division. They are, however, even in their earliest stage, constantly distinct and separate from each other; and on this account, admitting that the pistillum of the Labiatae is derived from five verticillate leaves, of which the mid-rib forms the style, and the limb on each side curls inwards, so as to form the two ovaria, of which five leaves, two only in ordinary cases, or in that of the present plant three, four, or the whole five, are developed; yet, when that fruit is arrived at maturity, the mid-rib being obliterated, and the two lateral lobes remaining, as they always were, perfectly distinct, I cannot consider them as forming one body; and therefore, in describing the ordinary state of the fruit, I think it far more intelligible, as well as more conformable to the evidence of the senses, to speak of it as consisting of four separate achenia than of two two-celled carpella.

“ Those flowers which have the above multiplication of styles have also the stamina nearly distinct from their base, and have often the fifth stamen, and an irregular increase in the number of lobes of the corolla.”

For the foregoing remarks we are indebted to the kindness of Mr. Bentham. Our drawing was made in the Garden of the Horticultural Society, where it is cultivated in the stove, and flowers from March to May. It is readily increased by cuttings.

In gardens it is often called *Gesneria odorata*.

J. L.



ACÁCIA* pentadénia.

Fern-leaved Acacia.

POLYGAMIA MONÆCIA.

Nat. ord. LEGUMINOSÆ Juss. §. Mimoseæ De Cand. (*Introduction to the natural system of Botany*, p. 86.)
 ACACIA.—*Suprà*, vol. 2. fol. 98.

Sect. IV. *Foliis bipinnatis, floribus in capitula globosa collectis.*—De Cand. prodr. 2. 460.

§ 2. Inermes.

** Antheris glabris, stigmatè simplici.

A. *pentadenia*; inermis glabra, ramis angulatis, pinnis 4-5-jugis, foliolis sub-24-jugis oblongis utrinque obtusis, glandulâ depressâ inter omnes pinnas, capitulis pedicellatis axillaribus simplicibus.

Frutex erectus, ramis angulatis, atroviridibus, pilis quibusdam sparsis. Folia bipinnata; pinnis 3-4-5-jugis; foliolis sub-24-jugis, parvis, oblongis, obtusissimis, basi quasi truncatis, glabris, vel parcissimè pilosis; petiolus communis, sulcatus, glandulâ parvâ cyathiformi inter utrumque jugum. Stipulæ ovatæ, acutæ, membranaceæ. Pedunculi plures, axillares, foliis breviores, capitula simplicia flava gerentes.

Collected for Mr. Knight, on the south-west coast of New Holland. It is a very elegant greenhouse plant, flowering in April; and if not equal to such species as *A. pubescens* in the beauty of its blossoms, it is perhaps superior to them in the graceful character of its foliage.

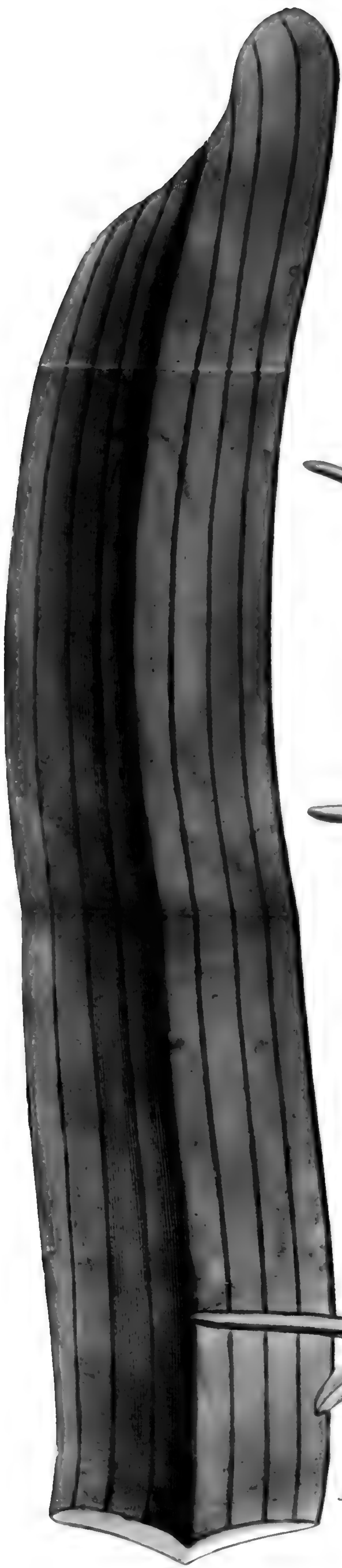
Will thrive with the same treatment as other New Holland Acacias, and is propagated by cuttings in the same manner.

The little glands that are seated upon the petiole, between each pair of pinnæ, are of a highly curious character; they have the form of a minute cup, and seem as if they were destined to expose some portion of the inner substance

* See fol. 1317.

of the petiole to the action of air or light; but for what purpose we are ignorant. One could almost fancy an analogy between the origin of these glands and of the shields of Lichens.

J. L.



ANGRÆCUM* eburneum,

Ivory Angræcum.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆÆ. § Vandææ Lindl. (Introduction to the natural system of Botany, p. 262.)

ANGRÆCUM Thouars.—*Perianthium patens. Sepala et petala subæqualia, libera. Labellum sessile, cum basi columnæ continuum, carnosum, indivisum, petalis multò latius; calcare recto cornuto, sæpiùs subcylindraceo, perianthio multò longiore, rarò obconico. Columna nana, subteres, rarò elongata, semiteres. Anthera 2-ocularis, truncata. Pollinia 2, bipartibilia, caudiculâ brevi angustâ, glandulâ triangulari. — Epiphytæ, caulescentes. Folia coriacea, ligulata, apice obliqua. Flores solitarii v. racemosi, albi, nunc citrini, v. herbacei.*

A. eburneum; caule simplici, foliis coriaceis lucidis apice obliquis 7-striatis, spicis multifloris secundis, labello cordato subrotundo cuspidato basi jugo elevato cristato, calcare sepalo supremo parallelo et dimidio longiore, ovario scabro.

Limodorum eburneum. "Bory Voyage, 1. 359. t. 19." Willd. sp. pl. 4. 125.

Angræcum eburneum. Thouars orch. afr. t. 65. Ach. Richard orch. maurit. p. 71.

Aerobion eburneum. Spreng. syst. veg. v. 3.

Caulis erectus, simplex, crassus, sesquipedalis, hic illic radices tortuosas promens. Folia subdisticha, ligulata, lucida, valdè coriacea, apice obliqua, quandoque emarginata. Spica è basi caulis, ascendens, caulis longitudine, teres, secunda, multiflora. Flores inodori, explanati, diametro 3½-unciali. Sepala et petala subæqualia, lineari-lanceolata, coriacea, basi convexa, omnind libera, pallidè herbacea. Labellum eburneum, cordatum, subrotundum, abruptè acuminatum, concavum, basi cristâ obtusâ elevatâ longitudinali instructum, calcaratum. Calcar ferè tres uncias longum, cornutum, ad apicem sensim attenuatum, intùs pubescens, cum sepalo dorsali parallelum. Columna nana, carnosâ, subteres, truncato-conica. Clinandrium planum, immarginatum, apice angustatum; margine antico altè excavato. Stigma sub fornice clinandrii occultum. Anthera subrotunda, truncata, bilocularis; loculis paulò disjunctis, longitudinaliter dehiscentibus. Pollinia 2, bipartita, incumbentia, basi approximata, caudiculâ lineari emarginatâ glandulâ triangulari affixâ. Ovarium breve, sexsulcatum, verruculosum, costis rotundatis.

* An alteration of Angurek, the Malayan name of such plants.

This remarkable plant is not uncommon in the Island of Bourbon, growing upon trees, where it was found both by Colonel Bory de St. Vincent and by the late Mons. Du Petit Thouars. It was also met with at St. Mary's, Madagascar, by the unfortunate Forbes, by whom the only plant that is known to exist in Europe was sent to the Horticultural Society. From that plant the accompanying drawing was made in November last, when it flowered for the first time, continuing in beauty for nearly two months. It grows slowly, but is in a perfectly healthy state, without, however, manifesting the smallest disposition to branch, or provide means for propagating.

It is very much to be regretted that some more efficient means are not taken to procure the plants of this description, which abound in all the tropical parts of the East. They are very tenacious of life, and require no care in collecting, it being only necessary to strip them off the trees on which they grow, and to suspend them in the cabin, never watering them, but moistening them occasionally with a wet sponge. Captains of ships touching at the Isle of France might succeed in importing them without difficulty; and yet of the numerous species figured by Du Petit Thouars, not more than three or four have ever been seen in our gardens. The only precaution that requires to be taken in importing them, is that they should not be over-watered; if this is done, they are sure to die; it would be much better to give them no water whatever. They should also, if possible, be collected *in the dry season*, at which period they are naturally in a state of torpor.

This plant offers a striking instance of the precaution Nature seems to have taken to prevent direct contact between the pollen and the stigmatic surface, and at the same time of the skilful means by which an indirect communication is substituted; so that no impediment may really exist to the process of fertilisation, notwithstanding the apparent obstacles to its taking effect. The pollen is locked up in an anther so firmly united to the top of the column, that nothing but actual force can remove it; while the stigma is situated upon the face of the column far beyond the reach of contact with the pollen. To establish the requisite communication, a narrow slip of the top of the column, proceeding from the edge of the stigma to beneath the anther, gradually separates from the surrounding tissue; the face of the anther opens along the middle of the cells, contracts, and allows the pollen masses to glue themselves to the narrow slip, which is the caudicula; at the same time, while this operation has been in progress, a triangular portion of the front of the edge of the stigma has been adhering to the caudicula; and thus establishes the direct communication which is required, afterwards separating with the caudicula under the form of the gland. From this statement it will be obvious to Botanists that the caudiculæ of Ophrydeæ, and that of Vandææ, are not analogous; the former belonging to the pollen, as was demonstrated by Mr. Bauer so long since as the year 1800, and the latter to the stigma. These phenomena, the progress of which we remarked last winter with great care, will form the subject of two

plates that have been prepared by Mr. Bauer for the next Part of the *Illustrations of Orchideous Plants*.

The genus *Angræcum* was first established by Du Petit Thouars in 1822. It consists, as far as is at present known, exclusively of plants native of trees in the islands of Bourbon, Mauritius, and Madagascar, and of the south-eastern part of the continent of Africa. Strictly limited, that is to say excluding certain species admitted by its founder, it is known by its undivided lip, which is neither cucullate, nor articulated with the column; by its spreading perianthium, which never has the segments turned upwards as in *Eulophia*; by its long taper-pointed spur, which is rarely enlarged at the base; and finally, by all these characters being connected with coriaceous leaves, that are never ribbed or plaited. Such being the definition of *Angræcum*, it will be apparent that, independently of the species already separated under the names of *Aeranthus*, *Æonia*, &c., certain others, such as our *Angræcum maculatum*, and a few of those of Du Petit Thouars, must be excluded; these form a genus nearly related to *Eulophia*, from which they are to be distinguished by their coriaceous leaves, by the perianthium never being secund, and by the want of a crest upon the lip. They may be thus defined:

ÆCEOCLADES.

Perianthium patens, v. ringens, v. connivens, subæquale, liberum, non secundum. Labellum liberum, sessile, cum columna articulatum, calcareatum; calcareo curvo sæpè obconico, laminâ lobatâ cucullatâ, v. complicatâ, v. concavâ. Columna sæpè elongata, semiteres. Anthera 2-ocularis. Pollinia 2, posticè sulcata, caudiculâ angustâ, glandulâ minutâ. — Epiphytæ, acaules v. caulescentes, nunc pseudobolbosæ. Folia coriacea, aut rarò membranacea, nunquam plicata. Flores sæpiùs minuti.

Sp. *Angræcum maculatum Lindl.* — parviflorum, caulescens, carpophorum, gracile, *Thouars*—*Limodorum pusillum*, filiforme? funale, falcatum, W. et plures *Indicæ ineditæ*.

Among the collections of Dr. Wallich are the following new genera, belonging to the same tribe as *Angræcum* and *Æceoclades*, with which our Botanical readers will be glad to be acquainted.

DIPLOCENTRUM.

Perianthium subclausum, liberum. Sepalum supremum lateralibus paulò obliquis multò minus. Petala sepalo supremo paululùm majora. Labellum cum columna articulatum, indivisum, bicalcaratum. Columna minuta, semiteres, rostello obtuso. Pollinia 2? caudiculâ subulatâ, glandulâ maximâ concavâ. — Epiphyta, caulescens. Folia complicata, carnosâ, recurva. Racemi paniculati, recurvi. Flores minuti. Calcaria brevia, obconica, incurva.

Sp. 1. *Diplocentrum recurvum*.

MICROPERA.

Perianthium æquale, patens, sepalis lateralibus basi labelli adnatis. Labellum cum basi columnæ continuum, calceiforme, leviter trilobum, lobo

intermedio minimo, lateralibus majoribus erectis. Columna brevis, rostello maximo inflexo. Pollinia 2, caudiculâ subulatâ. — Epiphyta, caulescens. Folia disticha, linearia, arcuata, apice æqualia, emarginata. Spicæ laterales, horizontales, foliis breviores. Flores citrini.

Sp. 1. *Micropera pallida* = *Aerides pallidum* *Roxb.*

CHILOSCHISTA.

Perianthium subpatens. Petala sepalis majora, cum sepalis lateralibus basi longè productæ columnæ adnata. Labellum cum ungue columnæ articulatam, bipartitum, medio cristatum. Columna minima, erecta, semiteres. Pollinia 2, caudiculâ brevi, subulatâ, glandulâ minutâ. — Herba humilis, epiphyta, hirsuta, aphylla; radicibus complanatis viridibus (quasi foliaceis!). Spicæ erectæ. Flores albi, odorati.

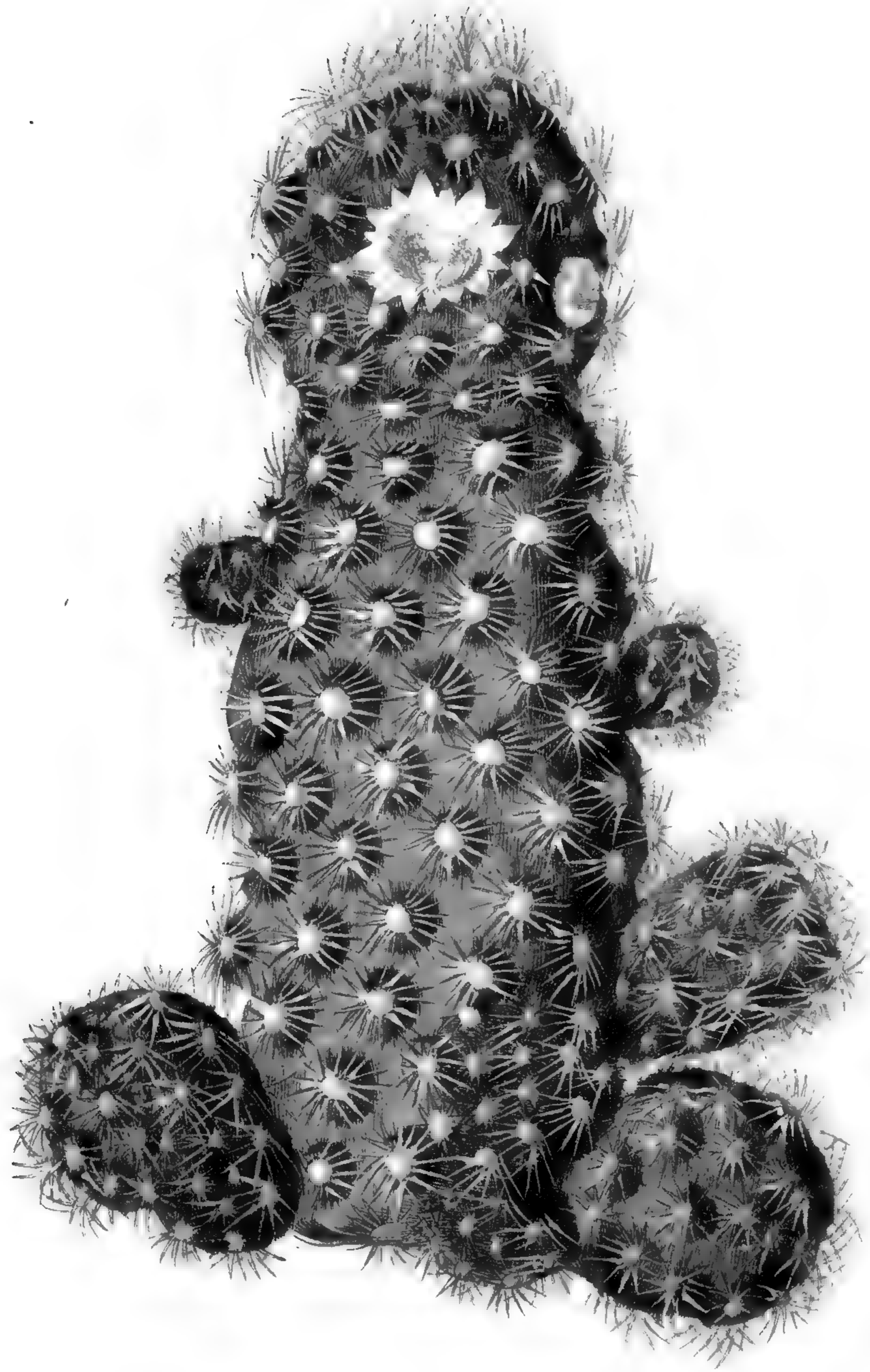
Sp. 1. *Chiloschista usneoides* = *Epidendrum usneoides* *Don prodr.*

TETRAPELTIS Wall. MSS.

Perianthium subpatens. Sepala libera, æqualia. Petala angustissima, æquilonga. Labellum liberum, sessile, saccatum, geniculatum, trilobum, lobis lateralibus abbreviatis, intermedio indiviso. Columna erecta, petalorum longitudine, semiteres, clavata; clinandrio cucullato; rostello rostrato recto. Pollinia 4, globosa, posticè foveata; geminatim caudiculis duabus angustis glandulâ communi connexis adhærentia. — Herba epiphyta, caulescens. Caules squamis vaginati, curvi. Folia geminata, lanceolata, plicata. Spica erecta, multiflora, foliis brevior. Flores albi.

Sp. 1. *Tetrapeltis fragrans* *Wall. MSS.*

J. L.



MAMMILLÁRIA* tenuis.

Taper Mammillaria.

ICOSANDRIA MONOGYNIA.

Nat. ord. CACTEÆ De Cand. § Opuntiaceæ. (Introduction to the natural system, p. 54.)

MAMMILLARIA.—Suprà, vol. 16. fol. 1329.

M. tenuis; pumila, cylindræa, prolifera, axillis nudis, spinis 20 radiatis æqualibus patentissimis intricatis.

M. tenuis. De Cand. in literis.

Caulis cylindræus, valdè proliferus, propaginibus sphæricis. Tubercula brevia, ovata, axillis nudis. Spinæ è centro lanato radiatæ, 20-21, juniores purpurascens, adultæ flavæ, omnes æquales, patentissimæ. Flores ochroleuci, minuti.

Gentle reader, hast thou never seen in a display of fire-works a crowd of wheels all in motion at once, and crossing and intersecting each other in every direction? and canst thou fancy those wheels arrested in their motion by some magic power, their rays retained, but their fires extinguished and their brightness gone; just as the glow-worm's light fades before the glare of day, and leaves nothing but a brown and lustreless shell, in place of the fiery mask which he wore in darkness? Then mayest thou conceive the curious beauty of the little herb now before thee; a plant so unlike all others, that we would fain believe it the reanimated spirit of a race that flourished in former ages with those hideous monsters whose bones alone remain to tell the history of their existence, in the quarries of our sandstone, slate, and clay. With nothing living has it any resemblance, except its own immediate kin; and even among those it exceeds in curious intricacy of structure all that we know elsewhere.

* See fol. 1329.

Its native country is unknown to us. The plant from which our drawing was made was received from M. De Candolle. It flowers in May, and propagates readily by means of the little round hedgehog-like bulbs, which it produces in abundance. They should be planted in lime-rubbish, and a little vegetable soil kept just damp, where they will strike root, and speedily establish themselves. Once rooted, nothing but frost or over-watering will destroy them.

J. L.



HÓVEA* chorozemæfólia.

Chorozema-leaved Hovea.

MONADELPHIA, OR DIADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ. Trib. Lotææ *De Cand.* (*Introduction to the natural system of Botany*, p. 86.)

HOVEA.—*Suprà*, vol. 4. fol. 280.

H. chorozemæfolia; foliis lanceolato-oblongis sinuato-spinosis mucronatis coriaceis glabris, stipulis spinescentibus, calycibus villosis.—*De Cand. prodr.* 2. 116.

Plagiolobium chorizemæfolium. *Sweet. fl. australas. t.* 2.

Plag. ilicifolium. *Ejusdem loci.*

Frutex erectus, densus, sempervirens. Rami murini, pubescentes. Folia ovata, v. oblonga, sinuato-spinosa, rigida, utrinque glabra, subtus reticulata. Racemi 2-4-flori, villosi, foliis breviores. Flores intensè cyanei. Calycis labium supremum indivisum.

King George's Sound, in New Holland, that country from which so many noble *Banksias*, *Dryandras*, and other fine evergreen plants, have been introduced, and which, although in most places too sterile for the purposes of man, seems to be "a paradise of pleasant flowers," is the native spot of this charming shrub. It flourishes in that frostless country among picturesque hills, described by Mr. Nind as "studded and capped by immense blocks of granite, and strewn with a profusion of beautiful shrubs, among which the splendid *Banksiæ* grow to a large size, while *Kingia* and *Xanthorrhæa*, or the Grass-tree, are abundant."

Our drawing was made in April last from a plant in the possession of Mr. Lowe, which was exhibited at one of the meetings of the Horticultural Society. It is a very healthy greenhouse shrub, scarcely less remarkable for the beauty of its foliage than for the rich, and for New Holland plants very unusual, colour of its blossoms.

Young cuttings will strike in sand under a bell-glass.

J. L.

* See fol. 1423.



ÁCERAS* secundiflora.

One-sided Aceras.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ. § Ophrydeæ Lindl. (Introduction to the natural system of Botany, p. 262.)

ÁCERAS R. Brown.—*Perianthium* clausum, æstivatione valvatâ. *Petala* sepalis multò angustiora. *Labellum* brevissimè saccato-calcaratum, v. gibbosum, pendulum v. patens, tripartitum. *Columna* erecta, bilocularis, loculis parallelis basi approximatis, caudiculis glandulæ solitariæ cucullo unico inclusæ adhærentibus.—*Herbæ*, radicibus carnosis fasciculatis, lobo uno alterove incrassato. Flores luteo-herbacei, v. obscurè violacei, labello sæpè maculato discolore.

A. secundiflora; foliis maculatis, spicâ densâ secundâ parviflorâ, petalis subulatis, labello patente oblongo sepalis æquali basi gibboso trilobo: lobo intermedio obovato mucronulato.

Satyrium maculatum. *Desf. fl. atl.* 2. 319, *fide Cambessédes.*

Ophrys densiflora. *Desf. coroll.* p. 11. t. 16.

Orchis secundiflora. “*Bertolon. amæn. Ital.* 82.” *Cambess. enum. pl. balear.* 140. *Spreng. syst. veg.* 3. 687.

Radix carnosus oblongus, indivisus. *Folia* radicalia oblonga, erecta, plicata, carnosâ, maculata. *Scapus* in cultâ spithamæus, in spontaneâ humilior, erectus, apice spicam densam secundam florum parvorum obscurè violaceorum gerens. *Sepala* ovata, acuta, æstivatione valvari. *Petala* subulata, sepulorum longitudine. *Labellum* patens, sepala non excedens, oblongum, basi concavum, sacculatum, trilobum; lobis lateralibus linearibus acutis, intermedio obovato mucronato longiore. *Columna* minima, generis.

This plant seems to have an unusually extensive geographical range for an *Orchis*. Bertoloni found it in Provence and Liguria; Cambessedes gathered it on the Puig-dî-

* So called by Dr. Brown, from α , priv., and $\kappa\epsilon\rho\alpha\varsigma$, a horn; in allusion to the *primâ facie* difference between the original species and *Orchis*. Afterwards Richard altered it to *Loroglossum*, because one of the species was found to have a horn. Then Professor Sprengel changed the name to *Himantoglossum*, because he did not like *Loroglossum*. Finally, we retain Dr. Brown's name, because it was the first, and is as good as the others, and because we do not approve of these idle changes.

Torrella, in Majorca ; it has been collected in Corsica by Viviani, and also in Calabria ; Desfontaines brought it from near Belis, in the Atlantis ; and finally, it was discovered in Madeira by the Rev. Mr. Lowe, to whom we owe its introduction to our gardens.

It is a neat little plant, requiring the same kind of treatment as *Ixias* and other Cape bulbs : that is to say, to be kept quite dry and quiescent during summer. Under such management, Mr. Henderson, at Lord Milton's, succeeds in making it flower freely every spring. For the specimens from which the drawing was taken we are obliged to Mr. Henderson, and also to the Rev. Mr. Berkeley, by whom they were communicated in April last. The parts of fructification are very minute, and difficult to make out. Mr. Berkeley first directed our attention to the agreement between their structure and that of *Aceras anthropophora*, an opinion which our own observation has subsequently confirmed.

We have wild specimens from the Balearic islands, for which we have to thank Mr. Bentham ; but they are not one-third the size of the cultivated plant.

Orchis parviflora of Willdenow, referred to this genus by Sprengel, in pursuance of a hint of the elder Richard, is, according to Tenore, nothing but a starved specimen of *O. ustulata*, and must be expunged from the list. In its place may be inserted the following very distinct Indian species, viz. :—

A. angustifolia (Lindl. in Wall. cat. ind. no. 7061), foliis lineari-lanceolatis acuminatis, spicâ rarâ elongatâ secundâ parviflorâ, petalis subulatis, labello pendulo lineari sepalis duplò longiore, apice trifido : laciniâ intermediâ breviorè.

Hab. in *Gossam Than*, Wallich. (*hab. s. sp. e museo Anglo-Indico.*)

J. L.



KENNÉDYA* dilatáta.

Dilated Kennedyya.

DIADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ Juss. (*Introduction to the natural system of Botany*, p. 86.)

KENNÉDYA.—*Suprà*, vol. 11. p. 944.

§ 2. *Foliis 3-foliolatis, carinâ vexillo et alis brevioribus.* D. C.

K. dilatata; foliolis tribus ovatis obtusissimis basi cuneatis apice mucronatis subrepandis subtùs sericeis, stipulis ovatis acutis, pedunculis filiformibus flexuosis flores 6-10-capitatos gerentibus.

K. dilatata. *Cunningham sec. Hortulanos.*

Caules debiles, filiformes, flexuosi, fusco-pilosi, pilis appressissimis. Folia magis minusve repanda (magis fig. 2, minus fig. 1). Calyces nigro-villosi. Flores vexillo coccineo basi luteo, alis purpureis.

A beautiful little prostrate or climbing plant, related, on the one hand, to *K. prostrata*, on the other to *K. inophylla*, with which latter it agrees in the black hairs that clothe its calyxes.

There are two varieties; one of which, represented at fig. 1, has smaller and less repand leaves than the other at fig. 2.

It requires precisely the same treatment as *K. prostrata* and *coccinea*.

A native of the south-west coast of New Holland, where its seeds were gathered by Baxter. Our drawing was made in Mr. Knight's Nursery in April last.

The name by which it is known in the Gardens is, we presume, that by which it has been called by Mr. Allan Cunningham, the distinguished traveller in New South Wales, to whom Botanists are looking with much impatience for that detailed account of the Flora of New Holland for which his talents and materials most highly qualify him.

J. L.

* See fol. 1421.



ÁSTER* spectábilis.

Shewy Aster.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (Introduction to the natural system of Botany, p. 197.)

ÁSTER.—Suprà, vol. 3. fol. 183.

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- A. foliis oblongo-lanceolatis acutis scabris sessilibus inferioribus serratis, caule stricto apice corymboso, ramis rigidis incurvis corymbosis, periclinii foliolis obtusis copiosissimis squarrosis ramulisque glanduloso-pubescentibus.—*Nees ab Esenbeck genera et species Asterearum*, 41.
 A. spectabilis. *Ait. Hort. Kew. ed. 1. 3. 209, et ferè omnium auctorum.*
 A. elegans. *Willd. sp. pl. 3. 2042. n. 74, ex parte; fide Neesii.*
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It is well known that the genus Aster has long been the disgrace of Botanists; that there is no instance in the whole range of Natural History of such imperfect descriptions, unscientific arrangement, false species, confused synonyms, and multiplied names, as that genus presents. We have for many years been collecting materials in the hope of being able to reduce it to better order; and lately we have begun to explain our ideas upon the subject in several articles that have appeared in the present publication.

But we are fortunately relieved from the prosecution of our undertaking by the appearance of a work from the pen of the learned Dr. Nees von Esenbeck, which, whether we regard the elegance of its style, the precision of its arrangement, the philosophical spirit that pervades every page, or the laborious accuracy with which the whole has been digested, is certainly the most remarkable instance of scientific research applied to systematic Botany that we are acquainted with. Our labour in future will be reduced

* See fol. 1487.

to an illustration of this extraordinary production, or to a criticism of such points in it as may appear to admit of improvement.

The species now described is said by Nuttall to be common in New Jersey: we have no wild specimens, nor has Nees seen any but those from gardens. It is, however, a most distinct kind, and among the most beautiful of the tribe. It flowers in September and October; and is easily preserved and multiplied in any common garden soil. Its stature is twice as great as that of the European and Asiatic *Aster Amellus*.

It appears that while the specific character of this plant in Willdenow really belongs to it, having been copied from Solander in the *Hortus Kewensis*, his description applies to a totally different species; and that another of Willdenow's species, *A. elegans*, is nothing but a patchwork of *A. spectabilis* and *A. Amellus*!!

J. L.



Phaseolus vulgaris L. var. *multicaulis* (L.) DC.

CHORÓZEMA* ovatum.

Ovate Chorozema.

DECANDRIA MONOGYNIA.

Nat. ord. LEGUMINOSÆ Juss. § Sophoræ D. C. (*Introduction to the natural system of Botany*, p. 87.)

CHOROZEMA.—*Suprà*, vol. 12. fol. 986.

C. ovatum; caulibus debilibus ascendentibus, foliis ovatis acutis, calycis laciniis acuminatis, pedunculis longissimis terminalibus nudis trifloris.

Caules *filiformes, ascendentes, pubescentes*. Stipulæ *subulatæ*. Folia *simplicia, ovata, acuminata, pilosiuscula*. Pedunculi *terminales, longissimi, triflori, subpubescentes*. Calyx *tubulosus, bilabiatus, levissimè pubescens; labio superiore lato bifido, inferiore tripartito, basi bibracteolatus*. Vexillum *subrotundum, emarginatum, coccineum, basi luteum, alis multò majus; alæ purpureæ; carina pallida, minor*. Stamina 10, *libera, basi calycis inserta*. Ovarium *lineare, dealbatum, sericeum, polyspermum*. Stylus *complanatus, brevis, pilosus, uncinatus, acutus*. Stigma *anticum, laterale, lineare*.

A native of the south-west of New Holland, where it was collected by Baxter. Its characters are more those of *C. rhombeum* than of any other species; but it is decidedly distinct.

Flowers in May; increases by ripened cuttings struck under a bell-glass; requires a greenhouse.

Our drawing was made in Mr. Knight's Nursery.

J. L.

* See fol. 1513.



STANHÓPEA* ebúrnea.

Ivory-lipped Stanhópea.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ Juss. § Vandææ Lindl. (Introduction to the natural system of Botany, p. 262.)

STANHOPEA Hooker.—*Perianthium* membranaceum, patentissimum v. reflexum. *Sepala* libera, subundulata, mole suâ ruentia. *Petala* conformia angustiora. *Labellum* liberum, anticum, ecalcaratum, carnosum, utrinque cornutum: dimidio superiore (*epichilio*) convexo, inferiore (*hypochilio*) excavato. *Columna* longissima, petaloideo-marginata. *Anthera* 2-ocularis. *Pollinia* 2, elongata, fissa, caudiculâ quam glandula biloba stipitata breviora.—*Epiphytæ pseudo-bulbosæ*. *Folia plicata*. *Scapi radicales, vaginati, pauciflori*. *Flores maximi, magis minùsve maculati*.

S. eburnea; labello oblongo non medio constricto, hypochilio pone basin bicorni, epichilio ovato-oblongo obtuso, metachilio duplò longiore solido plano-convexo anticè truncato bidentato, scapo pendulo bifloro petalis duplò longiore.

Scapi penduli, biflori, cum ovario 4½ poll. longi. *Vaginæ laxæ, ovatæ, obtusæ, internodiis vix æquales*. *Sepala oblongo-lanceolata, 2½ poll. longa, 1½ lata*. *Petala conformia, angustiora*. *Labellum cornubus è medio margine hypochilii, metachilioque lineis quibusdam interruptis purpureis notatis*.

We are indebted for our knowledge of this noble epiphyte to James Bateman, Esq., who most obligingly sent us specimens from his rich collection of Orchideous plants at Knypersley Hall, near Congleton, in July last. They were accompanied by a faithful drawing from the amateur pencil of Miss Jane Edwards, and by several important notes, which have together enabled us to prepare an account of the species.

It is a native of Rio Janeiro, whence it was originally imported by Messrs. Loddiges. Mr. Bateman informs us that "the plant from which the drawing was taken produced at the same time from the base of the same bulb another scape, which, coming in contact with the side of its pot, suâ vi was broken off: the other was only

* So called in compliment to the present Earl Stanhope, president of the Medico-Botanical Society.

preserved from a similar fate by breaking an opening through the sides of the pot. The flowers were slightly fragrant, and of short duration; the lip when fresh appeared to be formed of the most pure and highly-polished ivory. The plant in question differs decidedly from *S. oculata* and *insignis*, which have both flowered here; and in foliage from a plant I possess of *S. grandiflora*, being much smaller, more pointed and pliant in its leaves. Not, however, having seen a flower of the latter, I know not exactly in what respect it differs from it."

To this last species it is indeed very closely allied; but it appears to differ from it in some points of importance. In the first place, its flowers are not more than two-thirds of the size; secondly, the horns of the base of the lip proceed from the middle of the margin of the hypochilium, and not from the front of the margin; and thirdly, the scape in *S. grandiflora* is shorter than the sepals, so that the flowers are erect, while in *S. eburnea* the scape is twice as long, and pendulous. Such at least are differences that are to be discovered upon comparing this with Messrs. Loddiges' figure of *Ceratochilus grandiflorus*, and with a few notes upon that species which we formerly made when a blossom was communicated to us by those gentlemen in August 1828. We, however, should not perhaps have attached so much importance to these peculiarities, if *S. eburnea* had not been a native of Rio Janeiro, and *S. grandiflora* of Trinidad; but we know that it rarely happens that the same species of Orchideous plant inhabits such very distant stations.

When we originally examined this plant, we suggested to Messrs. Loddiges as a name for the genus that of *Ceratochilus*, which was accordingly adopted; but we unfortunately did not at the time advert to the existence of the same name in Dr. Blume's Observations upon Java Plants. The genus of the last-mentioned Botanist being, however, apparently distinct, it has become necessary to adopt the name of *Stanhopea*, which was subsequently applied to another species of this genus, the *Epidendrum grandiflorum* of Humboldt and Bonpland, by Dr. Hooker. We the more readily do this now, because on a former occasion, in objecting to the reception of the name *Stanhopea*, we suffered ourselves to be betrayed into unkind expressions, which should not have been applied to any one, and least of all to so amiable and excellent a man as our long-tryed friend the Professor of Botany at Glasgow.

J. L.



CYMBIDIUM* marginátum.

Red-edged Cymbidium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ Juss. § Vandææ Lindl. (*Introduction to the natural system of Botany*, p. 262.)

CYMBIDIUM.—*Suprà*, vol. 7. fol. 529.

Sect. 4. *Rhizoma repens, pseudo-bolbos 1-3-phyllis gerens.* (Bolbidium.)
—Lindl. *gen. et sp. Orch. part 3. ined.*

C. pseudo-bulbis ovato-oblongis teretibus 1-3-phyllis, foliis lineari-lanceolatis coriaceis erecto-recurvis, scapis unifloris gracilibus vaginatis foliis brevioribus, sepalis oblongo-lanceolatis, petalis minoribus conformibus, labello oblongo-lanceolato obtuso cucullato subrepando indiviso.

? *Maxillaria gracilis.* Lodd. *bot. cab.* 1837.

Folia 4-8 poll. longa, 6-7 lineas lata, atroviridia. Scapi palmares, vaginis longis fuscis distantibus. Flores lutei. Sepala pollicem longa, rubro-marginata; supremum cum petalis parallelum labium superius, laterali-
bus divergentibus inferius constituentibus. Labellum interruptè umbrino limbatum.

An air-plant, native of Rio Janeiro, whence it has been received by the Horticultural Society. It grows freely under the usual management required by this tribe of plants, but does not often flower. Our drawing was made in a stove in the Chiswick Garden in November 1830. Young plants may be obtained by dividing the creeping stem, when the pseudo-bulbs will establish for themselves an independent life by means of their little white and green roots.

The genus *Cymbidium* in its most definite state comprehends none but plants the lower sepals of whose flowers are spreading, the upper with the petals forming a sort of superior lip; the labellum being articulated with the column, and either entire or 3-lobed, but always cucullate.

* From *κύμβος*, a hollow recess; in allusion to the lip.

With these characters are combined a pair of 2-lobed pollen masses, sessile upon a transverse gland. The genus thus restricted will be found to comprehend two natural groups, one of which consists of plants that, like *C. aloifolium*, form neither stem nor pseudo-bulbs, but throw up several leaves from the surface of the soil; the other of species with a creeping rhizoma, from which at intervals spring pseudo-bulbs, bearing from 1 to 3 half-coriaceous leaves. It is to the latter that the subject of this Plate is referable. Besides these, it will probably not be expedient, with our present imperfect knowledge of the structure of those plants, to exclude such species as *C. diurnum* and *utriculatum*, both of which are types of additional groups; and perhaps our *Camaridium ochroleucum* will be better reduced to *Cymbidium* than retained distinct.

A very large portion of the Willdenovian species of *Cymbidium* are referable to other genera, especially *C. echinocarpum* and its allies, which form a genus we call *Dichæa*. The *Maxillaria gracilis* of the Botanical Cabinet is either this in a sickly state, or a nearly allied species.

J. L.



EPÁCRIS* nivális.

Snowy Epacris.

PENTANDRIA MONOGYNIA.

Nat. ord. EPACRIDEÆ R. Br. (*Introduction to the natural system of Botany*, p. 183.)

EPACRIS Forst.—*Calyx* coloratus, multibracteatus, bracteis textura calycis. *Corolla* tubulosa, limbo imberbi. *Stamina* epipetala; *antheris* supra medium peltatis. *Squamulæ* 5, hypogynæ. *Capsula* placentis columnæ centrali adnatis.—*Fruticuli* ramosi, sæpiùs glabri. *Folia* sparsa, petiolata v. basi simplici. *Flores* axillares, in spicam foliatam sæpiùs digesti, albi v. purpurascens.—R. Br. prodr. 550.

E. nivális; floribus pendulis racemosis, foliis lanceolatis sessilibus attenuato-acuminatis subtùs striatis, pedunculis calyce bis brevioribus, corollis campanulatis basi constrictis: tubo calycem bis superante.

E. nivális. Loddiges' botanical cabinet, t. 1821.

Frutex sempervirens, ramosus, 2-3-pedalis, floribus niveis pendulis onustus. Ramuli arachnoideo-pubescentes, fusco-purpurei. Folia ovato-lanceolata, v. lanceolata, reflexo-patentia, acuminatissima, glabra, subtùs striata. Sepala et bracteæ ovatae, acutæ, albæ, margine lanulosæ. Corolla foliorum longitudine, campanulata, intra calycem constricta.

Introduced from New Holland by Henry Moreton Dyer, Esq., vice-president of the Horticultural Society, who gave seeds of it, in 1829, to Messrs. Loddiges, in whose Botanical Cabinet an excellent figure appeared in July last.

It forms an evergreen bush, which, when loaded like an Andromeda with hundreds of snow-white flowers, is exceedingly ornamental. Any greenhouse will afford it protection enough in winter; and in summer it will bear the open air of this climate. It increases by cuttings.

* From ἐπι, upon, and ἄκρῃς, the summit of a mountain; alluding to the native situation of several of the species.

Our figure was taken from specimens supplied in April last by Mr. Lowe, of Clapton.

In Botanical affinity this species comes nearest to *E. impressa*, which is at once distinguished by its pink blossoms, the tube of whose corolla is cylindrical, and much longer than in *E. nivalis*.

J. L.



EURÝBIA* corymbósa.

Corymbose Eurybia.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (Introduction to the natural system of Botany, p. 197.)

§ *Corymbiferæ Juss. Astereæ Cassini.*

EURYBIA Cassini.—*Calathium* radiatum, radio fœmineo fertili, ligulis uniserialibus latiusculis. *Stigmata* flosculorum disci fertilis retorta, pilosula, obtusa, apice sterili brevissimo. *Periclinium* arcetè imbricatum, foliolis pluriserialibus non appendiculatis latiusculis à basi ad apicem membranaceo-marginatis, rariùs apice patulis. *Clinanthium* subalveolatum, alveolis parùm profundis marginibus obsoletè dentatis. *Pappus* simplex, pluriserialis, rigidulus, radiis filiformibus serrulato-scabris (ferrugineis albisve). *Achenia* elongata, linearia, 3-5-costata, striata, glabra, v. pubescentia.—*Nees ab Esenbeck genera et species Asterearum, p. 136.*

E. corymbosa; foliis ovatis, inferioribus cordatis serratis petiolatis, caule dichotomo-corymboso, periclinii foliolis imbricatis obtusis, exterioribus ovatis.—*Nees l. c. p. 143.*

A. corymbosus. Ait. Hort. Kew. ed. 1. 3. 207. Willd. sp. pl. 3. 2036, etc.

A. cordifolius. Michx. ! fl. boreali-amic. 2.

Eurybia corymbosa. Cassini in dict. des sc. nat. 37. p. 487.

A very common plant in gardens, rising from 1 to 2 feet high, and flowering in August and September. It is a native of North America, where it grows in shady woods from Canada to Virginia. When wild its stem does not usually bear more than from 6 to 10 flower-heads; but in the cultivated plant they are often exceedingly numerous, as is shewn in our figure. The leaves are deeply and rather widely serrated, but at some distance from the apex are perfectly entire.

By favour of M. Achille Richard we possess a specimen

* From *εὐρύβινος*, wide-spreading; in allusion to the creeping offsets.

from the Herbarium of Michaux, from which we have ascertained that this is his *A. cordifolius*. We have received it under the same name from Dr. Torrey; and it is probably that of other American Botanists: not, however, of Nuttall, who evidently, by combining it with *A. heterophyllus*, was aware of the true *A. cordifolius*.

J. L.



by J. Hodgway 169 Piccadilly Oct. 1. 1832.

S. Watts sc.

VILLARSIA* reniformis.

Kidney-leaved Villarsia.

PENTANDRIA MONOGYNIA.

Nat. ord. GENTIANEÆ Juss. (Introduction to the natural system of Botany, p. 215.)

VILLARSIA Vent.—Calyx 5-partitus. Corolla subrotata, limbo patente 5-partito, laciniis disco plano, basi barbato v. squamulato, marginibus ascendentibus æstivatione inflexis. Stamina 5, laciniis alterna. Stylus 1. Stigma bilobum, lobis dentatis. Glandulæ 5, hypogynæ, staminibus alternæ. Capsula polysperma, unilocularis, bivalvis (in aquaticis evalvis), valvularum axibus seminiferis. Folia simplicia.—Herbæ natantes, v. paludosæ. Folia alterna, rarò opposita, petiolis basi dilatatis, semivaginantibus, integra v. dentata, subtùs in plerisque punctata. Flores v. umbellati axillares, nunc petiolo insidentes, v. paniculati terminales. Corolla sæpiùs flava, laciniarum marginibus fimbriatis v. integris.—R. Brown prodr. 456.

V. reniformis ; foliis radicalibus reniformibus integris, caule elongato nudiusculo, floribus paniculatis.—R. Br. l. c. Römer et Schultes syst. veg. 4. 181.

Herba paludosa, pedalis, v. minor. Folia radicalia longè petiolata, reniformi-cordata, lucida, obtusa, subrepanda. Caulis pallidè viridis, ramosus, bracteis communibus linearibus obtusis apice foliaceis, propriis minutis squamiformibus. Flores pedicellis calycibus duplè triplève longioribus, erectis; lutei, 6-7 lineas lati, matutini. Laciniæ corollæ ovatæ, basi barbatae, tridentatæ.

A neat little greenhouse plant, native of swamps near Port Jackson, and in Van Diemen's Land. It should be cultivated in peat earth, and planted in a pot which can be immersed in a tank of water, when it will flower daily for five or six weeks in the middle of summer, opening its blossoms at sunrise, and closing them before noon.

Dr. Brown suggests its being too nearly related to

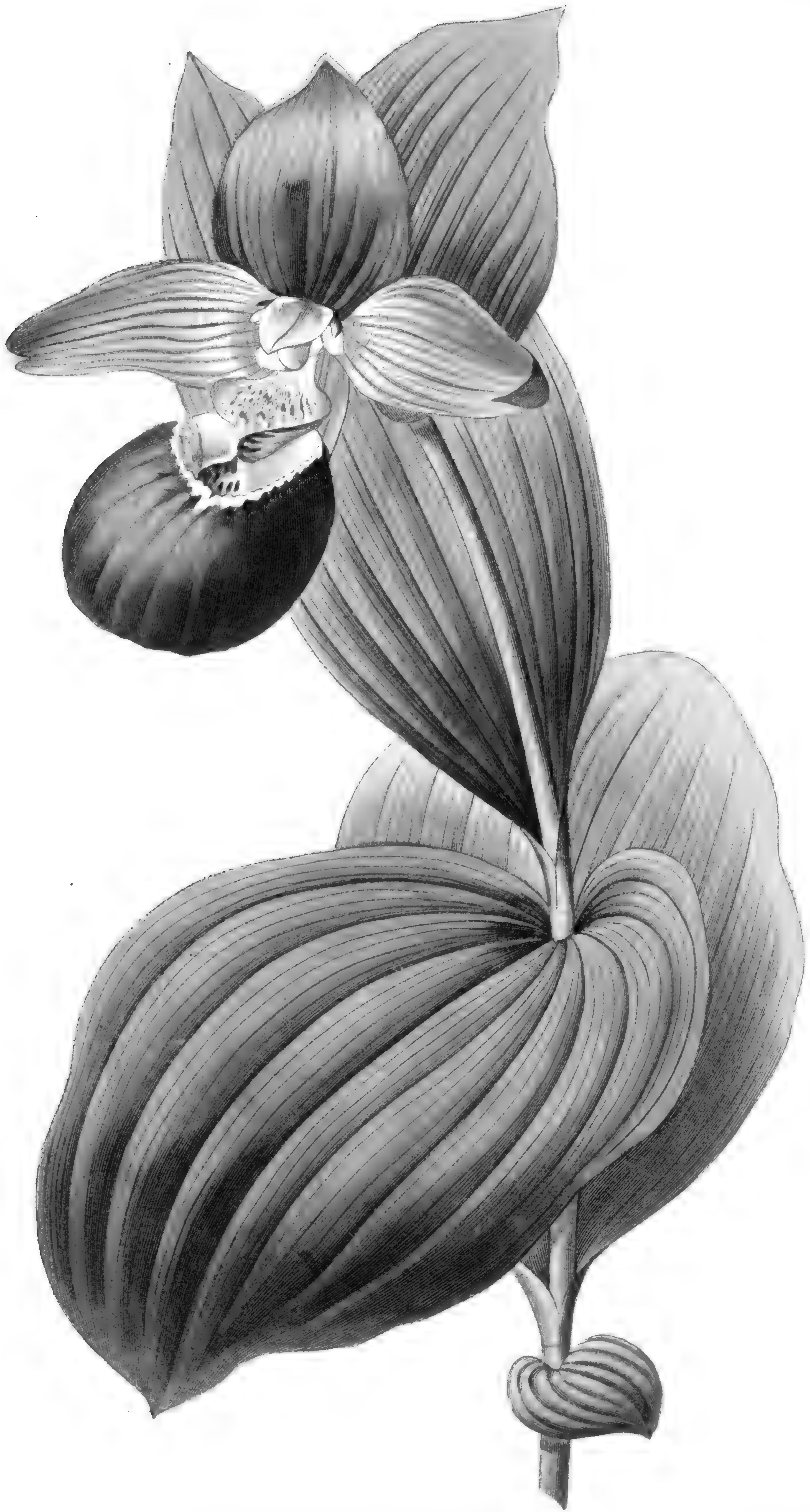
* So called after Mons. Villars, the author of a History of the Plants of Dauphiné.

V. parnassifolia: it is, however, a very distinct-looking plant when cultivated.

Our drawing was made in the Garden of the Horticultural Society in June last, from a plant that had been presented by Mr. Blair.

Increased by offsets.

J. L.



Orchis stramonifolia (L.) Swartz

CYPRIPÉDIUM* macranthos.

Large-flowered Lady's Slipper.

GYNANDRIA DIANDRIA.

Nat. ord. ORCHIDÆ Juss. § Cypripediæ Lindl. (Introduction to the natural system of Botany, p. 262.)

CYPRIPEDIUM.—Suprà, vol. 10. fol. 788.

C. macranthos; lobo styli cordato-acuminato subsessili, labello petalis longiore, ore contracto crenato.—Swartz act. holm. 1800, p. 251.

Calceolus petalis nectario æqualibus aut minoribus. Gmel. sib. 1. p. 2. t. 1.

f. γ.

Calceolus purpureus speciosus. Amman. ruth. p. 132. n. 176. t. 21.

C. macranthos. Willd. sp. pl. 4. 145. Hooker in bot. mag. t. 2938.

Roots of this fine species have been frequently sent to England by Dr. Fischer and other Russian Botanists, but they rarely have produced their blossoms, or even maintained a feeble existence. Those from which our drawing was made grew under a north wall, in a peat border, in the Garden of the Horticultural Society, where they flowered in May 1829: they had been presented by John Prescott, Esq., but have now disappeared.

In its native country it inhabits the northern parts of Asia as far as 58° north latitude, especially plains over which birch-trees are thinly scattered: it also occurs in rather dense birch-woods. Gmelin found it in all Siberia; Ammann met with it blossoming beautifully in June in a birch-wood on the eastern bank of the Irtisch, above the Tartar village of Tebendrinsk; we have been favoured by Dr. Fischer with specimens gathered in the Altai, and as far eastward as Dahuria, and with others from as much to

* Literally Venus's slipper, from Cypris, one of her names, and πῶδιον. It is thought to have been the Cosmosandalum of some Greek writers.

the west as the village of Krasnoi-rog, in the government of Chernigow, in the Ucrain.

From this fine species, Swartz, and, following him, Willdenow, have distinguished a plant which they call *C. ventricosum*, but which Gmelin does not consider more than a variety. Of *C. ventricosum* we possess a specimen from the Herbarium of Stephan, with no locality assigned to it, but with a ticket marked "*C. grandiflorum* β , var. *Lin. Sp. Pl. ed. Willd. Gen. 1613, spec. 7. 8;*" whence it appears that this Botanist considered the two supposed species as varieties of one. In this he possibly was correct; for it must be confessed, that the differences which exist between them are not of a very decided nature. The principal separating characters appear to us to consist in *C. ventricosum* having a rather larger flower, with very acuminate sepals and petals, being generally 2-flowered, and having the petals nearly twice as long as the lower double sepal. The first of these distinctions, namely, in the size of the flowers, is probably of no moment; for our Ucrain *C. macranthos* is nearly as large as *C. ventricosum*; the others may perhaps be of greater value.

J. L.



TRICHOPÉTALUM* grácile.

Slender Trichopetalum.

HEXANDRIA MONOGYNIA.

Nat. ord. ASPHODELEÆ Juss. (Introduction to the natural system of Botany, p. 273.)

TRICHOPÉTALUM. — *Calyx* herbaceus recurvus. *Petala* extùs herbacea, intùs colorata, margine barbata, ferè ex eadem serie cum sepalis originem ducentia, recurva. *Stamina* 6, æqualia, filamentis glabris, antheris linearibus innatis. *Ovarium* 3-gonum, 3-loculare, polyspermum. *Stylus* simplex. *Stigma*: punctum triangulare. *Capsula* oblonga, nuda, 3-locularis, polysperma, apice loculicido-trivalvis; pericarpio chartaceo. *Semina* reniformia, compressa; testá nigrâ, embryone circa albumen subcorneum arcuato. — *Herbæ Chilenses*, radicibus fasciculatis, caulibus annuis, teretibus, floribus albis, subsolitariis, racemosis v. spicatis paniculatis.

T. *gracile*; caule paniculato, petalis sepalisque revolutis, floribus nutantibus. ? Anthericum plumosum. Ruiz et Pavon fl. Peruv. v. 3. t. 300. f. 6. Römer et Schultes syst. veg. 7. 481.

Radix fasciculatus, carnosus. Caules subramosi, glauci, striati, in solo pingui (undè exemplar quod icon. nostram præbuit) 3-pedales. Folia glauca, lineari-ensiformia, canaliculata, debilia, glaberrima; superioribus sensim minoribus, demùm sub summis floribus depauperatis in bracteas membranaceas mutatis. Flores albo-virides, inconspicui, nutantes. Sepala et petala in eadem serie, basibus levissimè connata, subæqualia, lineari-oblonga, obtusa, striata. Pili marginis duplici serie inserti, crassi, scabri, brevi-articulati. Semina duplè majora quàm in T. stellato.

Found by M' Rae near the baths of Colina, in Chile, and by him sent to the Horticultural Society, in whose Garden it has been cultivated several years. In a starved or unhealthy state it is a dwarf few-flowered plant, scarcely exceeding a span in height; but planted in rich soil, and under good cultivation, it rises to the height of full 3 feet, flowering and seeding abundantly from June to August.

* From *τριχ*, *τριχός*, hair, and *πέταλον*, a petal; in allusion to the fringes of the inner series of the perianthium.

Like many, perhaps most, half-hardy bulbous, or fleshy-rooted plants with annual stems, it succeeds better if committed to the open ground in a frame or pit which is well drained, has a southern aspect, and from which the frost is entirely excluded. In such a situation, exposed to the open air all summer long, it will form its leaves in perfection, and will not lose them until they have completely fulfilled the purpose for which they are created, namely, the elaborating a supply of food upon which in the succeeding year the new stem will be fed, and by aid of which the flowers will be developed. Plants under such treatment, if unhealthy when first submitted to it, will probably not indicate any great renovation the first year; but in the second the good effects cannot fail to be distinctly perceptible. This is the only way in which Cape roots can generally be cultivated successfully; for few of them are capable of living, or at least of flourishing, so far north as London, if treated as hardy plants; a fact which we fear many who have unfortunately suffered themselves to be persuaded to trust their Cape bulbs to the open borders, have discovered to their cost.

Whether or not this is the *Anthericum plumosum* of Ruiz and Pavon we have not the means of positively determining: if the figure of these authors can be relied on, theirs must be a different plant, and may possibly be Dr. Hooker's *Anthericum? plumosum*, well figured in the *Botanical Magazine*, t. 3084: that the latter, which seems to be very common about Valparaiso, is distinct from the subject of the present article, we judge from its narrower leaves, smaller seeds, and erect flowers with spreading, not reflexed petals; characters which exist equally in the wild and cultivated specimens. It may be called *Trichopetalum stellatum*.

J. L.



TACSÓNIA* pinnatistípula.

Mrs. Marryat's Tacsonia.

MONADELPHIA PENTANDRIA.

Nat. ord. PASSIFLOREÆ Juss. (*Introduction to the natural system of Botany*, p. 148.)

TACSONIA.—Omnia Passifloræ; sed tubus calycis longus.

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- T. pinnatistipula*; foliis subtùs velutino-candidis ultra medium trifidis, lobis serratis, stipulis in lobulos tenues pinnatifidis.—*De Cand. prodr.* 3. 334.
Passiflora pinnatistipula. *Cavan. ic.* 5. 428.
Tacsonia pinnatistipula. *Juss. in ann. mus.* 6. 393.
Passiflora pennipes. *Smith in Rees cycl.* no. 48.
-

At length our Gardens have acquired one of the long-desired species of Tacsonia, a genus established by Jussieu upon a group of South American Passion-flowers, having a long tube to their calyx, and hitherto only known in Europe by indifferent uncoloured figures, and by dried specimens.

It first made its appearance in the Garden of Mrs. Marryat, of Wimbledon, by whom its seeds were procured two or three years ago from Chile, where it seems to be not an uncommon species. When first raised, a portion of the plants was placed in the open air, and the remainder in a conservatory. The former perished; but the latter have grown luxuriantly, covering the rafters with their long climbing shoots, and flowering in abundance in the spring and summer months. The blossoms are very large, and pendent, of a clear bright pale flesh-colour, beautifully contrasted with a single row of bright blue thread-shaped rays. They are succeeded by yellow, round, downy fruit, about the size of a hen's egg.

* The Peruvians call such plants as this *Tacso*; whence Jussieu formed Tacsonia, a name which Smith pronounces as exceptionable as the genus. We wish the genus were as unexceptionable as the name.

It strikes very freely from cuttings, and may, of course, be also multiplied by its seeds; the former are to be preferred, because young plants so obtained will blossom sooner than seedlings.

For the introduction of this plant, the Banksian medal of the Horticultural Society was this year awarded to Mrs. Marryat, to whom we are indebted for the specimens from which our drawing was made by Miss Drake.

No difficulty ought to be experienced in procuring more of these charming species. For the guidance of those who may have Peruvian correspondents, it may be useful to state, that *Tacsonia peduncularis* is common in the *Cuesta of Huamantanga*; and that a very fine undescribed kind may be easily procured from *Tarma*, both which situations are frequently visited by Europeans.

J. L.



Aster multiflorus L. var. *multiflorus* L.

ÁSTER* frágilis.

Brittle Aster.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. COMPOSITÆ Juss. (Introduction to the natural system of Botany, p. 197.)

ÁSTER.—Suprà, vol. 3. fol. 183.

A. fragilis; foliis radicalibus caulinisve (saltem inferioribus) oblongis adpresso-serratis, superioribus linearibus, omnibus in ambitu scabris, ramulorum oblongo-lanceolatis integerrimis mucronulatis patentibus, caule piloso-lineato racemoso-decomposito, ramis subpaniculato-racemosis, periclinii arcetè imbricati brevis foliolis lanceolato-linearibus.—*Nees ab Esenbeck gen. et sp. Aster. p. 101.*

A. fragilis. Willd. sp. pl. 3. 2051. Pursh fl. am. sept. 2. 558. Nutt. gen. 2. 158. Nees synops. 29.

A. scoparius. Nees synops. p. 28.

Of this well-marked and very distinct species, neither Pursh nor Nees von Esenbeck appear to have seen wild specimens. It is, however, by no means rare in North America, growing among bushes and long grass, when it acquires an aspect very different from that which it bears in gardens, where it grows singly; it then has shorter branches, and much denser leaves. We have it, by the kindness of the learned Dr. Torrey, of New York, from Alabama, and from swamps in the pine barrens of New Jersey.

It is readily known by its very long and narrow, serrated, cauline, and radical leaves, its minute upper leaves, and its branches bearing only a single flower-head, or at least a very small number, at their extremities. The rays are pure white, without any tendency to change to purple or lilac.

A pretty hardy perennial, flowering in September, from the beginning to the middle of the month. J. L.

* See fol. 1487.



CIRRHÆA* Loddigésii.

Loddiges' Cirrhæa.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ Juss. § Vandæe Lindl. (Introduction to the natural system of Botany, p. 265.)

CIRRHÆA Lindl. suprâ sub folio 930.—*Perianthium patens. Sepala libera, æqualia. Petala multò angustiora, linearia, flexuosa. Labellum longè unguiculatum, columnâ continuum, tripartitum; laciniis angustis intermediâ minore. Columna erecta, clavata, teres, stigmatè subquadrato, horizontali! rostello cirrhato. Anthera dorsalis! membranacea, sub-unilocularis. Pollinia 2, parallela, oblonga, compressa, elasticè prosilientia, caudiculâ brevi corneâ, glandulâ incurvâ.—Herbæ epiphytæ, pseudo-bulbosæ. Folia nervata. Racemi penduli, multiflori, radicales. Flores maculati.*

C. Loddigesii; foliis oblongo-lanceolatis utrinque acuminatis, petalis linearibus flexuosis, labelli lobo medio lineari-spatulato lateralibus acutis.

Cymbidium dependens. Lodd. bot. cab.

Pseudo-bulbi ovati, costati, 1-2½ poll. longi, sæpiùs nudi. Folia solitaria, pedalia, oblongo-lanceolata, utrinque acuminata, costis 7 subæqualibus. Racemi radicales, penduli, multiflori, foliis minùs longi. Sepala oblonga, obtusa, æqualia, et tali modo patentia ut triangulum æquilaterum efficiunt; apice maculata. Petala linearia, flexuosa, basi cum sepalo supremo parallela. Labellum ungue longo tereti, lobis lateralibus acuminatis, erectis, intermedio lineari spatulato obtuso duplò breviorè. Columna libera, arcuata, teres, clavata, apice truncata et stigmatifera. Stigma subhorizontale, obliquum; rostello subulato, elongato, cirrhoso. Anthera postica, opercularis, unilocularis, decidua, in clinandrio dorsali incumbens, valvis membranaceis involutis. Pollinia 2, cereacea, parallela, oblonga, compressa, elasticè prosilientia, glandulæ unicæ affixa, quæ processui tenui corneo elastico annectitur.

This plant has been hitherto only known by the figure in the Botanical Cabinet, and a short note at fol. 930 of this

* The flowers are remarkable for what is called the rostellum being prolonged in the form of a small tendril or *cirrhus*.

work. Its structure is, however, so remarkable, that we trust the present account of it will not be wholly uninteresting.

According to Messrs. Loddiges, its native country is *supposed* to be China; but it is more probably Brazil; for not only are its affinities altogether American, but two other Brazilian species are now known.

From all the genera of the tribe to which it belongs it is distinguished by its stigma occupying the apex, and not the face of the column, while its anther is situated at the back. In this last respect it agrees with *Notylia*, which is, however, otherwise very different.

It grows tolerably well in vegetable mould, if placed where the air is humid, and the drainage complete. In such situations it flowers in August.

The two other species above alluded to are the *Gongora viridi-purpurea* of the Botanical Magazine, and an undescribed plant from the Corcovado, of which we find a drawing, and some dried flowers, among a multitude of other interesting Orchideous plants, which, with the liberality that marks the man of true science, have been placed in our hands by Dr. Hooker. These two species may be thus named and defined:

C. viridi-purpurea; foliis oblongo-lanceolatis, petalis linearibus arcuatis, labelli lobo medio acuminato lateralibus æquali.

Gongora viridi-purpurea. *Hooker in bot. mag. t. 2978.*

Hab. supra arbores in sylvis ad sinum *Botofogo* in *Brazilia*.

The beautiful green colour of the outside of the sepals and petals, together with their rich spotted orange-yellow inside, distinguishes this at once from both the other species.

C. fusco-lutea; foliis lanceolatis acuminatis, petalis lineari-lanceolatis, labelli lobo medio ovato, lateralibus obtusis.

Hab. supra arbores *Brazilæ* ad *Corcovado* (*exam. s. sp. et v. ic. pict. in herb. Hooker.*)

This very much resembles *C. Loddigesii*; but the flowers are twice as large, the sepals are dusky brown, with a few reddish lines, and the petals greenish yellow; while all the parts are destitute of spots except the middle lobe of the labellum.

In the same rich collection we find two other genera nearly allied to *Cirrhæa*, of which the following will be the names and characters:—

MYANTHUS.

Perianthium explanatum. Sepala libera, æqualia, lateralibus paululùm ascendentibus. Petala conformia, angustiora, sepalo supremo supposita. Labellum planum, obovatum, 3-dentatum, sepalis brevius. Columna erecta, teres, basi bicirrhosa, posticè ad cardinem antheræ longè producta. Anthera et pollinia *Cataseti*.—Epiphyta, *Cataseti* omninò vegetatione.

1. *Myanthus cernuus*. Found on trees in the neighbourhood of Rio Janeiro. The racemes are cernuous, and about a foot long, or more. The flowers have a greenish yellow ground, closely covered with rich reddish brown spots. — Perhaps *Catasetum cristatum* would be better referred to this genus.

MONACHANTHUS.

Perianthium explanatum. Sepala et petala æqualia, deorsùm versa. Labellum posticum, carnosum, indivisum, ventricosum, sepalis multò majus. Columna brevis, crassa, mutica. Anthera Pollinia—Epiphyta, *Cataseti* habitu.

1. *Monachanthus viridis*. Found on trees in the Corcovado.

The fleshy stems are exactly those of *Catasetum*, as are the leaves, except that they are shorter. In the drawing we have examined, the flowers are represented in pairs from the apex of an erect scape about 9 inches high: they are fleshy, and of a deep uniform green, with a labellum that looks something like a hood drawn over a little face represented by the column.

This genus differs from *Catasetum* in the want of cirrhi upon its short column, and in the expanded perianthium, the five segments of which are turned all one way, like those of *Eulophia*.

J. L.



LUPINUS* mutabilis.

Changeable Lupine.

DIADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ Juss. § Papilionaceæ De Cand. (Introduction to the natural system of Botany, p. 87.)

LUPINUS.—Suprà, vol. 13. fol. 1096.

L. mutabilis; caule erecto suffruticoso, foliolis 7-9 oblongis obtusis basi angustatis subtùs sericeis, floribus subverticillatis, calycibus subbracteatis bipartitis: labio inferiore longiore acuminato, superiore emarginato, carinâ glaberrimâ.

L. mutabilis. Sweet Brit. flower-gard. 130.

A very handsome plant, first raised in this country by the late Mr. Barclay, from seeds obtained from Santa Fé de Bogota. It rises with a rigid woody stem to the height of about 3 feet, and has all the appearance of an arborescent species; but as the frost always destroys it, and it flowers and fruits the first year of being raised from seeds, it is for our gardens a mere annual.

In some respects it is very variable. The first specimens that appeared in Mr. Barclay's Garden, of which we possess one, had the stems covered with long dense hairs, and the leaflets exceedingly blunt; but as we now find it, the hairs of the stem have disappeared, the leaves are more acute, and the flowers much more regularly verticillate.

Had it not been for the absence of almost all trace of bracteæ upon the calyx, we should have suspected this to be the same as *L. paniculatus*. It is, however, probably a distinct species, native of the same country.

* See fol. 1198.

Quite as hardy as the other Lupines; growing freely in the border in any common soil, and flowering from July till the severe frosts of November or December. It increases both by cuttings and seeds.

J. L.



ALSTRÖMÉRIA* psittácina.

Parrot Alströmeria.

HEXANDRIA MONOGYNIA.

Nat. ord. AMARYLLIDÆ R. Brown. (Introduction to the natural system of Botany, p. 259.)

ALSTROMERIA.—Suprà, vol. 9. fol. 731.

A. psittacina; caule stricto, foliis ovato-oblongis obtusis in petiolum angustatis, floribus umbellatis, perianthio connivente ringente: laciniis spathulatis cuspidatis crenulatis interioribus angustioribus, capsulis globosis hexapteris.

A. psittacina. Lehm. cat. hort. Hamb. 1826. Römer et Schultes syst. veg. 7. 739. Hooker in bot. mag. t. 3033.

Caulis erectus, sub-bipedalis, glaber, levissimè angulatus, juventute purascens, senectute viridis; florifer parcè foliosus, v. foliis marcidis ferè nudus. Folia resupinata, ovato-oblonga v. angustiora, 7-costata, glabra. Flores umbellati, speciosi, basi sanguinei, apice virides maculati. Sepala unguiculata, spatulata, brevè acuminata, intùs apice pubescentia, obtusa, basi ciliata; petala conformia, breviora. Capsulæ subrotundæ, brevè hexapteræ, apice areâ hexagonâ coronatæ, intra aream trigonæ; triloculares, 3-valves; frictæ odore Liquiritiæ. Semina pauca in utroque loculo, subrotunda, testâ pallidâ tenerâ, embryone brevi cylindræo recto in basi albuminis carnosocornei.

Said to be a native of Mexico; but we know not upon what authority. We should rather have suspected it to be Brazilian or Chilian, for no true *Alströmeria* has yet been described from Mexico; the only species at present recorded as a certain native of that country belonging to the genus *Bomarea*, which by no means ought to be confounded with *Alströmeria*.

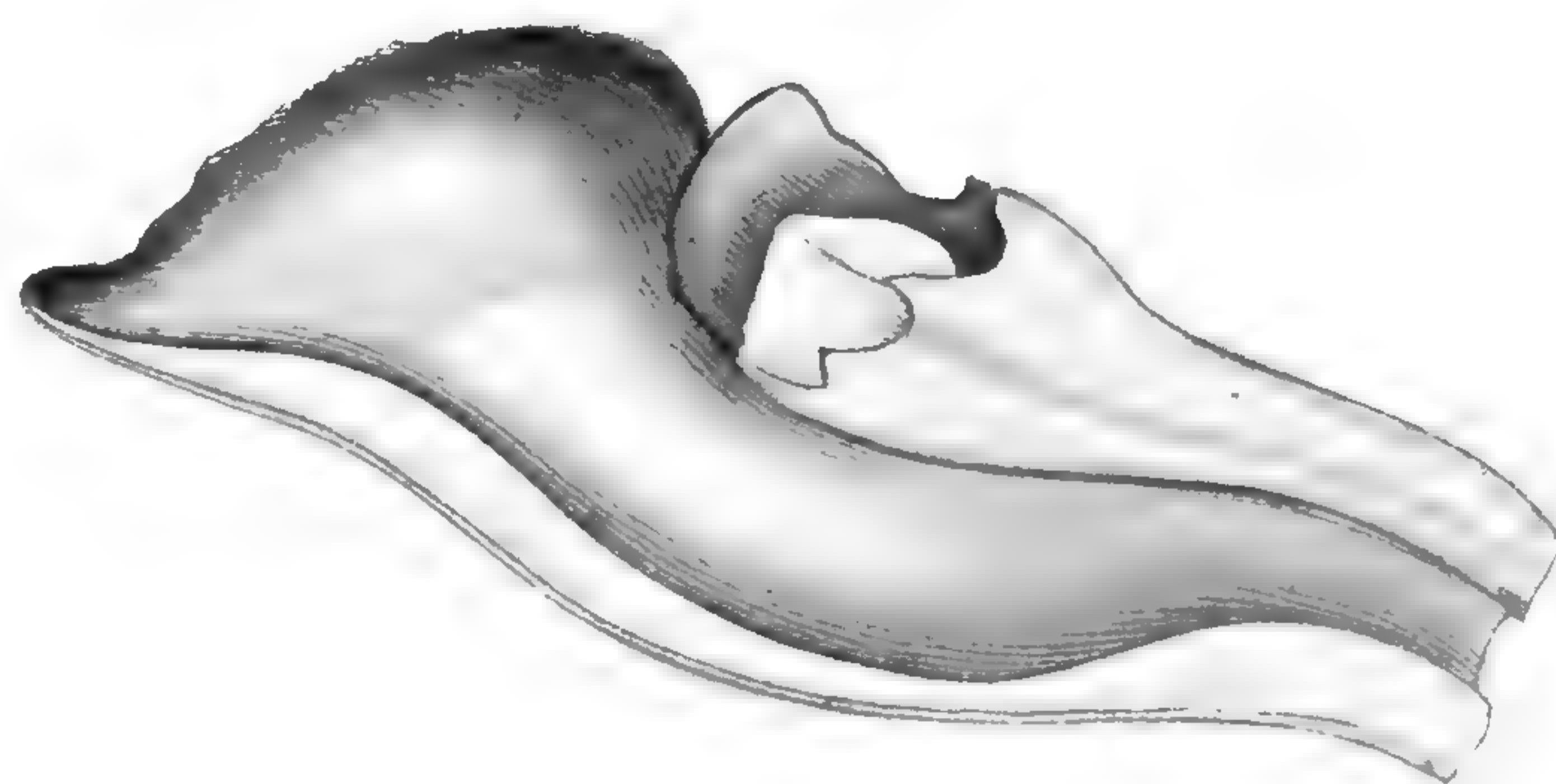
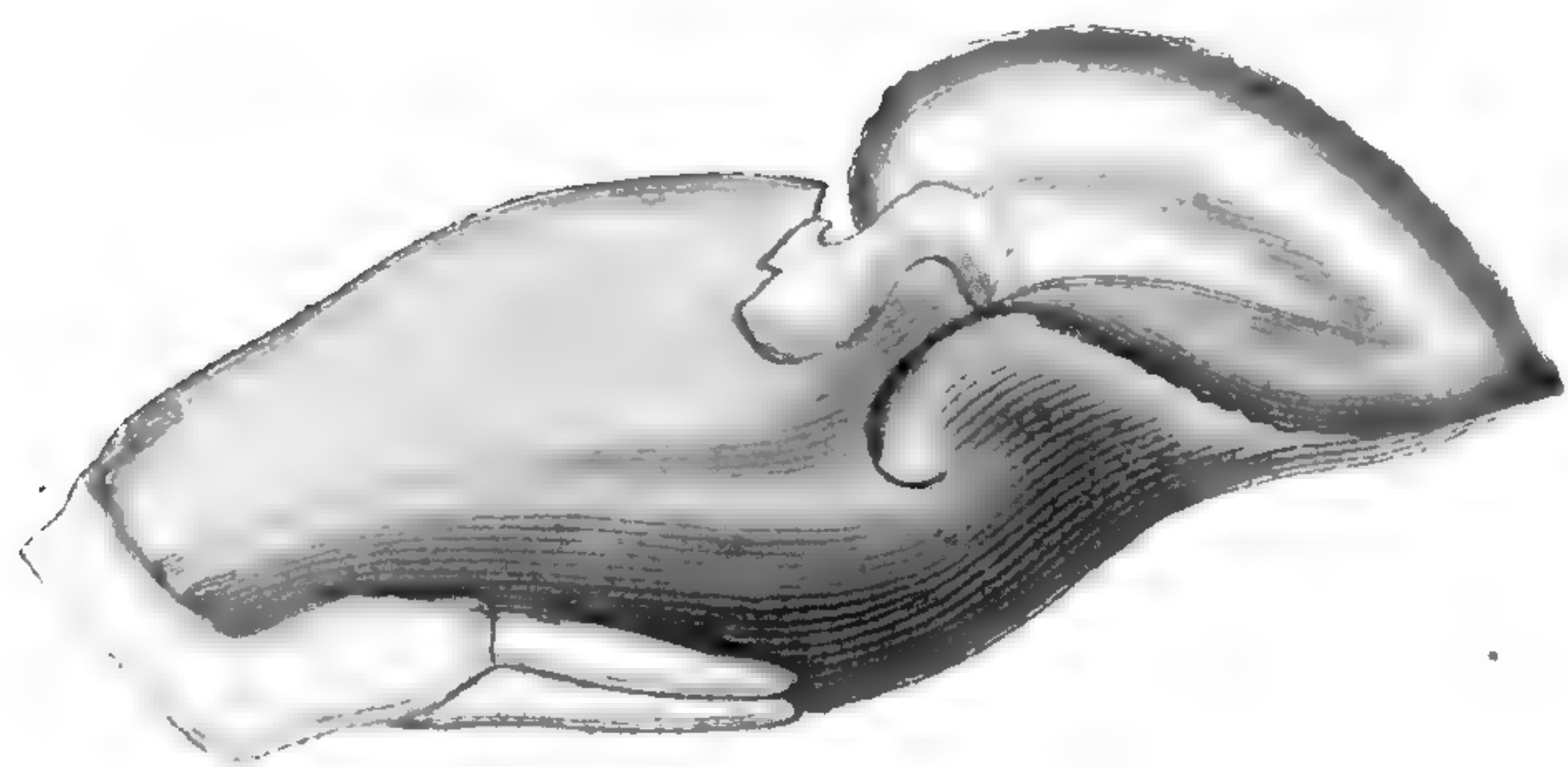
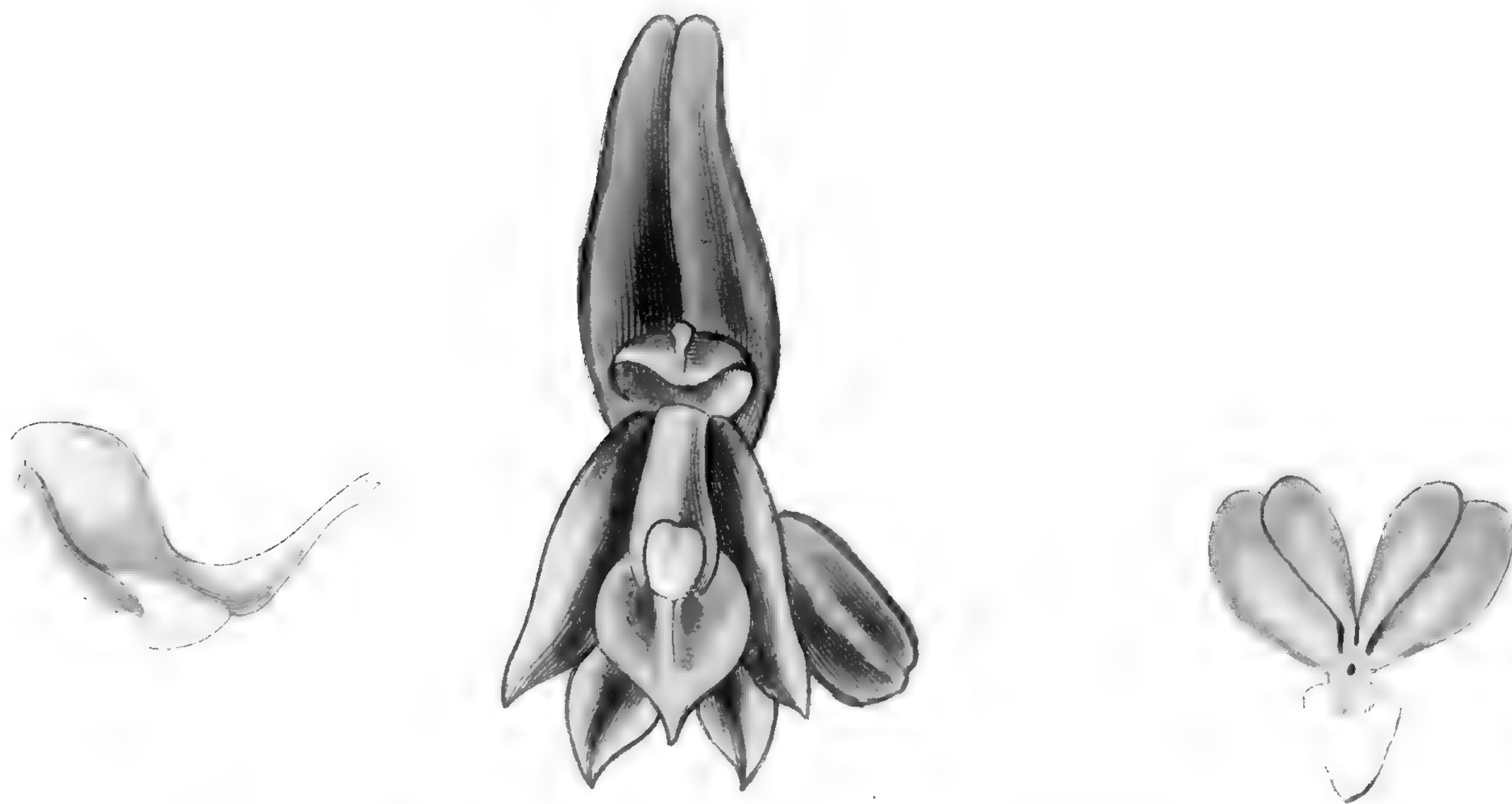
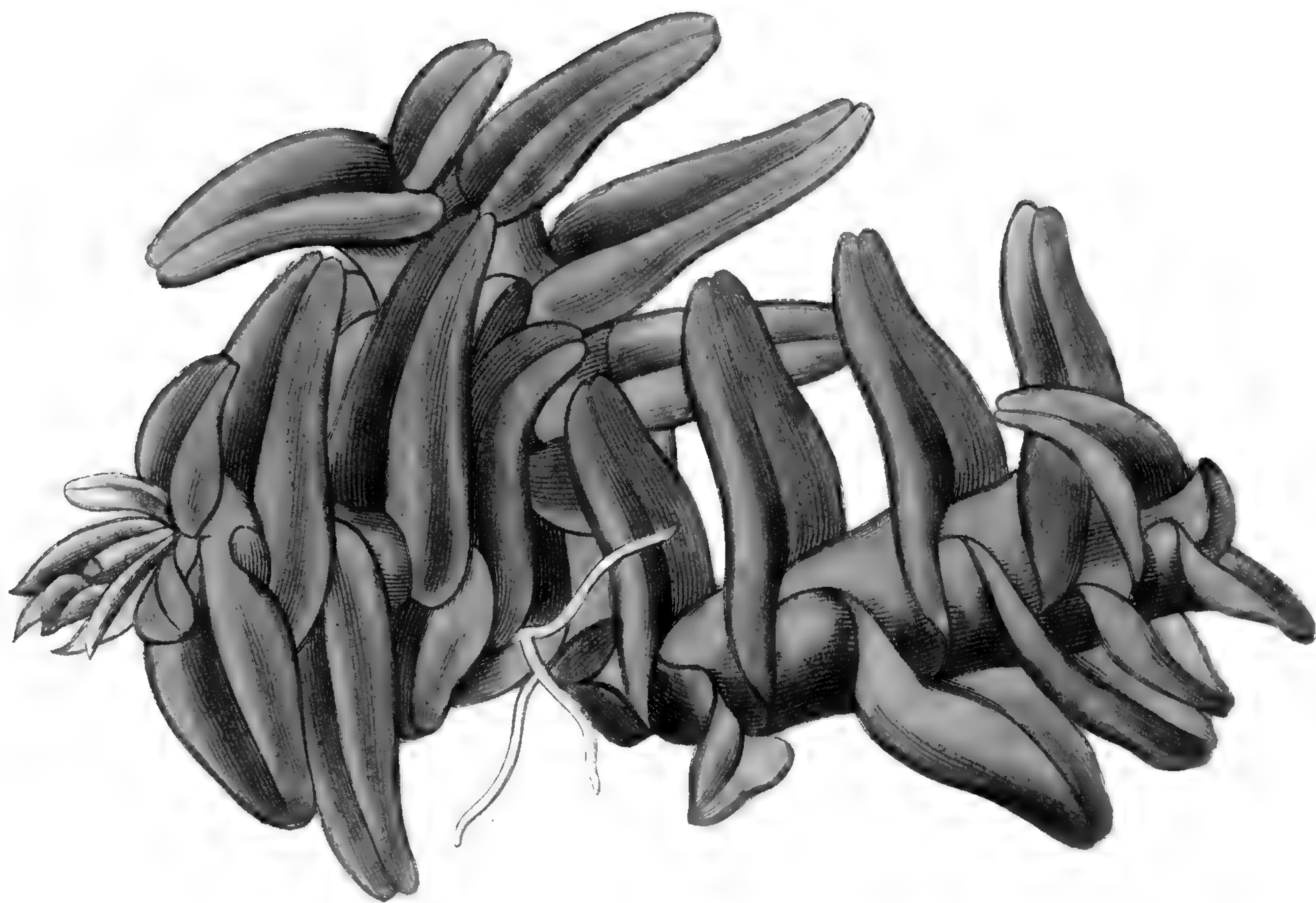
The method of cultivating such plants as this, recommended in our remarks upon *A. pulchella*, fol. 1410, has been found extremely well adapted to this species. Within

* See fol. 1410.

a brick pit, from which the frost is just excluded in winter, planted in a border of rich light soil, and exposed freely to light and air, it grows with the greatest luxuriance, flowering all the summer long, even to the month of November, and ripening abundance of seeds. By these latter, as well as by its numerous offsets, it is easily multiplied.

Than these *Alströmerias* no plants evince in a more striking manner the aptitude of one vegetable organ to adapt itself to the functions of another. The breathing pores of leaves, or *stomata* as Botanists name them, are usually placed upon their under-side, which has also much more prominent veins than the upper, and is covered with hairs exclusively, if hairs are found upon only one of the two surfaces. In *Alströmeria*, the leaves, owing to some unknown cause, are always resupinate; that is to say, in consequence of a twist of their petiole, that side which is born uppermost is turned undermost. Now it is very curious, that the surface which under other circumstances would have no breathing pores, no hairs, and not elevated veins, acquires all those characters in consequence of having to perform functions that are foreign to it, while the other surface, in like manner, loses them.

J. L.



NANÓDES* discolor.

Purple Nanodes.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDEÆ Juss. § Vandeeæ Lindl. (*Introduction to the natural system of Botany*, p. 265.)

NANODES.—*Perianthium* ringens. *Sepalum* supremum fornicatum; lateralia labello supposita eoque basi connata. *Petala* sepalis lateralibus conformia iisque subparallela, libera. *Labellum* carnosum, indivisum, cum columna connatum (more Epidendri). *Columna* ad utrumque marginem clinandrii alata. *Anthera* 2-ocularis, rostrata. *Pollinia* 4, compressa, collateralia, in glandulam ovatam sessilia.—Epiphyta humilis, cæspitosa, caulescens. *Folia* coriacea, disticha, vaginantia, approximata. *Flores* discolors, in apice caulium sessiles, solitarii.

Nanodes discolor.

Caules aggregati, 2-3 pollices alti, simplices, densè foliosi, nihil bulbosi. *Folia* ovato-oblonga, emarginata, basi amplexicaulia et vaginantia, internodiis duplè longiora, viridi-purpurea. *Flores* solitarii, sessiles, terminales, obscurè purpurei, inter folia immersi. *Sepalum* supremum ascendens, lineari-oblongum, convexum; *petala* declinata, cum sepalis lateralibus labello suppositis parallela. *Labellum* carnosum, ovatum, minutissimè crenulatum.

A native of the woods near Rio Janeiro, whence it was received, some years since, by the Horticultural Society. Our drawing was made in the month of August 1829.

Curious as are very many of the species of epiphytal Orchideæ, we do not remember one that is much more remarkable than this, which possesses a habit quite its own. Its flowers are so like the leaves from among which they spring, and by which they are embosomed, that you would scarcely discover the plant to be in flower even if every branch was blossoming.

We presume its cultivation should be that applied to

* From *νανόδος*, pigmy.

the more delicate of the same tribe, namely, plenty of heat and atmospheric moisture, with no watering upon the mould or stem. It is, however, no doubt what gardeners call "a very shy plant," for it has long been lost in the Horticultural Society's Garden.

J. L.



W. Herbert. del.

Pub by J. Ridgway 109 Piccadilly Nov. 1. 1892.

J. Watts sc.

ONCIDIUM* cornigerum.

Horned Oncidium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ Juss. § Vandææ Lindl. (Introduction to the natural system of Botany, p. 265.)

ONCIDIUM.—Suprà, vol. 13. fol. 1050.

§ *Labellum trilobum. Folia plana, v. complicata. Sepala lateralia connata. Labelli laciniæ laterales nanæ v. oblitteratæ.*—Gen. et sp. Orch. ined.

O. cornigerum; pseudo-bulbis oblongis sulcatis monophyllis, foliis ovalibus acutis sessilibus striatis scapo simplici decumbente paucifloro brevioribus, sepalo supremo petalisque obovatis concavis undulatis obtusis inferioribus minoribus angustioribus basi connatis, labelli lobis lateralibus linearibus connatis intermedio obovato subrependo undulato, cristâ anticè verrucosâ truncatâ posticè lamellâ crenatâ transversâ cornutâ, columnæ alis linearibus obtusis porrectis.

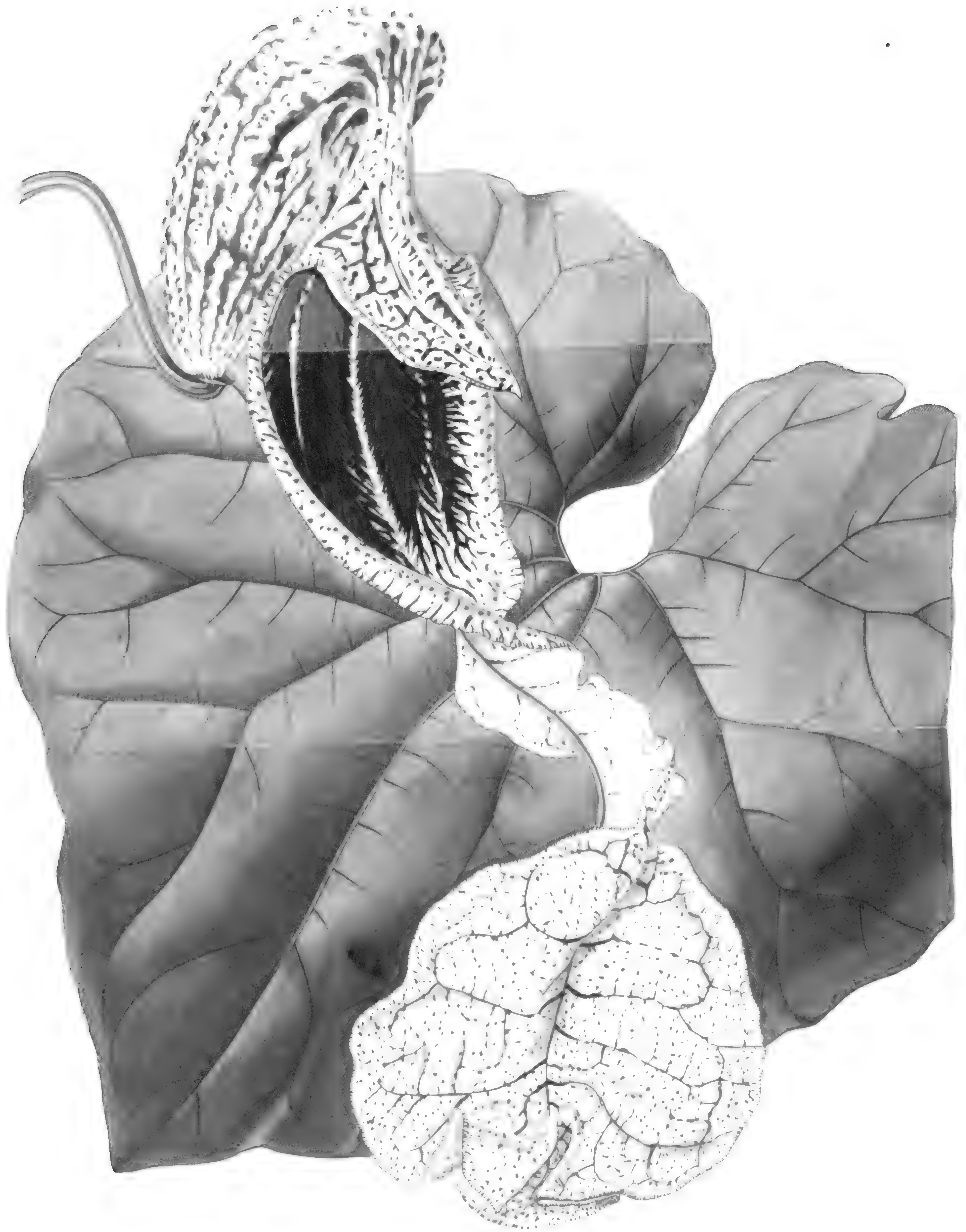
Folia 2-3 poll. longa, patentissima. Scapus debilis, 5 poll. longus. Anthera membranacea, truncata; clinandrio valdè proclivi.

A rare little species of *Oncidium*, native of Brazil, for which we are indebted to the Hon. and Rev. W. Herbert. The drawing has been in our portfolio ever since August 1830. We have never met with it in the collections round London, neither has it been received from any of our numerous country correspondents. It may, therefore, be supposed to be extremely uncommon.

Perhaps the smallest flowered of all the genus of *Oncidium* properly so called. The truncated callosity of the crest, with a sort of 2-horned screen at its back, and the two lateral erect lobes of the lip at its side, is, when viewed in profile, not very unlike a bull's head in miniature.

J. L.

* So named from ὄγκος, a tumour; the genus being composed wholly of species the labellum of which bears at its base warts, tumours, or other excrescences.



ARISTOLOCHIA* cymbifera.

Boat-flowered Birthwort.

GYNANDRIA HEXANDRIA.

Nat. ord. ARISTOLOCHIÆ Juss. (*Introduction to the natural system of Botany*, p. 72.)

ARISTOLOCHIA.—*Suprà*, vol. 8. fol. 689.

A. *cymbifera*; volubilis, glabra; foliis cordato-reniformibus, floribus solitariis: tubo obovato, limbo cylindrico deflexo bilabiato, labio superiore lanceolato acuto canaliculato, inferiore plus quàm duplò longiore è basi inflato-cymbiformi in laminam ovatam emarginatam undulatam extenso. — *Martius n. g. et sp. pl.* 1. 76. t. 49.

Caulis volubilis, cortice suberoso fisso tectus; intùs telá lignéa et cellulari omninò distinctis, ut in *A. labiosá* et similibus; zonis concentricis nullis. Folia maxima, sinu baseos valdè aperto, costarum lateralium basibus marginato. Stipulæ membranaceæ. Flores lutei, purpureo venosi, et maculati: tubo intùs hirsuto. — Capsula subcylindrica, apice rotundata, basi attenuata, 6-angularis, 6-ocularis, polysperma, dehiscentiá septicidá. Semina compressa, cuneata, testá suberosá fragili, nucleo obcordato, hinc tuberculis minimis sparsis punctato, illinc lævi raphe elevatá.

The only figures that have yet appeared of this remarkable plant are in the splendid work of Von Martius above referred to, and in the Lisbon Transactions for 1812, where it is published, according to that learned Botanist, under the name of *A. grandiflora*.

It is a native of shady thickets in the Province of St. Paul, and near Rio Janeiro. Its introduction to this country was owing to the transmission of a seed-vessel from South America by Mr. Parish to Mrs. Hawkins, of Bignor Park, about five years ago. By that lady it was presented to the Rev. John Austen, from whose Garden at Pulborough Rectory, in Sussex, the specimen was transmitted from which our drawing was prepared. Mr. Austen informs us,

* See fol. 1399.

that he originally planted it in his conservatory, a peach-house, and a stove; only those in the latter lived. From one of them planted in rich soil under the pavement at the back of the stove, the flowers were obtained. It is of vigorous growth, armsful of it being annually destroyed to prevent its overrunning the house.

It strikes very readily from cuttings.

Huge as are the flowers of this species, they yield in size both to *A. cordiflora* and *gigantea*, in which the blossoms are from 15 to 16 inches across, being large enough to form hats for the Indian children, who amuse themselves with them.

The internal structure of the stem of this, and of all other *Aristolochias* that we have examined, is in some measure at variance, and that in a very remarkable manner, with other *Dicotyledonous* plants. It is not improbable that this structure, which prevails not only in *Trichopodium** and *Bragantia*,† but also in *Trimeriza*,‡ an unpublished Ceylonese genus, may serve to combine a small number of orders that are in some respects different from either *Monocotyledones* or *Dicotyledones*. At least it confirms the correctness of Dr. Brown's approximation of *Nepenthes* to *Aristolochiæ*, an approximation in which we formerly did not concur.

J. L.

* *TRICHOPODIUM*. (*Trichopus* *Gærtn. Smith*). ♂ ♀ *Perianth*. 6-fidum, basi tubulosum. *Stam. ster.* 6, foveis totidem inserta. *Stylus* 1; *stigmata* 3, bipartita. *Capsula* 3-quetra, 3-locularis, 3-ptera, indehisc.; *loculis* 1-2-spermis.

1. *T. cordatum*; foliis cordato-triangularibus obtusis subemarginatis.—*Hab. cum sequentibus in Zeylonâ.*

2. *T. intermedium*; foliis ovato-lanceolatis acuminatis.

3. *T. angustifolium*; foliis lineari-lanceolatis acuminatis, capsulis 1-spermis.

† *BRAGANTIA* *Lour.* (*Ceramium* or *Munnickia* *Blume*). ♂ *Perianth*. 3-fidum, patens, coronâ brevi cyathiformi integerrimâ. *Stam.* 6. ♀ *Caps.* siliquiformis, 4-valvis, polysperma.

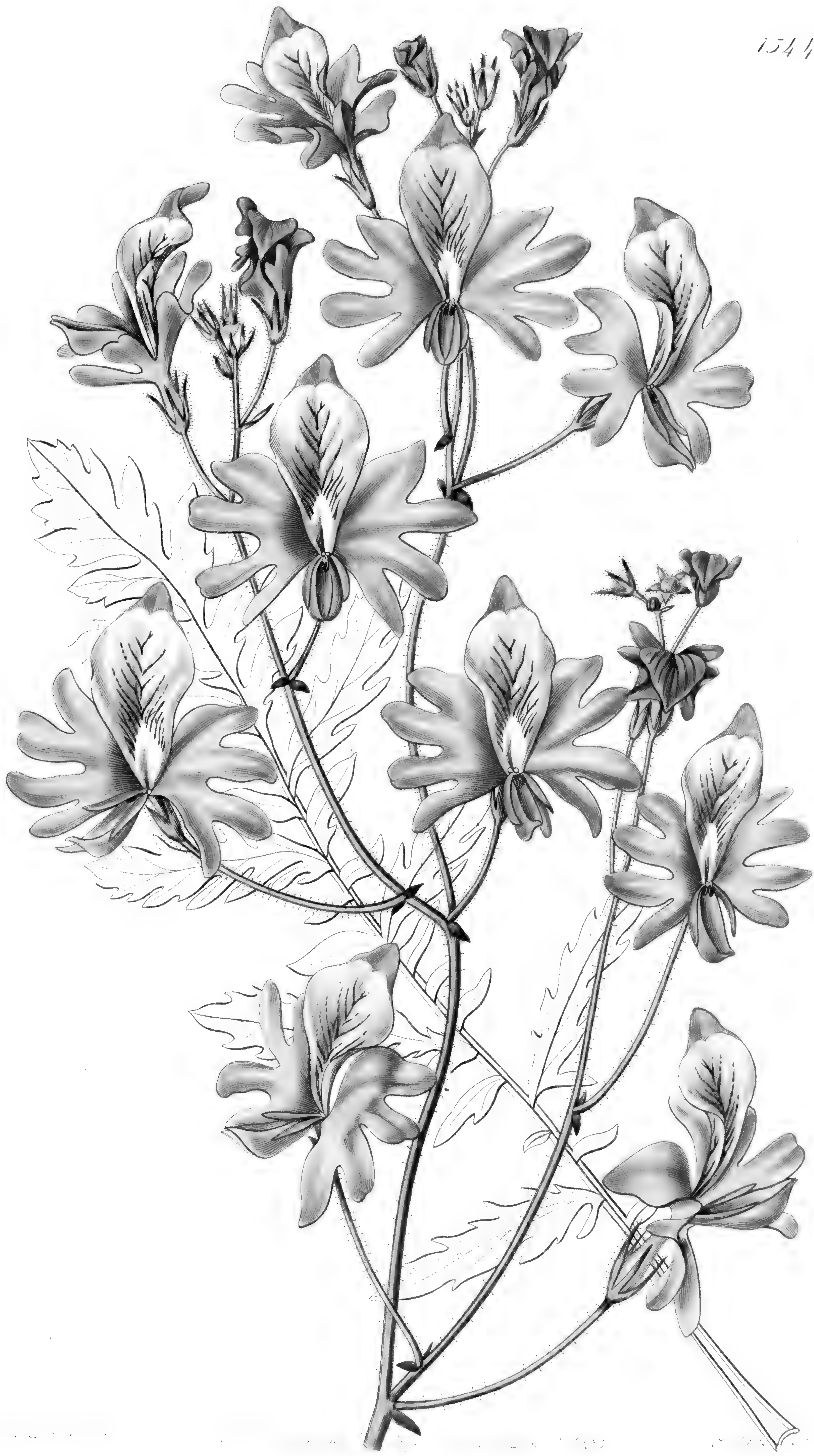
1. *B. racemosa*. *Lour. fl. coch.* 528.

2. *B. Blumii*. (*Ceramium tomentosum* *Blume Bijdr.* p. 1134.)

3. *B. latifolia*; caulibus 1-2-phyllis, foliis oblongis basi subcordatis.—*Hab. in regno Burmano.*

‡ *TRIMERIZA*. ♂ *Perianth*. 5-part. coronâ 0. *Stam.* 9, phalangibus tribus disposita. *Rudimentum stigmati* urceolare, 6-dentatum. ♀ *Capsula* siliquiformis, 4-valvis, polysperma.

1. *T. piperina*. *Hab. in Zeylonâ.*—*Caulis* flexuosus, glaber, ad nodos subtumidus. *Folia* ovato-lanceolata, triplicostata, subtus reticulata, pubescentia. *Racemi* pauciflori, brevissimi, axillares.



SCHIZÁNTHUS* retúsus.

Blunt-petalled Schizanthus.

DIANDRIA MONOGYNIA.

Nat. ord. SCROPHULARINEÆ Juss. (Introduction to the natural system of Botany, p. 228.)

SCHIZANTHUS.—Suprà, vol. 9. fol. 725.

S. retusus; corollæ tubo brevi, labii inferioris laciniis lateralibus intermediâ bilobâ brevioribus, labii superioris lobo medio subrhomboideo acuminato obtuso, sepalis truncatis.

S. retusus. Hooker in bot. mag. 3045.

We remember, when the now common *Schizanthus pinnatus* was first introduced, some nine or ten years ago, its singular blossoms excited so much interest, that it was thought nothing more remarkable remained to be obtained among the genera of the Chilian Flora; and, in truth, we still think it impossible to name an object more remarkable in structure, pleasing in colour, or elegant in form.

It must, however, be confessed, that the species now represented is a far more striking plant, on account of its richer and more brilliant colours. We are ignorant whether it is capable of bearing our summers so well as *Schizanthus pinnatus*; for we have hitherto only seen it cultivated in the greenhouse, where it flowers for four months uninterruptedly, ceasing only with the arrival of short days and cold weather. It is an annual, easily increased by seeds. A native of the Andes of Mendoza, whence we have specimens from Dr. Gillies.

* From *σχίζω*, to cut, and *άνθος*, a flower; in allusion to the numerous lacerations of its corolla.

Our drawing was made in the Garden of the Horticultural Society in August last.

We regret to find, that by the inadvertence of the artist the segments of the calyx are represented acute; they should be truncated, or almost emarginate.

J. L.



Trifolium repens L. (Common Clover)

OXALIS* Cummíngi.

Cumming's Oxalis.

DECANDRIA PENTAGYNIA.

Nat. ord. OXALIDEE De Cand. (Introduction to the natural system of Botany, p. 140.)

OXALIS.—Suprà, vol. 15. fol. 1249.

O. *Cummingi*, radice annuâ? stipite carnosò; terete, rubro; foliis ternatis, petiolo glabro, viridi, 2-unciali, suberecto, ad basin articulato rubro; foliolis obversè cordatis, ciliatis, utrinque lætè virentibus et pubescentibus; scapo erecto, pubescente, quadrunciali, viridi, 3-5-floro, stipulato, bifurcato, ad basin articulato, rubro; pedunculis uncialibus, viridibus, primò nutantibus, deinde suberectis, in seminando devexis, rubescentibus, uno interfurcali; calycis foliolis oblongis, subacutis, ciliatis, viridibus, dehinc rubescentibus; corollâ aureolâ, expansione $\frac{3}{4}$ -unciali; staminibus quinque tubo isometris, quinque duplò longioribus; stigmatibus filiformibus, tubo brevioribus, in capsulâ persistentibus.

N.B.—*Lanugo sensim crescente scapo obsolescit.*

— var. β . Stipite viridiore, corollâ luteâ dimidiò minore, umbellâ magis compositâ et numerosiflorâ, pedunculis pubescentioribus, stigmatibus provectoribus.—*W. H.*

“ This beautiful little Oxalis flowered at Spofforth in August and September; the seed, which was brought by Mr. Cumming from Chili, having been sown in a small pot standing out of doors at the beginning of July. The appearance of the little pot containing four or five seedlings, which produced a constant succession of blossom, expanding without sunshine on the wettest days, was very pleasing. It may be considered as a perfectly hardy annual, but will probably not last a second season. An inferior variety was raised from another parcel of seed, collected also by Mr. Cumming in Chili, with much smaller flowers, of a rather paler yellow, the stem less red, the down on the

* See fol. 1249.

peduncles more permanent, the forks of the umbel more compound and many-flowered, and the stigmas prolonged beyond the shorter stamens; but scarcely distinguishable by any features which in this genus can properly constitute a specific separation of plants that exactly correspond in general habit and appearance.”—*W. H.*

For the foregoing notes upon this species we are indebted to the Hon. and Rev. William Herbert. With that gentleman we quite agree in considering it a distinct species; but, at the same time, we suspect that it is comprehended, in the excellent and most useful contributions towards a Flora of South America by Dr. Hooker and Mr. Arnott,* under *O. lobata*. Although it was obtained from Mr. Cumming's seeds, it does not exist, as far as we know, among the collections of dried plants that have been sold by that industrious collector; we have it, however, from Mr. Bridges, from the neighbourhood of Valparaiso, under the name of *O. pubescens*.

O. Cummingi will be known from *O. lobata* by its many-flowered peduncles; and from *O. laxa* by its smoothness, and by the smaller number of flowers in each umbel.

J. L.

* See Botanical Miscellany, Part VIII.; an invaluable work, which ought to be in the hands of all lovers or patrons of Botany.



1. Herbent. 1846.

Bot. by J. ... 1846

1846

PHÁRIUM* fistulósum.

Hollow-leaved Pharium.

HEXANDRIA MONOGYNIA.

Nat. ord. ASPHODELEÆ Juss. (Introduction to the natural system of Botany, p. 273.)

PHARIUM.—*Perianth.* cernuum, sexpartitum, crateriforme. *Stamina* basi laciniarum inserta, membranâ cylindraccâ connexa, recta. *Stylus* fistulæformis, rectus. *Stigma* obtusum, dilatatum, perforatum, fimbriatum. *Ovarium* superum, nectarii membranâ cylindraccâ occultatum, triloculare, vix trisulcum, polyspermum. *Ovula* minuta, seriatim cumulata. *Capsula* erecta. *Semina*—*W. H.*

P. fistulosum, foliis viridibus, ultra-pedalibus, acutis, glabris, fistulosis, superficie planâ, dorso rotundato, versus basin attenuatis, canaliculatis, rubro-punctatis; scapo viridi, versus basin rubro-punctato, ultra-pedali, solido; spathâ parvulâ, 4-partitâ, bracteatâ, præcociter apertâ; umbellâ pedunculatâ, sexflorâ, pedunculis $1\frac{3}{8}$ -uncialibus, apice cernuo, ampliato, viridibus; limbo pendulo, crateriformiter semipatente, laciniis extùs roseo-purpureis lineâ virescente, intùs albis lineâ et marginibus roseo-purpureis, calycinis angustioribus brevioribus, corollinis extùs saturatiùs coloratis; tubo subnullo; staminibus limbo longioribus, cæruleo-purpureis, membranâ albâ connexis, stylum circumstantibus; antheris parvis, viridicæruleis, versatilibus, medio affixis, polline viridi-cæruleo; stylo staminibus plerumque longiore, fistuloso, purpurascente; stigmatè rotundo, perforato, densè fimbriato; ovario gracili, ovato, ovulis loculo cuique circiter quindecim; bulbo $\frac{3}{2}$ -unciali, ovato, flavescente.—*W. H.*

“ This curious and exceedingly pretty little bulb flowered in the Greenhouse at Spofforth in September, having been imported from Mexico by Mr. Tate, of the Sloane-street Nursery, Chelsea. The scapes began to appear early in July, pale-coloured and very weak, and were remarkable from exposure of the buds, which were not concealed by

* From *φᾶρος*, a veil; alluding to the concealment of the ovary in the cup.

the spathe. The pot was set out of doors, and the scapes gradually acquired vigour, but advanced very slowly; and, when the first flower was ready to expand, it was replaced under glass. It will be an interesting plant to the Botanist. The cup which connects its filaments seems to furnish a link between *Asphodeleæ* and *Amaryllideæ*. Its foliage resembles that of *Melanthium junceum*, so that it might easily, when not in flower, be mistaken for that plant."—*W. H.*

The foregoing remarks have been very obligingly communicated by the Hon. and Rev. William Herbert. In a memorandum subsequently received from the same gentleman, it is observed that in some respects this genus may be compared to *Puschkinia*, from which, however, it is essentially different; for if the crown or cup of *Puschkinia* is removed, you would have a *Scilla*, while if that part were abstracted from the present genus, you would have something more near *Albuca*; in one species of which, *A. vittata*, the filaments are winged, which is the first step to the formation of the cup. Mr. Herbert is also inclined to think there is some affinity between *Pharium* and *Conanthera*.

J. L.

- a.* The flower with the petals removed.
- b.* The ovary and style, the cup being removed.
- c.* The ovary magnified, one cell being opened to shew the ovules.
- d.* The interior of the cup cut open and distended.
- e.* A particle of pollen magnified by the microscope.
- f.* The perforated stigma magnified.

NOTE upon *Clivia nobilis*, fol. 1182.

“The fruit of this plant is a round berry, about the size of a boy’s marble, or $\frac{5}{8}$ ths of an inch diameter, slightly coloured with red. The three cells which contain the seeds consist of a red and very juicy pulp, which (like the internal segments of an orange) are separable from the rind and from each other; and they might easily be mistaken for the seeds. Within each cell are from two to four, but generally three, pearl-coloured seeds, which are apt to germinate while still contained in the berry, and even long before it is perfectly ripe. In a cool and airy greenhouse the fruit is from twelve to fourteen months coming to maturity. The progress of the young plants, also, is slow.”—*W. H.*



TROPÆOLUM* pentaphyllum.

Five-leaved Tropæolum.

OCTANDRIA MONOGYNIA.

Nat. ord. TROPÆOLEÆ Juss. (*Introduction to the natural system of Botany*, p. 141.)

TROPÆOLUM.—*Suprà*, vol. 9. fol. 718.

T. pentaphyllum; foliis digitato-quinatis, foliolis ovalibus integerrimis petiolatis, petalis duobus subrotundis subsessilibus calyce multò brevioribus. —*Graham in bot. mag. t. 3190.*

T. pentaphyllum. *Lam. encycl. meth. 1. 612. illustr. t. 277. f. 2. De Cand. prodr. 1. 684. Hooker et Arnott in bot. miscell. no. 8. p. 161. excl. syn. T. azurei.*

Radix tuberosa, perennis, carnosà. Caulis volubilis, petiolis tortis cirrhosis scandens, glaber, carneo-fuscus. Folia longè petiolata, digitato-quinata; foliolis ovatis obtusis. Flores solitarii, axillares, pedunculis petiolis longioribus. Calyx calcare roseo apice dilatato sepalis viridibus quadruplò longiore. Petala 2, rosea.

A native of Buenos Ayres. We have specimens gathered near that city by Dr. Gillies, which agree entirely with the plant as cultivated in the Gardens. It first appeared in Europe in the Garden of Mr. Neill, near Edinburgh, a tuber having been sent to that gentleman by Mr. Tweedie.

It proves a greenhouse climber, twisting itself round sticks or other plants by means of its tendrilly petioles. It may be increased by cuttings, as well as by seeds, and flowers about midsummer. It should have plenty of air in winter.

Our drawing was made in Mr. Knight's Nursery in July last.

* A diminutive of *tropæum*, a trophy. The leaves are like ancient bucklers, and the flowers resemble the helmets usually represented on classical trophies.

In the excellent Catalogue of South American plants, published by Dr. Hooker and Mr. Arnott, in the Botanical Miscellany, it is suggested that the *Tr. azureum* of Miers may be the same as this. We are, however, enabled to state, from an examination of specimens transmitted lately by Mr. Bridges, that it is a very distinct species, the characters of which may be given thus :

Tr. azureum ; foliis 5-partitis : laciniis linearibus subæqualibus, petalis 5?
(intensè azureis), calyce longioribus, calcare conico sepalis brevioribus.

Hab. in *Chile*, ad *Sierra la Campana de Quillota* ; alt. 4000 pedum :
Bridges.

J. L.



DIÁNTHUS* Libanótis.

The Pink of Lebanon.

DECANDRIA TRIGYNIA.

Nat. ord. CARYOPHYLLÆ Juss. (*Introduction to the natural system of Botany*, p. 156.)

DIANTHUS.—*Suprà*, vol. 13. fol. 1086.

D. *Libanotis*; caule erecto, floribus geminatis, bracteis senis acuminatis squarrosis tubo duplò brevioribus, petalis multifidis laceris, foliis lineari-lanceolatis.

D. *Libanotis*. *Labillard. pl. syr.* 1. 14. t. 5. *De Cand. prodr.* 1. 365.

Caulis erectus, 4-pedalis, glaber, dichotomè ramosus. Folia lævia, acuminata, caulina subreflexa. Flores sæpiùs geminati, in pedunculum communem subsessiles. Bracteæ apice foliosæ, acuminatæ, squarrosæ, basi membranaceæ, decolores, tubo multò breviores. Corolla speciosa; petala laciniis laceris fimbriata, punctata, nullo modo barbata.

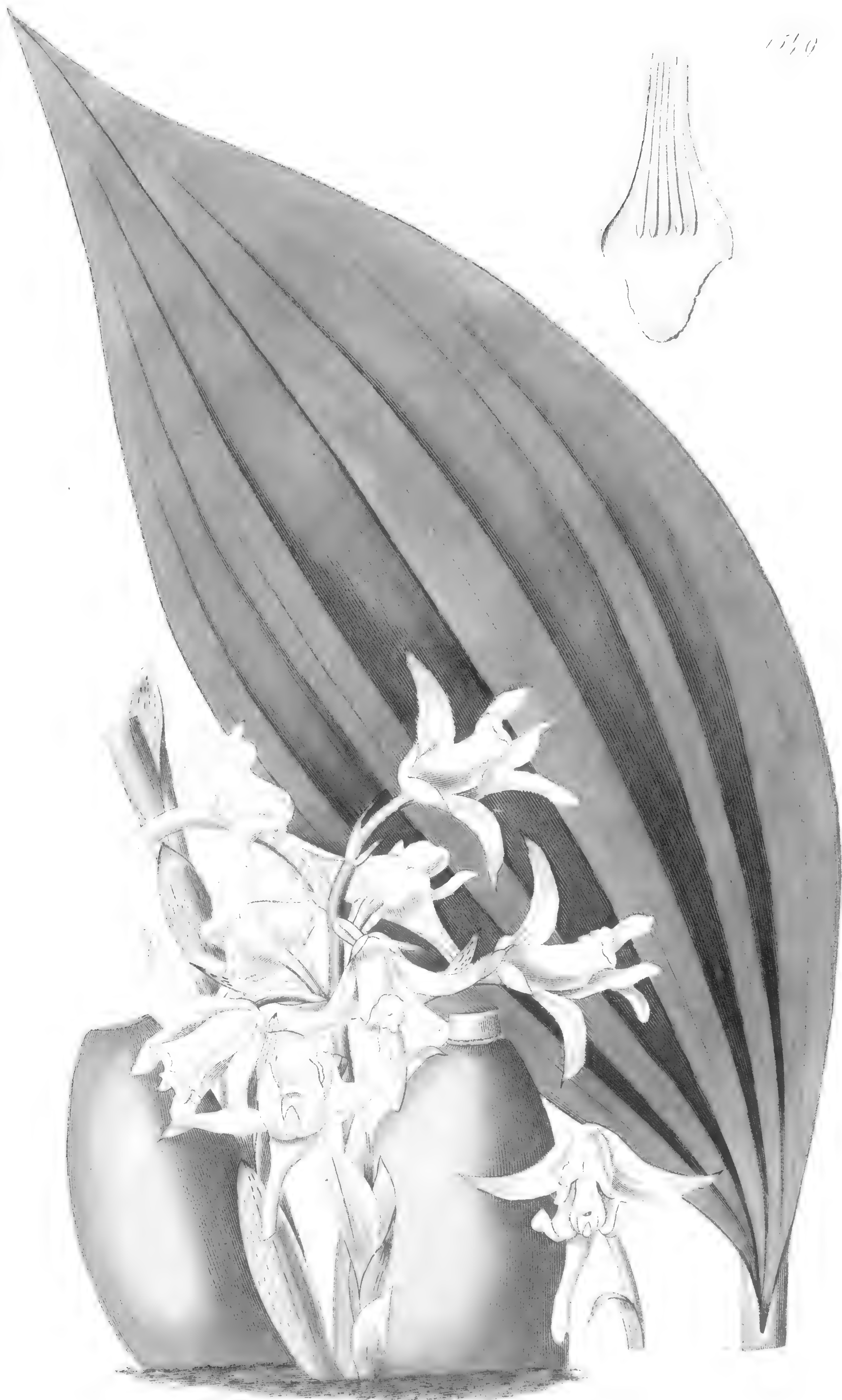
This most lovely species was found by Labillardière, a French Botanist, upon the highest points of Mount Lebanon; we believe the only station in which it has yet been discovered. Mr. Lambert, who is its fortunate possessor, was so good as to send us specimens, from which the accompanying drawing was made.

The species flowers in August, grows to the height of 4 feet, and may be increased either by cuttings, or layers such as gardeners call pipings. We presume, from its native country, that it will require a warm and dry situation: it will then thrive in the open air,

We incline to think this species the very finest of the genus. Labillardière's figure is a good one, but it is uncoloured, and besides is in a work that few persons possess.

J. L.

* Well may this genus be called Διὸς ἄνθος, the flower of the gods; the rose itself scarcely surpasses it in beauty and fragrance. Commentators think that the Diosanthos of the Greeks was our *Agrostemma flos Jovis*.



MAXILLÁRIA* decolor.

Pale Yellow Maxillaria.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ. § Vandææ. (*Introduction to the natural system of Botany*, p. 262.)

MAXILLARIA.—*Supra*, vol. 11. fol. 897.

§ SCAPIGERÆ. *Pedunculi radicales; labellum posticum. Xylobium.*—*Gen. et sp. of Orch. ined.*

M. decolor; pseudo-bulbis oblongis compressis, foliis solitariis oblongo-lanceolatis plicatis utrinque acuminatis, scapo radicali multifloro vaginato foliis brevioribus, sepalis ovato-oblongis obtusis patentibus, petalis duplò minoribus conniventibus, labello postico obsolete trilobo obtuso cucullato: callis 5 clavatis parallelis æquilongis ultra medium procurrentibus.

Folia diversæ formæ et magnitudinis, nunc 8 poll. longa, 3 p. lata, nunc 18 p. longa, 2 p. lata. Scapus 4-pollicaris. Flores ochroleuci, immaculati, *M. squalentis magnitudine.*

A new and very distinct species, native of Jamaica, whence it was imported by Mr. Lee, in whose Nursery at Hammersmith it was drawn in January 1831. It is a tender stove-plant, requiring the same treatment as other species of the same family. In our Plate, *a* is a magnified representation of the inside of the labellum.

The genus *Maxillaria*, as originally constituted by the authors of the *Flora Peruviana*, consisted of epiphytal caulescent Orchideæ, having the flowers proceeding singly, or in small numbers, from the axillæ of the leaves, as in the genus *Ornithidium*, of which they have in many respects the habit. Subsequently other species were added, having a radical inflorescence, and pseudo-bulbs bearing one or two coriaceous or plaited leaves. Of these, some have the

* See fol. 1428.

labellum anterior, and were formerly called by us Colax, while a few have the labellum posterior, and were considered a distinct genus, to which we gave the name Xylobium. An examination of many new species, and a reconsideration of the whole subject, has convinced us that the two last-named genera, together with Maxillaria, form one natural group, which is defined by its having two entire or split pollen masses attached by a broad caudicula and distinct gland to the rostellum, and a labellum that is neither inflated nor spurred, articulated with the elongated base of the column. It is by the latter character chiefly that it is distinguished from Cymbidium.

Of the genus thus limited, thirty-nine species are known, of which the following is a brief enumeration:—

§ 1. Axillifloræ. *Pedunculi axillares* (EUMAXILLARIA).

1. *M. undulata*. *Fl. Peruv. syst.* 221.
2. *M. variegata*. *Ib.*
3. *M. ligulata*. *Ib.*
4. *M. hastata*. *Ib.*
5. *M. paniculata*. *Ib.*
6. *M. cuneiformis*. *Ib.*
7. *M. bicolor*. *Ib.*
8. *M. tricolor*. *Ib.*
9. *M. triphylla*. *Ib.*
10. *M. undatiflora*. *Ib.*
11. *M. prolifera*. *Ib.*
12. *M. ramosa*. *Ib.*
13. *M. longipetala*. *Ib.*
- *13.† *M. ochroleuca*. *Lodd. bot. cab. ined.*
14. *M. platypetala*. *Ib.*
- *15. *M. alba* = *Dendrobium album*. *Hooker exot. fl. t.* 142.

§ 2. Scapigeræ. *Pedunculi radicales*.

*Labellum anticum (COLAX).

- *16. *M. stapelioides*. *Link et Otto abbild. p.* 111. *t.* 52.
- *17. *M. subulata*. *Formerly cultivated in the Kew Garden.*
- *18. *M. tetragona*. *Lindl. in bot. reg. t.* 1428.
- *19. *M. viridis*. *Ib. t.* 1510. = *M. placanthera*. *Hooker in bot. mag. t.* 3173.
- *20. *M. Deppii*. *Lodd. bot. cab. t.* 1612.
- *21. *M. Parkeri*. *Hooker in bot. mag. t.* 2729.
- *22. *M. aromatica*. *Graham in Hook. exot. fl. t.* 219. = *Colax aromaticus*. *Spreng.*
- *23. *M. Barringtoniæ*. *Lodd. bot. cab. t.* 1824. = *Epidendrum Barringtoniæ Smith.* = *Dendrobium Barringtoniæ Swartz.* = *Colax Barringtoniæ Lindl.* = *Dendrobium ciliatum Swartz.* = *Maxillaria ciliata Fl. Peruv. syst. Bot. reg. t.* 1206

- *24. *M. picta*. *Hooker bot. mag. t. 3154.*
- *25. *M. parvula*. *Hooker exot. fl. t. 217.* = *Colax parvulus*. *Spreng.*
- 26. *M. grandiflora* = *Dendrobium grandiflorum*. *Humb. et Kunth. n. g. et sp. pl. 1. 359. t. 88.*
- *27. *M. Harrisoniæ*. *Lindl. in bot. reg. t. 897.* = *Dendr. Harrisoniæ*. *Hooker.* = *Colax Harrisoniæ*. *Lindl.*
- *28. *M. racemosa*. *Hooker in bot. mag. t. 2789.*
- 29. *M. maculata* = *Dendr. maculatum*. *Humb. et Kunth. n. g. et sp. 1. 359.*
- *30. *M. pallidiflora*. *Hooker in bot. mag. t. 2806.*
- 31. *M. latifolia* = *Dendr. latifolium*. *Humb. et Kunth. l. c. p. 360.*
- 32. *M. longifolia* = *Dendr. longifolium*. *Id.* = *Xylobium? longifolium*. *Lindley.*
- *33. *M. palmifolia* = *Epidendr. palmifolium*. *Swartz.* = *Dendr. palmifolium*. *Swartz.* = *Colax palmifolius*. *Lindl.*
- *34. *M. Warreana*. *Lodd. bot. cab. ined.*

** Labellum posticum (XYLOBIUM).

- *35. *M. decolor*. *Suprà.*
- *36. *M. squalens*. *Hooker bot. mag. t. 2955.* = *Dendrob. squalens et Xylobium squalens*. *Lindl.*

§ 3. *Spathacæ*. *Pedunculi terminales è spathâ vaginante erumpentes. Caules cylindranei, non bulbosi. Species habitu omninò Cateleyæ. NOTHIUM.*

- 37. *M.?* *aggregata* = *Dendr. aggregatum*. *Humb. et Kunth. n. g. et sp. 1. 358.*
- 38. *M. spathacea*. *Lindl. in herb. Hooker.*

Those marked * are cultivated in the collections of this country.

J. L.



SENÉCIO* Tussiláginis.

Coltsfoot-leaved Groundsel.

SYNGENESIA POLYGAMIA ÆQUALIS.

Nat. ord. COMPOSITÆ. § Senecioneæ Lessing. (*Introduction to the natural system of Botany*, p. 197.)

SENECIO L.—*Capitulum* homogamum, v. pl. heterogamum. *Pappus* pluriserialis, setaceus, caducus, rectus, subæqualis, conformis. *Stylus* ♂ ramis truncatis, apiceque solo penicillatis. *Achæmium* erostre, exalatum, teretiusculum, glaberrimum aut hirsutiusculum.—*Herbæ* v. *Frutices*, per totum orbem terrarum divulgati, polymorphi, foliis alternis, integris v. pinatifidis; capitulis solitariis v. variè aggregatis, radio luteo purpureo v. albo; foliolis involucri uniserialibus, basi sæpè aliis magis minusve numerosis, accessoriis auctis, linearibus, alternis angustioribus, alternis latioribus, sæpè sphacelatis; rachide planâ nudâ, v. paleaceo-fimbrilliferâ.—Lessing synops. compos. 391.

S. Tussilaginis; capitulis laxè paniculatis, foliis radicalibus reniformi-cordatis duplicato-dentatis: caulinorum petiolis basi auriculatis, summis ovato-oblongis serratis subtùs arachnoideo-tomentosis.

Cineraria Tussilaginis. *L'Hérit. sert. angl.* 26. *Willd. sp. pl.* 3. 2078.

Senecio Tussilaginis. *Lessing l. c.*

Caulis erectus, striatus, levissimè arachnoideus. *Folia omnia præsertim subtùs arachnoidea; radicalia petiolo longo, angusto, alato; caulina subtriangularia, petiolo latè alato, basi auriculato; summa oblonga, amplexicaulia, simpliciter serrata.* *Pedunculi capitulorum bracteis quibusdam subulatis muniti. Radius purpureus.*

A native of Teneriffe, where it was originally found by Mr. Francis Masson, and recently by Philip Barker Webb, Esq., from whose Garden at Milford this specimen was forwarded in May last.

It is a handsome greenhouse plant, flowering very abundantly, and readily increased by cuttings.

* See fol. 1342.

According to Lessing,—who has done for *Compositæ* what Mr. Bentham is doing for *Labiatae*, and to whom the world is indebted not only for the first general work upon *Compositæ*, but also for the disentanglement of a subject, which the labours, as they are called, of Cassini have served only to render more unintelligible than before,—this species, referred by Willdenow and L'Héritier to *Cineraria*, is in reality a species of *Senecio*; a view which we have no difficulty in adopting, especially as its habit is quite that of the latter genus.

J. L.



SOLÁNDRA* guttáta.

Spotted-flowered Solandra.

PENTANDRIA MONOGYNIA.

Nat. ord. SOLANEÆ Juss. (Introduction to the natural system of Botany, p. 231.)

SOLANDRA Swartz.—Calyx cylindricus, rumpens, 5-dentatus. Corolla maxima, clavato-infundibuliformis, tubo longo, fauce inflatâ, lobis fimbriatis minimè acuminatis. Bacca (aliis capsula) globoso-conica, 4-ocularis, polysperma.—Röm. et Schult. syst. 4. lvii.

S. guttata; foliis subtùs pubescentibus, corollæ laciniis rotundatis crispato-crenatis: tubo calyce subduplò longiori.—*D. Don MSS.*

Tecomaxochitl. Hernand. mex. p. 408. cum fig.

*Planta fruticosa (caldario culta), biorgyalis, erecta, ramosa: ramis corticè cinereo vestitis, foliis delapsis, cicatricibus elevatis tuberculatis. Folia alterna, petiolata, elliptico-oblonga, acuta v. brevissimè acuminata, integerrima, suprà glabriuscula, subtùs pallidiora, copiosè pubescentia, basi dilatata, rotundata, 3-6 pollices longa, 2 v. 3 lata; suprema nunc obtusa. Petioli bipollicares, teretiusculi, densè pubescentes, suprà canaliculati, basi incrassati. Flores terminales, solitarii, brevissimè pedunculati, fragrantés. Pedunculus teres, crassus, vix unguicularis. Calyx amplus, tubulosus, foliaceus, pubescens, 3-uncialis: limbo trilobo: lobis ovatis, acutis; tertio minori. Corolla maxima, infundibuliformis, dodrantalis, pallidè flavus: fauce dilatata, intùs maculis purpureis notata: tubo longo, gracili, 5-costato, calyce ferè duplò longiori: limbo patenti, 5-lobo: lobis latissimis, rotundatis, crenatis, undulatisque. Stamina 5, tubo corollæ inserta, vix ultra faucem producta, subæqualia: filamenta glabra: antheræ ovato-oblongæ, obtusæ, basi insertæ, erectæ, purpureæ, biloculares: loculis parallelis, connectivo angusto lineari omninè connatis: valvulis subcoriaceis, complanatis, margine demùm solutis. Ovarium 4-loculare. Stylus filiformis, pallidus. Stigma exsertum, capitatum.—*D. Don MSS.**

“ This splendid species of *Solandra*, although figured in the work of Hernandez, has not been noticed by any modern

* Dr. Solander, after whom this fine genus has been named, was the companion of Banks in his voyage round the world, and the laborious collector of the Botanical notes made during that celebrated expedition. His descriptions are preserved among the MSS. in the British Museum, and attest his learning, diligence, and skill.

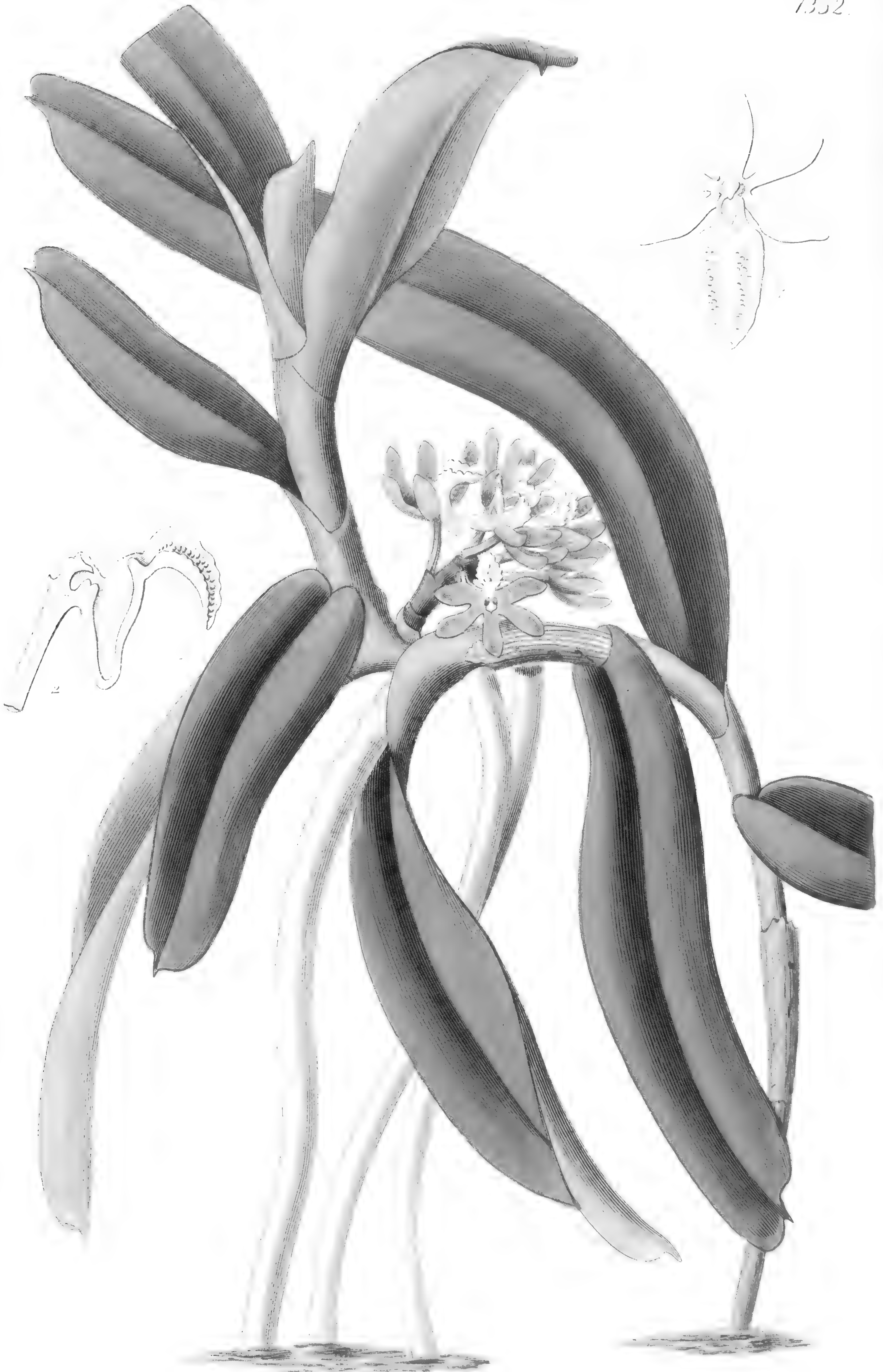
author. Introduced from Mexico by Mr. Tate, of the Sloane Street Nursery, from whom Mr. Lambert obtained the plant which blossomed in the stove at Boyton in the early part of last summer. It appears to be fond of warmth and moisture, grows luxuriantly, is readily increased by cuttings, and promises to produce its blossoms more freely than the other species.

“ In *S. grandiflora*, to which the present comes nearest in affinity, the leaves are quite smooth, the flowers shorter, of a greenish white colour, the tube less attenuated, and scarcely exceeding the calyx in length.

“ The genus is closely related to *Brugmansia*, from which it is principally distinguished by its berried fruit.”

For the specimen from which this noble species was drawn we are indebted to Mr. Lambert. Mr. Don has obligingly furnished us with the foregoing description and observations.

J. L.



SACCOLÁBIUM* papillósum.

Pimpled Saccolabium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ. § Vandææ Lindl. (Introduction to the natural system of Botany, p. 262.)

SACCOLABIUM Blume.—*Perianthium* explanatum, patens. *Sepala* petalis æqualia, lateralia sæpiùs majora. *Labellum* indivisum, calcaratum, basi columnæ accretum. *Columna* erecta, semiteres, rostello subulato. *Anthera* semibilocularis. *Pollinia* 2, subglobosa, caudiculâ elongatâ, glandulâ minutâ.—*Herbæ epiphytæ, caulescentes. Folia disticha, coriacea, apice sæpiùs obliqua. Flores axillares, racemosi v. solitarii.*

S. papillosum; foliis ligulatis apice obliquis cuspidatis, racemis brevissimis capitatis, sepalis carnosis lineari-ovatis obtusis, labelli calcare obconico obtuso intùs villosa laminâ ovatâ carnosâ papillosâ recurvâ.

Thalia Maravara. *Rheede hort. malab.* 12. t. 4.

Cymbidium præmorsum. *Swartz nov. act. ups.* 6. 75. *Willd. sp. pl.* 4. 103.

Epidendrum præmorsum. *Roxb. corom.* 1. 34. t. 43.

Aërides undulatum. *Smith in Rees suppl.*

Saccolabium papillosum. *Lindl. in Wall. cat. no.* 7305.

Caulis arcuatus, subpedalis, distichè foliosus, radices tortuosas promens. Folia atroviridia, 4-6 poll. longa. Racemi parvi, foliis triplò breviores. Flores albi, luteo purpureoque picti.

The genus *Saccolabium* consists of a large number of caulescent epiphytal species, inhabiting the continent and archipelago of India. It comprehends some of the most interesting and beautiful of the tribe, all of which are cultivated without difficulty by being suspended, in pots filled with potsherds intermixed with a little earth, from the back wall of a damp and hot stove.

We believe that at least four other genera will be reduced to it, namely *Rhyncostylis* of Blume; *Gastrochilus* of Don,

* From *saccus*, a bag, and *labium*, a lip; in allusion to the bagged labellum of all the species.

which, however, forms a curious section, with a ventricose spur; *Robiquetia* of Gaudichaud; and *Gussonea* of Achille Richard.

Found upon trees in Malabar, and in various other parts of the continent of India. We have it from Dr. Wallich from Prome. The plant in the Garden of the Horticultural Society, from which our drawing was taken, was introduced by that indefatigable Botanist. Flowers in August and September.

J. L.



SEMPERVIVUM* villósum.

Villous Houseleek.

DODECANDRIA HEXAGYNIA.

Nat. ord. CRASSULACEÆ De Cand. (*Introduction to the natural system of Botany*, p. 161.)

SEMPERVIVUM L.—*Calyx* 6-20-partitus. *Petala* 6-20, oblonga, acuta. *Stamina* petalorum numero dupla. *Squamæ* ad basin carpellorum apice dentatæ aut laceræ. *Carpella* tot quot petala. — *Herbæ nunc acaules, ex axillis propagines apice foliosas edentes, aut caulescentes propaginibus destitutæ; aut frutices carnosuli. Folia sæpiùs revoluta. Cymæ rami nunc in corymbum, nunc in paniculam dispositi. Petala flava, albida, aut purpurascencia.*—De Cand. prodr. 3. 411.

§ 1. *Chronobium*. Propagines nullæ. Flores sæpiùs flavi, rariùs albi.—Species omnes Canarienses aut Maderienses.—D. C.

S. villosum; caule frutescente suberecto tortuoso, foliis obovatis confertis subtùs gibbis villosis, squamis fimbriatis.—*De Cand. l. c.*

S. villosum. *Haworth syn.* 166. rev. 65.

Caulis fruticosus, carnosus, teres, subpubescens. Folia subtùs interruptè vittata, pilosa, ciliata; suprema magis distantia, glabriora. Cymæ ramosæ, multifloræ, subracemosæ. Flores lutei. Petala 8-10. Squamæ cuneatæ, angulis rotundatis, glabræ.

A native of the mountainous parts of the Canary Islands, whence it was sent by Mr. Webb to his Garden at Milford, near Godalming. Our drawing was made from a flowering plant, about 2 feet high, in May last. A Greenhouse plant, easily increased by cuttings.

If there be any permanence in characters derived from the nature of the hypogynous scales in this genus, this must be a different species from that to which we have referred it; for we find them wedge-shaped, and quite

* So called (ever-living), because of the power the species possess of flourishing in the most parched and barren places.

smooth, with 3 very imperfectly formed indentations, while they are described as being fringed in *S. villosum*.

This is a point we leave to be cleared up by Messrs. Webb and Berthelot in their forthcoming work on the Canaries.

J. L.



SÁLVIA* angustifólia.

Narrow-leaved Sage.

DECANDRIA MONOGYNIA.

Nat. ord. LABIATÆ Juss. (Introduction to the natural system of Botany, p. 239.)

SÁLVIA Linn. *Calyx* ovato-campanulatus, v. tubulosus, bilabiatus; labio superiore integro vel tridentato, inferiore bifido, fauce intùs nudâ. *Corolla* tubo recto vel ventricoso, bilabiata, labio superiore recto, integro vel emarginato, inferiore patente, trifido, lobis lateralibus erectis patentibus vel reflexis, medio latiore, integro vel emarginato, plano. *Stamina* fertilia 2 (superioribus abortientibus), filamentis adscendentibus, vel sæpiùs horizontalibus, cum antherâ articulatis. *Connectiva* elongata, filiformia, anticè adscendentia, loculum fertilem linearem ferentia, posticè deflexa, vel porrecta, connexa vel rariùs libera, polymorpha. *Stylus* apice breviter bifidus, lobis sæpiùs inæqualibus, apice stigmatiferis. *Achenia* sicca, lævia. — *Bentham MSS.*

Sect. CALOSPHERE. Calyx ovatus, tubulosus v. campanulatus: labio superiore integro v. rariùs tridentato. Corollæ tubus inclusus v. exsertus, intùs exannulatus: labium superius rectum concavum, inferioris lobi laterales patentes. Connectiva posticè deflexa, linearia, longitudinaliter connata. Styli lobus inferior subulatus.—*Bentham.*

S. angustifolia; caulibus herbaceis erectis glabris v. patentim pilosis, foliis subsessilibus oblongo-linearibus utrinque angustatis integerrimis serratisve glabris; floralibus lineari-lanceolatis deciduis, racemis elongatis simplicibus, verticillastris omnibus distantibus 2-6-floris, calycibus tubulosis striatis hispidis: labio superiore integro dentibusque labii inferioris ovatis acutis, corollis calyce duplò longioribus: tubo calycem æquante ventricoso; labio superiore extùs pubescente, inferiore duplò longiore lobis rotundatis: medio maximo emarginato bifido, stylo bifariam piloso. — *Bentham l. c.*

S. reptans. *Jacq.!* *hort. Schönbr.* 3. 38. t. 319.

S. virgata. *Orteg.!* *dec.* 3.

S. angustifolia. *Cav. ic.* 4. 9. t. 317. etc.

Caules complures, 1-1½-pedales, virgati, subramosi, basi foliosi, obtusè tetragoni, striati, ex omni parte v. saltem ad nodos pilis longis albidis patentibus ciliati. Folia in speciminibus spontaneis 1½-pollicaria, exactè linearia, v. basi parùm angustata, obtusa v. acuta, integerrima v. hinc inde

* See fol. 1205.

serraturis remotis notata; in plantá cultá medio latiora et magis dentata; floralia calyce duplò triplòve breviora. Racemus 6-9-pollicaris. Verticillastri ferè pollicem remoti. Calyx sæpè cærulescens, pilis albidis erectis v. patulis hispidus. Corolla azurea, magnitudine ferè S. Grahami. Connectiva posticè dentata, linearia. Stylus vix exsertus, lobo superiore subulato longissimo.—Bentham l. c.

A native of elevated dry places in New Spain, near *Totoniho el grande*; also of the mountains of Mexico, near *Tlalpuxahua*, whence it was introduced by Mr. Graham.

It proves a very pretty perennial, growing about 2 feet high, and producing its deep pure blue flowers in July, August, and September. In the summer it thrives in the open air, forming a pleasing contrast with the red Brazilian and Mexican species commonly cultivated; but in the winter it is necessary to preserve it from frost in a greenhouse or well-protected pit.

Easily propagated by cuttings.

J. L.



Chrysanthemum

MILLA* biflora.

Snow-white Milla.

HEXANDRIA MONOGYNIA.

Nat. ord. ASPHODELEÆ Juss. (Introduction to the natural system of Botany, p. 273.)

MILLA Cav.—*Perianthium* hypocrateriforme; tubo elongato-campanulato; limbo plano sexpartito, laciniis obtusis 3 exterioribus duplò angustioribus, sinibus rotundatis. *Stamina* exserta, in ipsâ fauce tubi sessilia; *antheræ* lineares, glabræ, in conum conniventes. *Ovarium* superum, elongatum, subpedicellatum, trigonum, triloculare, polyspermum, cum stylo filiformi exserto continuum; *stigma* 3-lobum, fimbriato-papillosum. *Capsula* induviata, 3-locularis, polysperma, 3-valvis, *seminibus* atris crustaceis angulatis.

M. biflora. Cavan. ic. 2. 76. t. 196. Willd. sp. pl. 2. 62. Römer et Schult. syst. 7. 675.

Radices fasciculatæ, carnosæ, *Asphodeli modo*. Folia cylindræa, apice subulata, fistulosa, glauca, scapis subæqualia. Scapi erecti, in cultâ pedales, in spontaneâ palmares. Flores in cultâ umbellati, in spontaneâ solitarii v. sæpiùs gemini, involucris foliolis brevibus membranaceis. Pedunculi scaporum sæpè longitudine, suberecti, paululum curvati. *Perianthium* intùs candidissimum, extùs virescens, per plures dies apertum, nec noctu clausum, ut sæpè hujus ordinis mos est.

A most welcome addition to our Gardens, procured by Mr. Graham from the mountainous parts of Mexico, near Tlalpuxahua. To the kindness of that gentleman we are indebted for wild specimens, which agree well with the indifferent figure of this plant in Cavanilles' work.

Our drawing was made in August last from a specimen that flowered beautifully in the Garden of the Horticultural Society. It had been planted out in a cold pit facing the south, from which the frost is just excluded in winter.

* Named by Cavanilles after Julian Milla, head Gardener in the Royal Garden of Madrid.

The flowers were of a white so pure that snow itself is not more colourless ; they continued for a long time expanded, as shewn in our Plate, never closing up at night, as is usual with plants of the same family.

We know of no mode of propagating this curious species except by seeds, of which a very few were produced ; in time the roots obtained from these will be distributed by the Society ; and when more common, experiments upon a readier mode of multiplying it may be attempted.

Fig. 1 is a magnified view of the pistillum, and of the tube of the perianthium cut open. 2 is the back of an anther, also magnified.

J. L.



FUCHSIA* globósa.

Balloon-flowered Fuchsia.

OCTANDRIA MONOGYNIA.

Nat. ord. ONAGRARIÆ Juss. (Introduction to the natural system of Botany, p. 56.)

FUCHSIA.—Suprà, vol. 10. fol. 1284.

F. globosa; foliis oppositis petiolatis ovatis acutis leviter dentatis glabris, floribus axillaribus pendulis, limbo alabastri globoso floris aperti connivente, petalis erectis convolutis duplò brevioribus.

Frutex habitu *F. gracilis*, sed robustior, magisque atrovirens. Flores à pedunculis capillaribus penduli, purpureo-sanguinei, ovario ovali, tubo ventricoso.

The origin of this most distinct species is unknown to us. The first specimen we saw was exhibited last March before the Horticultural Society by Mr. Dennis, of Chelsea; it was about 2 feet high, had been skilfully trained in a fan shape upon a small trellis, and produced a very beautiful effect.

The flowers, although in general appearance like those of other Fuchsias of the same section, are remarkable for their very globose figure when in bud, and for the balloon appearance they present when expanded, in consequence of their points continuing to adhere: their colour is more violet than any of the large red-flowered Fuchsias yet in our gardens. We publish it with the name it bears near London, given we know not by whom.

It has always been a matter of surprise with us, that, popular as is the name of Fuchsia, and beautiful as many of its species are well known to be, by far the finest should still

remain to be procured. The long-flowered kinds, found in Mexico and Peru, are as much more beautiful than those now cultivated in this country, as *F. gracilis* is than *F. microphylla*. One of them at least, called *Mollo Ccanta*, or *Plant of Beauty*, might be easily enough procured from Huamantanga, in Peru, where it is common.

J. L.



RÍBES* speciósum.

Shewy Gooseberry.

PENTANDRIA MONOGYNIA.

Nat. ord. GROSSULACEÆ D. C. (Introduction to the natural system of Botany, p. 54.)

RÍBES.—Suprà, vol. 2. fol. 125.

*GROSSULARIÆ. Gooseberries.

R. speciosum; ramis setosis, aculeis rigidis tripartitis rectis, foliis glabris trilobis crenato-incisis basi cuneatis integris, racemis nutantibus 2-3-floris ramis sublongioribus, floribus tubulosis 4-5-meris, staminibus longè exsertis, calycibus partitis, baccis hispidis.

R. speciosum. Pursh. *fl. am. sept.* 2. 731. *suppl.* De Cand. *prodr.* 3. 478. D. Don in *British fl. gard.* 149.

R. stamineum. Smith in *Rees' cycl. in loc.* De Cand. *l. c.*

R. fuchsioides. Berland. *mem. soc. phys. genev.* 3. t. 3.

A hardy shrub, native of California, and apparently of Mexico. It was raised from seeds brought from Monterey by Mr. Collie, in 1828; and from the Garden of Mr. Lambert our specimens were sent last May. Like all other Gooseberries, it is propagated most readily from cuttings.

If this cannot be said to be so beautiful a shrub as *Ribes sanguineum*, the Scarlet Currant, it is at least by far the most elegant of Gooseberries. In brilliancy of colouring it is perhaps superior to that species, and in abundance of flowering it is nearly its equal: but it has the demerit, common to all Gooseberries, of hiding its flowers by its leaves.

By the late Sir James Smith this plant was called *Ribes stamineum*,—that learned Botanist not having discovered, in 1819, that it had been described in a well-known English

* See fol. 1237.

work in 1814, under the name of *R. speciosum*; an oversight not confined to this species alone, but connected with others of the same nature, which form part of one of his communications to the Encyclopædia of Dr. Rees. It is not surprising that these errors should all have been copied by M. Berlandier in De Candolle's *Prodromus*.

The number of stamens in this species appears variable: in Mr. Don's account of it, above quoted, it is said to be four; but we find it in the specimens now before us quite as frequently five; so that there is nothing whatever to distinguish this as a section in the genus *Ribes*.

If one of those ingenious gentlemen who write *Alphabets of Science* were told that the Gooseberry and the Fuchsia are nearly related to each other, we have no doubt he would think the approximation quite as absurd as that of the nettle and the fig. We are certainly not disposed to waste arguments upon such a subject; but we should think that to most persons the production of this species would be sufficient to prove a point which no Botanist would think for a moment of disputing.

J. L.



STÁCHYS* albicaúlis.

White-stemmed Stachys.

DIDYNAMIA GYMNOSPERMIA.

Nat. ord. LABIATÆ Juss. (*Introduction to the natural system of Botany*, p. 239.)

§ Nepetææ Bentham.

STACHYS.—*Suprà*, vol. 15. fol. 1289.

St. albicaulis; caule erecto lanato, foliis oblongis dentatis arachnoideis subtùs petiolisque lanatis, rachi pubescente, bracteis integerrimis, calycibus galeâque glanduloso-hirsutis.—*Lindl. suprà*, fol. 1080.

Herba perennis, erecta, ramosa; caule basi tomentoso albo, apice pubescente viridi. Folia oblonga, angusta, basi angustata, æqualiter serrata. Flores rosei, labio inferiore picto.

This is only a Botanical subject, having no claims to cultivation for its beauty. It is a hardy perennial plant, easily increased either by cuttings, or by dividing its root, or by seeds.

The late Mr. M'Rae first found it in Chile at the baths of Collina, a favourite retreat of the inhabitants of St. Jago. Since that time it has been met with by others, and is probably not an uncommon Chilean species.

Fig. 1 is a magnified view of the calyx; 2 is a stamen, with its horizontal anther.

J. L.

• See fol. 1226.



AZÁLEA* Póntica ; *versicolor*.*Changeable Pontic Azalea.*

PENTANDRIA MONOGYNIA.

Nat. ord. ERICEÆ Juss. (Introduction to the natural system of Botany, p. 182.)

AZALEA.—Suprà, vol. 2. fol. 120.

GARDEN VARIETY.

We formerly gave in this work figures of several extremely beautiful hybrid Azaleas raised at Highclere by Lord Carnarvon. (See fol. 1366.) We now produce a variety, which, if it yield to some of those in intensity of colour, is certainly not surpassed in other respects. It is a most abundant flowerer; its blossoms are produced in large clusters; and the variation of tint caused by each corolla being diversified with bright yellow, rose of different shades, and white, gives the bush an air of richness that is hardly to be exceeded.

The plant having been liberally distributed by order of Lord Carnarvon, and being now to be found in many of the choicer collections of this country, it is to be hoped that it will soon become common.

J. L.

* See fol. 1366.



LEUCOPOGON* parviflorus.

Small-flowered Whitebeard.

PENTANDRIA MONOGYNIA.

Nat. ord. EPACRIDÆ R. Br. (Introduction to the natural system of Botany, p. 183.)

LEUCOPOGON.—*Calyx* bibracteatus. *Corolla* infundibuliformis, limbo patente longitudinaliter barbato. *Filamenta* inclusa. *Ovarium* 2-5-loculare. *Drupa* baccata v. exsucca, nunc crustacea.—*Frutices* sæpè humiles. *Folia* sparsa, quandoque interrupto-conferta. *Flores* spicati, axillares v. terminales. *Discus* hypogynus cyathiformis, sublobatus, rarè nullus.—*R. Br. prodr.* 541.

L. parviflorus; spicis erectis confertis foliis brevioribus, ovariis 4-ocularibus, foliis lanceolatis v. oblongis planis 3-5-venis, ramulis glabris.

Styphelia parviflora. *Andrews' bot. rep.* 287.

Frutex parvus, sempervirens; ramulis glabris. Folia plana, glabra, apiculata, ferè linearia, v. lanceolata, v. oblonga, basi angustiora, nunc apicem versus denticulata; venis acustriatis 3-5-primordialibus subparallelis; costâ nullâ. Spicæ axillares, confertæ, multifloræ, erectæ, foliis breviores. Bracteæ parvæ, acutæ. Flores parvi, albi. Ovarium cyatho quinquedentato, plicato, viridi cinctum, 4-loculare. Stylus tubo duplò brevior.

This species is probably very rare in New Holland; for Dr. Brown could scarcely have been acquainted with it, or he would not have referred the figure in the Botanist's Repository, which is a tolerable representation of it, to *L. lanceolatus*, a perfectly distinct species. Mr. Cunningham informs us that he did not meet with it during his long residence in New Holland, although he found the genus in abundance on every coast he visited; thirteen species having been collected in his last voyage alone to King George's Sound.

* Literally *whitebeard*; in allusion to the hairy surface of the segments of the corolla.

Styphelia Gnidium of Ventenat, also referred by Dr. Brown to *L. lanceolatus*, has been shewn by Mr. Cunningham to be equally distinct.

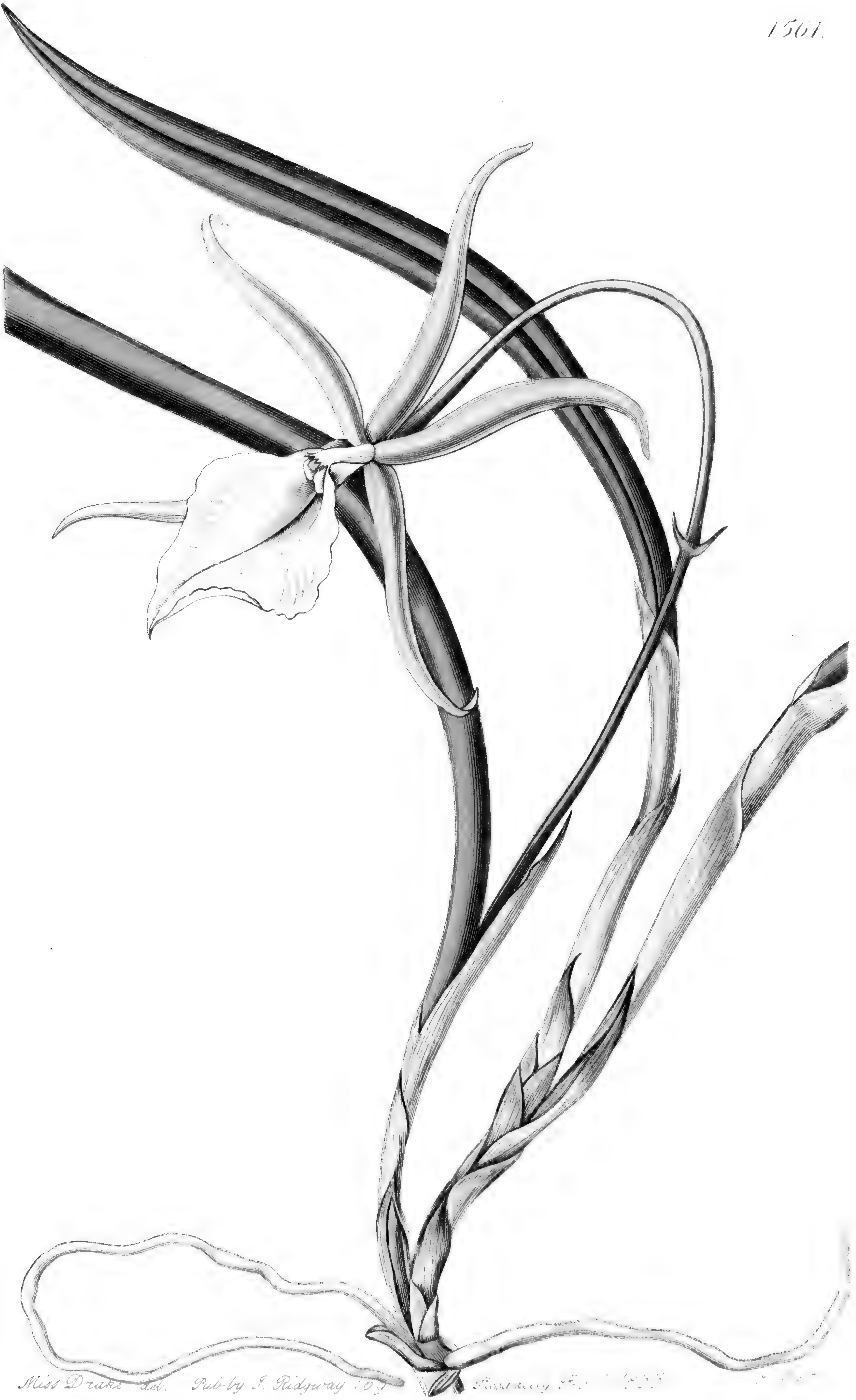
That this is really the *Styphelia parviflora* we are fortunately enabled to determine by means of an authentic specimen in our possession from the late Mr. James Donn's Herbarium.

For the specimens from which our drawing was made we are indebted to Mr. Lowe, of the Clapton Nursery, who raised them from New Holland seeds. It is a neat greenhouse plant, flowering in May.

The species varies very much in the breadth of the leaves; some of which are not more than two lines in breadth, while others are as much as four. The two sprigs in our Plate are different in this respect.

Fig. 1 is a magnified view of a flower, shewing the bearded segments of the corolla.

J. L.



Miss Drake del. Pub by J. Ridgway 1847

BRASAVÓLA* Perrínii.

Perrin's Brasavola.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDÆ Juss. Tribus Epidendreæ Lindl. (*Introduction to the natural system of Botany*, p. 262.)

BRASAVOLA.—*Suprà*, vol. 17. fol. 1465.

B. *Perrinii*; labello ovato acuminato integerrimo: ungue convoluto columnæ longitudine, petalis sepalisque linearibus acuminatis glabris, dentibus lateralibus clinandrii integris postico serrato.

Habitus omninò *B. nodosæ*. Præcipuè differt characteribus suprà datis.

When we received a specimen of this plant in the month of September last from Mrs. Arnold Harrison, by whom it had been obtained from Rio Janeiro, we were disposed to consider it the same as *Br. nodosa*. A more careful examination has, however, satisfied us that it is essentially distinguished by its smaller flowers, the short stalk of the labellum, and the tothing of the back lobe of the clinandrium. It is by no means so handsome as that species; but as it grows very freely, it will be esteemed an acquisition by the lovers of Epiphytes.

At the request of Mr. Harrison it is named after Mr. Perrin, his Gardener, under whose skilful management the collection of Epiphytes at Aighburgh has arrived at a state of great perfection.

J. L.

* See fol. 1465.



SCHIZANTHUS* pinnatus; *humilis*.

Pinnated Schizanthus; Dwarf variety.

DIANDRIA MONOGYNIA.

Nat. ord. SCROPHULARINEÆ Juss. (*Introduction to the natural system of Botany*, p. 228.)

SCHIZANTHUS.—*Suprà*, vol. 9. fol. 725.

S. pinnatus. *Suprà*, vol. 9. fol. 725.

β *humilis; racemis multifloris congestis, caule humiliore.*

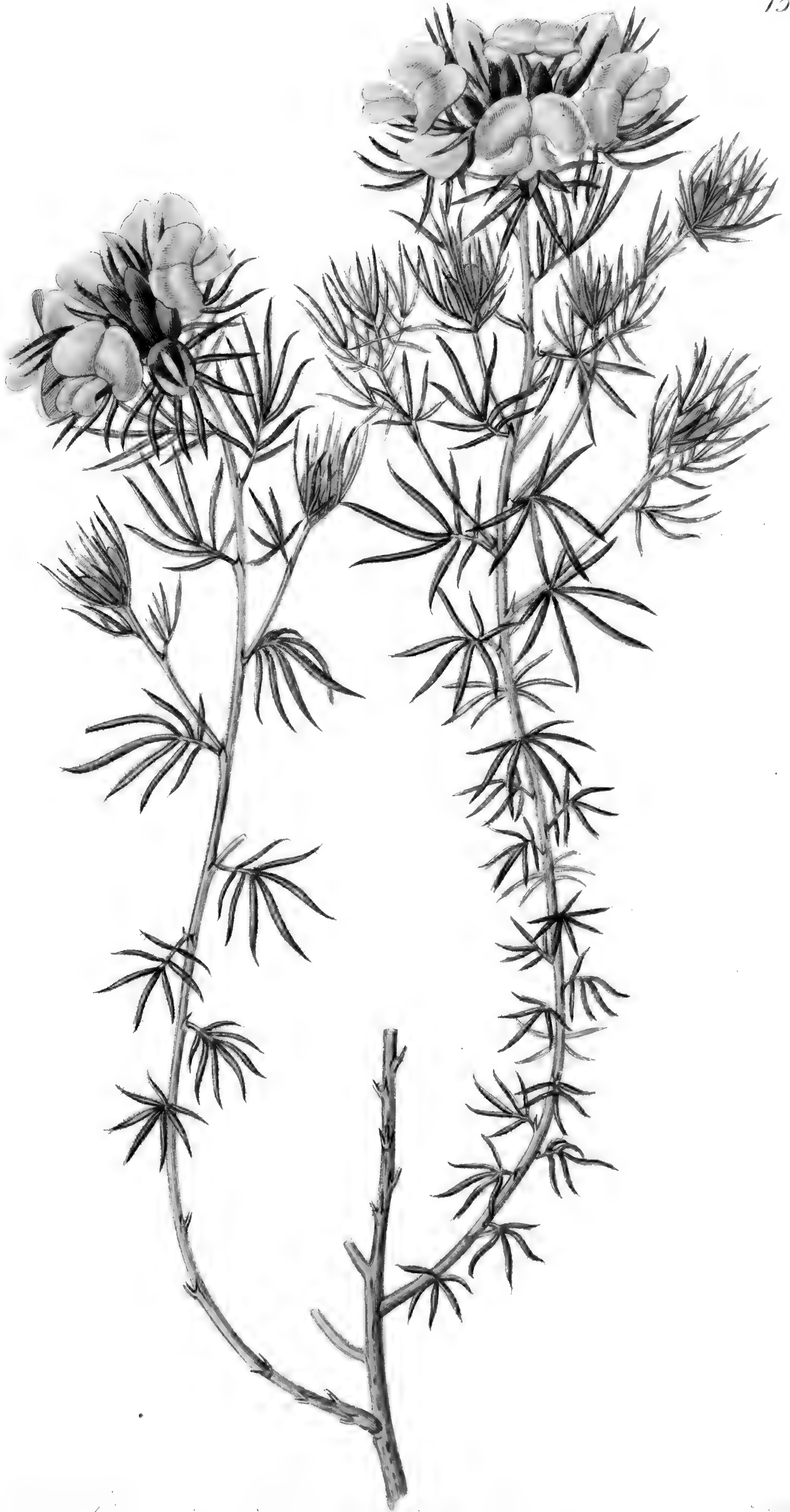
If *S. pinnatus* and *porrigens* are really distinct species, which we cannot think, then the plant now represented will be a third, distinguished by its very dwarf compact habit, and broader leaves. But as we are unable to discover any permanent differences between the two, so are we equally at a loss to point out any thing positive that will discriminate this from *S. pinnatus*.

It is nevertheless a well-marked variety of considerable beauty. It was raised from seeds sold in London last spring by Mr. Cuming, and flowered in the Garden of the Comte de Vandes, at Bayswater, in June. In all its habits it seems to agree with the species to which we refer it as a variety.

Among Mr. Cuming's dried plants this is numbered 712, from which it appears to be a native of Valparaiso. In its wild state it is about 6 inches high; when cultivated it does not exceed a foot.

J. L.

* See fol. 1544.



GOMPHOLOBIUM* capitatum.

Capitate Gompholobium.

DECANDRIA MONOGYNIA.

Nat. ord. LEGUMINOSÆ Juss. § Papilionaceæ. (Introduction to the natural system of Botany, p. 87.)

GOMPHOLOBIUM.—Suprà, vol. 6. fol. 484.

G. capitatum; pilosum, floribus capitatis, foliis impari-pinnatis 3-4-jugis nunc subpalmatis, foliolis subulato-linearibus mucronatis supra lævibus, calycibus hirsutis, carinâ ciliatâ.

G. capitatum. Cunningham. MSS.

Frutex tenellus, pilosus, habitû *G. tomentosum*, sed minùs ramosus. Folia similia, sed minùs pinnata, et supernè nequaquam scabra; foliolis sæpiùs tali modo approximatis ut è pinnatis palmata fiunt. Stipulæ minimæ. Flores ad fastigia ramorum congesti, pedicellis foliis multò brevioribus. Calyx *G. tomentosum*, sed viridis, nec discolor. Corolla vitellina. Carina paululùm ciliata. Ovarium glabrum.

Raised in the Nursery of Mr. Knight, of the King's Road, from seed of the collector Baxter. Mr. Cunningham first discovered it in 1822, in brushy forest-ground on the hills around Oyster harbour, King George's Sound.

In many respects it approaches *G. tomentosum*, figured at fol. 1474 of this work; but appears to be essentially distinguished by its less pinnated, shorter leaves, which are by no means scabrous on the upper side, and by its flowers growing in terminal clusters instead of singly, or in pairs. They are also of a bright deep yellow, and not pallid. It is also closely allied to the *G. lanatum* of Mr. Cunningham, to whom we are indebted for a specimen; but its capitate inflorescence at once distinguishes it.

A neat little greenhouse plant, flowering in July, and readily increased by seeds or cuttings. J. L.

* See fol. 1468.



MOSCHÁRIA* pinnatífida.

Turnip-leaved Musk-Succory.

SYNGENESIA ÆQUALIS.

Nat. ord. COMPOSITÆ Juss. (*Introduction to the natural system of Botany*, p. 197.)

§ Nassauviaceæ. Subtrib. II. Trixideæ Lessing. compos. 400.

MOSCHARIA R. et P.—Acháenia seriei extimæ (circiter 8) fertilia, compressa, obovata, obliqua, breviter rostrata, rostro inæquali, extùs gibboso, bracteolis omninò involuta atque pappo uniseriali, paleaceo, plumoso, brevi, æquali coronata, reliqua sterilia, calva.—*Herba Chilensis, supernè in paniculam dichotomam divisa; foliis teneris, pilosiusculis, imis confertis pinnatisectis; involucris campanulatis uniserialibus oligophyllis.*—Lessing l. c.

Moscharia pinnatifida. *Fl. peruv. Linnæa*, vol. 5. 40.

Gastrocarpha runcinata. *D. Don. in Linn. trans.* 232. *British flower gard. t.* 229.

Mosigia pinnatifida. *Spreng. syst.* 3. 661.

Herba annua, bipedalis, moschum olens, apice paniculatus. Rami striati, pubescentes. Folia tenera, atroviridia, glabra, amplexicaulia, basi dentata; inferiora pinnatifida dentata, superiora ovata v. ovato-lanceolata, indivisa. Involucra 5-6-phylla; foliolis laxis, ovatis, duplici serie imbricatis, æqualibus, foliaceis, pubescentibus. Receptaculum paleaceum, planum. Flosculi omnes hermaphroditi, albi, circiter viginti, bilabiati; labio exteriori oblongo, obtuso, integro v. apice 3-dentato, interiore lineari revoluti; fl. radii paleis ventricosis, gibbosis, subtruncatis basi cincti, pappo brevi, simplici serie paleaceo, polyphylo; fl. disci minores, paleis haud cincti, pappo nullo. Antheræ basi bisetosæ. Styli rami lineares, revoluti, truncati, stigmatibus fimbriatis.

An annual plant, found wild in the dry, barren, rocky districts of Aconcagua, Quillota, and Rancagua, in Chile, where it was originally gathered by the authors of the *Flora Peruviana*, and subsequently by many Botanical collectors in that country. Its native name is said to be *Almixclillo*. (*Fl. Peruv. syst.*)

* In allusion to the musky odour of the only known species.

With us it is a pretty bushy plant, growing about two feet high, and flowering in May. It should be raised in a frame with French marigolds and other tender annuals, and afterwards planted in the open border, where it will blossom and seed abundantly.

Our drawing was made in the Garden of the Comte de Vandes at Bayswater.

Mr. Lessing considers Mr. Don's *Gastrocarpha runcinata* the same as this; and we presume with reason, notwithstanding some points of discrepancy in the foliage.

Fig. 1 is a view of two of the outer florets, enveloped at the base in a hooded scale; 2 is one of the florets of the disc; 3 represents an anther, with the two bristles at its base; 4 is an ovarium of the ray, with its pappus. All these figures are more or less magnified.

J. L.

ALPHABETICAL INDEX

TO

VOLUME V. OF THE NEW SERIES,

OR

VOLUME XVIII. OF THE WHOLE WORK.

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