



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.

AND

MONTHLY CHRONICLE

OF

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BOTANICAL
GARDEN

BOTANICAL AND HORTICULTURAL NEWS.

CONTINUED

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&c. &c. &c.

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—viret semper—nec fronde caducâ
Carpitur.

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BOTANIQUE

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Wm. Drake del

Art by J. Redjany 169. Reprinted from 1846

J. Vanhey sc.

LUPĪNUS arvensis.

Field Peruvian Lupine.

DIADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ. § PAPILIONACEÆ.

LUPINUS. L.

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L. arvensis; biennis, decumbens, densè pubescens, foliolis 5-9 lanceolatis, stipulis setaceis liberis, racemo subverticillato, bracteis herbaceis subulatis deciduis alabastris subæqualibus, calyce bracteolato, corollâ glabrâ, alis obtusis, legumine hirsuto brevi ancipiti tenui subtetraspermo, seminibus cinereo-nebulosis.

L. arvensis, *Bentham Plant. Hartweg. ined.*

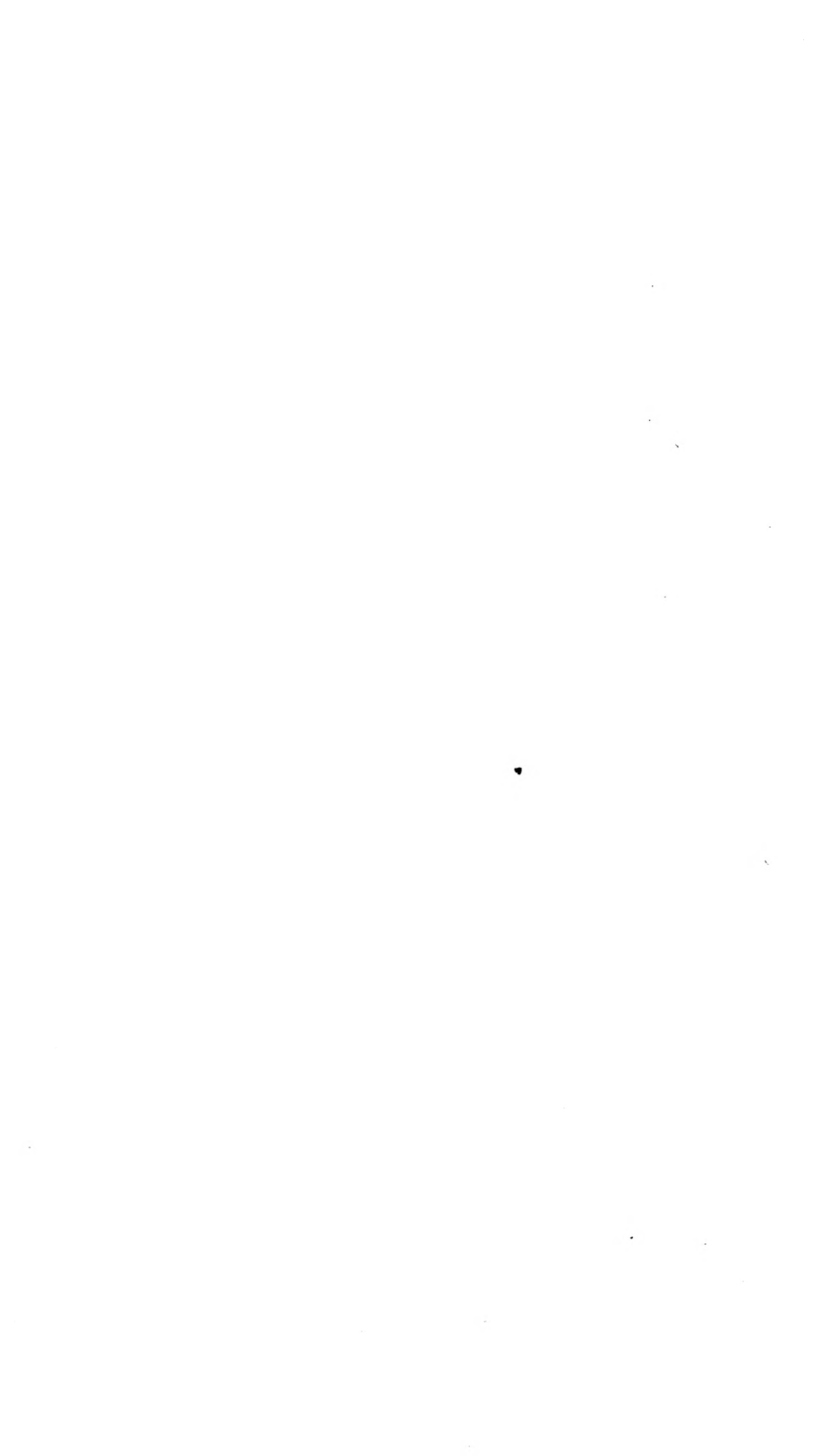
A gay little plant, forming one more addition to the large genus *Lupinus*. The flowers are rich bright lilac, enlivened by a yellow spot on the white centre of the vexillum. In number the leaflets vary from 5 to 9. The seeds, by which *Lupines* may be distinguished more accurately than by the ordinary marks employed by Botanists, are oblong, smooth, and mottled with grey of different tints. Fig. 3, represents one of them; 2, is a ripe pod; and 1, is the ovary and style.

It is a half hardy biennial, growing from one to two feet high, and flowering a great part of the summer and autumn. Like other *Lupines* it requires a strong rich soil, and although a half shrubby biennial, is best treated as an annual.

The seeds should be sown about the beginning of March, in pans filled with a loamy soil, and when large enough should be potted, placing three plants in a small pot; afterwards, when the danger of the late spring frosts is over, they may be planted out in the open border. The seeds may also be sown in the open border about the middle of April, but then the

plants flower much later, and are never so fine as when treated as above stated.

It was found growing in corn fields near Loxa, in Peru, by Mr. Hartweg, and flowered in the garden of the Horticultural Society in the course of last autumn.





M.

Printed by J. Ridgway 169 Piccadilly London W. 1 1844

S. Borellet sc.

ANGRÆCUM pellucidum.

Transparent Angrec.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ.

ANGRÆCUM. Thouars.

A. pellucidum; acaule, foliis distichis oblongis subundulatis recurvis apice obliquis basi equitantibus, racemis densis nutantibus axillaribus foliis brevioribus, sepalis petalisque linearilanceolatis, labello fimbriato cordato-ovato truncato, calcaris brevi lanceolato porrecto, caudiculis 2 subulatis, glandulâ communi didymâ.

We lament to see how little justice our artists have been able to do to this beautiful plant, whose flowers are as delicate and transparent as if they were flakes of snow fixed by frost in the very act of melting. Each part of the lip is studded and bordered with little crystalline elevations, and the whole fabric of the blossom is as fragile as thin plates of glass.

It was imported from Sierra Leone by Messrs. Loddiges, with whom it flowered in November 1842. It is number 1572 of their catalogue.

Fig. 1. represents the column and spur of the labellum, the limb of which, spread flat to shew its true form is seen at 2. Fig. 3. represents the pollen-masses with their straps; and 4. is a single pollen-mass seen from behind where the strap fitted on.

We still regret the want of leisure to effect that reformation in the genus, the necessity of which was alluded to at fol. 68 of our volume for 1840. A comparison of the details of this plate and of those of *A. gladiifolium* at the place just quoted, will shew that the genus Angrec, as it now stands, cannot be maintained entire.



W. Herbert del.

Pub. by J. Poirson, 115, Piccadilly, London, 1864.

G. Barclay sc.

CROCI autumnales.

Autumnal Crocuses.

TRIANDRIA MONOGYNIA.

Nat. ord. IRIDACEÆ.

CROCUS. Bot. Reg. 1843. fol. 21.

1. *C. pulchellus*; nudus, corni tunicâ præcipuâ (i. e. exterioribus obsoletis persistente) membranaccâ durâ annulo ad basim fibris ciliato, perianthio pallidè subviolaceo intus saturatius venoso fauce luteâ pubescente, filam. luteis hispidis, antheris albis. *In forestâ Belgratensi prope Byzantium*. V. 2. *major*; perianthio majore, annulo vix ciliato, in monte Athone. (Fig. 1.)
2. *C. longiflorus*; si mavis, *C. odor* (v.) *longiflorus*; involuero 1-2-fl. c. t. præc. reticulatâ non cribrosâ inferne parallelo-fibrosâ, spathâ virente, tubo lutescente, perianthio pallidè purpureo fauce saturatè luteâ pubescente. *In Italiâ et Trinacriâ*. Vidi sepalis extus luteo-striatis var. fortuitam. (Fig. 4.)
3. *C. odor*; si mavis, *C. odor* (v.) *Melitensis*; tubo et perianthio inferne extus saturatè purpurâ striatis, fauce sublutescente pubescente. *In monte Verdali Melitensi*. *C. longiflori invol. quandoque in foliolum desinit*. (Fig. 5.)
4. *C. Thomasianus*; involucreatus, c. tun. præc. reticulatâ non cribrosâ inferne parallelo-fibrosâ, tubo pallido, limbo saturatè violaceo, fauce pallidâ pubescente. *C. sativo affinis, in Italiâ*. (Fig. 6.)
5. *C. Pallasianus*; involucreatus c. tun. præc. tenuiter reticulatâ, perianthio pallidè violaceo extus ad basim striato fauce pallidâ pubescente. *C. sativo affinis*. *Neque perianthium vivum vidi, neque plantam dissecui; icon ex sp. sicco in Tauriâ a cl. Besser lecto est, cum C. Cartwrightiano comparandi gratiâ*. (Fig. 2.)
6. *C. Cartwrightianus*; involucreatus, c. tunicis tenuiter reticulatis perianthio albo intus purpurâ venoso, fauce pubescente. *In insulâ Teno., C. Pallasiano affinis*. (Fig. 3.)

De præcedentibus pleniùs consulas Synops. Croc. nobis supra anno 1843. Misc. p. 26. et Syn. Cr. Addenda, &c. p. 82, 83. De *C. cancellato* in Syn. pro *Tauriâ lege monte Tauro*; *C. serotini invol. 1-2-fl. est.*—*W. H.*

The first of these five autumnal Croci was sent to Spofforth by the kindness of J. Cartwright, Esq., H. M. consul-general at Constantinople. Having seen a dried specimen of the

plant from Roumelia, confounded with *C. speciosus* in Sir W. J. Hooker's herb. I requested that search might be made for it in the forest of Belgrade, where I thought it likely to grow, and there it was found in flower without any leaf in October. It differs from all known Croci in having *white* anthers and pollen. The filaments are also remarkable, being yellow and hairy. *C. longiflorus* is a native of Italy and Sicily, and flowers with us in October, or sometimes later, the leaf accompanying the flower, which is very fragrant, of a pale reddish lilac, with the tube yellowish and the throat of very deep yellow. It is closely akin to *C. odoratus* of Mt. Verdala in Malta, whereof the leaves rather precede the flower, and which has the throat very much paler, and the sepals and tube striped with purple. *C. Thomasianus* has much affinity to *C. sativus*, and is a native of Italy. *C. Cartwrightianus* was obtained last summer from the Greek island Tino by J. Cartwright, Esq. and was before unknown. It is evidently akin to *C. Pallasianus*. *C. Pallasianus* is found in Tauria, and said to grow also in the Cyclades, but is not sufficiently known and examined. The figure given is from a dry specimen found by Prof. Besser in Tauria, for the sake of comparison with *C. Cartwrightianus*.

This opportunity may be taken to give some general information concerning Croci. They grow naturally on high land between the Atlantic and the Caspian, north of the Mediterranean, one autumnal species being, however, found on the heights near Tangiers; and a vernal species was said to have been seen on Atlas by Desfontaines, whose confused and evidently erroneous description was taken from plants growing in the Jardin des Plantes, and no Crocus has been yet found by the French in Africa since their occupation of Algiers. *C. Pyrenæus* (afterwards ill-named *nudiflorus* by Smith) is found abundantly on the Pyrenees in September; and the kindred *Asturicus*, smaller, darker, a month later, and bearded, near Gijon and Santander. Whether they meet in Biscay and Navarre is not ascertained. They are distinguished from all others by a stoloniferous bulb producing its offsets at a distance. In the mountain pine-woods of S. Spain, *C. serotinus* grows, flowering with us in November and December, the leaves beginning to accompany the flowers, and distin-

guished by channelled filaments. *C. Salzmannianus* of Tangiers, and one very imperfectly known near Lisbon, called *Clusianus* by Gay, are probably allied to it. All the sorts which are found West of Italy have an involucre enclosing the flower-stalk and lower part of the flower, whence Smith's name for *Pyrenæus* was peculiarly unhappy, especially as the flower has not only an involucre, but an unusually conspicuous green spathe.

The remaining sorts that belong to the West of Europe are *C. versicolor*, a native of the neighbourhood of Nice, and probably extending into Savoy, though it is not named in Italian Floras, of which the throat is pale yellow and smooth; *C. insularis* (including *minus*) of Corsica and Sardinia, white-throated, but forming a link between *versicolor* and *suaveolens* of Italy; and *C. vernus*, (of which the coats are subreticulate, the throat hairy and never yellow, and of which the principal seats are the Alps and Apennines,) appearing large and purple, at the height of 6,000 feet on M. Pollino in July, and elsewhere in the S. of Italy; small, white with purple throat on the Splugen, larger and purple or purple-throated white intermixed on the Wengern Alp, 5,300 feet high, piercing the yet unmelted snow on the flat amidst short sour grass as late as June 19; elsewhere in Switzerland on Alpine pastures even as high as 5,500 feet, and on Mount Pilate 5,500 feet high, with a longer flower (*C. longiflorus*, Hegetzweiler,) in July and August, extending eastward by Cebennes to the Pyrenees, where it is rare, and (if Brotero is correct) passing thence through the N. of Spain to the mountains of Beira and Entre M. y D.; eastward white and obovate on the Bavarian, more acute and white on the Carinthian, Alps; and (if Besser's specimen is correct) passing by the N. of Hungary into S. Podolia, which seems to be the most northern seat of the native *Croci*, for they are not known to cross the left bank of the Danube above Vienna, and are stopped by alluvial lands to the N. of Podolia and of the steppes near Odessa and in the Crimea.

Mons. Gay has named an autumnal *Crocus* of Majorca, which he described imperfectly, *C. Cambessedesianus*, allied, as he says, to the vernal *Insularis*, but perhaps more probably to

the autumnal *Crocus* of Malta. Dried specimens exhibit two different varieties evidently akin to *Versicolor* from Dalmatia and the hills near Tifflis, and it is probable that the small dark varieties called *Versicolor* in our gardens, which have no yellow in the throat, do not spring from the Gallic plant. In Italy *versicolor* and *insularis* pass into *Imperatorianus* and *suaveolens*, to which they have much affinity; while the fragrant autumnal family of *C. odoratus* v. *longiflorus* and *Melitenensis* are confined to Italy and Sicily and to Malta. On the mountains near Genoa, and abundant near Varese in Liguria, we find *C. medius*, a purple autumnal *Crocus*, insufficiently known, but probably allied to *C. odoratus*.

Near Parma originates the family of the annulate *Croci*, which is best known by the plant called *biflorus*, or by English nurserymen Scotch *Crocus*. It is not ascertained from whence that plant was obtained. It is distinguished from all others by the yellow leaf-sheaths of its sprout, and is stated by Bory St. Vincent to grow round the Gulf of *Ægina*, but the fact is not distinctly ascertained. The Italian varieties ranking under the name *Pusillus* have the sheaths white, the external stripes on the straw-colour fewer, the internal colour white or pale blue, and in the Florentine plant (which differs also in its bracte) unstreaked straw-colour without, and pale blue within. It is stated to extend into Corfu, and similar forms appear in dry specimens from Tauria and Tifflis. In the Crimea is found *C. Adamicus*, a beautiful plant of this family, blue striped, varying towards purple; and, according to a specimen from the steppes near Odessa, (if the bulb and flower sent belong to one plant) to deep purple, which I propose to call variety *Iæmesianus*, after H. M. Consul at Odessa, Mr. Yeames, to whom I am indebted for the discovery of this plant and *C. nivigena*. A specimen found by Fridwalski in some part of Roumelia exhibits a small plant of this family (which has a thick membranaceous bulb-coat, and a smooth detached ring at bottom) with a golden flower. *C. Thomasianus* in Lucania exhibits the western type of the family of *C. sativus*, the cultivated saffron *Crocus*, which seems more closely connected with *Pallasianus* and *Cartwrightianus*, but of which the native spot in the east is not ascertained. *C. Byzantinus* is an autumnal *Crocus*, with

purple sepals, and shorter whitish petals, found in Wallachia and the Bannat, and probably advancing into Roumelia. *C. campestris* of Pallas, is identical with Fridwalski's *C. hibernus* from Roumelia. Both it and *Byzantinus* are imperfectly known, and, not having seen any specimen of the former, I entertain some doubt of their difference. The latter is a very late flower, and was mistaken by Mr. Ker for *C. serotinus*. *Byzantinus* is the earliest name.

C. speciosus, the most beautiful autumnal *Crocus*, appears first and in its best form in Transylvania, and extends into Caucasus, but there is no certainty of its being found S. of the Balkan, or even the Danube; the supposed *C. speciosus* of Mount Athos, of which I have just received a dry flower and some living bulbs, being a large variety of *C. pulchellus* of this article found in Belgrade forest near Constantinople, and also on the Asiatic side of the Bosphorus. *Crocus cancellatus*, an early purple autumnal species, with hard and widely reticulated coat-fibres, has been gathered near Nauplia, and of a smaller size on Mount Taurus and in Syria. *C. Tournefortianus* of Gay, with very smooth coats and an autumnal flower, is said by him to inhabit the Cyclades, but is imperfectly and not otherwise known. A white autumnal *Crocus*, described by Pohl from Paphos, is supposed by Mons. Gay to be a variety of the same. *Crocus reticulatus*, the vernal cloth of gold *Crocus*, first appears with a blueish purple-streaked flower, and is called *C. variegatus*, near Trieste in Lipiza wood, differing only in colour from the golden-striped of the Crimea. In S. Podolia and near Odessa the streaked white *v. albicans* appears; and the blue is found also in the Crimea, according to M. von Bieberstein, though probably smaller than in the west. A small reticulate *Crocus*, differing in the bulb-coats, with a pale lemon and sometimes golden flower, is found on Gargarus; and a specimen of a golden one of larger size, with harder reticulation, was brought by Lady Liston from Constantinople, of which the exact habitation is not known. The extensive family of *C. lagenæflorus*, golden, creamy, and white, with parallel-fibred coat, appears to begin in Corfu and stretch by the Balkan to Asia Minor, Chios, and some of the neighbouring islands. To this family belongs the florid *Crocus luteus* of our gardens, of which the exact

native site is not yet ascertained. The autumnal white *C. Boryanus* of Cephalonia, Modon, and Navarin, appears to differ in little but its season of flowering from *lagenæflorus*, but I have not yet seen it alive.

The southern limit of the genus runs near lat. 35°, from Tangiers by Malta, Candia, and Cyprus to Aleppo; there it turns northward, following, I believe, the right bank of the Phrat to its source between Erzerum and Trebisond, and from thence it passes between Kurdistan and the Caspian, as far S. as Tabriz, not descending into the plain of the Tigris and Euphrates, and is cut off from the southern shore of the Caspian and from the rest of Persia. Mr. Kotschy found a blue *Crocus*, (*cancellatus*) in Syria and near Tabriz, and a white one, probably *Boryanus* v. *Caspicus*, near Baalbec and Tabriz. I have lately learned from two quarters that the yellow *Crocus* follows Mount Lebanon southwards from Aleppo and approaches Damascus on the hills, where it is eaten by the natives, who make a palatable dish of it; but it cannot cross the Euphrates, and the alluvial plain of Damascus. The genus is stopped to the north of the Caspian by the Volga and the salt plains. *C. sativus* is a cultivated plant in Cashmere, and the *Crocus*-like plant of Suleimania seems to be a *Merendera* or *Colchicum*.

There are yet some vernal races in the Levant; one *C. Fleischerianus* on the hills near Smyrna, white-streaked with finely interwoven fibres, and seemingly in some degree akin to *C. reticulatus albicans*; *C. Sieberianus* (named more happily, but later, *nivalis* by Bory St. Vincent) on the very summits of Crete and Taygetus, flowering between patches of snow, at the height of above 6,000 feet on the latter in July; *C. nivigena*, allied to it, on the steppes near Odessa, which have both finely reticulated coats like *C. vernus*, attached at the base instead of the brow of the bulb, and differing in other respects; and lastly, *C. nubigena*, from the summit of Gargarus, (with a hard smooth coat, and at the base a ciliated ring, as in *C. pulchellus*) closely allied to *C. Sibthorpianus* of Cretan Ida, and seemingly to *C. lævigatus* of the summit of Milo and Thermia as well as Crete, which has a hard coat, cut at the base into the appearance of scales. As

the summits of Milo and Thermia are of schistous marble, it may be conjectured that those of Crete and Gargarus are similar, from the Croci they produce.

In confirmation of the report concerning the yellow Crocus of the mountains near Damascus, I have long observed the avidity of mice to scratch up and eat *C. luteus* and *lagenæ-florus aureus*, and the remarkable fact, that all the *lagenæ-flori*, when dug up wild, are found five or six inches deep underground as if for protection, and that the mice never touch any other Crocus in the garden. I tried to roast *C. luteus*, and found it as hard as a stone; boiled for three-quarters of an hour or more, it became a soft pulp, of which the flavour was insufficient, but not unpleasant. On becoming cold it hardened, so that it might be pounded or ground for culinary purposes, and with some seasoning might be palatable, but from its setting hard after being boiled, it would probably be not easily digested. It is a remarkable fact, that although the Croci of different localities are little distinguished from each other by casual observers, they refuse to intermix, and I have failed in every attempt to cross *C. vernus* (which produces seedlings at Spofforth so abundantly as to be troublesome) with any other Crocus, and I have equally failed with every other species, (unless perhaps in obtaining seed between *Versicolor*, *Imperatsonianus*, and *insularis*, which are peculiarly allied) although most, except the sorts long cultivated by off-sets, make seed pretty freely. It will not be found that the genus is subdivided unnecessarily.

Any vendor of bulbs can readily distinguish the bulbs of the common yellow, the vernal, the cloth of gold, the saffron, and that called Scotch Crocus, by their outer coat; and other species are so distinguishable, though often more easily by the eye than by a written description; but besides that apparent diversity, there is a great difference as to the part of the corm or kernel into which the several coats, or remaining bases of the last year's leaves and leaf-sheaths, are inserted, which is not so easily ascertained; and also of the particular zone, between the lines of insertion, from which the root-fibres spring; and it is in fact more easy to ascertain the species from a dry bulb than from a leaf or flower.

Seven species or varieties are said to be found in Corfu, which I have not yet seen; three belonging, I apprehend, to *C. lagenæflorus*; one to *biflorus*; one to *reticulatus*, blue; one said to be *vernus*, which is scarcely probable; and two imperfectly known, with an autumnal purplish flower.

Four plants of *C. pulchellus* were found in Belgrade forest with the limb white and throat yellow. It is curious, that, as the climate of the Alps can delay the spring *Crocus* even to August, the beginning of autumn on *M. Taurus* can bring forward the autumnal in the same month.

W. H.





916 ... 189 ... Jun 1 1894

J. Burckley

TURRÆA lobata.

Lobed Turraea.

MONADELPHIA DECANDRIA.

Nat. ord. MELIACEÆ.

TURRÆA, L. Calyx 5-dentatus, rarò in (in *T. pumilâ*) 5-partitus, vel (in *T. tetramerâ*) 4-dentatus. *Corolla* 5-petala, petalis ab imâ basi demùm patentibus. *Tubus stamineus* a corollâ liber, intùs ad apicem antheras 10, vel (in *T. tetramerâ*) 8, sessiles vel brevissimè stipitatas gerens, margine (quandoque reflexo) plerùmque in dentes lacinulasve formæ variæ diviso. *Tubus interior* nullus; sed post anthesin annulus brevissimus duplex, exterior e basibus petalorum, interior e basi tubi staminei, persistentibus, basin ovarii cingens. *Ovarium* 5-, 10-, 20-loculare, loculis sepalis (dum numero æqualibus) oppositis, 2-ovulatis. *Stylus* tubi staminei longitudine vel longior. *Stigma* exsertum discoideum, styli dilatationem formæ variæ terminans. *Capsula* 5-vel pluri-locularis, lociis 1-2-spermis. *Semina* infra apicem suspensa, arillata.—Arbores fruticesve, foliis *simplicibus integerrimis rarò* (in *T. heterophyllâ*) *obtusè lobatis, vel* (in *T. pumilâ*) *sinuato-dentatis*. Flores (*pedunculo communi abbreviato*) *fasciculati, pedicellati, vel rarò* (in *T. tetramerâ*) *sessiles*. Bennett in Horsfield's *Plant. Jav.* p. 180.

T. lobata; foliis rhombeis apice trilobis dentatisque subtùs pubescentibus, floribus solitariis axillaribus, calycibus 5-dentatis, petalis spathulatis columnæ longitudine, columnâ viginti-dentatâ intùs hirsutâ laeniis subulatis, antheris 10 exsertis, ovario 5-loculari. *Lindl. in Bot. Reg.* 1843. *misc.* 86.

This very rare stove plant flowered at Chiswick House last July. His Grace the Duke of Devonshire received it from Mr. Whitfield, who collected it in Sierra Leone. The flowers have much the appearance of those of the orange, but have no smell.

The nearest affinity of this plant is evidently with the *T. heterophylla* of Smith, a species from the same country, and apparently very like it. But Mr. Bennett, in his revision of the genus in *Horsfield's Plantæ Javanicæ*, p. 184, places *T. heterophylla* in a section having from ten to twenty cells to the

ovary; this however has most certainly only five cells with two ovules in each.

Fig. 1. represents the tube of the stamens in this plant, and the club-shaped head of the style, with five stigmas projecting beyond it. The twenty awl-shaped reflexed teeth which form a kind of coronet to this tube, stand in pairs between the ten anthers, and are apparently lateral processes of the stamens, one of each pair belonging to a different stamen.

There is something very singular in the *placentæ*, which are *densely covered with entangled twisted jointed hairs*, the nature and use of which require further examination.



Drake del

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C. Rowley sc

CATTLEYA pumila.

Bordered Dwarf Cattleya.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § EPIDENDREÆ.

CATTLEYA. Lindl.

C. pumila, *Hooker in Bot. Mag. t. 3656.*

This pretty little species is stated in the Botanical Magazine to be a native of the Essequibo; but we cannot confirm that statement, which has probably originated in some mistake. It is most assuredly Brazilian, being the No. 657 of Mr. Gardner's herbarium, and having been imported by a French dealer, from that country, under the name of *C. marginata*, a very good name, expressing the appearance of a beautiful pale border to the blood-red blotch of the lip.

Our drawing was made in Mr. Loddiges' Nursery.

It should be potted in turfy heath-mould, mixed with a few pieces of potsherds, to keep it as porous as possible. The pot should also be well drained, and the soil considerably elevated above its brim. In cultivation the genus *Cattleya* differs from many Orchidaceous plants; the species require very little water; even in spring, when the plants are growing, water once or twice a week will be sufficient, and if syringed it must be so slightly that no water may lodge in the axils of the leaves; but where steam can be admitted once a day, it will be found much better. During summer the house should be slightly shaded in sunny weather, and the temperature allowed to rise to 80° or 85° by day, but never above 70° at night. In winter, when little or no water will be required, except to keep the pseudo-bulbs from shriveling, the temperature may be as low as 65° by day and 58° by night.

There is in cultivation a plant called *C. Pinellii*, of which a specimen has been received from Messrs. Rollissons, and of

which the top of the column is figured at fig. 1. of the accompanying plate, which is nearly allied to this, but appears distinct. It has white sepals, and rose-coloured straight not curved petals. It requires further examination before its true value can be determined; it is, however, very pretty.

Considering the number of species, or supposed species, of this glorious genus, now in our gardens, and the length of time that has elapsed since any arrangement of them has taken place, it seems desirable that they should be brought into one view; especially as nearly all of them exist in our gardens. And I am the more induced to rearrange the genus, because I find some of the remarks made at t. 22 of the *Sertum* erroneous,—especially the statement that *C. maxima* is a *Lælia*, a mistake the origin of which I cannot trace. The division there suggested among the species is too artificial; that now proposed will be found more natural.

There is no character by which *Cattleya* and *Lælia* can be distinguished except the number of pollen-masses, which are four in the former, and eight in the latter. The flowers of *Lælia* are usually indeed in a raceme elevated on a long graceful stalk; but such is not the case in *Lælia Perrinii*, originally described by me as a *Cattleya*, and subsequently regarded by Sir W. Hooker (*Bot. Mag.* t. 3711) as a variety of *C. intermedia*; nor in *L. virens*.

CATTLEYA.

Section I. Lip rolled round the column.

* Sepals of the texture of petals, the lateral quite straight.

1. *C. superba* (Lindl. *Sert. Orch.* t. 22. *C. Schomburgkii*, Lodd. cat. no. 434.); caulibus clavatis sulcatis, foliis oblongis marginatis caule brevioribus, sepalis oblongis acutiusculis, petalis lanceolatis acutis membranaceis ferè duplò latioribus, labelli trilobi lobis lateralibus acutis intermedio transverso plano emarginato denticulato basi venis elevatis rugoso, callis duobus pone basin.—*Demerara*.—Flowers deep rose-coloured, sweet scented, with a deep crimson lip.
2. *C. Skinneri* (Bateman *Orch. Mex. Guat.* t. 13.); caulibus clavatis foliis binis ovalibus obtusis, spathâ abbre-

viatâ, sepalis angustis oblongo-lanceolatis rectis, petalis oblongis 3-plò latioribus, labello integerrimo convoluto emarginato plano, "columnâ nanâ 3-plò longiore."—*Guatemala*.—Flowers deep rich rose colour, with a crimson lip, resembling those of *C. Skinneri*. This species inhabits the hot damp coast, on very high trees, and is most difficult to get at, except after a storm that may have chanced to throw down some of the large forest trees. It should be well watered daily, to represent the heavy dews and the rains, which latter are from May to November. Mr. Skinner recommends care to be taken that it may not imbibe too much moisture, as its habitat is on branches of large trees seldom having any lichen, where the heavy rains do not lie. It does not seek too much shade, but rather, like 'Epid. aurantiacum,' exposed places. Climate 80° to 85°, and sometimes 95°, during the day. Flowers in January and February; vulgarly called 'Flor de San Sebastian,' from its being in season, and adorning the altars on that saint's day (20th of January).

3. *C. Walkeriana* (Gardner in London Journ. Bot. 2. 662); foliis oblongo-ellipticis coriaceis marginatis caule cylindrico longioribus, sepalis oblongo-lanceolatis acutiusculis calloso-apiculatis, petalis ovato-lanceolatis acutis duplò latioribus, labelli trilobi cucullati lobis lateralibus apice valdè et obliquè truncatis basi rotundatis, intermedio lato rotundo emarginato edenticulato plano basi venis elevatis rugosis.—*Brazil*; on the stem of a tree overhanging a small stream which falls into the Rio S. Francisco, beyond the Diamond district.—Flowers about 4 inches in diameter. Near *C. superba*; distinguished by its shorter pseudobulbs, smaller leaves, larger and rounder middle lobe of the labellum, but particularly by the obliquely truncated lateral lobes which envelope only the lower half of the broadly winged column, and not the whole of it.—*Gardner*.
4. *C. maxima* (Lindl. Gen. et Sp. orch. no. 4.); caulibus obovato-clavatis angulatis, foliis 1-2 ovato-oblongis, spathâ pedunculo multò breviorè, sepalis lineari-oblongis obtusis, petalis subrotundo-ovalibus undulatis membranaceis, labelli maximi crispì oblongi obsoletè trilobi lobo medio

undulato altè emarginato, disco lævi.—*Guayaquil* and *Colombia*.—Fine specimens, and live plants brought home by Mr. Hartweg shew this to be a rival of *C. labiata*. Its flowers are as large, and are described as being of a beautiful dark pink.

5. *C. labiata* (Lindl. coll. t. 33.); caulibus clavato-fusiformibus sulcatis, foliis solitariis oblongis, spatha pedunculi longitudine, sepalis lineari-lanceolatis acutis, petalis membranaceis oblongo-lanceolatis undulatis multò latioribus, labello obovato crispo-undulato emarginato disco lævi. *Varietates sunt.* a. petalis oblongo-lanceolatis undulatis, labelli disco sanguineo. (*C. labiata*, Lindl. l. c. Gen. et Sp. orch. 116. Hooker exot. fl. t. 157. Lodd. Bot. Cab. t. 1856. Bot. Mag. t. 3998.) β. petalis latioribus subcrispis, labelli disco luteo sanguineo punctato aut picto. (*C. Mossiæ*, Hooker in Bot. Mag. t. 3669. Bot. Reg. 1840, t. 58.)—*a* *Brazil*. β *La Guayra*.—One of the most noble species of this fine genus. The varieties of what has been called *C. Mossiæ* are numerous, and seem to prove that no reliance can be placed on the supposed distinctions between it and *C. labiata*. It must however be confessed that the question is open to further consideration.
6. *C. crispa* (Lindl. Bot. Reg. t. 1172. orch. no. 1. Hooker in Bot. Mag. t. 3910.) caulibus crassis oblongis clavatis, foliis solitariis, spathâ magnâ herbacæâ, sepalis lineari-obovato-lanceolatis acutis, petalis latioribus oblongo-lanceolatis undulatis crispis, labelli indivisi limbo ovato acuminato quam maximè undulato-crispato.—*Brazil*.—Flowers very large, pure white, with a large crimson blotch in the middle of the lip.
7. *C. citrina* (Lindl. Gen. et Sp. orch. no. 8. Bot. Mag. t. 3742. "*Corticoatzontecoxochitl*. Hernand. Mex. 1. p. 240." *Sobralia citrina*. Llave Nov. Veg. Descr. 2. 21.); caulibus ovatis squamis laxis albis membranaceis vestitis, foliis lanceolatis glaucis, pedunculis longissimis solitariis, floribus carnosis pendulis, sepalis oblongo-ellipticis, petalis conformibus paulò latioribus, labelli trilobi lobo intermedio ovato undulato emarginato lineâ mediâ latâ elevatâ.—*Mexic*.—A mountain plant remark-

able for its rich clear yellow flowers, which are very sweet scented.

- 8 *C. pumila* (Hooker in Bot. Mag. t. 3656. Lindl. Bot. Reg. 1844. t. 5. *C. marginata*, Hort.); caulibus brevibus ovalibus sulcatis, foliis solitariis ovato-oblongis acutis, pedunculo unifloro, sepalis lineari-lanceolatis rectis, petalis ovalibus 3-plò latioribus, labello obovato indiviso apice plicato, lineis 3 elevatis in medio.—*Brazil*, (Gardner, 657).—This is said to be from the Esse-
quibo, but that appears to be a mistake. It is a very distinct species, with peculiarly thick acute solitary leaves, and deep rose-coloured flowers. The lip is bordered with a pale colour, which is sometimes almost white.
- 9 *C. Pinellii* (Hort.); facie *C. pumilæ* sed sepalis acutis albidis, petalis ovatis roseis, labello magis crispo, columnâ apice dentibus 2 crenatis auctâ.—*Brazil*.—Very near *C. pumila*, but the sepals are white, the petals almost exactly ovate, the lip more crisp and of a brighter colour. Requires further examination.

** Sepals somewhat herbaceous, or more coriaceous than the petals, the latter manifestly falcate.

- 10 *C. Loddigesii* (Lindl. Coll. Bot. t. 37. Gen. and Sp. no. 5. Hooker Bot. Misc. t. 186. *Epidendrum violaceum*, Lodd. Bot. Cab. t. 337. *Cattleya ovata*, Lindl. in Bot. Reg. t. 1919.)—*Var. floribus pallidioribus*; (*C. intermedia*, Graham in Bot. Mag. t. 2851. L. no. 6.)—*Var. floribus subalbis*; (*C. intermedia pallida*, Lindl. in Bot. Reg. t. 1919. *C. vestalis* Hoffsg. verzeich?); caulibus elongatis teretibus, foliis 2 ovato-oblongis, spathâ brevi membranaceâ, sepalis oblongis lateralibus falcatis, petalis subconformibus, labelli lobis lateralibus rotundatis intermedio dilatato crispo 2½ longioribus, lineis pluribus elevatis lamellatis pone basin versus apicem evanescentibus.—*Brazil* and *Buenos Ayres*.—Flowers sometimes clear lilac with a whitish lip, sometimes nearly white with a crimson lip, with many intermediate gradations. It always appeared doubtful whether *C. intermedia* could be distinguished, and more experience in estimating the value of characters among these plants leads to the conclusion that *C. ovata* must also be reduced to the same species. It seems to be very common in Brazil, and to occur as

far south as Buenos Ayres. Mr. Gardner found it on trees in *marshes* at the foot of the Organ mountains, (no. 5635 of his herbarium). The size of the leaves is much affected by situation; in all cases, however, they seem to be broader at the base than at the point. So far as the character of Count Hoffmannsegg's *C. vestalis* can be judged of, that plant is the pale *C. intermedia*.

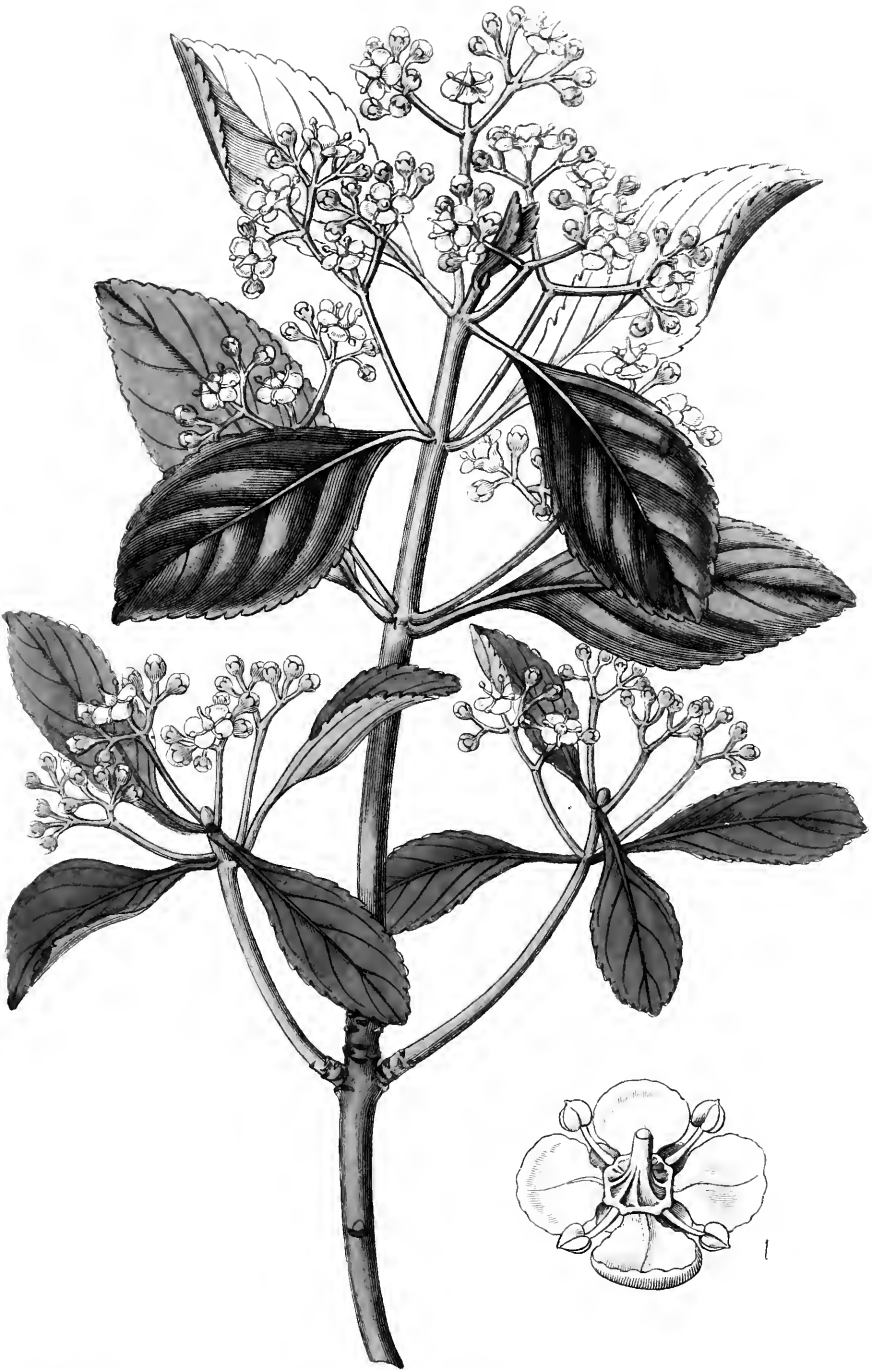
11. *C. Harrisoniana* (Bateman in Bot. Reg. sub t. 1919.); "foliis angustè lanceolatis," sepalis oblongis apiculatis, petalis ovalibus, labelli trilobi lobis lateralibus rotundatis intermedio angusto crispo $1\frac{1}{2}$ longioribus: lineis pluribus elevatis per totam axin lamellis nullis.—*Brazil*.—I only know this plant from two flowers given me by Mr. Bateman. They have much shorter and broader sepals than *C. Loddigesii*, the petals are much broader, and the proportion between the middle lobe of the lip and its lateral lobes is quite different. Besides which, certain elevated lines run all the way from the base to near the apex of the lip. The flowers are lilac; the tip with a deep blotch within the margin.
12. *C. Forbesii* (Lindl. Coll. Bot. sub t. 37. Bot. Reg. t. 953. Lindl. no. 7. Bot. Cab. t. 1152.); caulibus elongatis teretibus, foliis 2 oblongis, sepalis petalisque lineari-oblongis obtusis subæqualibus, labelli trilobi lobo medio cordato subrotundo-ovato argutè dentato undulato apiculato: lateralibus minoribus rotundatis planis, lineis 4 elevatis pone basin lamellæque membranaceâ utrinque, columna basi lineis 5 elevatis quarum duæ majores cristata, clinandrii cardine tuberculo corrugato acuto.—*Brazil*.—Flowers greenish yellow. Lip with bright orange brown veins. Very near *C. Loddigesii*.
13. *C. maritima* (Lindl. in Bot. Reg. sub t. 1919.); pedunculo unifloro, caule subelavato, foliis binis ovalibus obtusis spatha parum longioribus, sepalis oblongis acutis, petalis lanceolatis falcatis obtusis, labello trilobo (nudo?); laciniis lateralibus erectis rotundatis intermediâ dilatatâ denticulatâ emarginatâ.—Sea-beaten rocks, *Buenos Ayres*.—Flowers fine, rose-coloured, usually in threes; many varieties. Its small leaves, dwarf habit, and one-flowered peduncle, mark this, of which I have only seen one specimen with a single flower. Possibly it is one of the many varieties of *C. Loddigesii*.

14. *C. Arembergii* (Scheidweiler in Gartenzeit. 1843. p. 109.); “sepalis lateralibus falcatis obtusiusculis, supremo lanceolato, petalis latioribus undulatis, labelli trilobi lobis undulato-crispis, intermedio margine lilacino lamina lutea, lateralibus margine lutescentibus, spatha herbacea compressa obtusa, pseudobulbis cylindraccis nitidis, foliis ovatis carnosis, obscure viridibus.”—*Brazil*.—This species is only known from the above description. It is said to bear much resemblance to some others, but to be distinguished by its beautiful dull green ovate leaves, and its great lilac flowers. The stem is said to be eight inches high, the leaves four inches long and two inches broad; the flowers sweet-scented. It may be *C. Harrisoniana*, or *maritima*; but it seems to be distinct.
15. *C. guttata* (Lindl. Bot. Reg. t. 1406. Orch. no. 10. Hort. Trans. 2 ser. 2. t. 8. *C. elatior*, Lindl. Orch. no. 9.); caulibus elongatis teretibus, foliis 2 oblongis concavis basi paulò angustatis, spathâ brevi, floribus carnosis, sepalis linearibus-oblongis acuminatis, petalis conformibus paulò latioribus undulatis, labelli trilobi lobis lateralibus ovatis: intermedio cuneato bilobo disco tuberculato.—*Brazil*.—Flowers greenish yellow, beautifully spotted with crimson; lip white with a lilac tip. Raceme sometimes as large as a man's head.
16. *C. granulosa* (Lindl. in Bot. Reg. 1842, t. 1. *C. guttata* β *Russelliana*, Hooker in Bot. Mag. t. 3693?); caulibus teretibus gracilibus diphyllis, foliis oblongo-lanceolatis obtusis, sepalis oblongis obtusis, petalis obovato-spathulatis undulatis obtusissimis, labello cucullato tripartito: laciniis lateralibus semiovatis intermediâ sinu lato divulsâ ungue æquilateri lævi laminâ dilatâ rotundatâ plicatâ granulôsâ denticulatâ.—*Guatemala*.—This has a slender stem, terminated by two narrow leaves, something like those of *C. bicolor*, but shorter. Sepals two inches and a half long, oblong, olive green, mottled with rich brown spots. Petals obovate, very much rounded at the point, and narrowed to the base; wavy at the margin, and of the same colour as the sepals. Strongly contrasted with the dingy colours of those parts is the lip, of a pure white at the sides and point, and of a glowing orange spotted with crimson in the middle; its

lateral lobes curve over the column, but are divided very deeply from the middle lobe by a wide slit; the middle lobe itself has its surface broken up into numerous granulations, something in the way of *C. guttata*. It is scarcely possible to doubt that the plant figured in the Botanical Magazine as a variety of *C. guttata*, is this species. The Brazilian origin attributed to it is no doubt erroneous, like that of many plants from the Woburn collection.

Section 2. Lip without the lateral lobes, and flat below the column.

17. *C. Aclandiae* (Lindl. in Bot. Reg. 1840, t. 48.); caulibus cylindraceis striatis decumbentibus, foliis 2 oblongis, floribus subsolitariis, sepalis petalisque herbaceis lanceolatis æqualibus incurvis maculatis, labelli plani calvi hypochilio dilatato patulo subrepando epichilio orbiculariformi emarginato.—*Brazil*.—Flowers dull olive green, nearly the colour of *C. granulosa*. Lip dull violet. The smallest species yet known.
 18. *C. bicolor* (Lindl. in Bot. Reg. sub t. 1919.); foliis ovato-oblongis angustis caule tereti elato triplò brevioribus, sepalis lanceolatis falcatis acutis, petalis parum latioribus subundulatis obtusis, labello indiviso plano apice dilatato rotundato crenato convexo.—*Brazil*.—Stems two to three feet long. Sepals and petals tawny; labellum bright purple, with a lanceolate streak in the centre, white slightly spotted with purple. The flowers are slightly fragrant. This was introduced by Mr. Pontey of Plymouth, and flowered in his nursery in 1838.
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19. *C. Domingensis* (Lindl. Orch. no. 11.); caule brevi oblongo annulato squamoso, folio ovali-oblongo coriaceo, scapo terminali longissimo stricto apice racemoso 7-8 floro, sepalis lineari-lanceolatis acutis petalis oblongis obtusiusculis triplò angustioribus, labello indiviso obovato obtuso plicato-crispo emarginato cucullato.—*St. Domingo*.—In the absence of sufficient evidence as to this species, which is no. 231 of Jaeger's collections, it may be conjectured to be a *Lælia* rather than a *Cattleya*. It is found on logwood trees in the wood near Miragoane, in St. Domingo, where it flowers in April.



EUONYMUS japonicus.

Japan Euonymus.

TETR.-PENT.-HEXANDRIA MONOGYNIA.

Nat. ord. CELASTRACEÆ.

EUONYMUS. L.

-
- E. japonicus* ; sempervirens, foliis coriaceis oblongis basi in petiolum angustatis obtusè serratis : serraturis mucronulatis, cymis paucifloris folio duplò brevioribus, floribus quadrifidis, petalis orbiculatis indivisis.
- E. japonicus*, *Thunb. fl. jap.* p. 100. *Banks ic. Kæmpf. t.* 8. *DC. prodr.* 2. 4.
-

In all respects this corresponds with the account given by Thunberg, of the *Iso Curoggi*, or *black shore-tree*, of the Japanese, even to the sporting into a silver blotched variety, also in our gardens. He says it is in Japan a bush about as high as a man. With us it is not as yet higher than three or four feet, but it has all the appearance of becoming much larger.

Although no beauty is to be found in its flowers, this plant is of the same kind of value as the common Laurel, Phyllireas, and Alaternus, being a *hardy Evergreen shrub*, with much the appearance of a small leaved Orange. It is true that in very severe winters it is liable to be killed to the ground, but so are the Bay, the Ilex, and others; it however springs up again and rapidly forms a new bush. When older it will probably become more hardy.

It is easily increased from cuttings of the half ripened wood, placed under a hand-glass or in a close frame, and shaded in summer.

It flowers in July and August, but has not as yet produced fruit. There are two varieties, one with silver striped, the other with gold striped leaves; but the latter is very subject

to run back to the green-leaved, while the silver striped hardly ever changes.

It is called in many places, "Chinese Box," the name it bore when first introduced from Belgium.



Fraxinus vel Pub. by J. Ridgway 169 Decid. Ed. 1 1844

STIGMAPHYLLON *jatrophaefolium*.*Jatropha-leaved Stigmaphyllon.*

DECANDRIA TRIGYNIA.

Nat. ord. MALPIGHIACEÆ.

STIGMAPHYLLON. *Aug. de St. Hil. Supra, vol. 20. t. 1659.*

S. jatrophaefolium; foliis palmato-5-7-fidis-partitisve acutis serrato-ciliatis cordatis lobis basi divergentibus glabris petiolatis, petiolo apice biglanduloso, samaris . . . *Adr. de Juss. Fl. Bras. merid. 3. 51. t. 170.*

According to M. Auguste de St. Hilaire this little plant is an inhabitant of rocky places near the fort of Salto on the banks of the Uruguay, in the province of Rio Grande do Sul, where it creeps over the surface of the soil. Our own herbarium contains Brazilian specimens of the plant communicated by the Royal Herbarium of Berlin from Sellow's collections.

The figure now given was taken from a fresh branch sent last July anonymously from Liverpool to the Editor of the Gardener's Chronicle. We, therefore, conclude that it will soon make its appearance in the collections round London. No doubt it will be a very pretty twiner, well suited for cultivation in pots attached to trellis. Its leaves are a clear light green, and beautifully cut; it appears, however, from the figure above quoted, that they are sometimes heart-shaped and undivided.

The whole genus is worth cultivation, and some of the species extremely handsome. They amount to 45, according to M. Adrien de Jussieu, and are found in most of the warmer parts of South America, especially Brazil. Some of them are *Banisterias* of authors.

Of the cultivation of this plant we can of course know nothing certain. It is however probable that it will prove suited to a greenhouse; but as it is found trailing among stones it will no doubt require full exposure to all the sun

light that can be obtained in this climate. Probably the treatment given to Melons will suit it during summer.

We should add, however, that the correspondent who sent it states that it is a free flowerer growing luxuriantly in a moist stove.

If treated as a stove plant it requires to be potted in a compost consisting of two parts sandy loam and one of peat, in a rough state, but well mixed together. During the summer months an ample supply of water should be given, and the atmosphere kept as moist as possible. In sunny weather the house should be slightly shaded, otherwise the young leaves will become scorched by the sun. The temperature in summer may rise as high as 80° or 85° by day, and fall as low as 68° at night, but in winter never above 58° with fire heat. It may be propagated by cuttings in the usual way.



Wm. Drake del

Publ. by J. Linderman 169 Pineapple Fr. 11 1844

J. R. Curran sc

ANIA bicornis.

Two-horned Ania.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § EPIDENDREÆ.

ANIA. Lindl. *gen. & sp. Orch.* p. 129.

A. bicornis (Lindl. in Bot. Reg. 1842. misc. 31.); folio oblongo-lanceolato carnosio scapo breviorē, labelli lobo medio emarginato apiculato cœlcarato basi bilamellato lamellâ alterâ versus apicem interjectâ, antherâ bicorni.

Labellum cum basi producta columnæ articulatum. Anthera 2-ocularis.

To the Rev. J. Clowes, of Broughton Hall, we are indebted for a specimen of this terrestrial Orchidacea, which he received from Ceylon, and flowered in March 1842.

It belongs to a little group of the Epidendrous section, of which *Bletia* is the type, and is nearly allied to *A. latifolia*, a Sylhet plant, at present known only from dried specimens; from that it differs in having much smaller flowers and leaves, an entirely different labellum, and a 2-celled anther; that of *A. latifolia* being 8-celled. In the latter circumstance, indeed, it corresponds with the neighbouring genus *Cytheris*, whose distinctive character is therefore not to be taken from the cells of the anthers, but from its resupinate flowers, and truly calcarate labellum. In *Ania* the labellum, if it appears to have a spur, as in *A. angustifolia*, owes that appearance to the extension of the foot of the column.

Fig. 1 is a view of the lip of this plant; 2 shews the column, with its lengthened foot and two-horned anther; 3 gives the appearance of the pollen-masses.

At first sight this plant, when in flower, resembles a starved specimen of *Eulophia macrostachya*.



CRINUM variabile, var. roscum.

Rose-coloured changeable Crinum.

HEXANDRIA MONOGYNIA.

Nat. ord. AMARYLLIDACEÆ.

CRINUM. Herbert. Amaryll. p. 242.

C. variabile; foliis lætè viridibus erecto-arcuatis crassis, floribus subsessilibus ortu albis rubro pallidè extùs notatis dein saturatè rubris campanulato-infundibularibus apice revolutis.

C. variabile, Herbert, l. c. 268.

Amaryllis variabilis, Jacq. h. Schænb. 4. 426.

Amaryllis revoluta β. Supra, vol. 8. fol. 615.

This beautiful bulb flowered in April last with J. H. Slater, Esq. of Newick Park, near Uckfield. Its leaves are very long, and its gay rosy flowers most agreeably scented.

Upon shewing the drawing to the Dean of Manchester, the learned investigator of this difficult genus, he suggested the probability of its being either a variety of *Crinum variabile*, or a mule from *C. capense*, of which the Gardens now contain so many. A reference to the published figures of the former induces us to regard it as one of its varieties, with which it agrees in its bright green very long leaves, and comparatively short scape.

We borrow from Mr. Herbert's work the following memorandum concerning *C. variabile*. "This is the hardiest known species; out of doors it preserves its leaves in winter longer than *Capense*, and it shoots earlier in the spring. Both this plant and *revolutum* have a slender germen, but the idea conceived from Jacquin's plate by some persons, of its cells being monospermous was erroneous. Its leaves are deep green. The flowers turn to a rich purplish red, so that

flowers of two colours are always on the same umbel, as represented by Jacquin. The figures in the Register were taken at too early a period for a just representation, before the expansion of the flowers. Mr. Ker considers *Am. revoluta* (Bot. Mag. 1178) to be this plant. The plant offered at Mr. Woodford's sale, which Mr. Wykes, his gardener, asserted to be the one from which the figure was made, was not distinguishable from a common glaucous-leaved *C. capense*; and I observe in Mr. Ker's description, he says of the leaves rather glaucous, which is not the case with any bulb I ever saw of *variabile*, which has the green very bright; and if the plant had been *variabile*, the two decaying flowers in the figure would have been intensely red. The figure, therefore, if intended for *C. variabile* is quite incorrect, but it agrees better with some plants that I have of *C. capense*. Mr. Ker draws a peremptory distinction, that in *variabile* the tube is shorter than the limb, and in *capense* longer; but in his own fig. of *Capense* (*Am. longifolia*, Bot. Mag. 18. 661.) it is shorter. Usually, however, the tube is shorter than the limb in *Capense*, but it is a very variable plant, and in some seedling varieties its flowers change to red, as in *variabile*, which I consider to be much more akin to it than to *revolutum*. It is, therefore, best to discard all consideration of that plate, and of Mr. Ker's description accompanying it, as far as it disagrees with his amended description in the Bot. Reg. 8. 615."



Drake del.

Pub. by J. Kinsbury & Co. Circularly Feb. 1. 1844

J. Barlow sc.

SPIRÆA Reevesiana.

Mr. Reeves's Spiræa.

ICOSANDRIA POLYGYNIA.

Nat. ord. ROSACEÆ.

SPIRÆA. L.

S. Reevesiana; foliis lanceolatis serratis trilobis pinnatifidisve utrinque glabris subtus glaucescentibus, racemis capitatis terminalibus pedunculatis, sepalis intus villosis.

S. Reevesiana, Hort.

S. corymbosa, Roxb. *fl. ind.* 2. 512.

Frutex fere sempervirens, nitidus, *S. chamædrifoliæ aspectu*, foliis in ramis vegetioribus fere pinnatifidis in planta juniore sæpe trilobis, senectute indivisis serratis.

This plant, which was introduced from China by Mr. Reeves, whose name it bears, is generally supposed to be the *S. lanceolata* of Poiret: but that species is described with axillary sessile umbels, and must therefore be different. It is certainly Roxburgh's *S. corymbosa*, a name however which, being pre-occupied by Rafinesque, cannot well be retained. Probably, it is also the no. 701 of Dr. Wallich's Indian Herbarium, and if so, may be a native of the mountains of India, as Dr. Roxburgh states.

The leaves on its strong young shoots are so deeply lobed as to be almost pinnatifid. On the branches, when the plant is young, they are frequently 3-lobed; but as it becomes old they lose their lobed character altogether.

It is a handsome hardy sub-evergreen shrub, growing in any good garden soil, from three to four feet high. It is easily increased from cuttings of the small half-ripened twigs any time during the summer or autumn. The cuttings should

be put in sand, and covered with a bell-glass, and placed in an exhausted dung frame.

It forms a spreading bush, and flowers freely in May and June. It probably would be quite evergreen in the warmer parts of England.

Fig. 1. represents a calyx split open to shew the hairy surface of its lobes, the ovaries, undulated disk, and stamens.





Plant of the same species as in the preceding figure

Fig. 100

GENISTA *virgata*.*Twiggy Broom.*

MONADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ. § PAPILIONACEÆ.

GENISTA. Lam.

G. virgata; ramis virgatis teretibus striatis, foliis oblongo-lanceolatis subsericeis, floribus secus ramulos solitarios subracemosis, petalis sericeis longitudine subæqualibus, leguminibus villosis 1-3-spermis compresso-planis ad semina subtorosis. *DeCand. Prodr.* 2. 149.

Spartium virgatum, *Ait. Hort. Kew.* 3. 11.

Cytisus tener, *Jacq. ic. rar. t.* 147.

Genista gracilis, *Poir. suppl.* 2. 715.

The plant from which this figure was taken we received from Mr. Young, Nurseryman, Milford, in July 1843. He states that it is a very handsome compact shrub, which resisted the hard winter of 1836-7. It was raised from the seeds sent by Mr. Webb from Madeira in 1825, was turned out in 1833 into the open border, and is now a very woody shrub. It is deserving a place in all shrubberies.

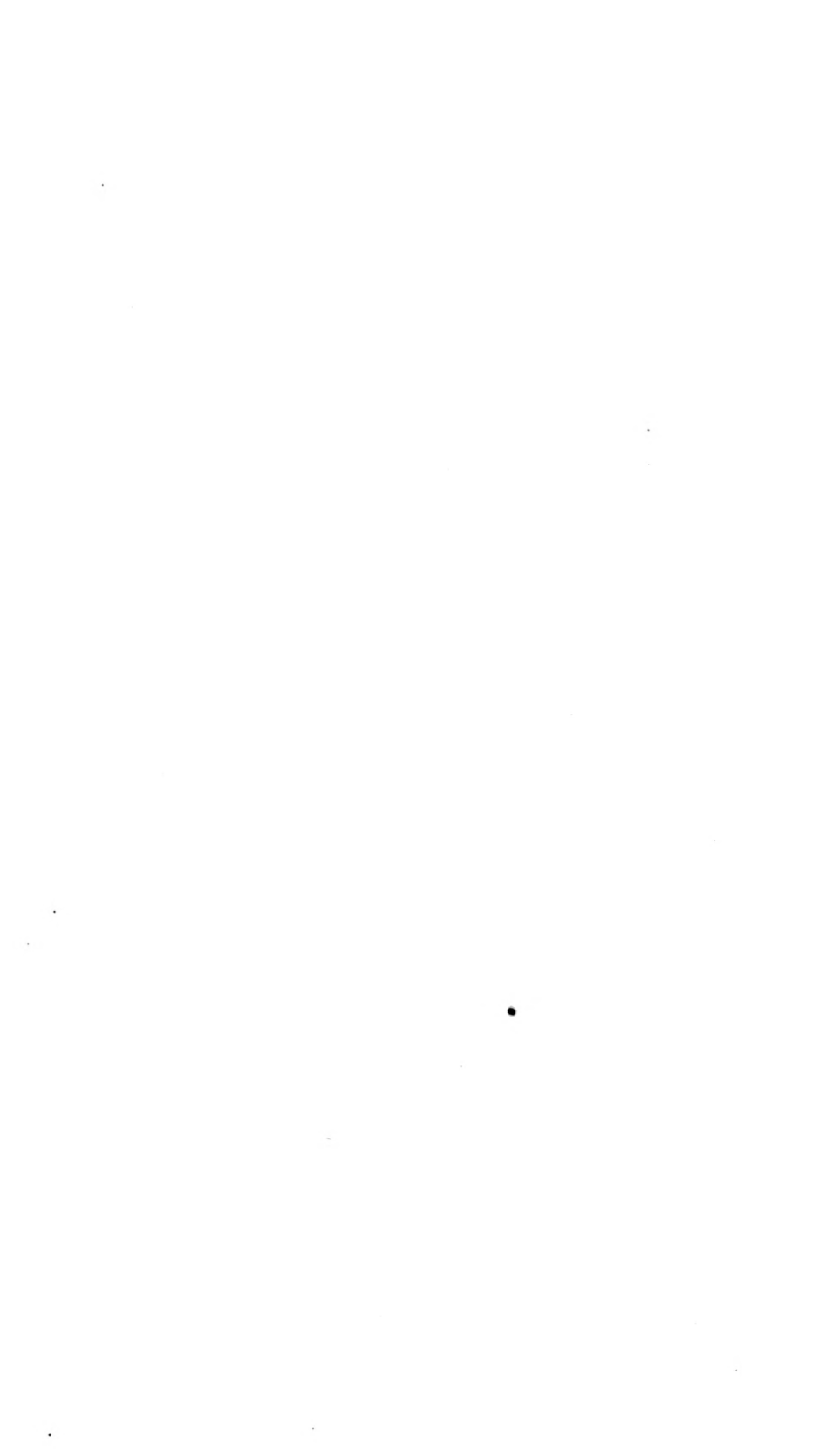
In the garden of the Horticultural Society it grows about four feet high, and is capable of enduring the ordinary winters round London, if placed in a dry situation, and planted in a loamy soil. It is increased by seeds or by cuttings of the young wood after midsummer. The cuttings should be placed in a shady situation, in light sandy soil, and covered with a hand-glass. It flowers freely in May and June, and forms a loose rather spreading bush, rather thin of foliage.

In the nurseries it is generally known by the name of *Spartium virgatum*.

In such wild and cultivated specimens, as we have had the opportunity of examining, the leaves were uniformly sim-

ple ; in the specimen represented, however, the lowest on each twig, those in fact from whose axil the twigs proceeded, were trifoliolate. This is interesting, as shewing an occasional passage to the 3-leaved species, even among those whose foliage is most decidedly simple.

Fig. 1. shews the calyx and stamens ; 2. is a section of the ovary.





S. Bulgarica (L.) Franchet

Franchet

LISSOCHILUS roseus.

Rose-coloured Lissochilus.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ.

LISSOCHILUS. *Supra*, vol. 12. vol. 1002.

L. roseus (Lindl. in Bot. Reg. 1843. misc. 37. *Dendrobium roseum*, Swartz. in Persoon synops. p. 523.) ; foliis lato-lanceolatis erectis plicatis, scapo squamis lanceolatis acutis membranaceis distantibus vaginato, racemo denso oblongo, bracteis ovatis acuminatis ovario brevioribus, sepalis spathulatis acutis concavis reflexis, petalis oblongis apiculatis, labelli trilobi lobis rotundatis intermedio emarginato cum mucrone, disco lamellis tribus undulatis serrulatis tuberculo parvo utrinque.

Although the terrestrial Orchidaceæ of hot countries are too often very inferior to the epiphytes, yet there are many exceptions to that rule, among which few are more striking than the present, which will not suffer by comparison with the Vandas, Saccolabiums, and Dendrobiums of India.

It is a native of Sierra Leone, whence it was received by Mr. Rucker, in whose magnificent collection of Orchidaceæ it flowered in February 1843. The leaves are broad, stiff, and plaited like a reed ; the flower-stem is between 3 and 4 feet high. The petals are of the brightest rose colour, set off with velvety-brown sepals, and a yellowish stain on the lip.

There is another plant in the same part of Africa, which would perhaps excel even this in beauty, and it is much to be regretted that no one should have yet been able to send it home. Its petals, even dried, are an inch and a half long. Sir William Hooker has a specimen in his herbarium, collected near Boney, which we named some years ago *Lissochilus macranthus*.

Fig. 1. shews the inside and form of the lip ; 2. the column ; and 3. the pollen-masses.

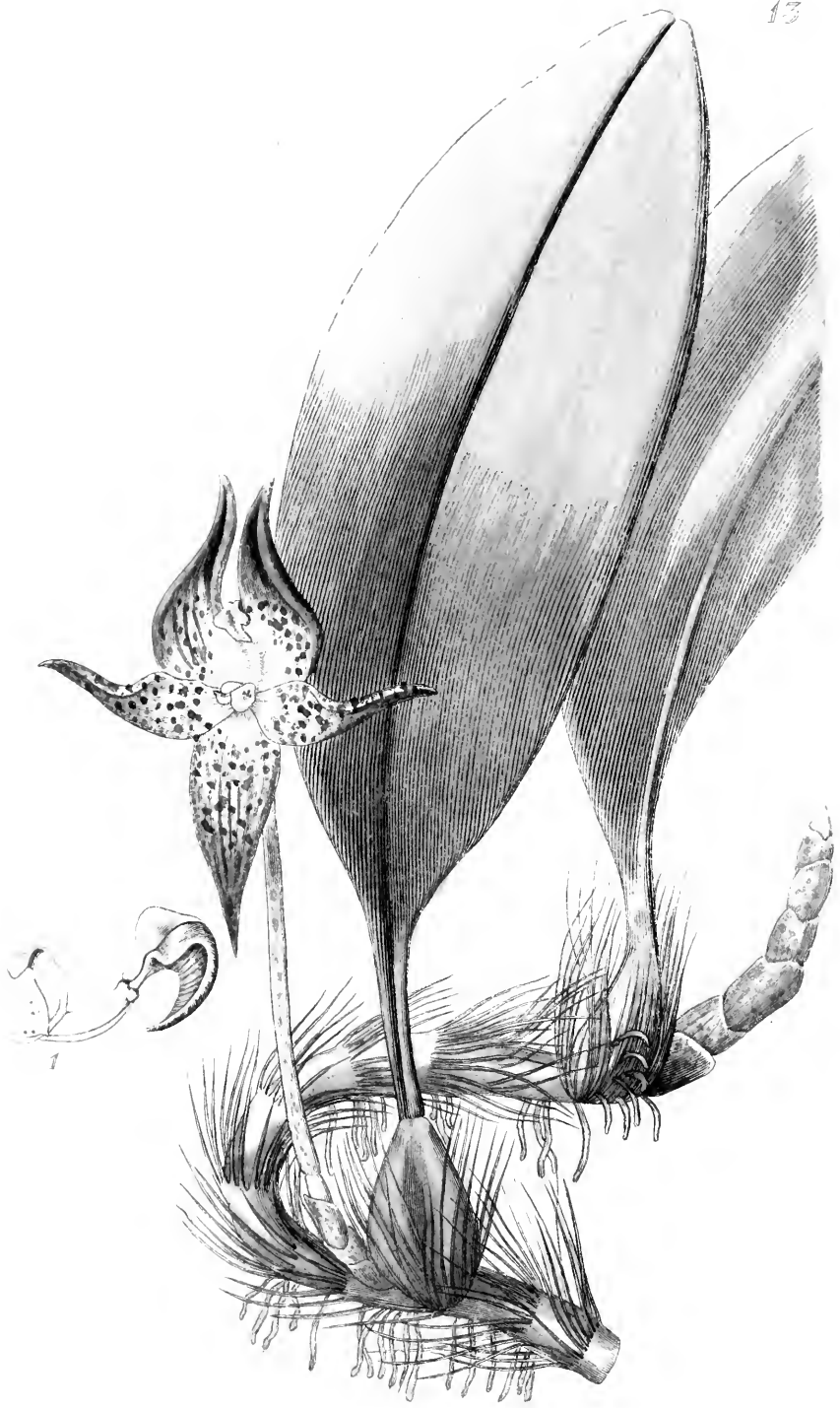
While we are writing on this subject, we would also mention another most noble plant, specimens of which might certainly be procured by any of our African merchants. When Mr. Ansell was ill from the effects of the Niger expedition, at Fernando Po, he found in Clarence Cove, growing on the stems of the Oil Palm (*Elais guineensis*), an epiphyte with a slender jointed stem about two feet long, having at the upper end many stiff, plaited, lanceolate, 5-ribbed leaves, and a terminal panicle of flowers as large as those of *Vanda Roxburghii*, with dark purple spots on a pale ground. Of that plant we possess a dried specimen, with one of the lower branches of the panicle in good preservation, and as it proves to be a new genus we take this opportunity of naming it after its discoverer

ANSELLIA.

Sepala oblonga, carnosâ, æqui-patentiâ, libera. *Petala* conformia, recta, patula, duplò latiora. *Labellum* sessile, patulum, trilobum, bilamellatum, lobo medio minore verrucoso. *Columna* elongata, marginata, basi utrinque auriculata. *Anthera* bilocularis. *Pollinia* 4, sessilia, basi contigua, duobus dorsalibus multo minoribus; glandula angusta utrinque acuminata.—*Caulis elongatus, teres, apice tantum foliosus. Folia plicata, coriacea. Panicula terminalis.*

Sp. 1. *Ansellia africana*.

It appears that this genus must be referred to that set of Vandæ of which *Cymbidium* must be taken as the type. In fact, it is very near that genus in technical characters, though extremely different in its manner of growth. The auricles at the base of the column, the four pollen-masses, and the very narrow gland fining away to each side will serve to distinguish it.



alt. *S. Hudsonii*, in *Grossh. Bot. Mexic. 1. Tab.*

S. Hudsonii, DC.

BOLBOPHYLLUM macranthum.

Large-flowered Bolbophyllum.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § MALAXEÆ.

BOLBOPHYLLUM. *Supra*, vol. 23. t. 1942.

B. macranthum; foliis petiolatis oblongis planis coriaceis, floribus solitariis, pedunculo petiolo longiore, flore plano resupinato, sepalo dorsali plano ovato acuminato lateralibus petalisque subconformibus hinc tortis, labello minimo unguiculato subtrilobo acuminato.

This singular plant was imported by Messrs. Loddiges from Singapore, and is closely allied to both *B. leopardinum* and affine. From each it differs in its much more fleshy and larger flowers, whose stalk is considerably longer than the petiole.

The flowers appear in March, and expand so flat that they seem as if they had been pressed between paper. In the centre they are a pale lemon colour, but towards the tips they are much mottled with dark chocolate-coloured spots.

Like the rest of the genus it succeeds best when tied to a block of wood, and suspended to a rafter in a moist stove. If the wood is charred enough to burn off the bark the block will be found to answer the purpose much better, and all insects that harbour about it will be destroyed. In summer the plant should receive water twice a day at least, and the temperature should be kept about 80° by day, and 68° at night. In winter for a few weeks very little water will be required, only as much as to keep the pseudo-bulbs from shriveling. The temperature then should never be raised above 50° or 55° with fire heat.



Museo Nacional del

*NELUMBIUM Caspicum.

Caspian Nelumbium.

POLYADELPHIA POLYGYNIA.

Nat. ord. NELUMBIACEÆ.

NELUMBIUM, Juss. *Calyx* tetrapentaphyllus, foliolis imo toro insertis, liberis, deciduis. *Torus* carnosus, obconicus, ovaria includens. *Corollæ petala* plurima, imo toro multiseriatim inserta, oblonga, patentia. *Stamina* plurima, imo toro pluriseriatim inserta, libera; filamenta filiformia, supra antheras in appendiculam producta; antheræ introrsæ, biloculares, loculis linearibus, adnatis, longitudinaliter dehiscentibus. *Ovaria* plurima, libera, unilocularia, tori alveolis immersa. *Ovula* solitaria v. gemina, ex apice funiculi a basi loculi ad apicem adscendentis pendula. *Styli* breves, simplices; *stigmatibus* peltato. *Nuces* plurimæ, monospermæ, e tori aucti alveolis emergentes, liberæ. *Semen* inversum, exalbuminosum. *Embryo* crassus, intra pericarpium germinans.—Herbæ in aquis Asiæ calidioris et Americæ borealis vegetantes, *Nymphæarum facie*; rhizomate crasso, repente; petiolis pedunculisque emersis teretibus, tuberculato-asperis, foliorum lamina centro peltata, orbiculata, penninervia, integerrima, glabra; floribus amplis, albis, roseis v. flavis, seminibus edulibus.—Endl. gen. no. 5026.

N. caspicum; petalis obovatis obtusis magnitudine parum diversis, carpellis 9. *Nelumbium caspicum*, Fisch in DeCand. Syst. 2. 45.
Nelumbium speciosum γ, DeCand. l. c.

The accompanying drawing was made in the nursery of Messrs. Rollissons of Tooting, in August, 1843. We are happy to have an opportunity of publishing it, not only for its own sake, but because it affords an opportunity of pointing out the true distinction between the Caspian and Indian *Nelumbia*.

According to M. DeCandolle all the *Nelumbia* found in various parts of Asia are varieties of one species, and this opinion is generally adopted. It is however difficult to believe that the deep red *Nelumbium* of India, with very sharp-pointed petals, such as is figured in the Botanical Magazine, t. 3916, and elsewhere, can be the same with the blunt-petalled white-flowered plant "found at the mouth of the Volga near Astrachan, in a part of the river called Tschulpan, amongst reeds intermixed with *Nymphæas* and *Trapa*," which,

* Dr. Carey considers this name to be derived from two Sanscrit words; viz. *Neel* blue, and *Umboja* generated in water. Although we have not yet found a blue *Nelumbium* in these parts of Asia, yet it is said to be a native of both Cashmere and Persia. *Roxburgh*.

according to Messrs. Fischer and Steven, is the locality of this plant. M. DeCandolle indeed suspected that it must be different, but he did not remark in the dried specimens examined by him any character beyond the bluntness of the petals and their general uniformity in size, and upon that distinction he was unwilling to rely. The true difference seems to consist in the very small number of carpels, which do not appear to exceed nine, while in the great Indian species they are as numerous as thirty or thirty-three.

Speaking of *N. speciosum* and its supposed varieties, Dr. Roxburgh writes as follows :—

“ I have met with only two sorts on the coast of Coromandel, one with rose-coloured flowers, the other with flowers perfectly white, and since that time a third variety has been brought from China with smaller rosy flowers. They grow in such sweet water lakes, &c. as do not dry up during the driest season, and, on the coast, flower all the year round. In Bengal they flower during the hot season, April, May, and June, and ripen their seed about the close of the rains. In China there is a still more beautiful bright crimson variety, which they call Hung-lin ; I have hitherto only seen a drawing of it. The white *Nelumbium* differs in few respects from the red one, and may be considered as only a variety of it.

“ The tender shoots of the roots between the joints of both sorts are eaten by the natives, either simply boiled or in their curries. The seeds are eaten raw, roasted, or boiled. The leaves are used to eat off instead of plates. These holy and beautiful plants are often met with in the religious ceremonies of the Hindoos under their Sanscrit name *Padma*.”

It is a stove aquatic, requiring to be kept dry during winter. Before putting it into the water, which ought to be done about the beginning of February, it should be repotted in sandy loam mixed with pieces of sandstone, to act on the same principle as drainage, for the water in which it is grown requires to be renewed once or twice a week, and should never be allowed (especially in summer) to be below 80°. About the end of October, when the leaves begin to decay, the pot should be lifted out of the water and dried off gradually. As the soil becomes dry it will crack or leave the sides of the pot, which should be filled up with sand, in order to cover many roots that would otherwise be exposed.



QUISQUALIS sinensis.

Chinese Quisqualis.

DECANDRIA MONOGYNIA.

Nat. ord. COMBRETACEÆ.

QUISQUALIS. *Bot. Reg.* 6. t. 492.

Q. sinensis; foliis oblongis brevi-petiolatis ramulisque glabriusculis, bracteis deciduis.

Q. indica, *Lour. fl. cochinch.* 1. 336. ?

This plant was exhibited before the Horticultural Society in July, 1841, by Messrs. Lucombe, Pince, and Co. of Exeter; who stated that it is a more compact grower than the old *Q. indica*, and therefore more desirable for cultivation in pots. It manifestly differs in its smoother leaves and branches, and in the larger size of its flowers, which are moreover of a much deeper rose colour.

Upon comparing it with wild specimens of the genus, it appears to be identical with the plant that is found about Canton, and which is probably the *Q. indica* of Loureiro.

We presume it to be of the same nature as the true *Quisqualis indica*. That plant is a stove climber, requiring to be potted in sandy loam and peat, mixed with a few pieces of potsherds. In summer an ample supply of water should be given to its roots, and it should be syringed over head once or twice a day as the weather permits, taking care always to have the plant dry before night; and the house, when air is given, shut up early in the afternoon, to retain as much sun heat as possible. During the growing season the temperature should average 80° by day, and 68° by night; but in winter it should never rise above 60° with fire heat. The plant may be propagated by cuttings under ordinary treatment.



Androsace 100

Androsace 100

BERBĚRIS pallida.

Pale Ash-leaved Berberry.

HEXANDRIA MONOGYNIA.

Nat. ord. BERBERACEÆ.

BERBERIS. *Supra*, vol. 17. fol. 1425.

B. pallida (§ Mahonia); foliis 11-13 ovatis v. ovato-lanceolatis undulatis spinoso-dentatis basi rotundato-cuneato, inferioribus a caule parùm distantibus, racemis laxis folio longioribus, filamentis minutè bidentatis. *Bentham. Plant. Hartweg. p. 34. no. 268.*

To the pinnated, or ash-leaved, Berberries, formerly mis-called Mahonias, Mr. Hartweg has been able to add seven new Mexican species, among which is the plant now represented.

In its native country it forms an evergreen shrub from five to six feet high, and is found but sparingly near Cardonal and Zimapan, on mountains thinly covered with *Pinus Llaveana*. Mr. Hartweg also met with it near the hot springs of Atotonilco El Grande, but nowhere in any quantity. That gentleman informs us that it is easily distinguished by its dry hard leaves, and pale yellow flowers; and that the wood is also of a lighter colour than in any other species. In our gardens its appearance is vastly improved, and it will probably prove as handsome as others.

It grows freely when potted in a mixture of sandy loam and leaf-mould, to which is added a small portion of rough bone-dust.

Being at present extremely rare, it has not been tried in the open border; but the appearance of the plant leads us to suppose that it may be at least as hardy as *B. fascicularis*. Up to the present time it has been kept in a cold pit, in the garden of the Horticultural Society, where our drawing was made in May, 1843.

It may be increased like the other pinnated kinds, by grafting on the common *B. aquifolium* either in spring or autumn, when the young shoots are nearly hard ; but hitherto the plant has not shewn the least disposition to make any lateral shoots, although three feet high. It will no doubt be increased hereafter by seeds, which are likely to be produced freely when the plants get older ; as yet the berries have had no seeds in them.

It flowers during the months of January and February, if kept in the greenhouse, and in July ripens its long erect spikes of deep purple berries.





ARCTOSTAPHYLOS pungens.

Pungent Bearberry.

DECANDRIA MONOGYNIA.

Nat. ord. ERICACEÆ.

ARCTOSTAPHYLOS. *Supra, fol. 1791.*

- A. pungens*; erecta, ramulis racemis foliisque junioribus tenuissimè velutinis, foliis ovalibus oblongisque mucronato-pungentibus utrinque acuminatis coriaceis integerrimis, racemis brevibus terminalibus, bracteis acuminatis (setis quam antheræ longioribus, ovario 7-loculari.) *DeCand. Prodr.* 7. 584.
- A. pungens*, *Humb. Boupl. & Kunth. nov. gen. Amer.* 3. 836. *t.* 259. *Hooker in Bot. Mag. t.* 3927.
- A. tomentosa* β , *Lindl. in Bot. Reg. sub t.* 1791.

This seems to be a common Mexican shrub, for it occurs in most collections from that country. In appearance it is extremely like *Arctostaphylos tomentosa*, and an insufficient examination of dried specimens led to the belief that it is a mere variety of that plant. The fresh specimens shew, however, that in addition to a want of the long beard-like hairs of the branches of *A. tomentosa*, this species has the awns of the anthers longer than the anthers themselves, and only seven cells to the ovary instead of ten.

Our drawing was made in the garden of the Horticultural Society, to which it had been introduced by Mr. Hartweg, who found it in Mexico, at an elevation of 7000 to 9000 feet above the sea, forming an evergreen shrub six to eight feet high, with a reddish brown smooth stem and branches, and very hard wood. It was common about Guanaxuato, Real del Monte, Bolanos, and Oaxaca, and is known there under the name of "Pinguica" or "Manzanilla," according to that Botanist.

Up to the present time it has proved, in cultivation, to be a neat little half-hardy or possibly hardy evergreen shrub, grow-

ing two or three feet high. But it is one of those uncertain plants which will die suddenly during the hot weather in July and August, especially after a few hours rain, if planted in the open border, although it may have been previously in the highest state of health and vigour. Mr. Gordon, who has had the management of it in the garden of the Horticultural Society, has given us the following note concerning its management.

“ It seldom can be kept alive for more than two or three seasons after being raised from seeds, even in pots, unless treated in the following manner.

“ The seeds should be sown in pans, filled with a mixture of peat and loam, to which should be added a small portion of decomposed cow-dung, and placed in a close pit or frame. They soon come up if sown in the spring or summer, but if sown late in the autumn the seeds lie in the soil until the following spring before they vegetate. When up, and before they make a rough leaf, prick them off into a fresh pan filled with the same kind of soil as that in which the seed was sown. Afterwards keep them shut up close and well shaded, and finally pot them off singly when they have made three or four proper leaves, giving them at once a shift into larger pots, and return them to the frame, which should now have the back turned to the sun, and be kept close for a few weeks ; air not being given at any time until the plants are fairly started and growing again. *Afterwards remove the lights entirely during the night time, and keep them on quite close in the day, during the summer and autumn.* When the nights become wet and frosty, remove the plants to a cold pit for the winter, where there is plenty of light and air and no damp.”



Paint by J. Katsunori for the author's book

1872

BROMHEADIA palustris.

Marsh Bromheadia.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ.

BROMHEADIA, Lindl. in *Bot. Reg.* 1841. misc. 184. *Sepala et petala* subæqualia patentissima. *Labellum* cucullatum, trilobum, cum columnâ omninò parallelum, basi inarticulatum, secus axin elevatum pubescens. *Columna* latè alata, carnosâ, elongata. *Anthera* 2 locularis, dorso conica, cum columnâ articulata. *Pollinia* 2, reniformia, posticè excavata, in glandulam latam, triangularem, membranaceam sessilia.—Herba *caulescens, ebulbis*. Folia *disticha, coriacea, emarginata*. Spica *terminalis, disticha, flexuosa, multiflora, longè pedunculata*, bracteis *brevissimis rigidis, dentiformibus*. Flores *speciosi, recti*.

Bromheadia palustris, Lindl. *l. c.* Hooker. *Bot. Mag.* t. 4001.

Grammatophyllum? Finlaysonianum, Lindl. in *Wall. Cat.* no. 7561. *Gen. & Sp. Orch.* p. 173.

We formerly introduced this curious plant to our readers with a few observations which we beg permission to repeat, with some corrections.

“When Mr. Finlayson was in the Malay archipelago, he found a curious Orchidaceous plant at Singapore with the habit of *Epidendrum elongatum*; and from specimens of it, almost destroyed by insects, which I examined some years since in Dr. Wallich’s herbarium, I referred it with great doubt to *Grammatophyllum*, under the name of *G.?* Finlaysonianum, (*Gen. & Sp. Orch.* t. 173.) This plant has flowered at Penllergare in South Wales with J. D. Llewelyn, Esq. who received it from Cuming, with the memorandum that it had been “dug out of a bog in Sumatra.” Having now had the advantage of examining a perfect specimen in flower, I find that although nearly allied to *Grammatophyllum*, it is in fact very distinct. I therefore avail myself of the opportunity of adding to the list of genera the name of Sir Edward Ffrench Bromhead, Bart. F.R.S. whose investigations of the natural affinities of plants are well known to systematical Botanists.”

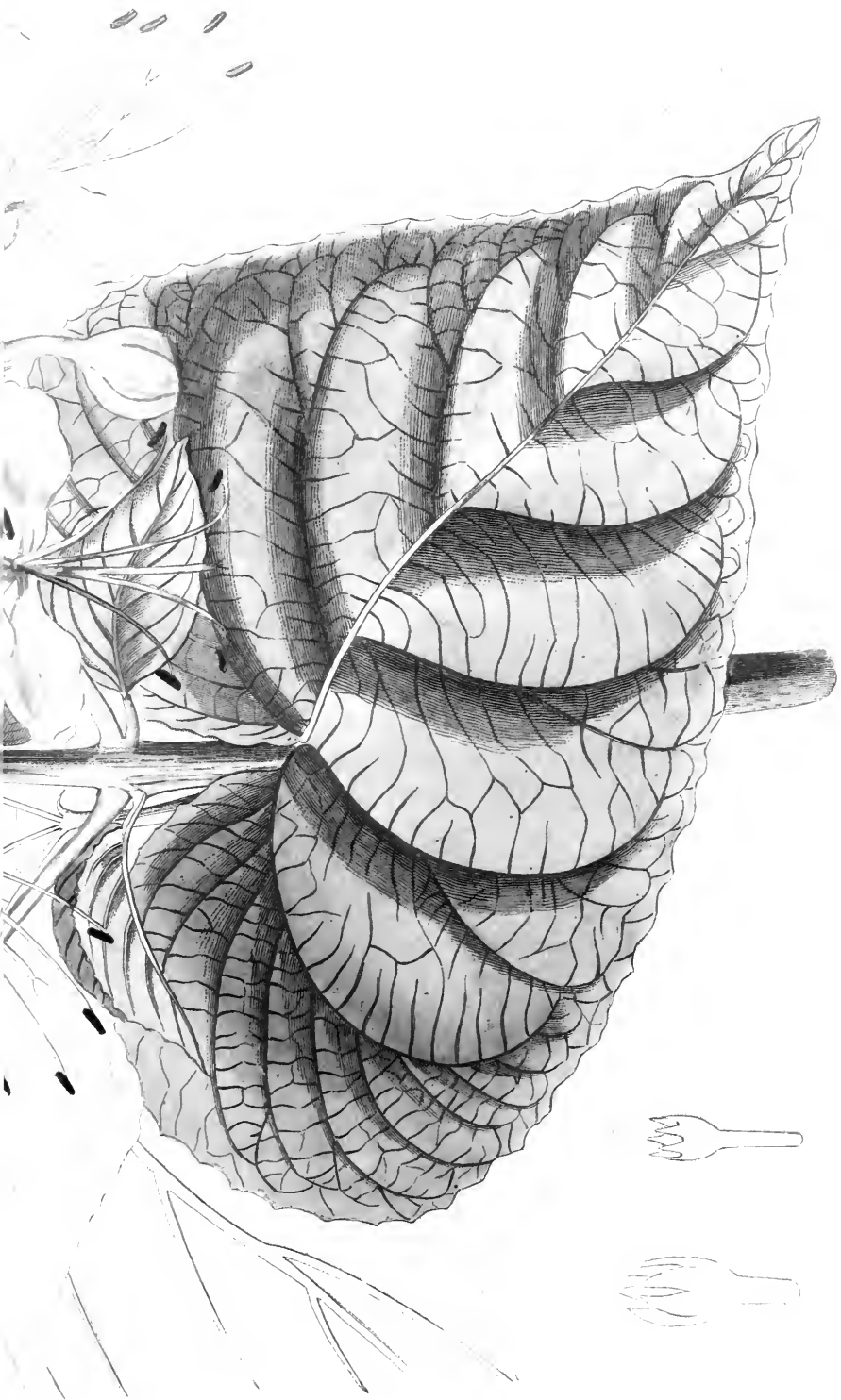
In appearance the plant has the aspect of *Epidendrum elongatum*, as has been already stated; and like it has the whole of the upper part of the stem provided with closely pressed distant sheaths, instead of leaves, on which the spike of flowers is arranged. The latter is very rigid, between two and three inches long, regularly zigzag, with a short hard tooth-like bract at each bend, so that the spike without the flowers resembles a coarsely-toothed narrow double-edged saw. The flowers are about an inch long, white, and rather drooping, spreading quite open. The labellum, in which alone any colour resides, is straw-coloured on the middle lobe, and violet at the tips of the lateral lobes; along the middle, as far as the separation of the lobes, it is convex and covered with purple down; while the disk of the middle lobe is broken up into yellow granulations.

We shall take another opportunity of pointing out in what way *Bromheadia* most differs from its allied genera, *Cymbidium*, *Grammatophyllum*, *Renanthera*, &c.

Our drawing was made from a specimen communicated by His Grace the Duke of Northumberland, in November 1841.

Fig. 1. represents a front view of the column; 2. the inside of the lip; and 3. gland and pollen-masses.





CLERODENDRON infortunatum.

Unlucky Clerodendron.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. VERBENACEÆ.

CLERODENDRON. Bot. Reg. v. 5. fol. 406.

- C. infortunatum*; foliis maximis subrotundis altè cordatis dentatis supra pilosis subtùs tomentosis, paniculâ coloratâ simplici pubescente, floribus apice ramorum subsessilibus, calyce ampliato quinquefido, corollæ laciniis planis obovatis obtusis staminibus paulo brevioribus.
- C. infortunatum*, *Linn. fl. Zeyl.* 232.

Whoever shall investigate the true distinctions between the beautiful species of *Clerodendron* with scarlet inflorescence, will find as ample a harvest of confusion to be reaped as he can desire. We cannot pretend to do more than point out some of the instances to which we refer.

Linnaeus founded this species upon a Ceylon plant in Burmann's Herbarium, with a specific character that applies very well to this plant, and a description which leaves no doubt upon our minds that we have now before us what he intended, which was sent from Ceylon to His Grace the Duke of Northumberland by Mr. Nightingale, and which flowered at Syon in August, 1843. But Linnaeus quoted as a synonym the *Petasites agrestis* of Rumphius, which is quite a different species, and added as a variety the plant represented at t. 29 of the *Thesaurus Zeylanicus*, which is also different, and probably what Dr. Wallich distributed under the name of *Clerodendron infortunatum*. The true characters of the species seem to lie in its very large flowers, which are clustered in little heads at the end of the principal branches of inflorescence, and in the large leafy-coloured calyx, which is *half* split into five segments.

Nearly allied, but very different, is the *Clerodendron squamatum*, figured in this work at p. 649. That plant has
April, 1844.

leaves with a similar form, but they are smaller, have no broad toothing at the margin, and are covered beneath with depressed scaly glands instead of down: whence the name. Its flowers are very much smaller, and are not collected into small clusters, but are long-stalked and racemose at the end of the panicle-branches. The following definition will distinguish it.

C. squamatum (Vahl. Symb. 2. 74. Bot. Reg. t. 649); foliis subrotundis altè cordatis supra pilosiusculis subtùs densè glanduloso-squamatis, paniculâ coloratâ compositâ pilosiusculâ, floribus (minoribus) apice ramorum racemoso-corymbosis, calyce ampliato 5 fido, corollæ laciniis obovatis revolutis staminibus pluriès brevioribus.

This is probably the *C. coccineum* of some gardens, as it certainly is the *Volkameria Kæmpferiana* of Jacquin.

But there is now cultivated in the gardens of this country, under the name of *Clerodendron squamatum*, quite a different plant, resembling *C. infortunatum* in the form of its leaves, and having no glandular scales on their underside, in place of which is an abundance of soft-jointed hairs. It also differs from both species in its calyx, (represented at fig. 2. of the accompanying plate,) which instead of being enlarged and half divided into five parts, is very small, and has five shallow teeth. Its flowers are smaller than in *C. infortunatum*, and larger than in *C. squamatum*. This may be named *C. fallax*, inasmuch as it might be mistaken by an incautious observer for either of the two species above mentioned. We have it from the rich collection of Syon, and we propose the following definition.

C. fallax; foliis subrotundis altè cordatis subdentatis supra pubescentibus subtus mollibus, paniculâ coloratâ compositâ pilosiusculâ, floribus apice ramorum corymbosis, calyce minimo 5-dentato, corollæ laciniis obovatis planis staminibus paulò brevioribus.

There is also in English gardens a *Clerodendron*, absurdly called *speciosissimum*, which must not be omitted in noticing these plants. It has ovate leaves, not at all cordate, but rather truncate at the base, with few hairs on either side, and no glands; its flowers are in dense heads like those of *C. fragrans*, about the size of *C. squamatum*, and are sur-

rounded by long narrow permanent bracts, which usually have one or more oval glandular spaces on their surface; the calyx is not enlarged, but its teeth are extended into long narrow tongues. In foliage, it resembles *C. trichotomum*, but its inflorescence and calyx are quite dissimilar. It may be called *C. glandulosum*, and thus defined.

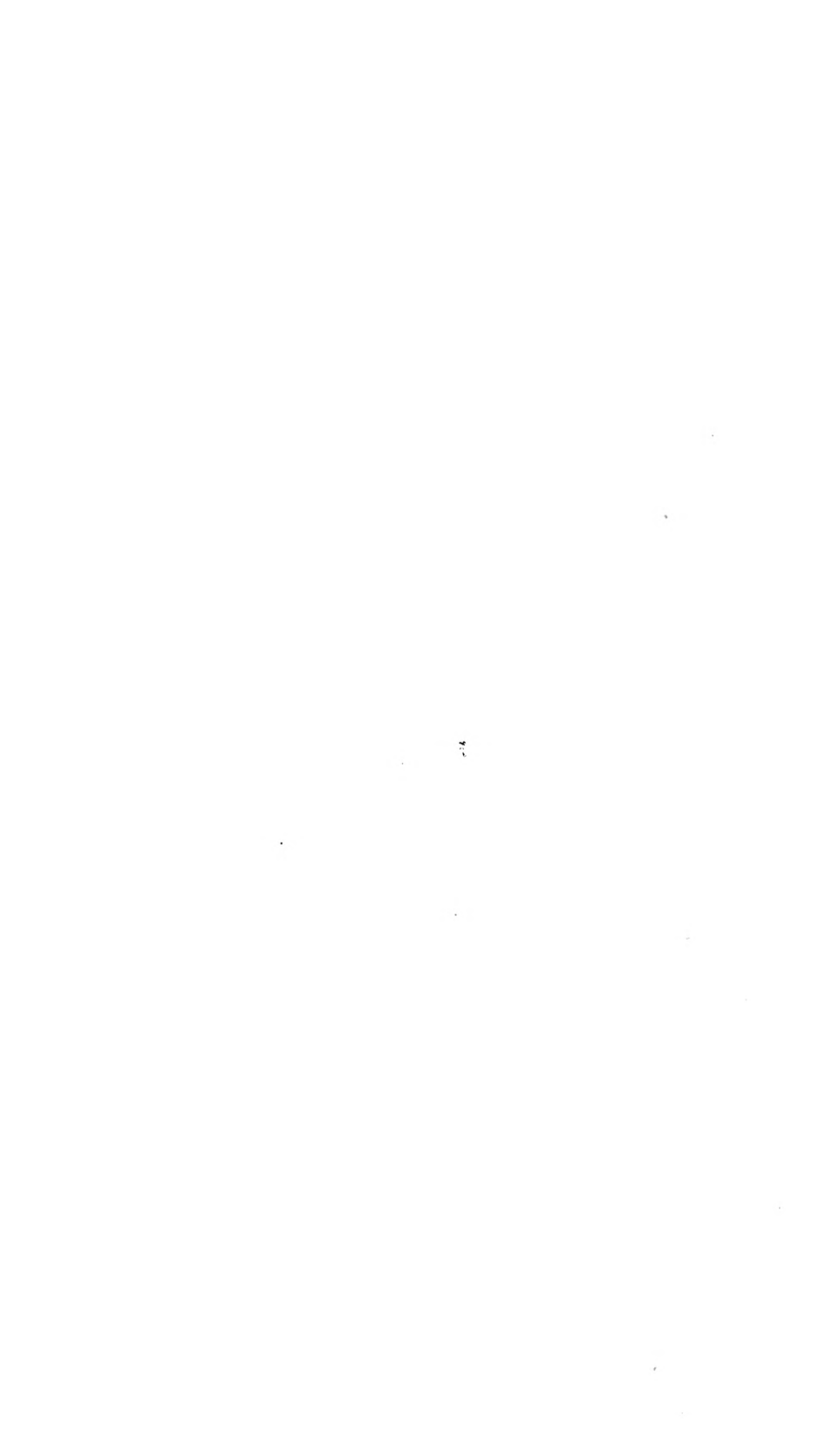
C. glandulosum; foliis subrotundo-ovatis basi truncatis v. parùm cordatis pilosiusculis esquamatis subdentatis, paniculâ densâ capitatâ, bracteis lineari-lanceolatis calyce longioribus dorso glandulâ unâ alterâve pellucidâ immersâ notatis, calycis 5-fidi laciniis acuminatis, corollæ laciniis oblongis reflexis staminibus brevioribus, stylo longissimo.

The singular name *C. infortunatum* originated with Linnæus, who called another species *fortunatum*, and another *calamitosum*. According to De Théis this was in consequence of *C. fortunatum* being useful in medicine, while *C. infortunatum* and *calamitosum* are dangerous.

The plant before us is a truly splendid species, and will be a great addition to a Botanical collection, as it is a very free-growing plant.

It is a stove shrub, which will succeed best from a cutting struck in autumn, and kept in an intermediate house until the beginning of February, when it should be repotted and induced to grow. The soil should consist of peat and sandy loam, and if a mixture of well decomposed cow-dung is added so much the better. In the summer season an ample supply of water should be given, and the atmosphere kept as moist as possible. This plant differs from many others in not requiring to be topped; nor does it need to be grown in a high temperature, which is apt to render it tall and unsightly.

Fig. 1. is the calyx of *C. infortunatum*; fig. 2. of *C. fallax*.





119. *Passiflora* Sep. 7 1869

S. W. Purdy sc.

ERIA floribunda.

Many-flowered Eria.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § MALAXEÆ.

ERIA. Lindl. supra, vol. 15. fol. 1654.

§ Tonsæ; *perianthio glabro v. parùm pubescente.*

E. floribunda (Tonsæ) (Lindl. in Wall. Cat. no. 7408. Bot. Reg. 1843, misc. 56. 1844, t. 20.) ; caulibus carnosis subflexuosis teretibus, foliis lanceolatis acuminatis, racemis oppositifoliis patulis multifloris pubescentibus foliis brevioribus, bracteis defloratis ovatis concavis retrorsis, sepalis petalis 3-plò latioribus, labello angusto nudo basi saccato : laciniis lateralibus ascendentibus abbreviatis intermediâ cuneatâ tridentatâ.

Labellum basi *cyathiforme, melliferum, bidentatum, columnæ adpressum, sursum unguiculatum, cuneatum, apiculatum, inflexum, columnâ paulò brevius.*

Although the flowers of this plant cannot boast of large size and rich colours, they are by no means destitute of beauty. Arranged as they are in long drooping racemes, glassy in texture, and delicately touched with crimson, they are among the prettiest of the smaller kinds.

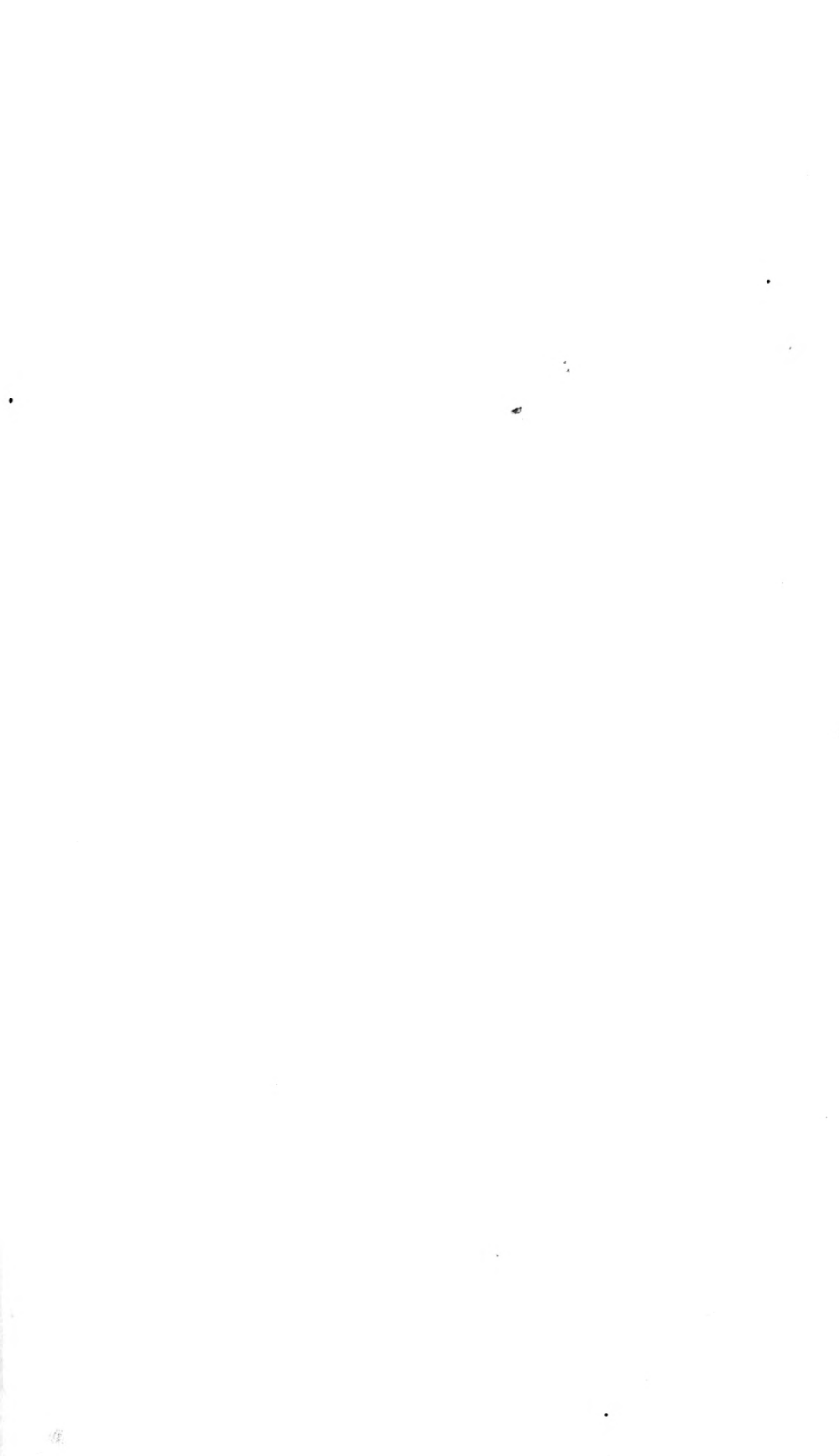
It is a native of Singapore, whence it has been received by Messrs. Loddiges.

Along with *E. polyura, bipunctata, profusa*, and some others, it forms a small group of species, which are very different in habit from such plants as *E. pannea, armeniaca*, &c.

Fig. 1. represents the column and lip seen in profile ; 2. shows the pollen-masses adhering at their points by a granular mucilaginous substance.

It is a stove plant, and succeeds best when potted in turfy peat, mixed with a few potsherds. During the summer a liberal supply of water should be given, and the house be kept as moist as possible. In sunny weather the plant will

be much benefited if slightly shaded, for although it enjoys a high temperature, yet its leaves will become pale and contracted if too much exposed to the rays of the sun. In winter very little water is required, especially if the house can be filled with steam once a day, which is always preferable to syringing.





* *TROCHETIA* grandiflora.*Large-flowered Trochetia.*

MONADELPHIA POLYANDRIA.

Nat. ord. BYTTNERIACEÆ.

TROCHETIA, D. C. *Involucellum* nullum. *Calyx* quinquepartitus, foliolis lanceolatis, æstivatione valvatis. *Corollæ* petala 5, hypogyna, obovato-subrotunda, æstivatione convolutiva, decidua. *Stamina* 15-30, hypogyna, basi in urccolum connata, quinque v. septem sterilia, ligulæformia, integra v. irregulariter bifida, cum duobus v. tribus fertilibus brevissimis alternantia; *filamenta* subnulla; *antheræ* introrsæ, biloculares, erectæ, loculis longitudinaliter dehiscentibus. *Ovarium* sessile, quinqueloculare. *Ovula* in loculorum angulo centrali plura, biserialim adscendentia, anatropa. *Stylus* terminalis, filiformis; *stigma* obtusè quinquelobum. *Capsula* quinquelocularis, loculicidè quinquevalvis, valvis medio septa margine seminifera gerentibus. *Semina* plurima, subrotunda, aptera. Embryo . . . —Arbusculæ *borbonicæ et madagascarienses, ferrugineo-lepidote*; foliis *alternis, petiolatis, ovatis v. ovato-lanceolatis, coriaceis, penninerviis, integerrimis, pedunculis axillaribus unitrifloris*. Endlicher genera, no. 5351.

T. grandiflora; foliis ovalibus acutis subdentatis, pedunculis 3-4-floris, petalis calyce longioribus.

This noble plant was introduced by His Grace the Duke of Northumberland from the Mauritius, and flowered at Syon in December last. Its name is probably one of M. Bojer's, but it has not yet found its way into any of the modern compilations of species. The plant at Syon is a seedling, about six feet high; when struck from cuttings it will probably become bushy, in which case it will be very beautiful, as it appears to be a free flowerer.

The blossoms are snow-white, with a yellow blotch at the base of each petal, and are nearly three inches in diameter. Their pendulous position, which occurs in all the known

* So named by DeCandolle in honour of M. Dutrochet, the celebrated French physiologist.

species of the genus, gives them a peculiarly graceful appearance.

According to Endlicher and DeCandolle the stamens are, in the other species, collected into a small cup ; but here at least they are united into a column, and arranged on each side of the sterile filament, so that in fact the filaments form five parcels, or phalanges, each consisting of four fertile stamens adhering, two on each side, to a central sterile one ; as is represented at fig. 1.



Miss Drane del

Printed by J. H. Adams, 169 Broadway, N.Y., 1844

S. Barclay sc

PHLOMIS Cashmeriana.

Cashmere Phlomis.

DIDYNAMIA GYMNOSPERMIA.

Nat. ord. LABIATÆ. § STACHYDEÆ.

PHLOMIS. L.—*Supra*, fol. 1289.

-
- P. *Cashmeriana*; herbacea, erecta, caule densè floccoso tomentoso, foliis ovato-lanceolatis obtusis versus apicem crenatis basi latè rotundatis molliter rugosis supra pubescentibus villosisve subtùs densè albo-tomentosis, bracteis subulatis ciliatis calyce longioribus, calycis floccoso-lanati dentibus subulatis rigidis patentibus pilosis. *Bentham. Gen. & Sp. Lab.* p. 630.
- P. *Cashmeriana*, *Royle Illustr. p.* 303. *fig.* 75 A. *fig.* 1.
-

To those who possess no greenhouse this good-looking plant, from the valley of Cashmere, will be welcome; for its large pale lilac flowers remain for a considerable time in beauty.

It is a hardy perennial plant, growing about two feet high, and flowering in July and August. It requires a rich light soil, and a situation which is rather dry in winter.

It is increased, when the plants are old, by dividing the roots in spring, or from seeds; but it grows slowly when young, and will not flower before the second year after the seed is sown.

Our drawing was made in the garden of the Horticultural Society, where it was raised from seeds received from Dr. Royle.





SCHOMBURGKIA *crispa*.*Crisp-flowered Schomburgkia.*

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § EPIDENDRÆÆ.

SCHOMBURGKIA, Lindl. *Sertum Orchidaceum*, t. x. *Sepala* et *petala* conformia, patentia, omninò libera, basi æqualia. *Labellum* difforme, membranaceum, trilobum, semicucullatum, basi cum margine columnæ con-natum, supra basin tumidum (intrusum): venis lamellatis. *Columna* alata. *Pollinia* octo.—*Rhizoma repens, nudum, annulatum, pseudobulbigerum*. *Pseudobulbi magni, elongati, 2-3-phylli*. *Folia coriacea*. *Scapi terminales vaginati*. *Bracteæ magnæ, siccæ, spathaceæ*. *Flores speciosi, racemosi, congesti*.

S. crispa, Lindl. in *Sert. Orchid.* t. 10.

This fine genus is remarkable for the large size of its pseudo-bulbs, which are occasionally as much as two feet long. It differs from *Epidendrum* and its allies in having eight pollen-masses, and evidently constitutes an extremely well marked group. But its species have been little examined except in a dried state, for which their fleshiness renders them ill-suited, and hence a difficulty in determining their true limits. It is hoped that the enumeration, at the end of this article, will render their distinctions clearer.

For the opportunity of figuring this we are indebted to Mrs. Marryat, who received it from Mr. Schomburgk himself. Its yellow-brown flowers distinguish it from all the others.

In cultivation it demands the same treatment as many of the genus *Cattleya*. It may either be potted in turfy peat in the usual way, or it may be tied to a block of wood (with a little sphagnum to retain moisture) and suspended to a rafter in a stove. In any case, care should be taken not to water over head when the plant is in a growing state, otherwise the glutinous substance on the scales which surround the young shoots will retain the water and cause them to damp off. In summer the plant should be slightly shaded, and the house kept as moist as possible at a temperature of 80° by day, and about 68° at night. In winter, when little water is required, the temperature need not be raised above 56° by artificial means.

Fig. 1. represents the lip; 2. the column seen in profile.

The species of *Schomburgkia* are,—

1. *S. crispa* (Lindl. in Sert. Orchid. t. 10. Bot. Reg. 1844. t. 23. *S. marginata*, var. Hooker in Bot. Mag. t. 3729.); pseudobulbis fusiformibus, floribus racemosis, bracteis ovario subæqualibus, labello ovato-oblongo obtuso vix cucullato obsoletè trilobo sepalis petalisque oblongis crispis subæquali: lamellis 5 undulatis duabusque lateralibus tenuibus rectis. —*Demerara*.—This plant has yellowish brown flowers, with scarcely a trace of purple; and by that circumstance alone it may be distinguished. Its lip is nearly flat, very little three-lobed, and broadest at the base: other characters peculiar to itself. Although the author of the species, I must plead guilty to having on one occasion, (Bot. Reg. misc. Feb. 1839) confounded it with *S. marginata*, and thus misled Sir Wm. Hooker, whose figure in the Bot. Magazine, t. 3729, undoubtedly belongs to this species. Probably the colours in the Sertum, taken from a drawing by Mr. Schomburgk, are much too yellow.
2. *S. marginata* (Lindl. in Sertum Orchid. t. 13.); pseudobulbis clavato-fusiformibus, floribus racemosis, bracteis ovario subæqualibus, labello ovali acuto basi angustato trilobo parùm cucullato sepalis petalisque oblongis undulatis subæquali, lamellis crispis 5 continuis lateralibus interruptis.—*Surinam, Demerara*.—Formerly in cultivation, but now lost; unless the “Spread Eagle” plant of Jamaica should prove to be it. It differs from *S. crispa* in its flowers being distinctly purple, with only a little yellow at the edge of the sepals and petals, and in the form and appendages of the lip, which tapers to the base, is very distinctly three-lobed, has an acute oval middle lobe, and is furnished with wavy plates, which are broken up at the sides.
3. *S. undulata* (Lindl. in Bot. Reg. 1844. misc. 21.); pseudobulbis fusiformibus, floribus dense racemosis, bracteis longissimis spathaceis, sepalis petalisque æqualibus linearibus undulato-crispibus labello longioribus, labelli cucullati lobis lateralibus rotundatis intermedio ovali acuto v. obtuso, lamellis 5 undulatis duabusque lateralibus rectis tenuibus.—*La Guayra*.—This has fine rich brownish purple sepals and petals, and a clear violet-purple lip. From *S. crispa* and *marginata*, it is distinguished by its very long narrow crisp sepals and petals. The flowers are as large as those of *S. tibicinis*, but the inflorescence is quite different. There is no yellow in them, and the lip is distinctly curved up towards the column. Some fine specimens have been lately flowered by Mrs. Lawrence, one of which has browner flowers, and the middle lobe of the lip wedge-shaped and obtuse, not oval and acute; but they do not otherwise seem to differ. The very long narrow crisp sepals and petals render this very obviously different from the two last, which it quite resembles in habit.
4. *S. tibicinis* (Bateman. Orch. Mex & Guat. t. 30. Lindl. in Bot. Reg. 1841. misc. 119. *Epidendrum tibicinis*, Bateman in Bot. Reg. 1838. misc. 12.); pseudobulbis conicis corniformibus annulatis sulcatis 3-phyllis, foliis oblongis coriaceis patentibus, scapo longissimo tereti distanter squamato apice paniculato, paniculâ pyramidali laxiflorâ, sepalis petalisque undulatis crispis, labello oblongo cucullato venis per medium 5 elevatis approximatis: laciniis lateralibus apice rotundatis intermediâ sub-rhombicâ emarginatâ, antherâ emarginatâ.—*Honduras*.—This noble plant is the cow’s-horn orchis of Honduras. The flowers when fully expanded are about two and a half inches wide, deep pink speckled with white on the outside, rich chocolate red within. The lip is white in the middle, but deep rose-colour at the sides, with a short chocolate-red middle lobe. The flowering stem is eight or nine feet long. Its pseudo-bulbs, between one and two feet long, are quite hollow, and as smooth inside as the chamber of a Bamboo; at their base there is always a small hole, which leads to the interior, and furnishes access to colonies of ants, which are constantly found inhabiting the plant.



Phalaenopsis

Phalaenopsis

CYMBIDIUM pendulum, var. brevilabre.

Short-lipped thick-leaved Cymbidium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ.

CYMBIDIUM. *Botanical Register, vol. 7. fol. 529.*

C. pendulum (Swartz. nov. act. ups. 6. 73. Willd. Sp. pl. 4. 101. Roxb. Fl. Ind. 3. 458. L. p. 165. Bot. Reg. 1840. t. 25. *C. crassifolium*, Wall. Cat. no. 7357. *Epidendrum pendulum*, Roxb. corom. plants, 1. 35. t. 44.); foliis ensiformibus distichis coriaceis obliquè obtusis, racemis pendulis multifloris, bracteis minutis, petalis sepalisque lineari-oblongis obtusis, labelli trilobi lobis lateralibus acutis intermedio oblongo apiculato: lamellis continuis approximatis apice confluentibus.

Var. *brevilabre*; labello latiore lobis lateralibus acutioribus intermedio subrotundo-oblongo. *Bot. Reg. 1844. misc. 67.*

Having already figured this plant, it may perhaps be thought that the variety now given is too trifling to deserve a separate representation. We are however rather anxious to shew that when these Orchidaceous plants do run into ordinary varieties, it is only within recognizable limits, as happens in other plants, and that the masquerading dress under which such plants as *Catasetum* and *Cycnoches* occasionally appear, are not, as some suppose, to be taken as indications of a disposition to vary, which throws suspicion upon all specific distinctions in the order.

As far as our experience goes, the ordinary variations to which Orchidaceæ are subject, are in all respects analogous to what is met with in other plants, and as is exemplified by the plant before us from Sincapore, in which, while the lip becomes shorter, broader, and with a much blunter middle lobe, every thing else remains so exactly the same, that nobody can entertain a doubt about the specific identity of the plant with *Cymbidium pendulum*. The vertical plates of the lip, in particular, are quite unchanged, shewing, as we find it always shewn, that the elevations and processes of the surface of the lip are of the utmost importance in considering the limits of species. *Eria bractescens* and *longilabris*, published in the present number, t. 29, furnish the converse of the rule. They are much alike, and their labella vary in form in a manner not unlike that of *C. pendulum* and *C. p. brevilabre*;

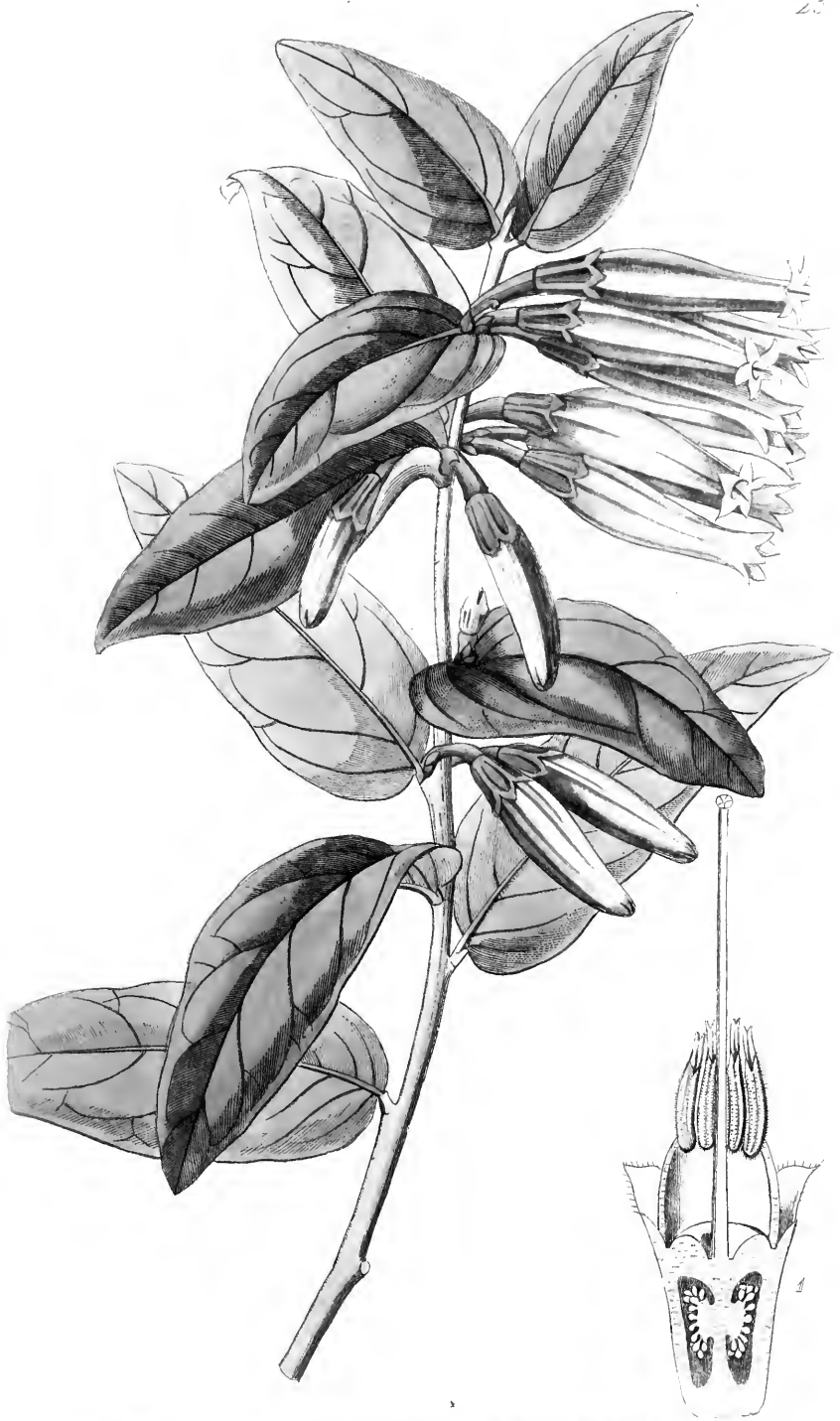
but with a change in the form of the lip occurs in these plants a most material alteration in the form of the labellar processes, and both are connected with other peculiarities in the appearance of the two species.

The variations that experience tells us occur in the structure of the same species of tropical Orchidaceæ are principally in colour and size, just in fact as happens in those of Europe. Our common wild Orchises have purple or white flowers indifferently, and in some specimens they are much larger than in others, as is more particularly shewn by *Orchis latifolia*. Just so with the epiphytes. The flowers of *Catasetum tridentatum*, for instance, are spotted or quite green, and much larger in some varieties than in others. The well known *Oncidia ornithorhynchum* and *ampliatum* exhibit great differences in the size and depth of colour of their flowers; so do *Lycaste Skinneri* and *Cattleya Forbesii*; indeed, if one can judge from Mr. Hartweg's collection, it is very common for species found on the west of the Cordilleras to have much smaller flowers than when they occur on the east side. As to differences in form again, the greater or less breadth of the petals and the lobes of the lip is very uncertain in *Orchis militaris* and its allies; and in the same way *Catasetum tridentatum*, *Cyrtorchilum maculatum*, and other epiphytes differ among themselves. But so far as is yet known, there is nothing peculiar in the tendency to variation among tropical Orchidaceæ, beyond what we find in all other plants, with the exception, as we have already said, of the masquerading species of *Catasetum* and *Cycnoches*.

The plant now figured was drawn in July 1842, from a specimen, received by Messrs. Loddiges from Mr. Cuming, who found it at Singapore. Fig. 1. represents the lip and its peculiarities.

It should be grown in turfy heath-mould, of rather closer texture than that commonly used for Orchidaceous plants. The pot should be well drained, in order that all superfluous water may pass off freely, otherwise the roots will perish. Like some other species of the genus, this requires an ample supply of water at all times; and the atmosphere to be kept as moist as possible, especially during the growing season. To prevent the leaves from being scorched, the house should be slightly shaded in sunny weather. In summer the temperature should never be allowed to rise much above 80° by day, nor to fall below 68° at night; but in winter it should never be raised higher than 64° by artificial means.





MACLEANIA longiflora.

Long-flowered Macleania.

MONADELPHIA DECANDRIA.

Nat. ord. VACCINIACEÆ.

MACLEANIA. *Calyx* truncatus obsoletissime 5-dentatus, 5-alatus, infernè ovario adhærens. *Corolla* cylindracea, limbo 5-fido. *Stamina* decem basi corollæ inserta, filamentis per totam longitudinem in urceolum connatis. *Antheræ* basi affixæ, dorso muticæ, apice in tubum simplicem attenuatæ et rimula singula introrsum dehiscentes. *Ovarium* 5-loculare, multiovulatum. *Fructus*:—Bacca?—Frutex habitu Thibaudia vel Ceratostemmatidis. Flores numerosi axillares secundi. Folia subsecunda. Rami cortice deciduo.—Hooker Ic. 2. t. 109.

M. longiflora; foliis sessilibus ovali-oblongis obtusis reticulatis obsoletè tripinnerviis, axillis trifloris, corollis cylindraceis angulatis concoloribus.

When Sir William Hooker named a plant *Macleania*, he not only paid a well-merited compliment, for few British merchants have deserved better of Botany than Mr. John Maclean of Lima, but he founded a good genus. A less accurate observer might indeed have referred it to *Thiebaudia*, a group of plants from the same countries, and very similar in habit; but each anther of *Thiebaudia* is divided into two long tubes, which open at their point; while, on the contrary, in *Macleania* the anthers have only one tube each.

The plant now described is very near *M. angulata*, figured in the Botanical Magazine, t. 3979, and said to be from Peru. But that species has shorter and broader leaves with manifest stalks, and the flowers are also shorter, contracted at the orifice, and yellow there. Their colour, too, is represented as much more vivid than in our species.

A warm greenhouse shrub, which requires to be kept in an intermediate house during winter. It may be potted in a compost, consisting of sandy loam and peat in equal proportions. Owing to its producing very fleshy roots, a large pot or tub will be required, or where there is convenience it is

probable it would succeed well if planted out in a conservatory. It requires a liberal supply of water in summer, but very little in winter. To have this plant well furnished with young wood from the bottom for flowering, it is necessary to cut it well back early in autumn, in order to have the plant clothed with leaves before winter. It is rather difficult to multiply, but may be managed under a bell glass in a bottom heat of 80°.

Note by Mr. Hartweg.

This is one of the numerous fleshy-rooted vaccinnaceous shrubs, frequently met with in dry and exposed situations in the Andes; the present species has been collected on the main Cordillera near Loxa, (4° S.) at an elevation of about 8,000 feet above the sea, where it forms a neat compact evergreen shrub, five feet high, and is called by the inhabitants Salapa.



BERBĒRIS tenuifolia.

Thin Ash-leaved Berberry.

HEXANDRIA MONOGYNIA.

Nat. ord. BERBERACEÆ.

BERBERIS. *Supra*, vol. 17. fol. 1425.

B. tenuifolia; foliis pinnatis ternatisque, foliolis distantibus lanceolatis acutis tenuibus planis integerrimis racemis laxis cernuis multifloris brevioribus.

B. tenuifolia, *Lindl. in Bot. Reg.* 1838. *misc. no.* 121.

B. fraxinifolia, *Hook. ic.* 4. 329. 330. 1841.

This very rare plant was found by Mr. Hartweg, on his first arrival in Mexico, at a place called Zaquapam, at the foot of Orizaba, and was raised among the first collections that he sent to the Horticultural Society. Considering the warm climate of which it is a native, it was expected to prove tender, and the event has shewn it to be so; for we have no species yet in our gardens so impatient of cold. In fact, it must be regarded strictly as a greenhouse plant, to which any amount of frost would be fatal.

It is a hard-wooded graceful plant, very apt to run up with a single stem, without producing lateral buds, and when that is allowed to happen, its beauty is much impaired. For some time, indeed, it remained in that state in the large conservatory of the Horticultural Society. At last, by binding it down, so as to check the rise of the sap, the lateral buds were enabled to expand, and now the specimen is well furnished with branches, and is above six feet high.

Its flowers appear in the latter part of the year (October to December), and are agreeably sweet-scented.

So far as experience has gone, it appears to be the most easily propagated by cuttings of the half ripe wood, or by grafting on *B. aquifolium*. For soil it seems to like sandy loam and peat.

Note by Mr. Hartweg.

A Mexican plant from the eastern declivity of Orizaba, near the sugar farm of Zaquapam, at an elevation of 3,000 feet above the sea, where it is found, though not very plentifully, in the outskirts of the woods bordering on the savannahs, attaining the height of ten feet.



* LINDLEYA mespiloides.

Medlar-like Lindleya.

ICOSANDRIA PENTAGYNIA.

Nat. ord. ROSACEÆ. § QUILLAJÆ, Endl.

LINDLEYA. *Calyx* tubo turbinato, limbo quinquepartito. *Corollæ* petala 5, calycis fauci inserta, eiusdem laciniis alterna, brevissime unguiculata, patentia. *Stamina* 15-20, disco annulari calycis faucem marginanti inserta; antheræ lanceolatae, basi uncinato-reflexæ, cruribus inæqualibus, connatis, biloculares. *Ovaria* 5, in unicum quinqueloculare coalita. *Ovula* in quovis loculo 2, collateralia, infra apicem affixa, pendula. *Styli* 5, terminales; *stigmata* subclavata. *Capsula* calyce persistente suffulta, ovato-pentagona, lignosa, quinquesselcata, quinquelocularis, loculicide quinquevalvis, loculis di- v. abortu monospermis. *Semina* margine membranaceo cincta . . . —*Arbor mexicana, glaberrima; foliis sparsis, simplicibus, integris, crenulatis, stipulis petiolaribus geminis, floribus ad apicem ramulorum axillaribus, solitariis, pedunculatis, bracteatis, albis.* Endl. gen. no. 6399.

L. mespiloides, *Humb. Bonp. Kunth. nov. gen. pl. 6. 239. t. 562. bis. DeCand. Prodr. 2. 548.*

Semina ovalia, tenuia, alata, testâ mucilaginosâ vesiculosâ. Cotyledones tenues, plana. Radicula conica, exserta, hilo proxima.

This plant is an evergreen tree of small size, looking very much like *Mespilus grandiflora*, but with flowers as sweet-scented as the Hawthorn bloom. It belongs to a small set of Rosaceous plants, of which one, the *Kageneckia cratægifolia*, has been already figured at t. 1836 of this work. The late Professor Don attempted to distinguish them as a peculiar natural order, but unwisely, and on erroneous grounds. That they are really nothing more than Rosaceous plants is proved by this plant grafting readily on the common Thorn and the larger kinds of Cottoncaster; in which way it is propagated.

But although *Lindleya* and its allies are by no means to be separated from Rosaceæ, they form a peculiar group, remark-

* Named thus by Humboldt and Kunth, in the year 1823, after the present editor of the Botanical Register.

able for their capsular fruit and winged seeds, the latter a circumstance not hitherto observed in other plants of the order.

The botanical peculiarity of the present genus consists in its carpels joining together at the very base into a solid pistil, although their upper halves, as well as the styles, are entirely distinct. And so, in like manner, when the fruit is ripe, it becomes a hard capsule, the thick bony lobes of which separate freely at the upper half, but not at the lower, without violence. Fig. 3. represents it when ripe; 1. in the young state, when some of the stigmata are entire, and others two-lobed; 2. shews one of the thin-winged seeds hanging to the side of one valve of the capsule.

In our gardens the plant seems likely to prove about as hardy as an *Escallonia*, but not more so. Its fine evergreen foliage, and large sweet flowers render it very desirable that it should be able to bear our climate.

The accompanying drawing was made in the garden of the Horticultural Society in July 1843. It remains in flower for a month or six weeks.

Note by Mr. Hartweg.

An evergreen slender-growing shrub, 12 to 15 feet high, from the natural bridge called Puente de Dios, 45 miles N.E. of Real del Monte, growing at an elevation of 6,500 feet above the sea. It also occurs sparingly near the Hacienda de Santa Ana, in the State of Oaxaca, always preferring a dry chalky soil.

I never found it in flower.





HIBISCUS *Cameroni-fulgens*.

Garden Variety.

A specimen of this fine plant was sent us in August 1843, by Messrs. Rollissons, of Tooting, who state that it is a hybrid, between *Hibiscus Cameroni* and *H. fulgens*. *H. Cameroni* is a Madagascar shrub, with heartshaped 5-lobed leaves, buff flowers, with five deep crimson spots in the eye, and a very small involucre; *H. fulgens* is a garden name for a variety of *H. Rosa Sinensis*.

The produce of these two is the very handsome variety now figured, which, as might have been anticipated, proves worthy of so beautiful a parentage.

We presume it to be a stove shrub.



1892

Asplenium platyneuron (L.) Oakes, 1892

Plate 11

ERIA bractescens.

Long-bracted Eria.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § MALAXEÆ.

ERIA. *Botanical Register*, vol. 11. fol. 904.

§ Tonsæ; floribus calvis v. parum pubescentibus.

E. bractescens (Lindl. in Bot. Reg. 1841. misc. 46.); pseudobulbis brevibus oblongis apice subdiphyllis, foliis oblongis undulatis basi angustatis racemis subæqualibus, bracteis membranaceis coloratis margine revolutis superioribus linearibus reflexis, racemis erectis, labelli trilobi lamellis duabus abbreviatis intermediâ productâ lobo medio truncato rugoso obtusè apiculato.

Among the extensive genus *Eria* we find a few species particularly distinguished by their short fleshy stems, and the membranous coloured bracts which accompany their hairless flowers. Of these the best known are the present species, *longilabris*, *obesa*, and a Philippine plant that may be called *ovata*. They are natives of the hotter parts of India, and are so much alike that an incautious observer might almost regard them as varieties. They are, however, most truly distinct, as the following definitions of them will shew.

1. *E. bractescens*.

Mr. Cuming found this at Singapore, and Mr. Griffith in Burma, near Moulmain. It has a fleshy oblong stem, which bears at the summit two or three leaves, from one and a half to two inches broad, and gradually tapering to the base. Its flowers are in the Singapore plant greenish white, with a lip crimson except at the end; in the Burma plant they are more straw colour than green. The lip is three-lobed, has an abruptly truncated extremity, and is marked with three elevated ridges, of which the two side ones are very short, while the middle one reaches to the end of the lip. Fig. 1. shews this structure, and fig. 2. the pollen-masses.

2. *E. longilabris* (Lindl. in Bot. Reg. 1841. misc. 69.); Eriæ bractescentis facie sed sepalis petalisque magis acuminatis, labelli trilobi lamellis tribus ad apicem ferè pro-

ductis æqualibus lateralibus abbreviatis lobo medio ovato acuminato.

This is a native of Panay in the Philippines, whence it was sent to Messrs. Loddiges by Mr. Cuming. It is very like *Eria bractescens*, but is a much finer species, and bears more flowers. It is distinguished at once by its lip, which is not truncate, and has three equal wavy ridges prolonged almost as far as the tip of the middle lobe, which is long and acuminated. The form of the lip is shewn at fig. 3.

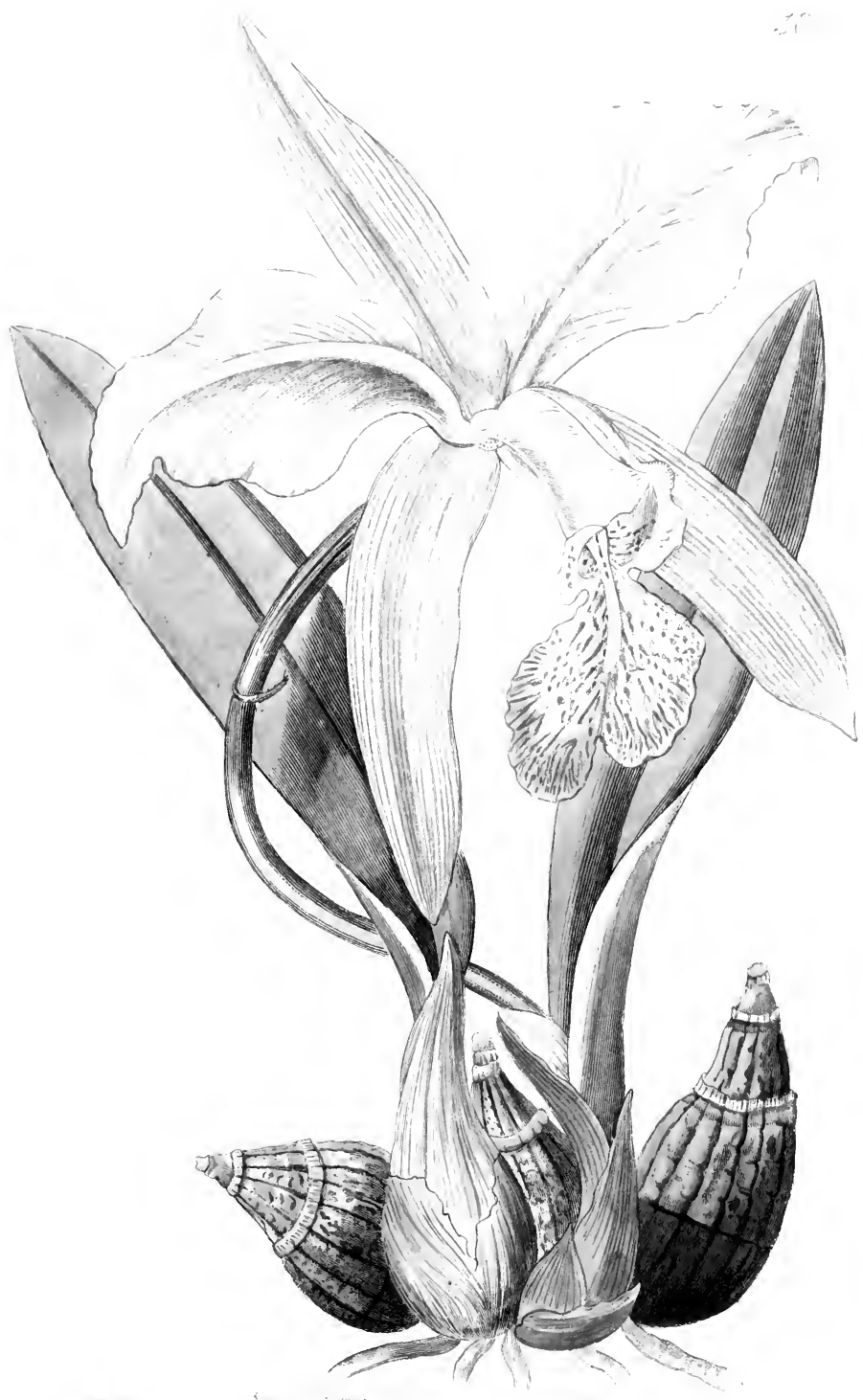
3. *E. obesa* (Lindl. in Wall. Cat. no. 1976. Gen. & Sp. no. 15.); foliis, caulibus crassis ovalibus, sepalis petalisque lanceolatis acutis subglabris, labelli trilobi ecallosi lobis lateralibus obsolete rotundatis: intermedio ovali retuso, racemis paucifloris pubescentibus, bracteis ovato-lanceolatis pedicello capsularum longissimarum vix æqualibus.

This was originally taken up from imperfect Martaban specimens in Dr. Wallich's herbarium. It was afterwards met with at Moulmain and Merquy by Mr. Griffith; always however without leaves. The pseudo-bulbous stems are about twenty-seven inches long; the bracts ovate, reflexed, greenish dull purple; the flowers white with a tinge of pink, and a yellow lip; they are arranged in short spreading racemes.

4. *E. ovata*; foliis oblongis obtusis basi angustatis, racemis pubescentibus multifloris, bracteis parvis ovalibus reflexis, sepalis petalisque acuminatis, labello ovato-oblongo indiviso basi bicalloso.

This plant, found in the Philippines by Mr. Cuming, evidently differs from the three others in the shape of the lip, which has no lobes, but an ovate-oblong form and a couple of little diverging plates near the base. It is nearest to *E. longilabris* in general appearance.

All these should be potted in turfy heath-mould, mixed with a few pieces of potsherds. Water should be liberally given during the growing season, and the atmosphere kept as humid as possible. In sunny weather the house should be slightly shaded, for although this plant succeeds well in a high temperature, it is soon injured by the rays of the sun. In winter very little water is required, and where steam cannot be admitted a slight syringe over head will be sufficient for two or three months.



LÆLIA majalis.

The May-flower Lælia.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § EPIDENDRÆÆ.

LÆLIA. Lindl. *supra*, 1839. *misc.* 42.§ 1. Grandifloræ ; *Petals distinctly larger than the sepals.*

L. majalis ; folio angusto scapo bifloro æquali, bracteis membranaceis ovatis, sepalis lanceolatis, petalis oblongo-lanceolatis duplò latioribus, labelli lobo medio rotundato emarginato plano lateralibus parvis obtusis.

L. majalis, Lindl. in *Bot. Reg.* 1839. *misc.* 42. *Bateman, Orch. Mex. & Guat.* t. 23.

Cattleya Grahami, Lindl. *Gen. & Sp. Orch.* p. 116.

The history of this charming plant is so well given by Mr. Bateman, that we beg to extract it from his magnificent work on the Orchidaceæ of Mexico and Guatemala.

“This lovely plant abounds in the most temperate parts of Mexico, where its exquisite beauty has rendered it a prime favourite with the natives, from whom it has received the familiar appellation of ‘Flor de Mayo.’ It does not however appear to have been long known to botanists, Dr. Schiede having been the first to send specimens to Europe, which, through the liberality of Professor Schlechtendahl have been extensively distributed. Living plants were first obtained by Mr. Barker from Oaxaca through the instrumentality of Mr. Ross : and more recently, a large supply has been received by the Horticultural Society of London, collected by Mr. Hartweg in San Bartolo, in situations so elevated, that the temperature sometimes falls below the freezing point. This habitat, so unusual for an Orchidaceous plant, will go far to explain the ill success that has hitherto attended its cultivation, for while it is comparatively easy to imitate the close and humid atmosphere in which most of the tribe are found, it is infinitely more difficult to provide a substitute for the pure air and frequent changes of temperature in which these mountain epiphytes

June, 1844.

N

would seem to delight. Indeed, so signal, in the case of *Lælia majalis*, has been failure of even the most experienced cultivators, that although there was scarce a collection that did not contain one or more specimens of the plant, still did it obstinately refuse to flower, except in the solitary instance about to be described, when it yielded to the skilful treatment of Mr. Dillwyn Llewelyn, of Penllergare, who has favoured us with the following note :—

“ ‘This plant was purchased,’ says Mr. Llewelyn, ‘about three years since from M. Deschamps, and soon afterwards potted in very rough fibrous peat, being kept nearly dry in a cool plant house, until its new buds began to swell, when it was removed to a hot and damp stove, kept exclusively for Orchidaceæ. Water was regularly given until its buds had acquired their full size, when it was discontinued by degrees, and the plant carried back to a lower temperature. This treatment has been repeated, and under it the entire genus seems to thrive, although, perhaps, from the vigour of some specimens of *L. anceps* and *L. autumnalis*, which I have attached to pieces of rough barked wood (with a little peat tied round the root) I should prefer that course of treatment to the more usual one of potting them.’

“ ‘The mode pursued by Mr. Llewelyn is certainly the only one under which success can be expected ; but there is yet a point to be gained, for while the specimens at Penllergare, however beautiful, consisted of only a solitary flower, in a wild state three or four are borne upon a spike.’”

The method of managing the plant in the Gardens of the Horticultural Society is as follows.

It is tied to a block of wood and suspended to a rafter in a moist stove. When removed from one block to another, which is sometimes necessary, it will be found beneficial to place a slice of turfy peat or a small quantity of sphagnum between the wood and the roots of the plant, this retains moisture in summer so that less syringing is required. The quantity of water necessary for it on the bare block of wood would prove injurious to plants in pots below it. In the growing season the temperature does not exceed 80° by day nor does it fall below 70° at night. In winter 56° with fire heat is quite sufficient.

3.





1865 - 1866

CERĒUS crenātus.

Crenated Torch Thistle.

ICOSANDRIA POLYGYNIA.

Nat. ord. CACTACEÆ.

CEREUS. *Botanical Register*, vol. 4. fol. 304.

§ 7. Alati, Pfeiffer.

C. crenatus; ramis strictis compressis biconvexis margine exactè crenatis omnino viridibus, floribus maximis candidis, stigmatè 9-radiato.

A most remarkable plant, belonging to the winged section of Torch thistles, according to Pfeiffer, which Link regards as a peculiar genus and calls Phyllocactus. It is the finest thing yet known of its class with white flowers, and will doubtless prove invaluable as a breeder; for its habit is beautiful, to say nothing of its magnificent flowers, which rival the night-flowering Cactus, but open in the day time. When produced last month at the exhibition in the Horticultural Society's Garden, it received the highest medal offered for new plants. Let us only imagine a cross between it and *C. speciosissimus* or *Ackermanni*!

For the following information concerning it we are indebted to Mr. Booth.

This fine species, with several others, was forwarded from Honduras in 1839 by George Ure Skinner, Esq. and presented to Sir Charles Lemon, Bart. M. P. with whom it flowered at Carew in May 1843. Although similar in some respects to *Ep. latifrons* of *Botanical Magazine*, fol. 2692, it proves to be perfectly distinct and far more desirable, on account of its flowers opening in the day time and continuing expanded for nearly a week, whilst those of the one referred to open in the evening, are in perfection at midnight, and finally close a little before sunrise. It is also proper to state that in addition to their other recommendations the flowers of this species are deliciously fragrant, which will no doubt render it a most valuable acquisition to the admirers of this singular tribe of succulents.

The plant grows about two feet high with large spreading branches, some of which in their young state are round and angular, with bristly hairs at the joints, resembling the young shoots of *Cereus speciosissimus*. Their most usual form,

however, is flat and broad, tapering a little at the base, where they are round, hard, and woody. The flat part is remarkably thick and leathery, from one to two feet long, and about two and a half or three inches wide, of a rich deep green, with large crenatures along the margin, from which it gradually thickens towards the midrib which is prominent from the base to the point. The *flowers* are produced at the first or second sinus from the apex of the leaf, or shoot, on which several buds make their appearance, but only one of them comes to maturity. The *tube* is round, and about four inches long, slightly curved and angular, with three or four series of elevated, ovate-acuminate, brownish green scales on the outside, each of which are similar in form and colour but vary in size, the inner ones being small, and the outer ones so large as to resemble the sepals from which they are scarcely to be distinguished. The *buds* are long and much pointed, of a brownish pink colour. The *flowers* are large and extremely handsome, being about five inches in diameter, and of a pale cream colour. The *sepals* are linear lanceolate acute, about four inches long and three-fourths of an inch wide, ranged in two rows of six, the one alternating with the other, and the inner being somewhat paler than the outer, which is a deep brown. The *petals* are eighteen in number, arranged in three rows, similar to the sepals. They are ovate oblong, somewhat pointed and taper towards the base, which is thick and fleshy, but otherwise they are of a thin delicate texture, about three and a half inches long and upwards of an inch broad. The inner row is rather shorter than the rest but similar in every other respect. The *filaments* are very numerous and about two-thirds the length of the petals, to which many of them are attached round the mouth of the tube. The greater number of them, however, are placed along the throat of the tube, which causes them to be of unequal lengths. All are of the same pale cream colour as the petals, with a slight greenish tinge internally. The *anthers* are ovate, obtuse, deep yellow. The *style* is very conspicuous, being about the thickness of a straw and as long as the petals, with eight recurved feathery looking stigmas half an inch long. The *ovarium* is at the bottom of the tube and is comparatively small, yellowish green, apparently five-angled.

The plant is easily cultivated in rich loamy soil mixed with small bits of charcoal instead of sand, and increases freely by cuttings of the leaves or shoots, which not unfrequently emit roots at their extremity. It requires to be grown in a warm greenhouse, and to be placed in a situation where it may have plenty of light.



* PENTAS carnea.

Flesh-coloured Pentas.

PENTANDRIA MONOGYNIA.

Nat. ord. CINCHONACEÆ. § HEDYOTIDÆÆ.

PENTAS, Benth. *Calycis tubus* brevis turbinatus; *limbus* profundè 5-fidus, laciniis angustis inæqualibus, glandulis 1-2 interdum in sinibus adjectis. *Corollæ tubus* elongatus; faux campanulata intus barbata; *limbus* patens, 5-fidus, laciniis ovatis glabris æstivatione leviter imbricatis. *Stamina* 5, infra faucem inserta. *Filamenta* brevia. *Antheræ* lineares. *Discus* epigynus crassus. *Stylus* filiformis, apice bilobus. *Capsula* subglobosa, apice libera, acutiuscula, loculicidè bivalvis, valvis bifidis. *Semina* numerosa. Benth. in Bot. Mag. t. 4086.

P. carnea; foliis ovatis v. ovali-oblongis acutis basi cuneatis pilosiusculis, corollæ tubo calyce multoties longiore, styli ramis clongatis, capsulæ valvulis parte adnata vix brevioribus. Benth. l. c.
Sipanea carnea, Hort.

We learn from Sir W. Hooker that this is supposed to be a native of Africa, within the tropics, and that it was introduced by Mr. Jacob Makoy, of Liege.

It is a soft wooded shrub, of a grey aspect, with strongly furrowed leaves, and terminal cymes of delicate flesh-coloured flowers. Specimens of it have been lately exhibited to the Horticultural Society by Mr. Ayres, from the collection of James Cook, Esq. of Brooklands, and by Mr. Glendinning of Turnham Green. The accompanying figure was made last September, from a plant in the possession of Messrs. Rolissons.

Judging from these we should say that it will prove a plant well worth cultivating; with a bad foliage certainly, but with flowers that more than compensate for it by their deli-

* So named by Mr. Bentham from πεντας, "a number five," in allusion to the parts of the flower being in fives instead of fours.

cacy. There can be no difficulty about growing it: for it seems to grow as freely as a *Clerodendron* or *Ruellia*, and to require similar management.

Fig. 1. is the calyx; 2. is a corolla and ovary divided longitudinally.



LONICĒRA diversifolia.

Various-leaved Fly Honeysuckle.

PENTANDRIA MONOGYNIA.

Nat. ord. CAPRIFOLIACEÆ.

LONICERA. *Supra*, vol. 14. t. 1179.§ Chamæcerasus; *baccis liberis, corollis basi vix gibbis.*

L. diversifolia; erecta, densè pubescens, foliis ovatis cordatisque oblongis acutis breviter petiolatis, floribus geminis et quaternatis pubescentibus subsessilibus omninò liberis, calyce cyathiformi 5-dentato, corollæ tubo hinc convexo limbo brevior, filamentis basi villosis.

L. diversifolia, *Wall. Fl. Ind.* 2. 169. *DeCand. prodr.* 4. 334.

In many respects this Himalayan shrub is much like the common Fly Honeysuckle (*L. Xylosteum*); from which it principally differs in its flowers being nearly or quite stalkless, and much larger. Dr. Wallich first received it from the mountains of Gurwhal; he afterwards procured it from Kamaon; according to Dr. Royle it is common on the mountains of the North of India. In a wild state it sometimes becomes small-leaved, and approaches the common *Xylosteum*, but its stalkless flowers still distinguish it.

By some mistake it is included by DeCandolle among his Nintooas, a set of climbing 2-flowered species which belong to the genus *Caprifolium*.

This is a hardy middle sized shrub, which thrives in any good garden soil, and flowers during the months of May and June. It is easily increased by cuttings of the half ripe wood, if treated in the same way as those of the common Honeysuckle. It was raised from seeds received from Dr. Royle from the North of India.

There is also in the Garden of the Horticultural Society, where the accompanying drawing was made, another Indian species of this genus, very distinct from any thing hitherto

described. It belongs to the *Isicas*, whose distinctive character resides in their having the twin ovaries completely united, so that when the fruit is ripe all trace of its two-fold origin disappears. It is a slender plant with deep purple branches, quite smooth leaves, and very long stalked pale yellow flowers stained with purple. It may be defined in the following terms.

L. (*Isica*) *discolor* ; glaberrima, foliis petiolatis oblongis acutis subtùs glaucis, pedunculis foliis dimidio brevioribus, calyce 5-dentato glandulis ciliato, corollæ tubo hinc valdè convexo discolore limbo multò brevior.



Herb. Linn. du

Herb. Frang. p.

Herb. Linn.

Herb. Linn.

EPIDENDRUM pterocarpum.

Wing-fruited Epidendrum.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § EPIDENDRÆÆ.

EPIDENDRUM. *Bot. Reg.* 1838. *fol.* 53.

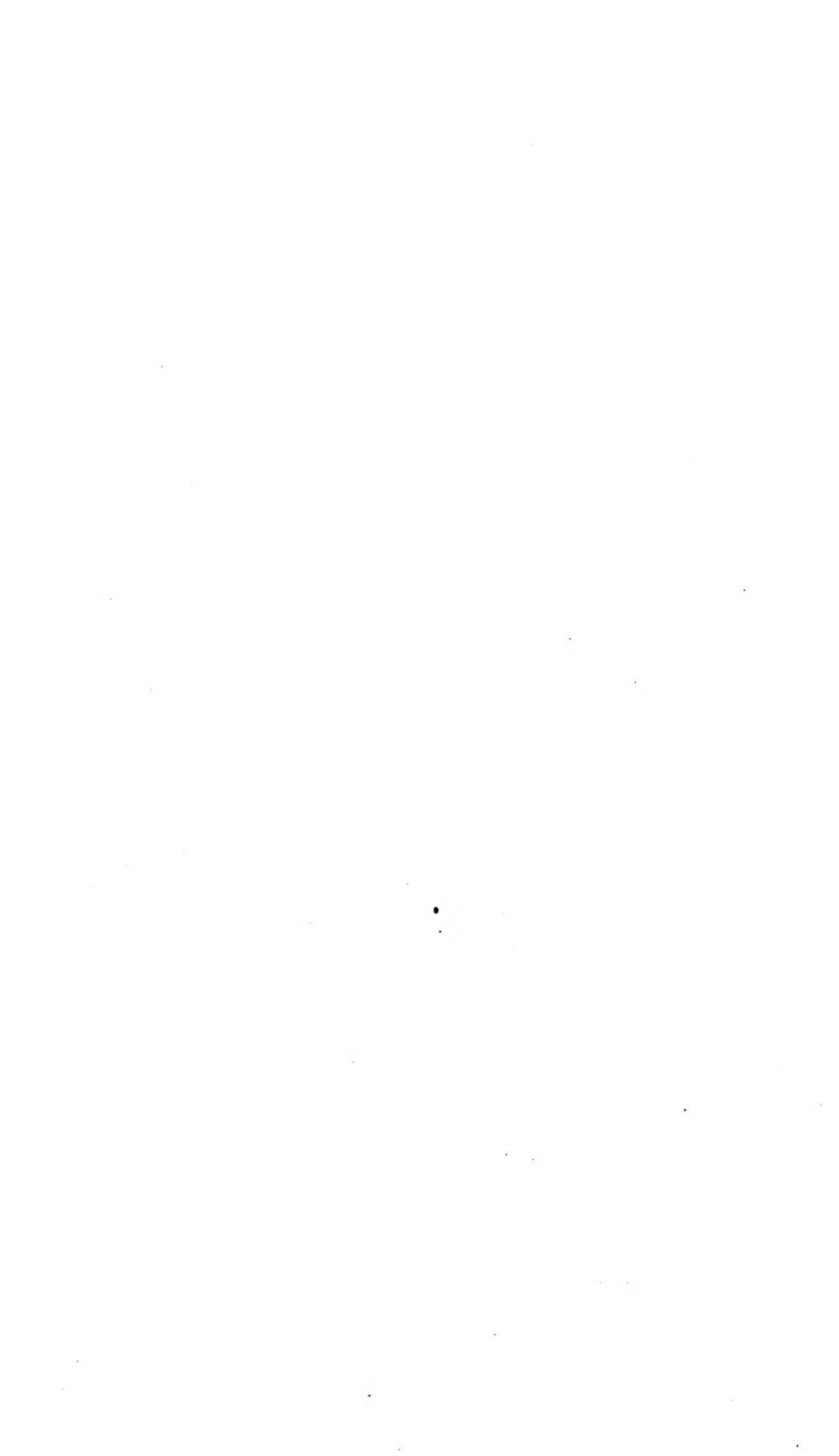
Subg. Encyclium. § III. *Labello trilobo.*

E. pterocarpum (Lindl. in Hooker's Journal, 3. 82. *Bot. Reg.* 1841. misc. 128.); pseudobulbis ovalibus compressis subdiphyllis, foliis ensiformibus acutis, racemo angusto, sepalis petalisque subæqualibus linearibus acuminatis patentibus, labelli subrotundi trilobi cordati laciniis lateralibus rotundatis intermediâ multò longiore acutâ basi bilineatâ callo pubescente obscure tridentato auctâ, capsulâ ovatâ tri-alatâ.

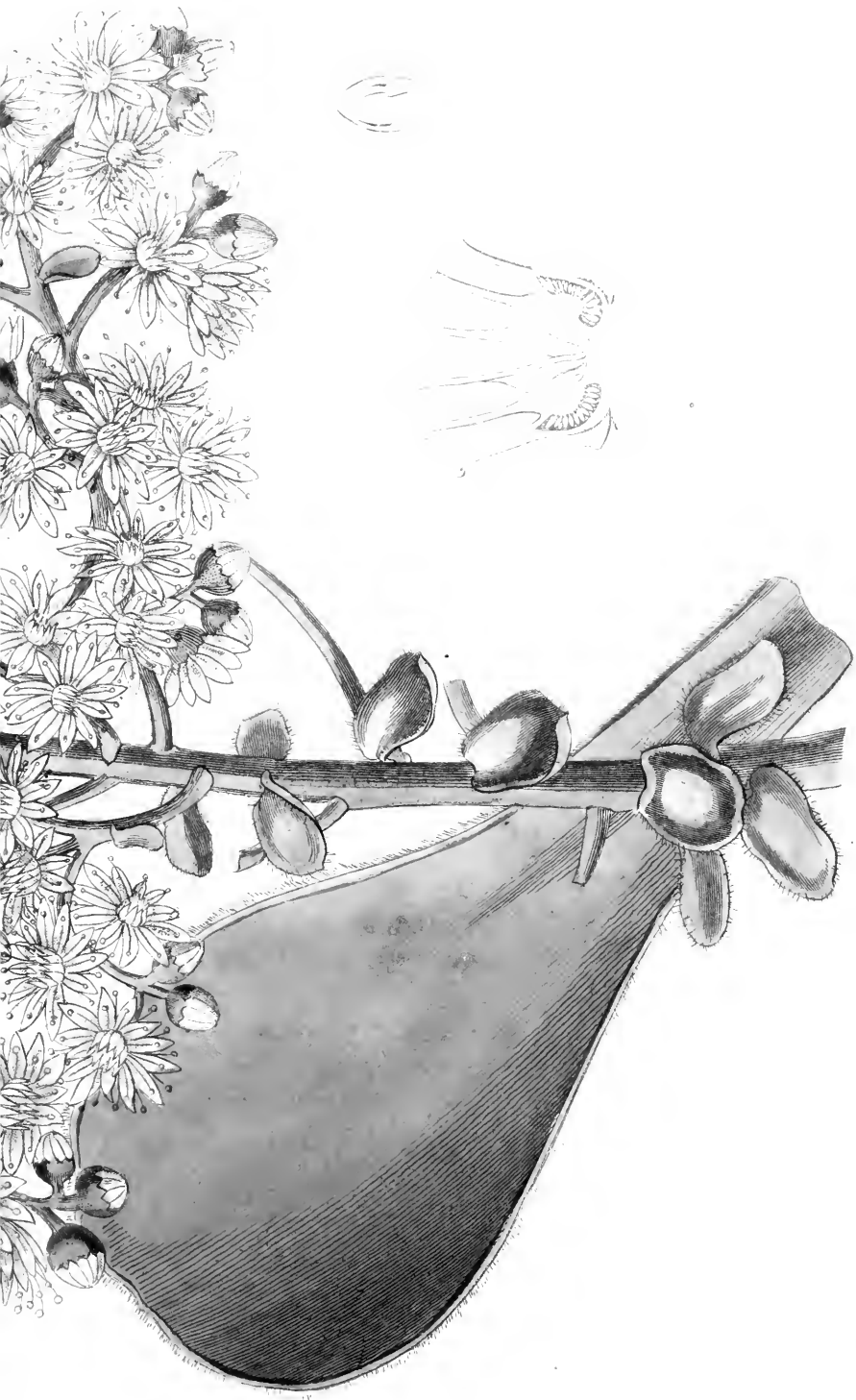
We cannot say much as to the beauty of this plant, which flowered with Messrs. Loddiges in December 1842. It however presents a remarkable instance of the formation of broad wings by the fruit, which, when ripe, has three of them of considerable size.

The flowers are a brownish green, with a broad, rolled up yellow variegated lip whose middle lobe is whitish. It is a native of Mexico, and closely allied to *E. tessellatum*.

Fig. 1. represents the column and lip.







ÆONIUM Youngianum.

Mr. Young's Houseleek.

DODECANDRIA DODECAGYNIA.

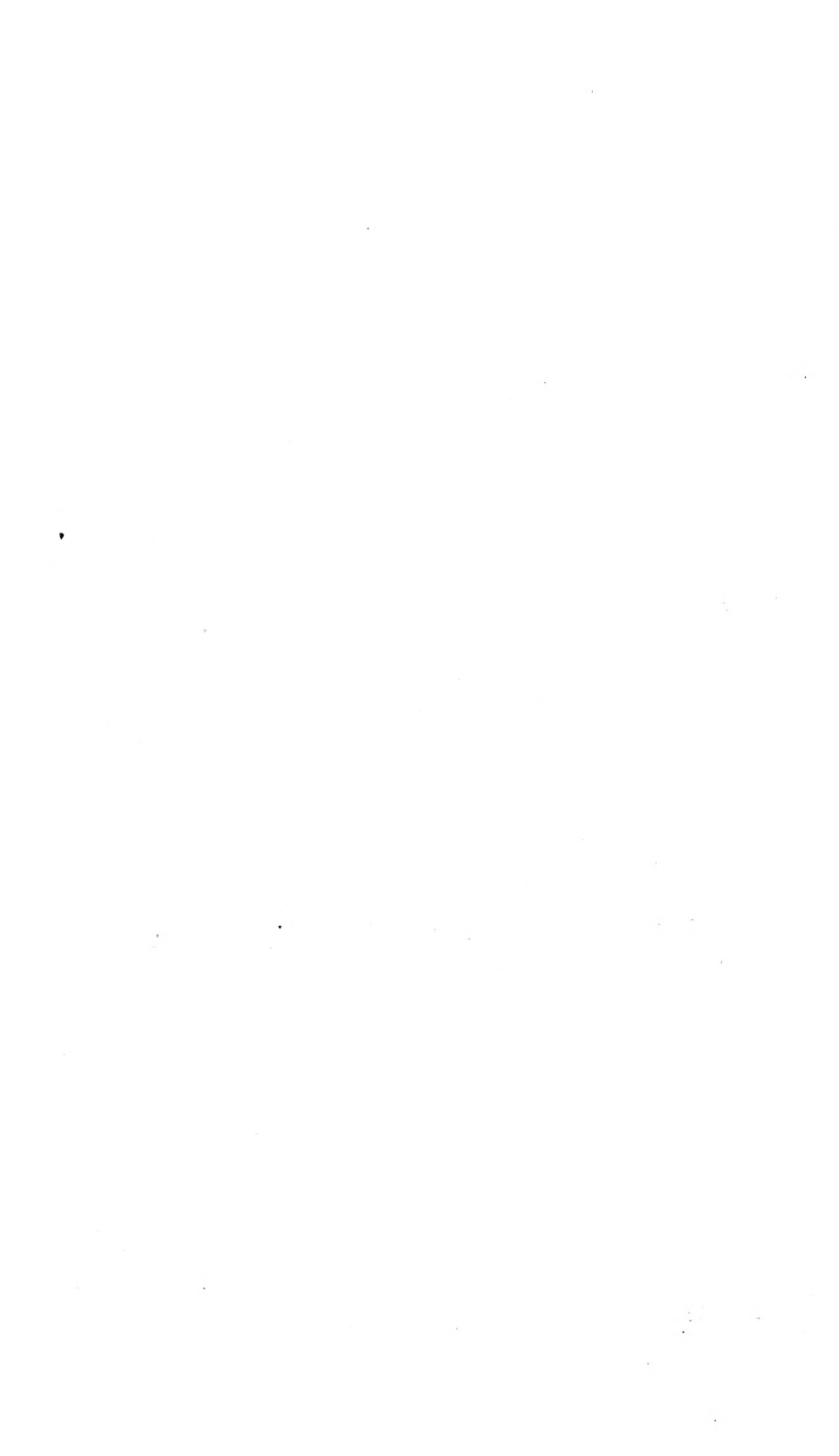
Nat. ord. CRASSULACEÆ.*ÆONIUM.* *Botanical Register*, 1841. fol. 61.

Æ. *Youngianum*; caule fruticoso crasso, foliis subcartilagineis crassis lucidis saturatè viridibus obcordato-spathulatis basi subtetragonis apice obsolete mucronatis margine attenuatis breviter ciliatis. *Webb Histoire Naturelle des isles Canaries, Vol. III. p. 197.*

This plant, hitherto only known from the brief Latin phrase above quoted, flowered in June, 1843, in the nursery of Mr. Wm. Young of Milford, near Godalming, after whom it was named by Mr. Barker Webb, who discovered it in the Canaries.

It appears nearly allied to *Æonium* (*Sempervivum*) *arbo- reum*, which, according to Mr. Webb, does not grow in the Canaries; but we have no information concerning it.

Fig. 1. represents a section of the ovaries. Fig. 2. a young petal and stamen some time before the flower expands.





ANDROMEDA phyllireæfolia.

Phyllirea-leaved Andromeda.

DECANDRIA MONOGYNIA.

Nat. ord. ERICACEÆ.

ANDROMEDA. *Botanical Register*, vol. 10. fol. 807.

A *phyllireæfolia*; foliis sempervirentibus oblongis convexis juxta apicem serratis, racemis pilosis axillaribus nutantibus foliorum longitudine v. longioribus, sepalis ovatis corollâ ovatâ duplò brevioribus, filamentis apice sigmoideis, antheris dorso bisetis.

A. *phyllireæfolia*, *Hook. ic. plant. vol. 2. t. 122.*

Pieris? *phyllireæfolia*, *DeCand. prodr. 7. 599.*

A very neat greenhouse shrub, introduced lately by Messrs. Loddiges, with whom it flowered for the first time in January last. It was originally discovered in West Florida, at a place called Apalachicola, by the late Mr. Drummond, from whom we have a specimen.

We place the plant, with Sir W. Hooker, in *Andromeda*, for these reasons. In the first place there seems no sufficient ground for separating from *Andromeda* the genera proposed by the Dons, which, to our apprehension, are neither limited by solid characters, nor so contrived as to form useful divisions. Secondly, the plant before us will not suit any of them exactly; so that M. DeCandolle, who admitted the proposed divisions, although he thrust it into *Pieris*, a name in which he admits there is no common sense, does so with doubt, and questions whether it may not form a new genus of itself. For ourselves we cannot separate it from *Andromeda polifolia*.

One of the most striking characters in this very distinct species is the peculiar darkness of its leaves, which thus are able to set off the snow-white flowers to great advantage. They look like pearls on a negro's neck.

It is a pity that the plant should not be hardy, but of that we fear there is no probability.

It is a pretty dwarf evergreen shrub, probably about as hardy as a *Pernettya*, and capable of enduring the mildest winters in the open border. It requires peat soil, and the same kind of treatment as *Andromeda floribunda*, like which it may be increased by layering, which should be done when the plant has finished its growth early in the autumn. It only requires the young shoots to be pegged down, and lightly covered with light sandy peat, and afterwards kept moist. The layers require two years before they are fit for removing from the mother plant.



CALANTHE Masuca.

Lilac Calanthe.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ.

CALANTHE. *Botanical Register*, t. 720.

C. Masuca (Lindl. Gen. & Sp. Orch. p. 249. *Bletia Masuca*, Don. Prodr. fl. nep. 30. *Amblyglottis veratrifolia*? Blume Bijdr.) ; scapo erecto foliis latis oblongis petiolatis acuminatis subtus pubescentibus longiore, racemis multifloris, labello tripartito basi tuberculis seriatis 5-cristato, seriebus intermediis elevatioribus ; laciniis lateralibus linearibus subfalcatis intermediâ multò majore cuneatâ emarginatâ in unguem linearem laciniis lateralibus æqualem angustatâ, calcare longissimo falcato clavato, columnâ brevi obliquâ anticè bifoveatâ, ovario pubescente.

For the figure of this charming plant we have to thank Messrs. Rollisson of Tooting, with whom it flowered in June, 1843.

It is a native of Nepal, and may be regarded as the gayest of the terrestrial species of that rich country, being conspicuous both for the large size of their flowers and their fine colour.

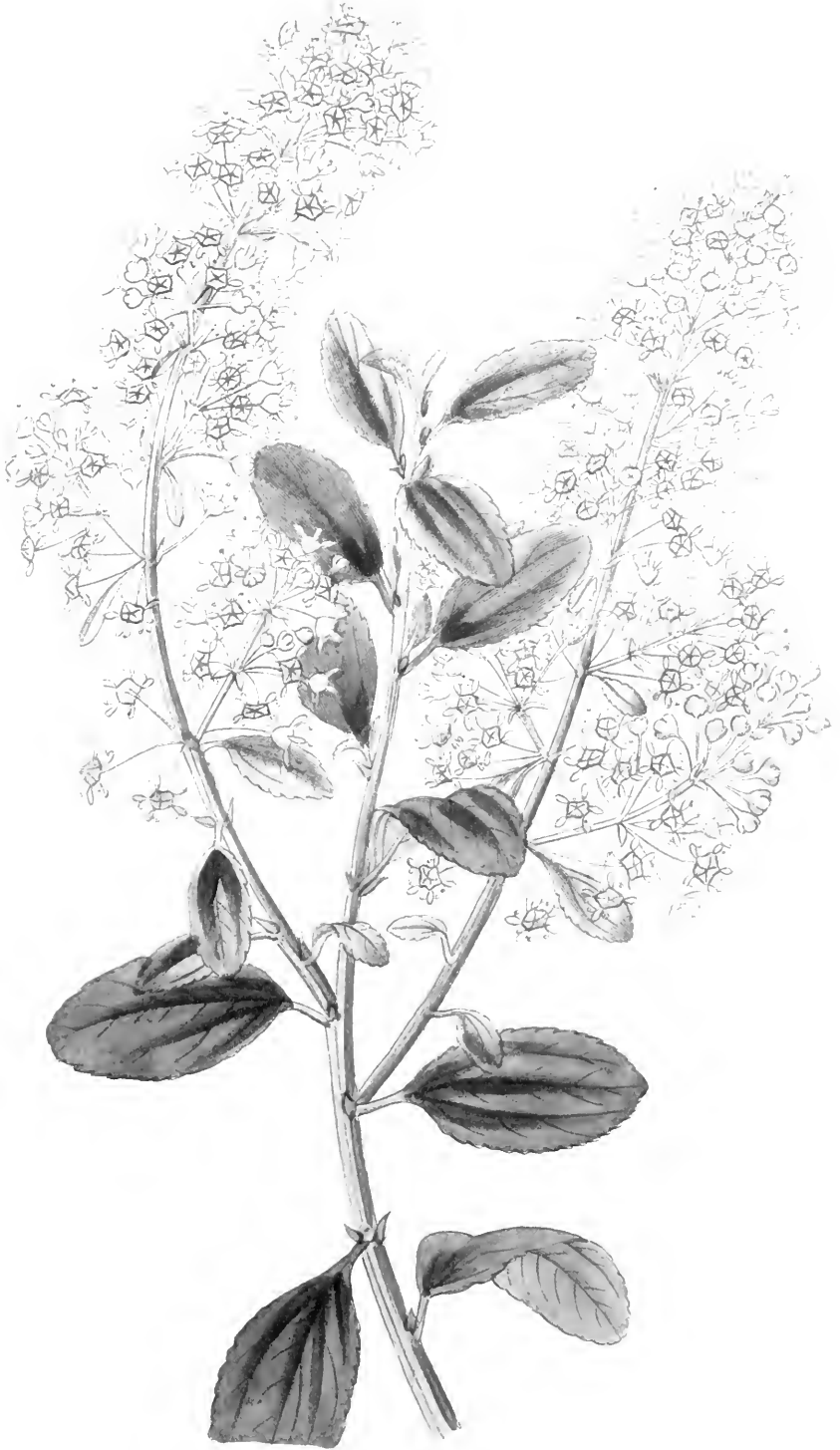
From the other purple species allied to it, this is readily known by the leaves as well as by the flowers. *C. versicolor* has leaves smooth on both sides ; *C. purpurea* downy on both sides, especially beneath ; while this has down only on the under side. *C. versicolor* has white sepals and petals ; *C. purpurea*, and this, purple ones. While however *C. purpurea* agrees in the colour of its flowers, its lip is altogether different, being very narrow, with the lateral lobes quite round. In order that there may be no confusion among these nearly allied plants, the characters of *C. purpurea* and *versicolor* are given below.

C. Masuca should be potted in turfy heath-mould, mixed with a few pieces of potsherds. In summer it should receive

an ample supply of water at its roots; and where it can be avoided, little should be allowed to fall on its leaves, otherwise the young shoots will damp off. It enjoys a humid atmosphere and a high temperature; but as the leaves are very delicate, they will soon become scorched if shading is not carefully attended to. In winter little water will be required; still it is necessary to keep the soil damp enough to preserve the bulbs from shrivelling. This is one of the most difficult of Orchidaceous plants to grow well.

C. purpurea (Lindl. Gen. & Sp. Orch. no. 2); scapo erecto foliis latis oblongis petiolatis acuminatis supra pilosis subtus tomentosis longiore, racemis laxis multifloris, labelli trilobi lobis lateralibus nanis rotundatis patentibus intermedio angusto cuneato divergenti-bilobo, calcare ovario vix brevior.

C. versicolor (Lindl. Sert. Orch. t. 42); foliis oblongo-lanceolatis erectis concavis 7-9-nerviis utrinque glaberrimis scapo apice pubescente brevioribus, racemo denso pyramidato, labelli columnæ brevi accreti trilobi lobis lateralibus ovatis nanis intermedio cuneato bilobo multò majore basi trituberculato secus lineam mediam verrucoso, calcare glabro ovarii pubescentis longitudine.



CEANOTHUS thyrsiflorus.

Thyrse-bearing Ceanothus.

PENTANDRIA MONOGYNIA.

Nat. ord. RHAMNACEÆ.

CEANOTHUS. *Botanical Register*, vol. 4. fol. 291.

- C. thyrsiflorus*; caule arboreo, ramulis inermibus angulatis, foliis ovato-oblongis glanduloso-serratis lucidis utrinque viridibus subtus pubescentibus triplinerviis, paniculis terminalibus oblongis contractis racemiformibus.
- C. thyrsiflorus*, *Eschscholtz in mem. acad. Petrop.* 1826. *Hooker Fl. Bor. Am.* 1. 125. *Torrey & Gray, Flora of North America*, 1. 266.
- C. divaricatus*, *Hort. nec Nuttall.*

A perfectly hardy shrub, as this is, with evergreen foliage of the most beautiful glossy green, and dense panicles of bright blue flowers, is indeed an acquisition to our gardens. In all respects this is one of the most valuable things that has been introduced for years. The country owes it to R. B. Hinds, Esq., who, while surgeon to the Sulphur surveying ship, occupied himself with Botany, formed collections of dried plants, now publishing under the auspices of the Admiralty, and sent home seeds to the Horticultural Society, from among which this was obtained. He describes it as being common at San Francisco and Monterey, where it produces a most beautiful effect.

A considerable number of plants have been distributed by the Horticultural Society under the name of *C. divaricatus*, which species it was at first supposed to be. Now, however, that it has flowered, it proves to be *C. thyrsiflorus*, and the first name has to be changed.

According to Messrs. Torrey and Gray, this species forms a small tree, with a stem sometimes as thick as a man's arm. The wild specimens, gathered in California by Douglas, for he too found it, appear to belong to a plant of considerable

stature, and are completely loaded with dense masses of bloom.

Our drawing was made in the Garden of the Horticultural Society in May last, when it first began to flower against a south wall.

This shrub may be planted in any kind of soil, and is easily increased by cuttings of the half-ripe wood, treated in the ordinary way.



Asplenium platyneuron L. f. *Asplenium platyneuron* L. f. *Asplenium platyneuron* L. f. *Asplenium platyneuron* L. f.

ODONTOGLOSSUM læve.

Smooth-lipped Odontoglossum.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ.

ODONTOGLOSSUM. *Botanical Register*, 1840. fol. 30.

O. læve; pseudobulbis compressis sulcatis, foliis oblongo-ensiformibus obtusis apice obliquis, floribus paniculatis, bracteis laxis membranaceis, sepalis petalisque oblongo-linearibus acutis planis, labelli laminâ panduriformi apiculatâ ungue lævi obsoletissimè bidentato, columnæ alis apice rotundatis crispis basi planis.

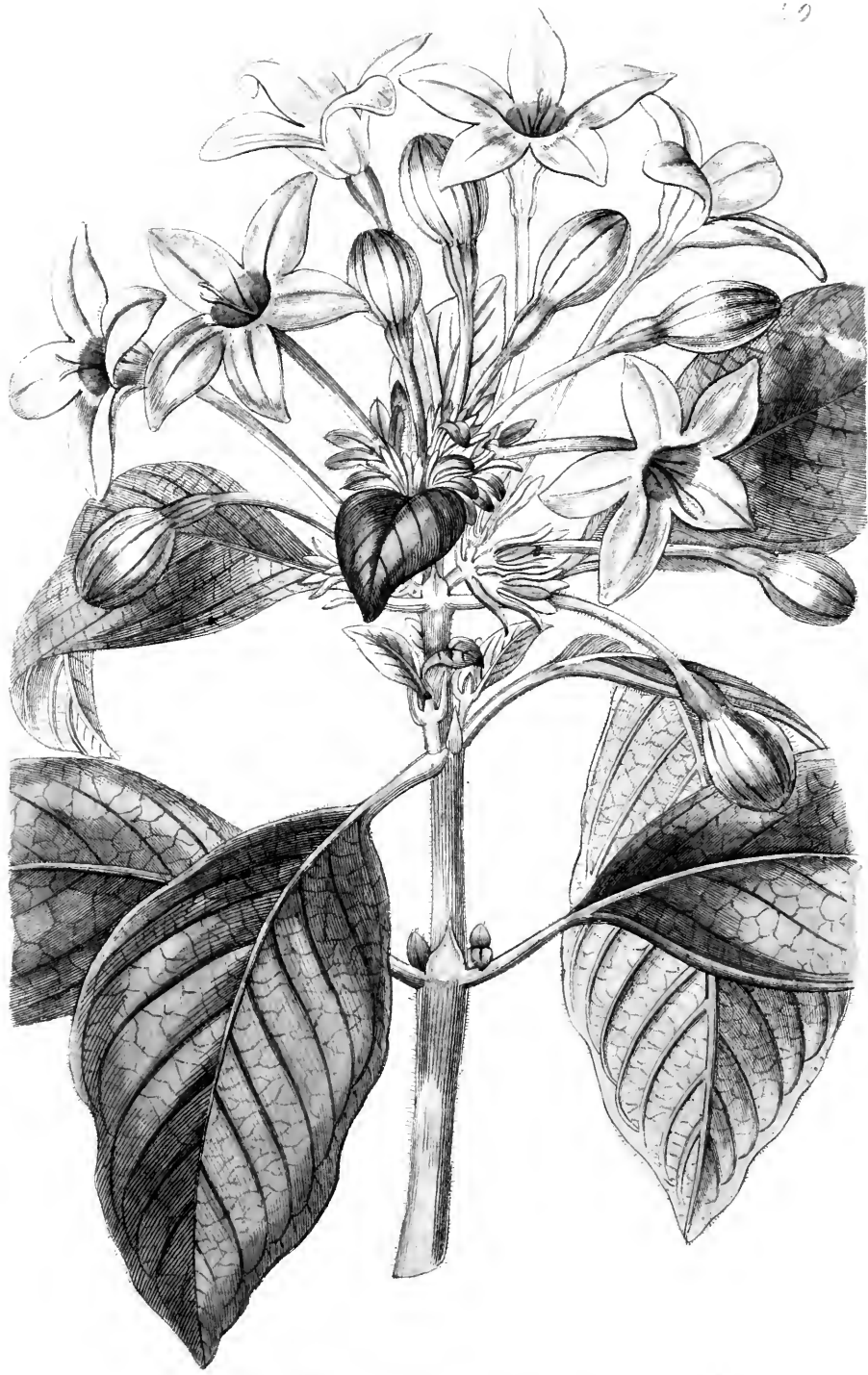
Both Mr. Skinner and Mr. Hartweg found this plant abundantly in Guatemala, and sent it home to their friends, so that it is by no means rare in collections. It is not, however, much esteemed, because of the flatness of colour in its flowers. Nevertheless, they have cinnamon-brown blotches on the yellow ground of the petals and sepals; and the lip, which is white, is banded with violet across the middle; besides which they are fragrant.

The name *Odontoglossum*, or *Tooth-tongue*, has been given to these plants, because they are usually furnished with strong teeth on the lower part of the lip, and these teeth are not unfrequently very conspicuous. Here, however, they are reduced to a couple of trifling notches, and might be easily overlooked.

Our drawing was made in the garden of the Horticultural Society in May, 1842. Fig. 1. represents the column, seen in front, with its wings.

This species should be potted in turfy peat, and placed in a moist stove. A liberal supply of water should be given during the growing season, and the house be slightly shaded in sunny weather, in order to keep the temperature as near

30° by day as possible. In winter, like many other bulbous Orchidaceous plants, it requires very little water for a few weeks, but would be much benefited (especially in clear weather) if the house in which it is grown could be filled with steam once a day. The temperature should at that time never be raised above 60° by fire heat.



* *HINDSIA* violācea.*Porcelain blue Hindsia.*

PENTANDRIA MONOGYNIA.

Nat. ord. CINCHONACEÆ.

HINDSIA. *Calycis* tubus turbinatus, limbus 4-5-partitus laciniis inæqualibus linearibus v. apice foliaceo-dilatatis. *Corolla* infundibuliformis, tubo elongato, superne paullo inflato et inter stamina intus barbato, fauce nuda, limbi laciniis 5 ovatis, æstivatione valvata. *Antheræ* lineares sub apice tubi subsessiles. *Ovarium* biloculare; placentæ medio dissepimento affixæ, multiovulatæ. *Styli* rami longi lineares compressiusculi papilloso-hirti. *Capsula* calyce corticata, septicide bivalvis, valvulis duris demum loculicide bipartitis. *Semina* numerosa, non alata (matura ignota).—Frutices *austror-americanæ*. Folia *opposita, petiolata, ovata v. sublanceolata*. Stipulæ *utrinque solitariae ovatae, integræ, v. glanduloso-dentatæ intus sæpius glandulosæ*. Flores *ad apices ramorum in cymas subfoliatis dispositi, subsessiles, speciosi, corollis cœruleo-violaceis*. Bentham MSS.

H. violacea (supra, p. 40); molliter pubescens, stipulis ovatis, foliis lato-ovatis basi rotundatis, laciniis calycinis valde inæqualibus majoribus supra medium foliaceo-dilatatis. Bentham MSS.

“ The above generic character is taken from this species and from the closely allied *Rondeletia longiflora* of Chamisso and Schlechtendahl, which may be thus characterised as a second species of *Hindsia*.

H. longiflora; glabra v. tenuissime pubescens, stipulis lanceolatis, foliis anguste ovatis basi longe acutatis, laciniis calycinis parum inæqualibus non dilatatis.

“ It is much to be regretted that these plants should have been referred to *Rondeletia*, from which they differ so much in appearance, and from which they may be essentially distinguished by the form of the corolla, rather funnel-shaped than salver-shaped, without any callous contraction or beard at the mouth of the tube, by the capsule which (according to

* See p. 40 of the miscellaneous matter of this volume.

Chamisso and Schlechtendahl) separates by the splitting of the dissepiment into two cocci, which are loculicidally split, and by some other minor points. Nearly the same characters distinguish them also from *Sipanea*, which is quite as nearly related as *Rondeletia*, though very different in habit. They have also been compared with *Bouvardia*, and in some respects resemble the large white-flowered species of that genus, but independently of all minor distinctions the *Hindsias* have the ovules and probably the seeds of the tribe of *Rondeleticæ*, not of that of the *Cinchonæ*.

“The *Hindsia violacea* differs from the better known *H. longiflora*, chiefly by having much larger, broader, and more downy leaves, the flowers much larger and more hairy; and by the calyx, of which one, two, or three divisions are much larger than the rest, and more or less dilated and leaf-like above the middle.

“Both species vary in the size of the flowers, and in the shade of their colour. In the *H. longiflora* also, and perhaps in *H. violacea* the stamens are entirely included in the tube of the corolla in some specimens, and in others the tips of the anthers protrude. In the latter case the style appears to be less prominent than in the former, so that these differences may arise probably from a certain degree of sexuality.”

For the foregoing matter we are indebted to the kindness of Mr. Bentham, who agrees with us in regarding the *Rondeletia longiflora* wrongly referred to the genus in which it has been placed.

This *Hindsia violacea* is one of the finest things obtained from South Brazil. It has been imported by Messrs. Veitch and Son of Exeter, who received for it the large silver medal at the Horticultural Society's Garden Exhibition in May last. It will doubtless prove a very easily cultivated greenhouse plant; and is certainly unsurpassed in beauty by blue flowering shrubs.





AERIDES *viridis*.*Green-leaved Air plant.*

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ.*AERIDES.* *Supra*, 1842. *fol.* 55.

A. viridis (Lindl. in Bot. Reg. 1843. misc. 48); foliis latis obliquè retusis, racemis pendulis multifloris, sepalis petalisque obovatis obtusis, labelli cornu acuminato ascendente lobis lateralibus apice denticulatis intermedio lanceolato medio canaliculato versus apicem denticulato.

This is a beautiful addition to that set of *Aerides* of which *A. odoratum* was the first discovered. Like the flowers of that species, these are deliciously and very peculiarly sweet-scented, and not at all inferior in size.

Each sepal and petal has a deep purple blotch at the end, while the remainder is a delicate soft French white. The lip is speckled with crimson, and bears in the middle an inflated, sanguine, serrated tongue; as is represented at fig. 1.

The leaves are much alike in all these plants, but here they are of a peculiarly bright green, which circumstance has suggested the name.

Our drawing was made in April, 1843, in the stove of Messrs. Loddiges, who imported it from Java.



STENOMESSION Hartwegii.

Mr. Hartweg's Stenomesson.

HEXANDRIA MONOGYNIA.

Nat. ord. AMARYLLIDACEÆ.

STENOMESSION. *Herbert.*

S. Hartwegii; foliis synanthiis ligulatis margine revolutis, umbellis 2-floris, spatha pedicellis brevioribus, floribus pendulis, perianthii laciniis ovatis erectis, staminibus inclusis, coronæ edentulæ filamentis 2-3 dentatis sinibus integris acutis.

A pretty little bulbous plant found by Mr. Hartweg at the Hacienda del Ixo, on the ascent to Antisana, in the province of Quito, at the height of 11,800 feet above the sea.

It has gay orange-coloured nodding flowers, growing in pairs.

Fig. 1. represents the flower cut open so as to shew that the filaments are 3-toothed, without any considerable space between them.

The accompanying figure was made in the garden of the Horticultural Society in March last; but the plant, which has been extensively distributed by the Society, has appeared in many other collections.

It should be potted in a compost consisting of peat and sandy loam in equal proportions. In spring and summer, while the plant is in a growing state, an ample supply of water should be given, but in autumn, when the leaves begin to die off, this should gradually be withheld, and for a few weeks in winter kept quite dry. The temperature in a warm greenhouse will be quite sufficient.



St. J. ...

Pub. by ...

1864

* *HABROTHAMNUS* purpureus.*Purple Habrothamnus.*

PENTANDRIA MONOGYNIA.

Nat. ord. CESTRACEÆ.

HABROTHAMNUS. *Calyx* campanulatus, quinquedentatus. *Corolla* hypogyna, clavato-tubulosa, tubo longo, limbo quinquedentato, contracto. *Stamina* 5, medio corollæ tubo inserta, inclusa; *filamenta* simplicia. *Antheræ* longitudinaliter dehiscentes. *Ovarium* biloculare, placentis oblongis, dissepimento adnatis, pluriovulatis. *Stylus* simplex; *stigma* capitatum, obsolete bilobum. *Bacca* calyce cincta, bilocularis. *Semina* pauca, angulata, umbilico ventrali. *Embryo* in axi albuminis carnosus rectus; *cotyledonibus* foliaceis, *radicula* tereti, infera.—Frutices *mexicani*, *glabri* v. *subtomentoso-pubescentes*, pilis *articulatis*; foliis *alternis*, *integerrimis*, floribus *inæqualiter cymosis*, corollis *baccisque rubris*.—Endl. gen. p. 667. no. 3867.

H. purpureus; ramulis foliisque subtus pubescentibus, foliis petiolatis ovato-lanceolatis acuminatis, cymis terminalibus, calyce obconico glabro, corollæ laciniis acutis ciliatis.

H. elegans, *Hort.*

H. purpureus, *Supra misc. no. 19. p. 12.*

The beauty of *Habrothamnus fasciculatus* is so striking that attention is strongly drawn to the discovery of other species in Mexico; and the Belgians have already succeeded in adding that now represented, which, although not comparable with *H. fasciculatus*, is evidently a graceful and gay-looking plant. We received fresh specimens from Mr. Van Houtte, Nurseryman, Ghent, in January last, and with them a coloured figure by Mr. Van Damme. From these materials the accompanying figure has been made. We however fear that justice has hardly been done to the colours, partly because of the specimen having flowered in the winter, and partly because it is probable that pressure and packing had

* So named from ἀβρός, gay, and θάμνος, a shoot or branch, in allusion to the beauty of the species.

given too much blue to the flowers we examined. We understand indeed that the corolla is really of a bright carmine.

We have not seen the plant in cultivation in this country : but it is evidently a soft-wooded species, to be treated in the same manner as *Pelargonium*s.

It differs from *H. fasciculatus* in its small bracts, and less conspicuous flowers, which moreover are smooth, not downy ; from *H. tomentosus* in the shortness of the lobes of the corolla, the broadness of the leaves, the smoothness of the calyx, and the terminal, not lateral, flowers ; from *H. corymbosus* in not being destitute of hairs.



BERBERIS umbellata.

Umbellate Berberry.

HEXANDRIA MONOGYNIA.

Nat. ord. BERBERACEÆ.

BERBERIS. L. Bot. Reg. 1840. fol. 27.

* *Leaves simple, evergreen. Flowers racemose.*

B. umbellata; spinis gracilibus 3-partitis, foliis angustis obovato-oblongis integerrimis mucronatis subtus glaucis, racemis foliis longioribus.

B. umbellata, *Wall. herb. Don. syst.* 1. 116.

B. angulosa, *Wall. Cat. no.* 1475.

This is a hardy sub-evergreen bush, about three feet high, growing freely in the common garden soil, flowering abundantly in June, and easily increased either by seeds or layers.

It was raised in the garden of the Horticultural Society, from seeds received from the East India Company, at different times, and under various names, but more particularly those of *B. Wallichiana* and *floribunda*. It is no doubt in many other collections under this or similar names. *B. floribunda* however has spiny leaves, not at all glaucous on the under side, and *B. Wallichiana*, which also differs in those respects, has sessile fascicles of flowers, and is quite another thing.

This is easily known by its narrow, spineless leaves, slightly glaucous beneath when fresh, and becoming more so when dry.

Dr. Wallich has distinguished a plant called *B. angulosa* from his *B. umbellata*, but our specimens of it from him present no tangible mark of distinction. As for the name *umbellata*, it is unfortunate that it has been introduced into systematic works, for the shortness of the racemes, from which circumstance it has been taken, is apparently accidental and unimportant.



EPIDENDRUM radiatum.

Ray-flowered Epidendrum.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ § EPIDENDRÆÆ.

EPIDENDRUM. *Supra*, 1838. fol. 53.

§ OSMOPHYTUM. Caulis pseudobulbosus v. fusiformis apice foliosus. Flores racemosi. Labellum adnatum, sæpius indivisum et cochleatum. *Lindl. in Hook. Journ.* 3. 81. *Bot. Reg.* 1842. *sub folio* 50.

E. radiatum (Lindl. in *Bot. Reg. misc.* 1841. no. 123); pseudobulbis ovatis compressis utrinque tricostatis triphyllis, foliis angustis clongatis acutis, racemo denso multifloro, ovariis trialatis, sepalis linearibus petalisque lanceolatis patentissimis, labello cochleato crenato crispo, clinandrio trilobo laciniis lateralibus erectis carnosis intermediâ truncatâ apice serratâ.

Allied to both *E. cochleatum* and *lanceifolium*, this pretty species is distinctly known by the round form and crisp margin of its lip, which moreover is almost notched out in the middle, and very delicately streaked with purple. Its petals too are both shorter and broader than in either of those two species.

Its habit is precisely theirs; and the three, considering their constant flowering and very neat appearance, deserve a place in all collections. Besides, this species smells deliciously of cinnamon.

The accompanying figure is from a plant in the garden of the Horticultural Society, received from Mexico from Mr. Hartweg. We also possess specimens gathered in that country on rocks, at the Hacienda de la Laguna, by Dr. Schiede.

It should be potted in turfy heath-mould, mixed with small pieces of potsherds. During the growing season an ample supply of water should be given, and the atmosphere kept as moist as possible. In summer when the sun is

September, 1844.

T

strong, the house should be slightly shaded, in order to keep the temperature as near 80° by day as possible, without admitting much air. For a few weeks in winter little or no water should be given, providing the house can be filled with steam once a day.



Ant. G.

1848

ALŌNA cœlestis.

Sky-blue Alona.

PENTANDRIA MONOGYNIA.

Nat. ord. NOLANACEÆ.

ALONA, Lindl. (Vide infra.)

A. cœlestis. (Vide infra.)

It has long been known to Botanists that Chile and Peru abound in shrubby plants allied to Nolana, few of which are yet published, but including among them some species of remarkable beauty. Hitherto our gardens have possessed no others than *N. prostrata*, *tenella*, *paradoxa*, and *atriplicifolia*, of which the first and last alone remain in cultivation. But they are annuals, and, with the exception of the last, of small importance for the purposes of decoration. The shrubs are still to procure. Of these one species, that now figured, has at last been raised from some of Mr. Bridges' seeds, by Mr. Best, gardener to A. Park, Esq. of Merton Grove, Surrey.

It proves to be a very fine thing, with pale sky-blue flowers, each of which remains in beauty for several days. Its habit is that of a soft-leaved heath, and it appears likely to form a bush of some such size as a common Pelargonium. What its proper treatment may be we are unable to tell, having had no opportunity of studying the plant; but we presume it will thrive with the same cultivation as Scarlet Pelargoniums, and we hope it will prove a capital thing for bedding out during the summer. We would, however, suggest to gardeners, that as all the Nolanas appear to be shore plants, salt in small quantities may be found useful in the soil.

Our drawing was made from a plant exhibited to the

Horticultural Society in July last, when it received the silver Knightian medal.

The genus *Nolana*, as at present constituted, includes plants so different from each other in structure and general appearance that, considering the principles adopted in the classification of the Convolvulaceous, Boraginaceous, and other allied orders, it is necessary to break it up into several genera, for which good characters will be found in the very remarkable fruit, and probably in the flowers also, whenever an opportunity shall occur for examining them in a fresh state.

If we regard *Nolana prostrata* as the original species of *Nolana*, we shall find that its distinctive character resides in the regular combination of its twenty ovaries into five nuts or drupes, each of which is four-celled.

But there is another group, consisting principally of shrubs, in which the ovaries are very irregularly combined, so that while some of the nuts or drupes are four or more celled, others have not more than one, two, or three cells. They may be conveniently separated under the name of *Alona* (the anagram of *Nolana*).

Corresponding with these in the irregular condition of the fruit, but not having more than eight or ten ovaries in combination, are two singular plants with all the habit of shrubby *Salsolas*, and a very small hypocateriform corolla. They may be named *Dolia* (from *δολιος*, deceptive); they being one thing, and looking like another.

On the other hand, in *Nolana paradoxa* and *atriplicifolia* there is a complete breaking up of the twenty ovaries into so many independent drupes. Those species constitute a group bearing the same relation to the other genera as *Malope* to its neighbouring *Malvaceæ*. The name *Sorema* (from *σωρος*, a heap,) may be applied to them.

Finally, under the name of *Aplocarya* (*απλοος*, simple, and *καρνα*, a nut,) it will be desirable to station a singular scrubby shrub, in which the ovaries are five in number, and altogether simple.

The following brief characters will serve for the discrimination of these plants, until they can be described in greater detail.

NOLANA, *Lim.*

Corolla campanulata. *Ovaria* 5, 4-locularia. *Drupæ* 4-loculares, 4-spermæ, basi apertæ.—Herbæ annuæ prostratæ, floribus convolvulaceis.

1. *N. prostrata*, Linn.—Chile.
2. *N. tenella*, Lindl. in Hort. Trans. 1827.—*N. paradoxa*, Bot. Mag. t. 2604.—Chile.—Obs. A precedente calyce bilobo diversa.
3. *N. spathulata*, Fl. Peruv.—Peru.
4. *N. inflata*, Fl. Peruv.—Peru.
5. *N. ? coronata*, Fl. Peruv.—Peru.

ALONA.

Corolla campanulata. *Ovaria* plura, 1-6-locularia. *Nuces* v. *drupæ* 1-6-loculares, seminibus paucioribus, basi apertæ.—Plantæ floribus *conspicuis, nunc* fruticosæ *teretifoliæ, nunc* herbacæ *planifoliæ*.

1. *A. cælestis*; fruticosa, glabriuscula, foliis teretibus fasciculatis, calycis hirsuti longè pedunculati dentibus apice teretibus subæqualibus, corollæ plicis pilosis, nucibus quibusdam multilocularibus.—Coquimbo, (herb. Cuming, 857; Bridges, 1329).
2. *A. rostrata*; fruticosa, ramulis pubescentibus, foliis teretibus sparsis, calyce glabro subsessili subbilabiato in alabastro rostrato, corollæ plicis glaberrimis.—Coquimbo, (herb. Bridges, 1326). A very fine species, with flowers as large as the last.
3. *A. obtusa*; fruticosa, ramulis scabriusculis, foliis teretibus sparsis, calyce glabro breviter pedunculato subbilabiato in alabastro obtuso, corollæ plicis glaberrimis.—Coquimbo, (herb. Bridges, 1327). Like the last, but leaves shorter, flowers smaller, and calyx different.
4. *A. glandulosa*; fruticosa, undique corolla etiam glanduloso-scabra, foliis brevibus teretibus sparsis subsquarrosis basi valdè productis, calycis subsessilis angulati dentibus brevibus abruptè teretibus.—Coquimbo, (Macrae). Flowers smaller than in the last.
5. *A. carnosa*; fruticosa, glabriuscula, foliis brevibus rigidis trigonis incurvis sparsis, calycis subsessilis bilobi teretis carnosii dentibus tenuibus, corollâ glabrâ.—Coquimbo, (herb. Bridges, 1328; Cuming, 863). Flowers as large as those of *A. obtusa*.
6. *A. tomentosa*; fruticosa, incano-tomentosa, foliis spathulatis obtusissimis sparsis planis margine revolutis, calycis 5-fidi brevè pedunculati dentibus triangularibus, corolla pubescenti.—Valparaiso, on rocky cliffs, (herb. Bridges, Cuming, 481). Flowers white, small.
7. *A. revoluta*.—*Nolana revoluta*, Fl. Peruv. 2. t. 113. f. 6.—Peru, (herb. Mathews, 836, 837; Cuming, 1068). Herbaceous, shrubby at the base. Flowers as large as in *Nolana prostrata*.
8. *A. bacata*; annua, erecta, pubescens; foliis lineari-oblongis obtusis carnosis, calycis longipedunculati laciniis triangularibus, corolla glabra.—Coquimbo, (herb. Bridges, 1322). Flowers large, and apparently yellow. Drupes quite pulpy in the dried state.
9. *A. longifolia*; annua, procumbens?, pubescens, foliis ovato-oblongis tenuibus, calycis longipedunculati laciniis inæqualibus linearibus corolla

dimidio tantum brevioribus, corollam pilosiusculam, drupis siccis rugosis. —Coquimbo, (herb. Cuming, 887). A coarse half-succulent plant, with flowers an inch and a half long. Its drupes appear to have scarcely any pulp; six are one-celled, and one four-celled, with the cells placed one above the other!

DOLIA.

Gorolla hypocrateriformis, limbo campanulato. *Ovaria* 8-10, varie coadunata. *Nuces* 1-3-loculares, basi clausæ.—Fruticuli *erecti, ramosi, foliis linearibus, carnosis, floribus minutis.*

1. *D. vermiculata*; ramis cotoneis, foliis brevissimis, calycis dentibus carnosis obtusis recurvis tubo corollæ multo brevioribus.—Coquimbo, (herb. Cuming, 893; Bridges, 1336).
2. *D. Salsoloides*; ramis calvis, foliis longis linearibus, calycis dentibus linearibus obtusis tubo corollæ æqualibus v. longioribus.—Chile, (Macrae). This has quite the appearance of some of the Salsolas, or still more of *Chenopodium maritimum*.

SOREMA.

Corolla campanulata. *Ovaria* 20, libera, cumulata. *Drupæ* 1-loculares, 1-spermæ, basi apertæ.—Herbæ *annuæ, prostratæ, floribus convolvulaceis.*

1. *S. paradoxa*.—*Nolana paradoxa*, *Lindl. in Bot. Reg. t. 865.*—Chile.
2. *S. atriplicifolia*.—*Nolana atriplicifolia*, *D. Don.*—Chile, (within the spray of the sea, Bridges; herb. Cuming, 627).

APLOCARYA.

Corolla campanulata. *Ovaria* 5, omnino libera. *Nuces* 5, simplices, erectæ, basi omnino apertæ, toroque facile separabiles. *Semina* (immatura) hilo magno pulvinato.—Fruticulus *ramosus, floribus parvis, foliis carnosis.*

- Sp. 1. *A. divaricata*.—Coquimbo, (herb. Cuming, 862). Fruticulus rigidus, ramosus, divaricatus. Folia carnosæ, lineari-spathulata retusa. Flores parvi, solitarii, terminales. Calyx tubi corollæ longitudine, 5-dentatus.



Stictis ... M.D. ... 1844

*CORETHROSTYLIS bracteata.

Rosy-armed Corethrostylis.

PENTANDRIA MONOGYNIA.

Nat. ord. LASIOPETALEÆ.

CORETHROSTYLIS, Endl. Inflorescentia cymosa, oppositifolia. Bracteolæ a calyce remotæ, coloratæ. Calyx petaloideus, marcescens, ad basim quinquepartitus, laciniis lanceolato-acuminatis, stellato-patentibus, æstivatione valvatis. Corolla nulla. Stamina 5, hypogyna, calycis laciniis alterna; filamenta brevissima, subulata, libera; antheræ extrorsæ, biloculares, ovoideo-oblongæ, medio dorso insertæ, loculis apice intus poro dehiscensibus. Ovarium sessile, triloculare. Ovula in loculis gemina, collateralia, ex anguli centralis basi adscendentia, extrorsum anatropha. Stylus elongatus, pilorum fasciculis retrorsis hispidus, pyramidato-scopæformis. Stigma simplex. Capsula calyce emarcido connivente tecta, trilocularis, loculicide trivalvis, valvis medio septiferis intus glabris. Semina in loculis solitaria, erecta, ovato-oblonga, testa durissima, raphe introrsa filiformi adnata, umbilicum basilarem, strophiola cupulæformi multipartita cinctum, cum chalaza apicali, jungente. Embryo in axi albuminis carnosus orthotropus, ejusdem fere longitudine, cotyledonibus foliaceis, ovatis, planis, dorso raphen respicientibus, radícula tereti, longa, umbilicum attingente, infera. —Frutices Novæ-Hollandiæ austro-occidentalis, pilis stellatis consiti; foliis alternis, petiolatis, cordatis, integerrimis v. repando subsinuatis, inflorescentia oppositifolia, cymoso-racemosa, bracteis foliaceis, bracteolis sparsis, coloratis, alabastris acuminatis. — Endl. gen. no. 5326.

C. bracteata; Endl. nov. stirp. mus. Vind. dec. 1. Walper's rept. 1. 337.

This is one of the most striking of the Swan River shrubs, but owing to some difficulty in cultivating it, the specimens that have been produced in Europe are very inferior to the wild ones. In the latter the bracts are four times as large as in the annexed cut, and of the most vivid rose-colour, thus rendering the bush indescribably gay; for the long loose clusters, adorned by these bracts, are produced in multitudes all over the plant.

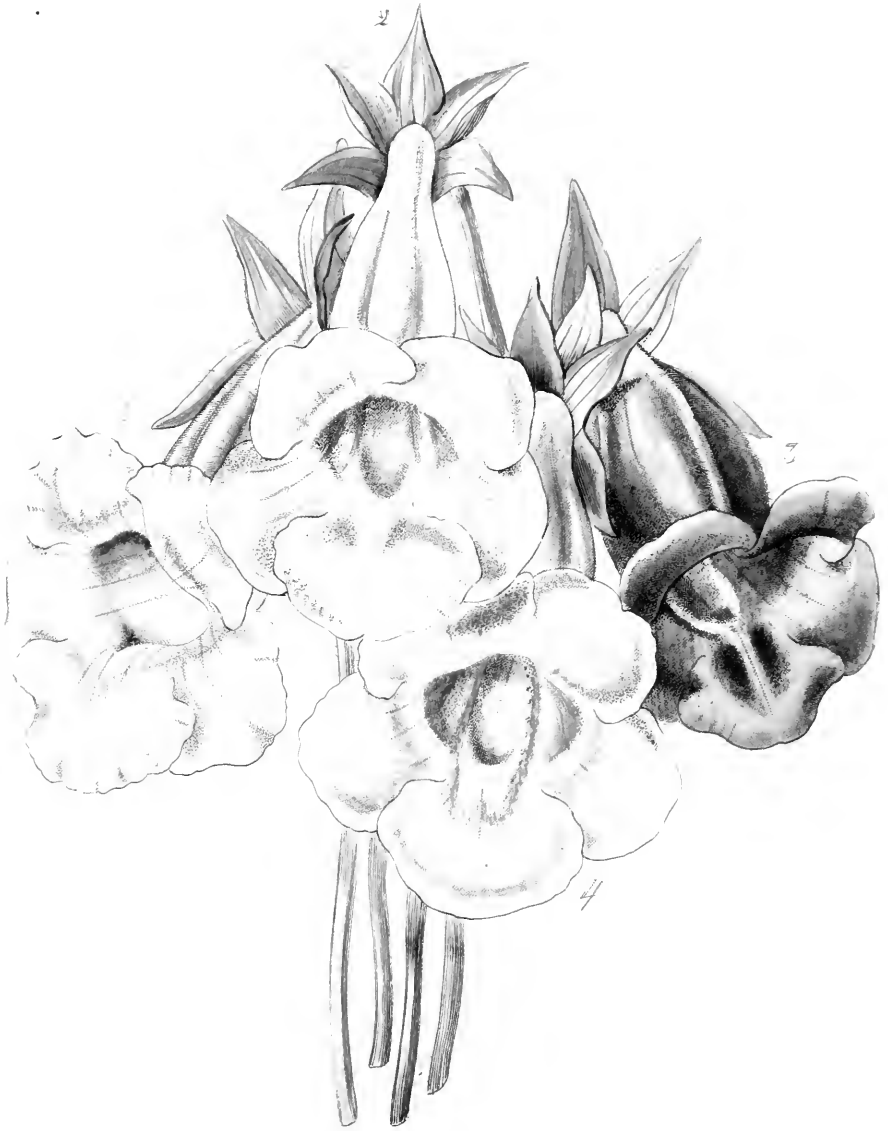
* From κορηθρον, a broom, in allusion to the singularly hairy style.

We entertain no doubt that when the habits of the plant shall have been more correctly studied it will become a general favourite. In the meanwhile it is as well to know that the foliage is very sweet-scented.

Our figure was made last spring from a plant belonging to Mr. Groom of the Clapham Nursery.

Fig. 1. shows the broom-like style, with the anthers at the base ; 2. the ovary and style after the anthers have been pulled off ; 3. an anther viewed from behind ; 4. a cross section of the ovary.

It is a greenhouse shrub, and will succeed best if potted in rough peat, well mixed with one-fourth silver sand. During the summer season a liberal supply of water should be given, and as much air as possible. In winter it should be treated in the same manner as Cape Heaths—never applying fire heat except to keep off frost. It may be propagated by cuttings in the usual way.



GLOXINIA speciosa.

(Garden Varieties.)

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. GESNERACEÆ.

GLOXINIA. *Botanical Register*, vol. 3. fol. 213.

-
1. GLOXINIA magnifica.
 2. ————— insignis.
 3. ————— bicolor.
 4. ————— Cartoni.
-

For the few last months our gardens have been furnished with some new varieties of this beautiful plant, which have excited universal admiration; especially those in which pink is the predominant colour. We have, therefore, thought it desirable to take advantage of an opportunity afforded by Mr. Glendinning of the Chiswick Nursery, for bringing together the most distinct among them.

The account Mr. Glendinning has given of their origin is as follows:—

“These beautiful varieties were raised from *G. speciosa rubra* fertilized with the pollen of *Sinningia guttata*. The flowers, however, give little evidence of the male parent, although the branching habit which distinguish Nos. 1, 2, and 4, are proofs of their alliance to *Sinningia*, particularly that of *magniflora*, which has very hairy leaves and stems, and an erect growth.

“They were first raised in the garden of the Duke of Northumberland at Syon, by his Grace’s gardener, Mr. Cartton, who has been long celebrated for producing various interesting novelties by hybridizing. The plants which

furnished the figures were exhibited by me before the Horticultural Society in Regent Street, in June last, when they were awarded a Banksian medal. The same individuals have continued to bloom ever since very profusely, and are now, August 14th, still in flower. On that account, as well as their great beauty, they are likely to prove permanent objects of interest in our gardens."



1

2

L. S. - Jun 1852

* *ASTIRIA* rosea.*Pink Astiria.*

MONADELPHIA PENTAGYNIA.

Nat. ord. BUTTNERIACEÆ.

ASTIRIA, (Lindl. supra misc. no. 31. Maio.) *Involucellum* 3-phyllum, deciduum. *Petala* 5 contorta. *Stamina* 20 inæqualia, in urceolum connata; sterilibus intermixtis nullis. *Ovarium* 5-loculare, *stylis* totidem liberis spathulatis. *Ovula* 2 cuique loculo, ascendentia.—*Arbor tomentosus, Borbonicus, Dombeyæ v. Ruizia vultu.*

A. rosea (Lindl. supra 1844. misc. 31.)

Arbor stellato-tomentosus. *Folia* longè petiolata, subrotunda, cordata, obsolete serrulata. *Pedunculi* axillares, apice cymosi, petiolo breviores, 10-12 flori. *Involucelli foliola* subrotunda, calyce paulò breviora, denique reflexa et decidua. *Calyx* 5 fidus, valvatus. *Petala* rosea valdè obliqua, calyce paulo longiora. *Antheræ* lineares, erectæ, extrorsæ.

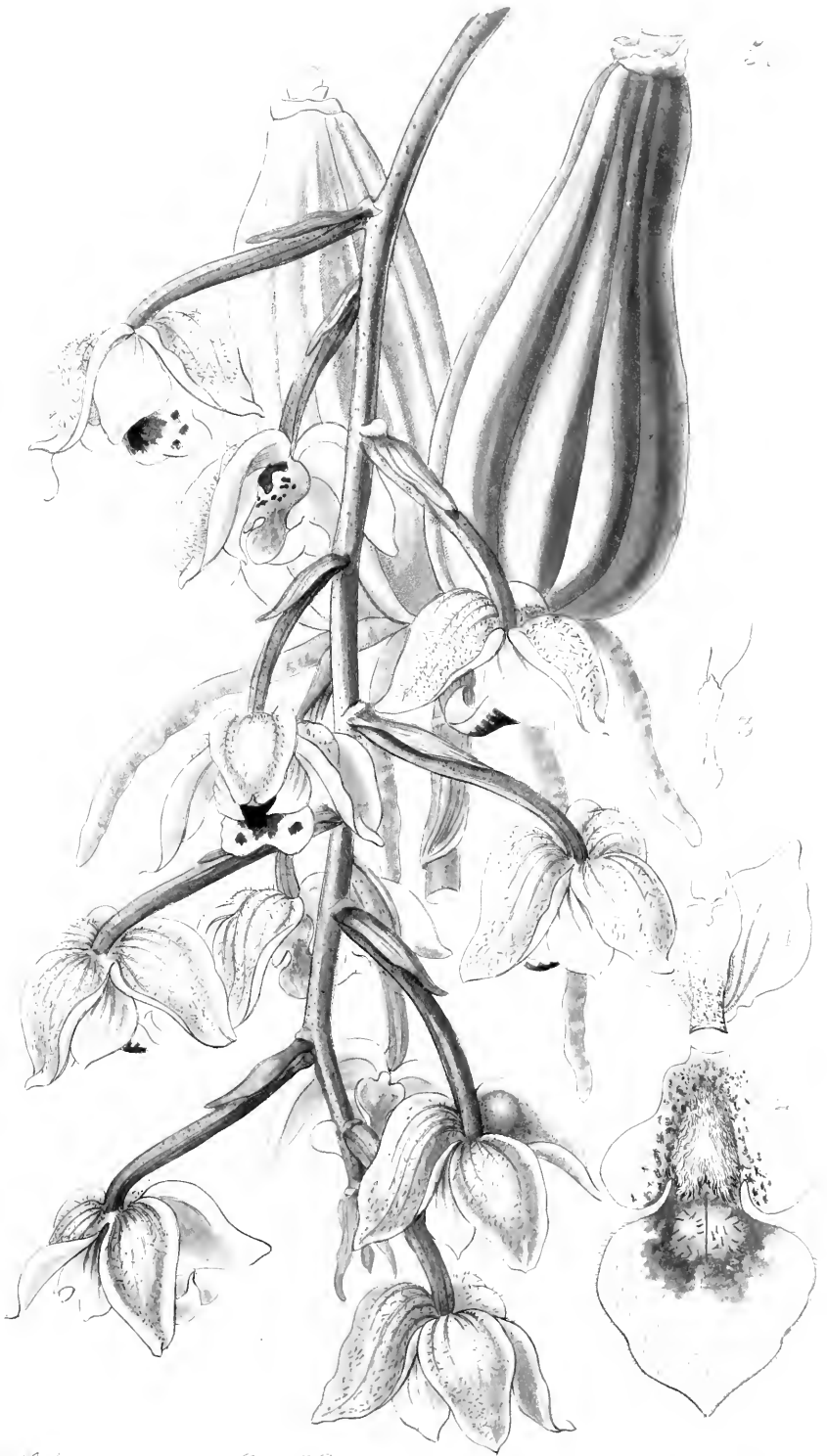
His Grace the Duke of Northumberland received this plant from the Mauritius, at the end of the year 1833, along with *Trochetia grandiflora*, already figured in this volume (t. 21.) It flowered at Syon at the end of March last, when our drawing was made.

The fine broad heart-shaped leaves, and close clusters of pink flowers, render it a rather handsome plant. Fig. 1. represents a portion of its stamens, and 2, the ovary and styles.

From all the race of *Byttneriaceæ*, to which this belongs, it differs in the want of sterile stamens, with the exception of *Ruizia*. From *Ruizia* it is distinguished by having a 5-celled and not a 10-celled ovary, and not having hairy capitate stig-

* From a privative, and *στεῖρος* sterile, in allusion to the want of sterile stamens.

mata, if the figures of that genus, as given by Cavanilles, are to be trusted. It may even be regarded as a species of *Ruizia*, but, if so, we find no published species to which it can be referred.



Mss. Drake det.

Paint by J. Ridgway 16y. F. G. A. S. F. n° 11244

1844

* LACÆNA bicolor.

Two-coloured Lacæna.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ; MAXILLARIDÆ.

LACÆNA, Lindl. Perianthium carnosum patens, sepalis subæqualibus basi subconnatis. Petala conformia minora. Labellum cum columnâ et in medio articulatum, hypochilio unguiculato cuneato bilobo apice pulvinato, epichilio integro. Columna erecta semiteres. Pollinia 2, posticè fissa, caudiculâ setacèâ, glandulâ minutâ.—Herba, Peristeriæ habitu.

L. bicolor, Lindl. in Bot. Register, 1843. misc. 101.

This fine plant was sent to the Horticultural Society from Guatemala by Mr. Hartweg, who found it in the mountains of Salama, in the province of Vera Paz, also near the village of Sunil, near Quezaltenango, in Guatemala, growing on rocks, at an elevation of about 7000 feet above the sea. In May, 1843, it produced its flowers, and ever since has been in such bad health that it is doubtful if it will survive.

In habit the species is so like some of the Peristerias with pendulous racemes, that it would certainly be mistaken for them; and in structure it approaches them no doubt very closely. It is, however, essentially distinguished by the labellum and pollen apparatus. In Peristerias the labellum, although having a moveable joint in the middle, is continuous with the column by a thick fleshy base; here the articulation at that part is very conspicuous. The Peristerias have four pollen-masses; here we have but two. And, finally, the strap by which the pollen-masses cohere is long and slender, like that of a Lycaste, not deficient, so as to render

* This was one of the names of Helen, and may be applied to this plant because of its beauty: but it may also be derived from *λακίς*, a cleft, in allusion to the divisions of its lip.

the pollen-masses sessile upon a crescent-shaped gland as in *Peristerias*.

The flowers of this plant are formed in a pendulous raceme, as much as eighteen inches long; the lower part being clothed with distant short blunt scales, which extend into bracts about half the length of the pedicels. Each raceme consists of nine or ten flowers of a dull greenish yellow, covered externally with short hairs; their petals have three streaks of violet; their lip is downy all over the upper surface, dark purple in the middle, with two or three spots of the same colour near the point. In the centre of the lower half is a large shaggy hump.

Fig. 1, represents the column and petals; 2, the labellum spread open; 3, pollen-apparatus.

It may be grown in a wire basket like a *Stanhopea*, or tied to a block of wood and suspended to a rafter, in a moist stove. If potted in the usual way, the flower-spike will be apt to go down into the soil and perish. Like many other Orchidaceous plants it requires an ample supply of water during the growing season, and shade in sunny weather, at a temperature between 80° and 90° by day, but not above 70° at night. Towards the end of October water should almost be withheld for a few weeks, no more being given than will prevent the pseudo-bulbs from shriveling.



Vanilla sp. - S. Gray 1849 - Botanical Soc. - 1854

Bot. Soc. 1854

EPIDENDRUM verrucosum.

Warted Epidendrum.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § EPIDENDRÆÆ.*EPIDENDRUM.* *Supra*, 1838. fol. 53.

E. verrucosum (Encyclium, § labello trilobo); pseudobulbis ovatis, foliis ensiformibus obtusis, scapo pedicellis ovariisque verrucosis, racemo nutante, sepalis petalisque lineari-lanceolatis acuminatis, labelli trilobi lobis lateralibus subfalcatis acutis nanis intermedio ovali crenulato basi serrato bilamellato, columnæ alis 2 nanis truncatis.

This beautiful and fragrant plant has been obtained from Mexico by Messrs. Loddiges with whom it flowered in July last. Among all the Encycliums not more than two or three are superior to it in attractiveness.

It is not very nearly related to any kinds hitherto discovered: belonging to the same set as *E. tessellatum* and *Candollii*, from all which its stems and flower-stalks, closely covered with minute asperities, and its rich crimson flowers, which are as much as three inches in diameter, readily distinguish it. Its closest affinity is perhaps with *E. phœniceum*, a native of Cuba, and figured in the *Sertum Orchidaceum*, t. 46, and *E. Hanburii*, mentioned in this work at no. 60 of the miscellaneous matter of the present year; but both those plants have the middle division of the lip 2-lobed; and they are not, that we are aware of, fragrant.

Fig. 1. represents a front view of the column; 2. the labelum spread open.

This plant should be potted in turfy heath-mould, mixed with a few pieces of potsherds. When this operation is performed, care should be taken to keep the pseudo-bulbs always above the soil. In spring and summer, while the plant is in

October, 1844.

x

a growing state, an ample supply of water should be given, and the temperature allowed to rise as high as 80° or 85° by day, but not above 70° at night. In winter very little water will be required, providing a humid atmosphere can be maintained. The temperature should never be raised above 66° by fire heat.



Wald. i. raka. 22.

Publ. by J. G. Sowerby II. S. C. 1842

1842

CRATÆGUS crenulata.

Indian Pyracantha.

ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. ROSACEÆ. § POMÆÆ.

CRATÆGUS. *Supra*, v. 13. fol. 1128.

C. crenulata ; spinescens, sempervirens, ramulis junioribus tomentosis, foliis angustè oblongis nitidis crenato-serratis in petiolum angustatis corymbis æqualibus v. longioribus, calycibus glabris laciniis subrotundis membranaceo-marginatis, stylis 5 glabris, pomis depresso-globosis.

C. crenulata, *Roxb. fl. Ind.* 2. 509. *D.C. prodr.* 2. 626.

Mespilus crenulata, *Don. prodr. fl. nep.* 238.

This plant is the *Pyracantha* of the Indian mountains, and rivals that of Caucasus in its rich scarlet haws, which are however of a peculiar vermilion tint, and of a very depressed figure. Their flavour too is by no means ungrateful. In fact, if it would bear our climate with certainty, it would be preferable to the *Pyracantha* itself, for its leaves have a remarkable glossy surface, and the plant is in all respects handsomer.

The shrub is a native of Nepal, whence it was long since received by Dr. Roxburgh, who named it, and says that in the Calcutta garden it had grown to the height of from six to eight feet in eight years ; it would have been better for us if he had found it unkeepable. As it is we do not anticipate its hardiness in severe winters. In the garden of the Horticultural Society, where our drawing was made, it has survived several winters, trained against a south wall.

Fig. 1. is a section of a flower, without the petals, shewing the calyx, disk, stamens and carpels, which latter adhere to the tube of the calyx, by their back, but are not united to each other.

A fine hardy evergreen shrub, attaining about the same size as the common *Pyracantha*, and requiring the same kind

of treatment. It grows freely in any good loamy soil and rather dry situation, flowering abundantly in June, and producing its fine clusters of bright red berries in September.

It is easily increased, by grafting, or by budding on the common Thorn, or by seeds, which should be sown when ripe, in October. It was raised for the first time *true* in the garden of the Horticultural Society, from seeds, presented by Dr. Royle, from the North of India. Most plants to be found in collections at the present time, under this name, are not different from the common *Pyracantha*.



DENDROBIUM compressum.

Flat-stemmed Dendrobium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § MALAXEÆ—DENDROBIDÆ.

DENDROBIUM. *Supra*, vol. 15. fol. 1291.

Sect. DENDROCORYNE (*Lindl. in Bot. Reg.* 1842. misc. 76); caulibus clavatis, sæpius apice tantum foliatis.

D. compressum (*Lindl. in Bot. Reg.* 1842. misc. 76); caule obovato compresso 2-6-phyllo, foliis ovalibus acutis striatis basi dilatatis membranaceis amplexicaulibus, racemis subquadrifloris cernuis, sepalis petalisque ovatis erectis, cornu elongato obtuso, labello cuneato lævi per axin sulcato.

This singular species was discovered in the island of Ceylon by Mr. Nightingale, and by that gentleman sent to his Grace the Duke of Northumberland, from whose collection at Syon we were permitted to obtain a figure in August 1842. The year of its importation was 1840.

The curious flattened stems are not more than three or four inches long, and resemble those of no species hitherto discovered. They appear however to bring the plant into a section of the genus to which the name *Dendrocoryne* (κορυνη a club) may be applied, and which will also contain *D. densiflorum*, *tetragonum*, *Griffithianum*, and *Macraei*.

The singular form of the labellum, fig. 1, which is that of a wedge drawn out at the point, and furrowed along the middle, distinguishes this plant, independently of its habit.

It should be potted in turfy heath-mould. The pot in which it is grown, should be half filled with potsherds, in order that all superfluous water may pass off; the soil must be considerably elevated above its brim. During the growing season an ample supply of water should be given, and the

atmosphere kept as moist as possible. This, like many other Orchidaceous plants, requires to be shaded in sunny weather, to prevent the leaves from being scorched, as well as to keep the temperature about 85° by day, without admitting much air. In winter a humid atmosphere is necessary, but for a few weeks water should only be given to prevent the plant from shriveling.



BIGNONIA Carolinæ.

Lady Caroline's Bignonia.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. BIGNONIACEÆ. Trib. 1. BIGNONIÆ, Bojer.

BIGNONIA. Bot. Reg. 3. 249.

B. *Carolinæ*; glabra, gracilis, foliis conjugatis, foliolis cordatis acuminatis subpubescentibus, paniculis terminalibus paucifloris, calyce campanulato truncato obsolete 5-dentato pubescente, corollâ arcuatâ tomentosâ laciniis crispis patulis. *Supra* 1842. *sub folio* 45.

All that we know of this charming plant is that it flowered with the Earl of Ilchester at Melbury in 1842, at which time we were favoured with specimens; and that it again blossomed with his Lordship in great abundance in May 1844, when the accompanying drawing was made.

It is a most desirable plant for conservatories, because, in addition to the beauty of its snow-white flowers, which the plant pours forth with exuberant luxuriance, they are sweet-scented; an unusual circumstance with Bignonias. We presume it to be a Buenos Ayres species.

It is surprising that those who struggle and strive to outdo their neighbours in preparing fine things for exhibition, should not turn their attention more to the small growing Bignonias, such as this and *pieta* for example; and by means of the wire trellises now employed in pot cultivation, force them to confine themselves within portable dimensions. They would make most beautiful objects, and would certainly reward the gardener for whatever pains he might bestow upon them. Even *B. venusta* itself might no doubt be compelled to submit to such treatment, and to flower in abundance, if it had plenty of bottom heat to enable it to form its blossom buds. Indeed, the whole Bignoniaceous order is full of the finest, the most indescribably lovely plants that the eye can rest upon, of

which scarcely any, and they in many cases the worst, have found their way to Europe. Collectors in Brazil should above all things strive to procure them, and then, if half the pains are bestowed upon their management that are given to Heaths and Pelargoniums, we should acquire a race of plants whose noble flowers are such as those unacquainted with them have no conception of.

All such plants being very subject to red spider, require syringing once or twice a day during the summer months. They may be propagated from cuttings, in the usual way.



OSBECKIA stellata, var.

Starry Osbeckia, with small scales.

OCTANDRIA MONOGYNIA.

Nat. ord. MELASTOMACEÆ.

OSBECKIA, Linn. *Calyx* tubo ovato v. oblongo, inferne cum ovarii basi connato, sæpe setis a basi palmatis v. pube stellata aut rarissime simplicibus vestito, limbi quadri quinquefidi laciniis cum totidem appendicibus alternantibus. *Corollæ* petala 4 v. 5, calycis faucis inserta, ejusdem laciniis alterna, ovata v. obovata. *Stamina* 8 v. 10, cum petalis inserta, subæqualia; *anthere* oblongo-lineares, subarcuatae, rostratae, uniporosae, connectivo ad basim incrassato, antice breviter bicalcarato v. biauriculato sive mutico. *Ovarium* semiinferum, vertice libero, conico setosum, quadri-quinqueloculare, loculis multiovulatis. *Stylus* filiformis, infra apicem incrassatus; *stigma* punctiforme. *Capsula* sicca, calycis tubo sursum truncato inclusa, quadri-quinquelocularis, superne loculicede quadri-quinquevalvis. *Semina* plurima, cochleata.—Frutices v. suffrutices, in Asia et Africa tropica crescentes, plerumque setosaspera; ramulis magis minusve tetragonis, foliis oppositis, rarissime verticillatis, nervosis, subintegerrimis, floribus terminalibus, sæpe capitatis, bracteato-involucratis, nunc solitariis, variis racemosis v. subcorymbosis, purpurascensibus, speciosis.—Endl. gen. 6221.

Sect. IV. OSBECKIARIA, DC. *Cal.* 4-5 fidi, setis a basi palmatis per totum tubum ornati; appendices plumosae aut sæpius pectinatae; lobi demum cum appendicibus decidui ore calycis truncato.

O. stellata; caule suffruticoso tetragono sursum pilis adpressis scabro, foliis petiolatis oblongo-lanceolatis septemnerviis utrinque præsertim supra pilosis subtus viridibus, pedunculis trifloris terminalibus, bracteis ovatis patulis citò deciduis, calycis appendicibus in setis longis solutis, petalis 4 subrotundis calyce multò longioribus.

O. stellata β , *DeCand. Prodr.* 3. 142.

Of this fine plant, seldom seen now in our gardens, there are two very distinct varieties. Of these one has the curious fringed scales with which the calyx is coated, so closely arranged that the whole surface is covered over with a mat of entangled bristles. A figure of this has already been given at plate 674 of this work. The other, with a narrower calyx, whose scales stand wide apart, so as to shew its sides between

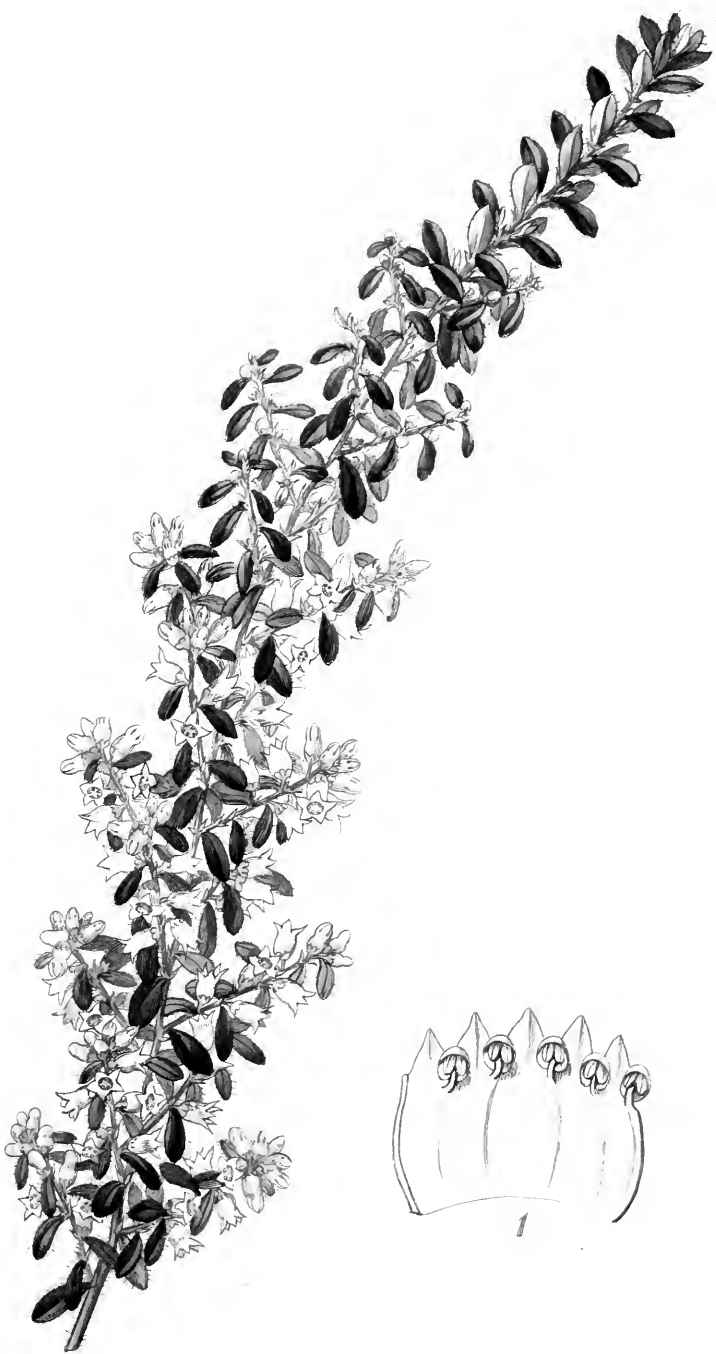
them, is that now represented, of which a figure was taken last September, from a plant in the garden of Henry Thomas Hope, Esq. of the Deep Dene, near Dorking.

Since these two forms differ in nothing except the condition of their calyx, which however is very remarkable, we presume they are really mere varieties, as they are usually considered.

Fig. 1 represents one of the stamens.

The species is found in Nepal, where it seems to be common. Dr. Royle mentions it as one of those Melastomaceous plants which advance farthest to the north, in the valleys near Massoorce, and on the banks of the Giree river.

It is a greenhouse plant, requiring to be potted in sandy loam and peat, in equal proportions. Although it enjoys a moist atmosphere, it is very apt to damp off if too much water is given to its roots. After flowering it should be cut back, within two inches of the old wood, and re-potted as soon as it has produced a few leaves. It may be propagated from cuttings, in the usual way.



Miss Doane det.

Pres. by T. Ridgway 169 Pleasants Oct. 1 1844

J. Barlow sc.

*CRYPTANDRA *suavis*.*Sweet-scented Cryptandra.*

PENTANDRIA MONOGYNIA.

Nat. ord. RHAMNACEÆ.

CRYPTANDRA, Smith. *Calyx* coloratus, extus sæpe villosus, intus disci indiscreti strato inerustatus, tubo campanulato, rarius cylindrico, ovarii basi connato, superne libero, limbi quinquefidi laciniis acutis, erectis v. patentibus, intus carina versus apices incrassata percursis. *Corollæ* petala 5, calycis fauci inserta, ejusdem laciniis alterna, parva, cucullata, subsessilia, coriacea, persistentia. *Stamina* 5, cum petalis inserta, iisdem opposita et inclusa; *filamenta* brevissima, antheræ introrsæ, biloculares, longitudinaliter dehiscentes. *Ovarium* semiinferum, apice libero villosum, triloculare. *Ovula* in loculis solitaria, e basi erecta, anatropa. *Stylus* simplex; *stigma* tridentatum v. trilobum. *Capsula* semiinfera, calyce et corolla persistentibus tunicata, trilocularis, tricocca, coccis bivalvibus, monospermis. *Semina* erecta, funiculo brevi cupulæformi subtensa, oblongo-trigona, testa coriacea, lævi. *Embryo* intra albumen carnosum orthotropus; *cotyledonibus* magnis, carnosis, planis, *radicula* brevissima, infera.—Suffrutices *ericoides*, in Nova-Hollandia *indigeni, erecti, ramosissimi*; ramis *fastigiatis v. patentibus interdum spinescentibus, foliis alternis, integerrimis, glabris, floribus ad apices ramulorum aggregatis v. solitariis, erectis v. nutantibus, basi squamulis quinque parvis imbricato-calyculatis*.—Endl. gen. 5742.

C. suavis; pilosa, foliis obovato-linearibus, floribus in ramulos laterales axillaribus glabris, calycis tubo cylindræo. *Supra misc. 27. hujus voluminis.*

Fruticulus, pilis longis vestitus, ramulis gracilibus abortientibus in spinas mutatis. *Folia* oblonga, obtusa, convexa, in petiolum brevem angustata, subtus glabra, in exemplaribus spontaneis linearia margine revoluta. *Flores* candidi, cernui, suaveolentes, secus ramulos axillares, solitarii, pedicellati, glabri bracteis rufis imbricatis pariter glabris calyculati. *Calyx* oblongus, tubo cylindræo; limbo valvato 5-dentato.

The Cryptandras are little New Holland shrubs, with the aspect of Heaths, found on barren hills and rocky places, or in light sandy land. In a wild state they often become spiny,

* So named from *κρυπτος* hidden, and *ανηρ* a stamen, in allusion to the concealment of the anthers beneath the hooded petals.

but in cultivation, when they are kept in a moist atmosphere, they much lose this tendency.

In general their leaves are very small, like those of the plant now before us; but in *C. buxifolia*, which Allan Cunningham considered a *Pomaderris*, they acquire a tolerable size. Their flowers are always small.

The species now figured is a native of the Swan River, whence we have wild specimens from Drummond. Its flowers are very sweet smelling, like hawthorn, and though small they render the plant attractive from the profusion in which they are produced, all over the branches. Mrs. Wray, of Oakfield, has had the good fortune to rear it from seed, and to that lady are we indebted for specimens. It flowers in January.

Fig. 1. shews the calyx cut open, with the five little hooded petals arched over the stamens.

A neat little greenhouse shrub, requiring about the same treatment as Cape Heaths. It should be potted in a soil composed of sandy peat, and a small portion of loam, with plenty of drainage. It is increased by cuttings of the young shoots in the early part of summer; they must be put in sand, and covered with a bell-glass, and have a slight bottom heat.





***ABUTILON** vitifolium.*Vine-leaved Abutilon.*

MONADELPHIA POLYANDRIA.

Nat. ord. MALVACEÆ.

ABUTILON, *Gærtn.* *Involucellum* nullum. *Calyx* quinquefidus, sæpius cupulæformis, laciniis æstivatione valvatis. *Corollæ* petala 5, hypogyna, obovata, sæpius inæquilatera, unguibus imo tubo stamineo adnata, æstivatione convolutiva. *Tubus stamineus* basi dilatata fornicata ovarium obtegens, superne angustatus, columnæformis, apice in filamenta plurima, filiformia divisus, rarius simul infra apicem antherifer; *antheræ* reniformes, sinu affixæ, versatiles, rima semicirculari apertæ, bivalves, septo manifesto. *Orarium* sessile, quinque-multiloculare. *Ovula* in loculis 4-9, angulo centrali inserta, adscendentia et pendula. *Styli* loculorum numero, filiformis, basi plus minus coaliti; *stigmata* capitata. *Capsula* penta-polycoeca, coccis haud secedentibus, apice introrsum rima apertis. *Semina* in loculis pauca v. abortu solitaria, reniformia v. subhippocrepica, *testa* crustacea, emarginaturæ sinu umbilicata. *Embryo* intra albumen parcum, subcarnosum homotropè arcuatus; *cotyledonibus* foliaceis, petiolulatis, basi auriculatis, sese plicato-involventibus.—Herbæ, suffrutices v. frutices, nonnullæ arbores, in regionibus tropicis et subtropicis totius orbis crescentes; foliis alternis, petiolatis, cordatis dentatis, v. rarissime obsolete lobatis, stipulis lateralibus geminis, pedunculis axillaribus, solitariis v. pluribus, uni-multifloris, infra apicem articulatis, interdum floribus spicatis v. racemosis, rarissime corymbosis.—Endl. gen. 5292.

A. *vitifolium*; foliis cordatis 5-7-lobatis lobis acuminatis serratis, pedunculis petiolo longioribus ramoso-umbellatis, carpellis 9 apice longè biaristatis.—*DeCand. Prodr.* 1. 472. sub Sida.

Abutilon vitifolium, *Presl. reliq. Hænk.* 2. 116.

Sida vitifolia, *Cav. ic.* 5. 428.

This fine Malvaceous plant is a native of Chili, whence it appears to have been introduced about the year 1836, by Captain Cottingham of Dublin. It was noticed in this work in July 1840, when it was stated that it had proved quite hardy in Ireland, having stood in a south border, without protection for three years. Under such circumstances it must be a noble looking shrub, for it is said to maintain a stature of six feet, and to become one mass of blossom.

November, 1844.

2 A

With us in England it does not however prove fit for the open ground.

It may be grown in a large pot or tub, but where it can be planted out in a conservatory bed it will succeed much better. The soil most suitable is heath mould mixed with silver sand. Being a greenhouse plant, air should be given at all times when the weather is favourable, and it must be exposed as much to the light as possible. It is propagated from cuttings in the usual way.

The worst of the plant is that it occupies a great deal of room, and therefore can only be grown in large houses, and it is, like all its family, a favourite resort of red spider. When however the first is of no consequence, and the second can be kept down, it is well worth growing; for we have few plants whose flowers form such broad gay masses.



M.

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Chromolaena

HOVEA ilicifolia.

Holly-leaved Hovea.

DIADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ. § PAPILIONACEÆ.

HOVEA. *Supra*, vol. 4. fol. 280.

H. ilicifolia; ramulis tomentosis, foliis coriaceis ovalibus spinoso-dentatis mucronatis pungentibus subtus reticulatis stipulis spinulentibus, pedunculis 2-3-floris, calycibus tomentosis, bracteolis pungentibus glabris, legumine subrotundo glabro.

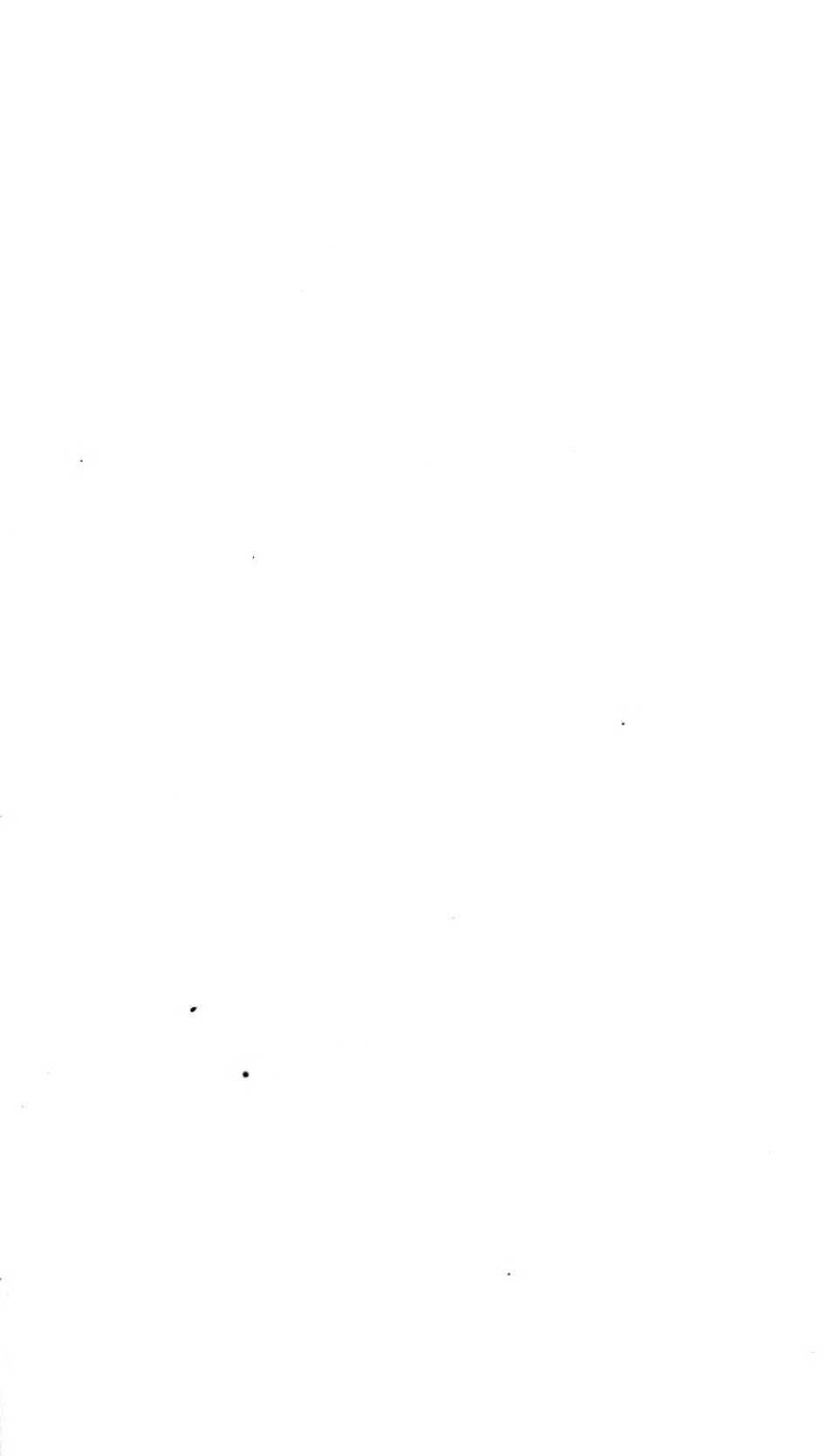
H. ilicifolia, *Allan Cunningham in herb-nostro*.

Folia *juniora leviter pubescentia*. Flores *atro-violacei inter minores*. Ovarium *dispermum*.

This is one of the less attractive species of the genus, for which we are indebted to Robert Mangles, Esq. who raised it from Swan River seeds, and flowered it last April.

It cannot be the *Plagiolobium ilicifolium* of Sweet, if that plant is rightly described with a downy pod, for this has one perfectly smooth. At all events it is most certainly a *Hovea*, and the species named by Allan Cunningham *ilicifolia*, as is proved by one of his specimens from King George's Sound, now before us.

It is a green-house shrub, requiring the same treatment as *H. Celsi*. It should be potted in heath mould mixed with one-fourth silver sand. The pot should be well drained, and a few pieces of potsherds mixed through the soil. In summer water should be liberally given, and as much air as possible. In winter it should be placed in some airy place, and watered only in fine weather. Fire heat should never be applied except to keep off frost. It is multiplied from seeds.





CHIRITA sinensis.

Chinese Chirita.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. CYRTANDRACEÆ.

CHIRITA, Buchanan. Calyx 5-fidus, æstivatione valvata. Corolla tubulosa, bilabiata. Stamina 2 antherifera; antheræ (sæpius barbata) loculis divergentibus. Stigma: labio superiore abortiente v. nano; inferiore 2-lamellato. Capsula elongata, valvis striatis. Semina inappendiculata, pendula.—Herbæ v. suffrutices; foliis oppositis sæpius inæqualibus, altero in quibusdam nano v. abortiente; pedunculis axillaribus.—Brown in Horsfield Pl. Javan. p. 116.

C. sinensis; acaulis, foliis pilosis oblongis obtusis crenatis in petiolum angustatis, pedunculis erectis subbifloris, corollæ laciniis obtusis callis duobus linearibus in labium inferius altero lato obtuso in superius, antheris imberbibus.

This charming little greenhouse plant is one of the first results of any importance, from the voyage to China, by Mr. Fortune, on account of the Horticultural Society. It was sent home in a wooden case, and its beautiful large lilac fox-glove-like flowers were open when it arrived.

We were accidentally unable to describe the flowers, for whose structure we are therefore obliged to trust to our artist, who we hope has been correct in the drawing. From this it appears that the plant belongs to the genus *Chirita*, distinguished from *Didymocarpus* by its stigma, having the upper lip abortive, and the lower two-lobed.

Those who see what this is may judge how desirable it would be to obtain from India the other species of the genus, among which are some still finer. And they are all so easily cultivated, that they are just the things to introduce into gardens. Anybody who can grow a *Gloxinia* can manage a *Chirita*.

Fig. 1. represents a section of a corolla; 2. the ovary; and 3. its section.

It appears to be a stove plant, requiring to be potted in a compost of peat loam and sand, in equal proportions. During the summer season an ample supply of water should be given to its roots, taking care to wet the leaves as seldom as possible. In winter, water once a week will be quite sufficient. It may be propagated from leaves, cut at the base of the veins, and laid down on a pot filled with silver sand.



* ANGULŌA uniflōra.

One-flowered Anguloa.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ. || MAXILLARIDÆ.

ANGULOA, *Fl. Peruv. prodr.* 118. t. 26. Flores subglobosi, nunquam patentes. *Sepala* lateralia invicem imbricantia, basi valde convexa, nec in cornu producta; alterum nunc anticum nunc posticum, conforme, basi planum. *Petala* sepalo dorsali æqualia, et similia. *Labellum* coriaceum, unguiculatum, subconvolutum, trilobum, laminâ carnosâ latâ planâ supra medium auctum, hinc quasi bilabiatum. *Columna* teres, clavata, libera; *clinandrio* nunc mutico, nunc laciniâ acutâ porrectâ utrinque aucto. *Anthera* galeata, valvis membranaceis nunc in lacinulas acutas productis. *Pollinia* 4, plana, inæqualia, *caudiculâ* longâ lineari, et *glandulâ* acutâ.—Herbæ *epiphytæ Granatenses & Peruvianæ*, *Lycastes facie*.

A. *uniflora*; pedunculo unifloro radicali squamis 2 inflatis imbricatis vaginato, flore bracteâ spathacê herbacê parum longiore, sepalis lateralibus anticis petalisque acuminatis, labelli glabri lobo medio angustissimo reflexo lateralibus rotundatis, laminâ appendiculari retusâ duplò latiore, clinandrio lacinulis 2 acutis aucto.

A. *uniflora*, *Fl. Peruv. syst.* p. 228 *Lindl. gen. & sp. Orch.* p. 160.

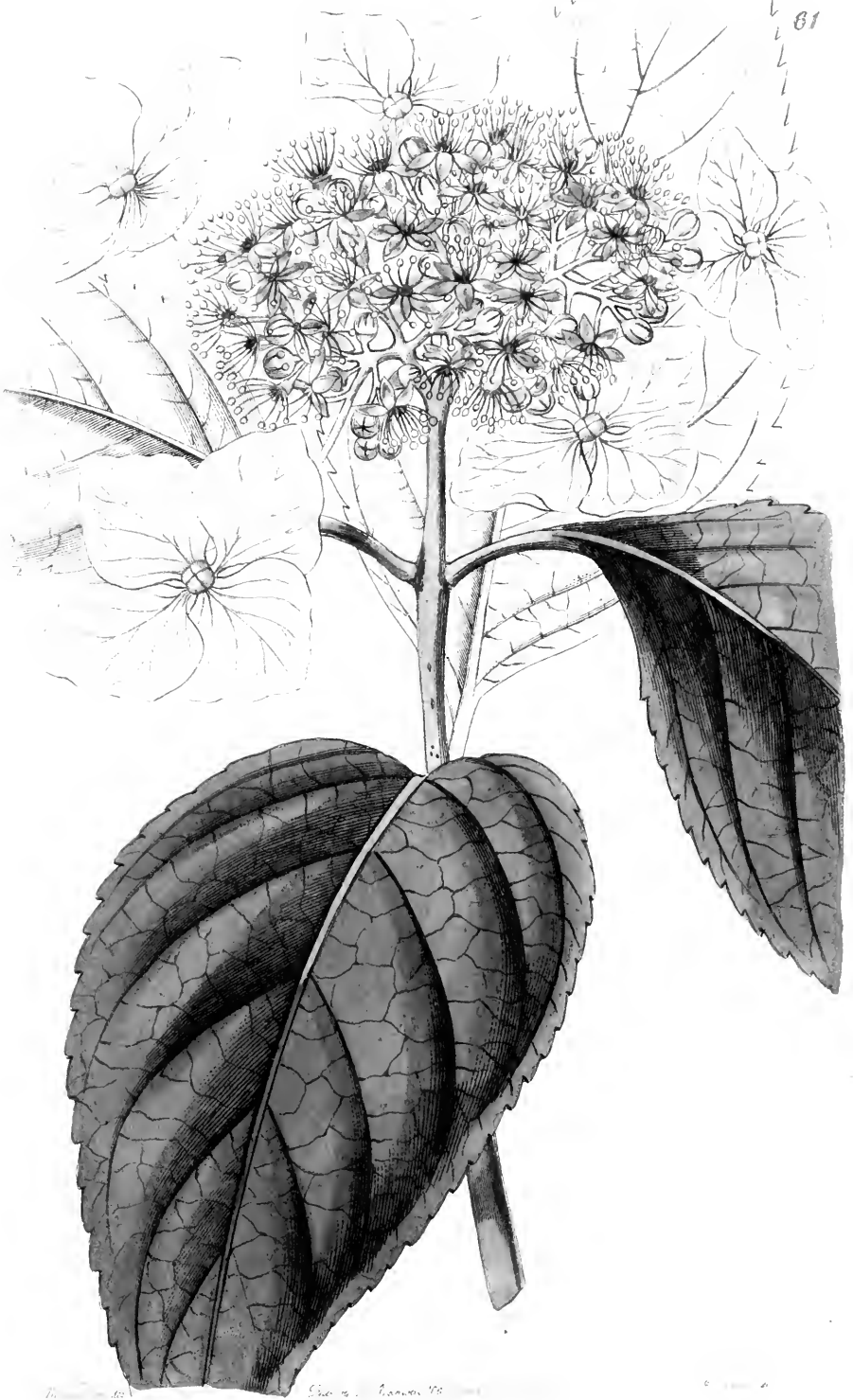
We some time since announced the appearance in this country of a new species of the long lost genus *Anguloa*, concerning which so many mistakes have been made. We are now able, by the kindness of Mr. Barker of Birmingham, to publish the very *Anguloa uniflora* itself, which he was so fortunate as to flower in April last. We believe he received it among Linden's collection in Columbia; according to Ruiz and Pavon it is found in precipitous places about Muña and Chincao in Peru, and profusely in the woods of Tarma, where it is called *Carपालes*.

It is a sweet-scented plant, with large white flowers slightly tinged with yellow, and the whole habit of a *Lycaste*,

* Dedicated to Don Francisco de Angulo, director-general of the mines (of Peru), and greatly attached to Botanical pursuits, (*Ruiz & Pavon*.)

to which genus this approaches very nearly. In what respect it differs we shall endeavour to show next number, upon figuring *Anguloa Clowesii*; a species remarkably different in some respects.

Fig. 1. represents a section of the labellum, with the plate that lies over the middle cut in two. Fig. 2. shows the column with the two thin sharp-pointed processes which project forward; it will be remarked, upon comparing this figure with that in the centre of the flower, that there are in the latter two additional plates, looking like lappets. Those bodies were missing in the first flower that we saw, and were only present in the second; they belong to the sides of the anther, and are, it is to be supposed, accidental developments. Fig. 3. shows the pollen-masses, with their caudicle and glands.



HYDRANGEA japonica.

Japan Hydrangea.

DECANDRIA TRIGYNIA.

Nat. ord. SAXIFRAGACEÆ—HYDRANGÆÆ, DC.

HYDRANGEA, Linn. Flores omnes, fertiles, v. marginales steriles. *Floribus sterilibus*: Calyx membranaceus, venosus, explanatus, quadri-quinquepartitus. Corollæ et genitalium rudimenta. *Floribus fertilibus*: Calyx tubo cum ovario connato, costato, limbo supero, quadri-quinquedentato. Corollæ petala 4-5, annuli epigyni margini inserta, sessilia, ovata, æstivatione valvata. Stamina 8-10, cum petalis inserta; filamenta filiformia; antheræ biloculares, longitudinaliter dehiscentes. Ovarium inferum, biloculare, placentis dissepimenti superne interrupti marginibus adnatis, multiovulatis. Styli 2, distincti; stigmata subterminalia, introrsum lateralia. Capsula calycis limbo stylisque coronata, basi bi-superne subunilocularis, vertice deplanato inter stylos foramine aperta, semiseptis margine placentiferis. Semina plurima, ascendentia, testa membranacea, adnata, reticulata. Embryo in axi albuminis dense carnosi orthotropus; cotyledonibus brevissimis, obtusis, radícula cylindrica, infera.—Frutices, in America boreali, Nepalia et Japonia indigeni; foliis oppositis, petiolatis, ovatis v. oblongis, integerrimis v. sæpius dentatis aut serratis, floribus corymbosis, albis v. roseis, marginalibus plerumque sterilibus, radiantibus, coloratis.—Endl. gen. 4668.

H. japonica; foliis oppositis breviter petiolatis e basi rotundata v. latè cuneatâ ovato-oblongis acuminatis argutè serrulatis glabris, cymæ planæ densæ ramis pubescentibus, florum radiantium 4-6 pedunculis horizontaliter patentibus, sepalis plerumque 4 obovato-rhombeis acuminatis serratis.—Siebold *fl. japon.* 1. 106. t. 53.

Japan seems to abound with Hydrangeas, Siebold having described as many as fourteen from that country. In this respect, as in many others, we have the indication of a near relation between the flowers of Japan and North America.

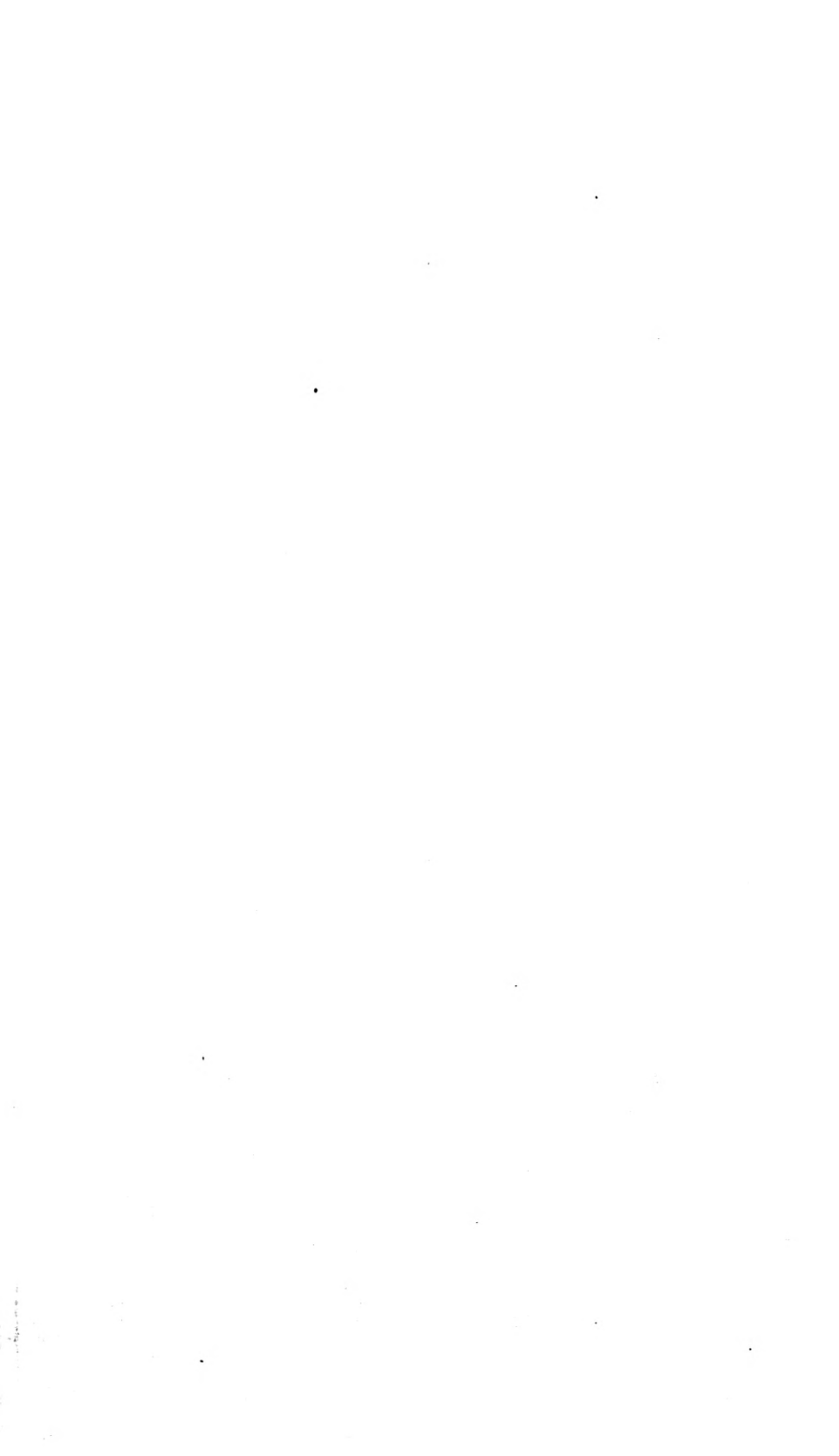
It does not, however, appear that they are very handsome, and in this respect too they agree with the American species, with the exception of *H. Otaksa*, which seems to be hardly different from *H. hortensis*. The greater part of them are like this, and some are not so pretty. The most interesting among them are *H. Belzonii*, a plant with the habit of

H. arborescens, but with large blue flowers ; and *H. stellata* whose barren flowers are double, and light blue or pink.

According to Siebold this *H. japonica* has two varieties, called *Benikaku*, with rose-coloured flowers ; and *Konkaku*, with pale blue flowers. It does not grow more than two feet high at the most, branched from the very bottom. The Japanese cultivate it commonly in their gardens. It is found wild on the mountains of Nipon.

A hardy shrub, very much resembling, and requiring the same kind of treatment as, the common *Hydrangea hortensis*. It grows freely in a mixture of loam and sandy peat, to which is added a small portion of decayed cow-dung.

It is easily increased by cuttings of the young wood, after the plant has flowered in July. The cuttings should be put in sand, and placed in a mild heat, and kept close for two or three weeks. It flowers from May to July, and was presented to the Society by Mr. H. Low, of Clapton, who imported the first plants.





GAYLUSSACIA *Pseudovaccinium*.*Bilberry-like Gaylussacwort.*

DECANDRIA MONOGYNIA.

Nat. ord. VACCINACEÆ.

GAYLUSSACIA, Humboldt, Bonpland, & Kunth. *Calyx* ovario adnatus, limbo libero quinquefido. *Corolla* tubulosa, basi ventricosa, ovata aut subglobosa, limbo 5-fido. *Stamina* decem, limbo calycis inserta. *Antheræ* muticæ, apice in tubulos duos productæ. *Stylus* erectus. *Stigma* depresso-capitatum. *Drupa* subglobosa sulcato-decagona calyce vestita decem-locularis, loculis monospermis. *Semina* lenticularia lævissima. *Spermodermium* tenuissimum albumini arcu adhærens. *Albumen* semini conforme, carnosum. *Embryo* centralis axillis teres, albumine brevior.—Frutices ramosi. Folia sparsa apice mucronato-glandulosa. Racemi axillares approximati. Flores bracteati, coccinei.—DeCand. Prod. 7. 556.

G. Pseudovaccinium; fruticosa glaberrima pubescens, foliis ellipticis lanceolatis, racemis secundis erectis bracteatis, corollis cylindræis, ovario glabro v. glabrescente.—*DeCand. l. c.*

G. Pseudovaccinium, Chamisso & Schlechtendahl in *Linnaea*, 1. 530., 8. 492. *Aug. de St. Hilaire*, 2. 406.

Andromeda coccinea, Schradler in *Götting. Anz.* 1821. ii. 709.

Vaccinium brasiliense, Spreng. *Syst.* ii. 212.

The genus *Gaylussacia*, so named after M. Gay Lussac, the eminent French Chemist and Philosopher, differs from *Vaccinium* in the same way as *Arctostaphylos* from *Arbutus*—it has but a single seed in each cell. The species are chiefly found in Brazil, where they are common, Peru, and the North of India, and among them are several which, as this species shews, would be worth introducing to cultivation.

G. Pseudovaccinium is stated to be a native of sandy open plains in Brazil. Auguste de St. Hilaire says that he found it on the coast from the city of Caravellos in the Province of Porto Seguro as far as the island of St. Catharine, and that it forms a shrub from one to two and a half feet high. At least it is to be presumed that this is the plant he means,

December, 1844.

2 c

although he describes the corolla as somewhat narrow, and the ovary as 5-celled with 1-seeded cells; for the flowers are, in our figure, much too globular, and M. de St. Hilaire adds, that the fruit of his plant has *ten* ribs when dry in consequence of its containing *ten* seeds; whence it is evident that his account of the ovary is erroneous.

The accompanying drawing was made at Messrs. Lodiges, in May, 1844.

Fig. 1. represents a stamen; 2. a transverse section of the ovary.

It is a hardy and very pretty greenhouse shrub, which should be grown in a mixture of sandy peat and leaf mould, and treated in the same way as Cape Heaths. It may be increased either by seeds or by layers. Seeds should be sown in pans filled with sandy peat about February, and covered with a bell-glass. The layering should be effected before the plant commences its fresh growth.



Miss Drake del.

Publ. in *Revue des Sciences* N. 3, Bruxelles, p. 118, 1844.

J. B. B. Bordas sc.

ANGULŌA Clowēsii.

Mr. Clowes's Anguloa.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEÆ. § VANDEÆ—MAXILLARIDÆ.

ANGULOA, *Supra t. 63. hujus voluminis.*

A. *Clowesii* (Lindl. in Bot. Reg. 1844. misc. 29.); pedunculo unifloro radicali laxè squamato, flore carnoso resupinato, sepalis petalisque ovatis convexis conniventibus, labelli trilobi lobo medio piloso infundibulari bilabiato: labio altero emarginato altero tridentato, columnâ integrâ.

Among a lot of plants collected in Columbia by Linden in 1842, this fine thing was received by the Rev. J. Clowes of Broughton Hall near Manchester, with whom it flowered for the first time in Europe in March, 1844. The old plants had as many as five flower-scapes to a pseudo-bulb. Thus, by the enterprise of a few English gentlemen, who had the spirit to defray the cost of a collector in the rich country once known as the kingdom of New Granada, has one of the greatest botanical puzzles been at last obtained. Mr. Barker's species was figured last number, that before us is from Mr. Clowes, and a third species, with spotted flowers, still undescribed, has blossomed with Mr. Rucker, all of whom were the supporters of Mr. Linden's expedition.

The two characters upon which the authors of the *Flora Peruviana* must be considered as having most relied for the distinction of their genus *Anguloa*, were the "chrysalis-shaped" lip, and the two-horned column.

But that rolled up form of the lip, to which the name chrysaloid was applied, is in reality common to the greater part of the Maxillaridous division; and the two horn-like processes which distinguish the column of the original *Anguloa* are altogether of too doubtful a nature to be relied on for generic distinction; for they have no relation to such organs as the wings of *Oncidium*, and it is by no means

certain that they are constantly present in the same species. If, as seems probable, they are analogous to the cirrhi of a *Catasetum*, experience warns us to distrust their importance.

This being so, it becomes a question whether the genus is distinct from *Lycaste*, to which it undoubtedly approaches very nearly. The pollen-masses and gland of the two, although dissimilar, if *A. Clowesii* is compared with *Lycaste Deppii*, are nevertheless not so different when *A. uniflora* is the subject of comparison. The funnel-shaped condition of the middle lobe of the lip is at first sight peculiar to *Anguloa*, but it is in reality only an exaggerated condition of that kind of lip which we have in *L. aromatica* and its allies, in which there is a large flat appendage resting on the surface of the lip; the main difference consists in that appendage being attached to the lip at the base only, while in *Anguloa* it is united by the sides also. This, however, is a difference which may be regarded as available for generic distinction. The main difference, however, between *Anguloa* and *Lycaste* consists in this; that in *Lycaste* the lateral sepals are placed edge to edge in the manner of a true *Maxillaria*, but in *Anguloa* they overlap each other very considerably; this peculiarity causes a striking difference in the appearance of the flowers of the two genera, and, in fact, gives that of *Anguloa* somewhat the look of a *Mormodes*.

What *Anguloa squalida* of Pöppig may be, I cannot say. I have never seen the plant, and the barbarous analyses given by that author preclude all hope of coming to any conclusion about it. It may, however, be safely asserted that no such plant exists as is represented by Mr. Pöppig.

Fig. 1. represents the lip of this plant cut through the axis, to shew its funnel-shaped structure; 2. is the pollen apparatus, two of the pollen-masses being half cut away.



Solanum...

Solanum...

Solanum...

Solanum...

DIPLADENIA crassinoda.

Knob-jointed Dipladenia.

PENTANDRIA MONOGYNIA.

Nat. ord. APOCYNACEÆ.

DIPLADENIA, *Alph. D.C.* Calyx 5-partitus, lobis basi interne utrinque 1-2-glandulosis; glandulis nunc ligulatis vel squamosis. Corolla hypocraterimorpha vel tubo basi cylindrico et superne infundibuliformi, circa originem staminum hispida; fauce exappendiculata; lobis æstivatione sinistrorsum convolutis. Antheræ subsessiles, in superiore parte tubi vel medio aut sub media parte ubi tubus latior fit insertæ, sagittatæ, medio stigmati adhærentes, apicæ acuminatæ vel membrana acuta terminatæ. Glandulæ nectarii 2, cum ovariis alternantes, obtusæ, singulæ a duabus connatis plerumque constantes, quinta glandula in Echite uno ex ovariis opposita deficiente. Ovaria 2, nectario sæpius longiora. Stylus 1. Stigma globulosum, inferne membrana reflexa umbraculiformi (an semper?) stipatum. Folliculi et semina ut in Echite.—Frutices scandentes, vel sæpius suffrutices aut herba basi suffrutescens erecta, Americæ meridionalis incolæ foliis oppositis, integris, sæpe angustis, utrinque basi setis glandulisve pluribus loco stipularum stipatis, pedicellis axillaribus, nunc in racemum terminalem approximatis, florazione centripeta; corollis sæpius purpureis.—*Alph. DeCand. Prod.* 1. 481.

D. crassinoda; glaberrima, caule ramoso nodoso, foliis lanceolatis acutis v. acuminatis basi acutis utrinque nitidis coriaceis, racemis axillaribus compressis subsexfloris elongatis, lobis calycinis lanceolatis acuminatis tubi parte cylindricâ paulò brevioribus pedicello duplo tripove brevioribus, corollæ tubo infra medium campanulato, lobis obovato-orbicularibus.—*Alph. DC. l. c.* 486.

Echites crassinoda, *Gardner in Hook. Journ. bot.* 1. 544.

Echites carassa, *Hort.*

Mons. Alphonse DeCandolle in his monograph of the Apocynaceous order, has separated various plants from the old Linnæan genus *Echites*, and among others the *E. splendens* and *atropurpurea*, two well known garden species, which he places in a genus called *Dipladenia*, from διπλος, double, and ἀδην, a gland, in allusion to the two tubercles which are found at the base of their ovary. This genus, to which twenty species in all are referred; also contains the plant

now represented, whose resemblance to *E. splendens* must strike every one.

It is a native of the more elevated parts of the Corcovado mountain near Rio Janeiro, where it was found by Mr. Gardner. It differs from *D. splendens* in its smaller and more richly coloured flowers, in the form of its leaves, which are smaller and not cordate at the base, and in its having at the insertion of the leaves a ring of fleshy hard teeth, which stand in the room of the glands, or raised lines found in allied species.

The accompanying figure was made from a specimen which flowered with R. G. Loraine, Esq. of Wallington, and which gained the Horticultural Society's Silver Knightian medal in October last.

Fig. 1. shews the ovary, and one of the two glands that peculiarize the genus.

It is a stove twiner, and requires to be treated in a similar manner to *D. splendens*: viz. to be potted in rough heath mould, mixed with about one-fourth silver sand. In summer it should be grown in a damp atmosphere, and be amply supplied with water, but in winter it must be kept rather dry, otherwise it will be apt to damp off. It may be propagated by cuttings in the usual way.



ANEMONE obtusiloba.

Dr. Govan's Anemone.

POLYANDRIA POLYGYNIA.

Nat. ord. RANUNCULACEÆ.

ANEMONE, *Botanical Register*, vol. 3. fol. 200.

Sect. HOMALOCARPOS.

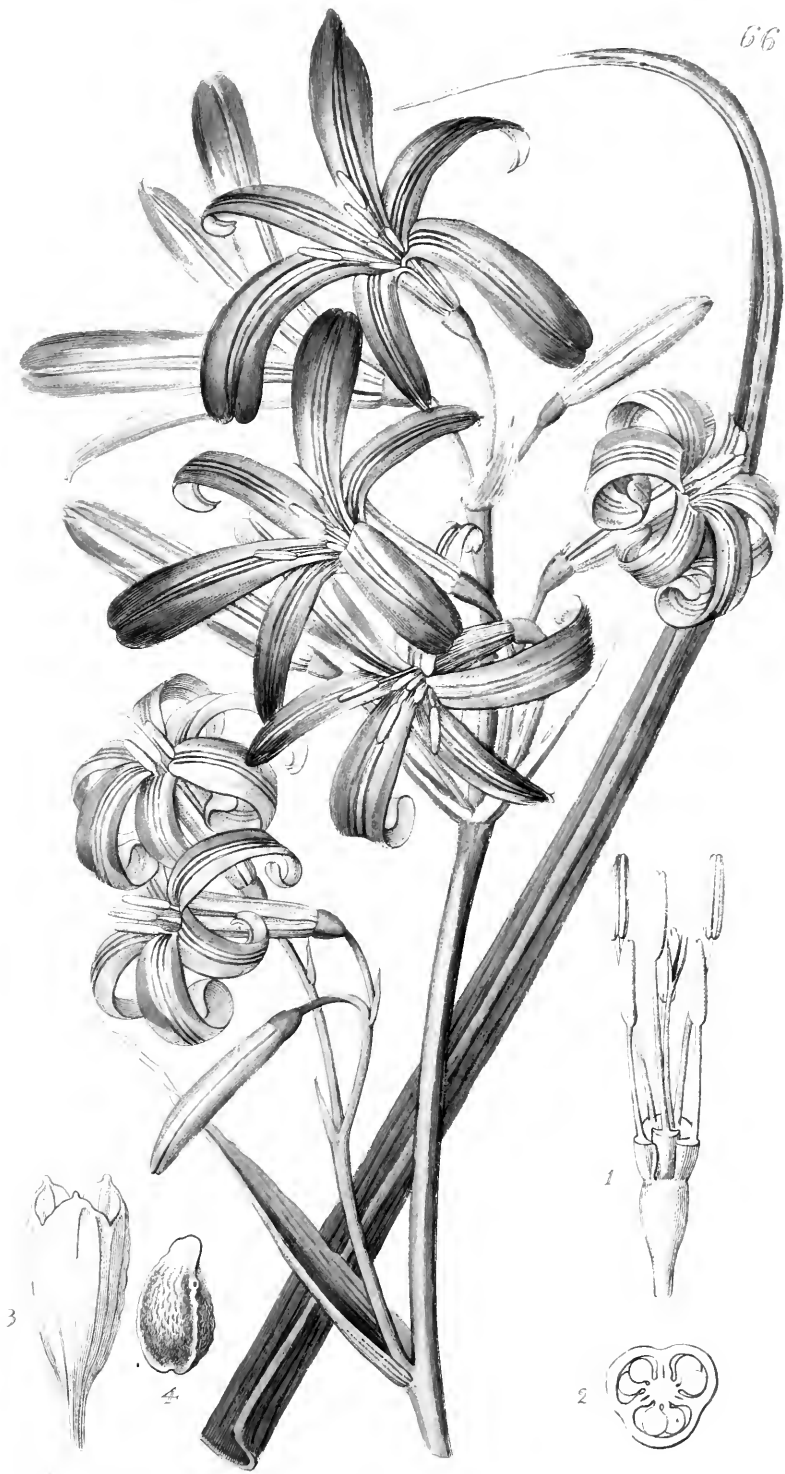
Caryopsides compresso-planæ ovali-orbiculatæ glabræ, ecaudatæ; pedicelli 00 umbellati aphylli 1-flori.—DeCand. Prodr. 1. 21.A. *obtusiloba*; villosa, foliis subrotundis cordatis trilobis grossè inciso-crenatis, umbellâ pauciflorâ, sepalis obtusis dorso pilosis, involucri foliolis foliaceis supremis cuneatis trilobis, carpellis pilosis.A. *obtusiloba*, *Don prodr. fl. nep.* 194. *Royle Illustrations*, p. 52. *Walpers Repertorium*, 1. 29.A. *Govaniana*, *Wall. Cat. no.* 4688. *Supra, misc.* 59. *hujus voluminis.*

This pretty Indian alpine herbaceous plant has been already noticed at p. 45 of the Miscellaneous matter of the present volume, under the name of *A. Govaniana*, which is what Dr. Wallich called it. It, at the same time, escaped my observation that Professor Royle had determined that species to be the same as *A. obtusiloba* of Don, which name must take precedence. It is nearly allied to *A. narcissiflora*, which is however readily distinguished by its short flower-stalks, and deeply divided leaves.

The native situation of the species is stated by Dr. Royle to be the Choor mountain of the Himalayas, at elevations of from 10,000 to 12,000 feet, flowering in May. In cultivation it proves to be a hardy little alpine plant, growing about six inches high, and well suited for pots, or a rockwork where the situation is rather shaded and damp. It is easily increased from seeds, which should be sown early in spring, in a soil composed of sandy peat and leaf-mould, and a small portion of loam; afterwards, when the young plants are large enough, they should be potted singly in very small pots, and kept in a

cold frame, with the back turned to the sun during the summer. Afterwards they may be treated in the ordinary way, but they will not flower before the second season. June and July are the blowing months.

It was raised from seeds received by the Horticultural Society from the Honorable Court of Directors of the East India Company.



IXIOLIRION montanum.

Mountain Ixia-lily.

HEXANDRIA MONOGYNIA.

Nat. ord. AMARYLLIDACEÆ. Divisio, CAULESCENTES.

IXIOLIRION. *Cormus* tunicatus. *Caulis* foliifer pedunculis axillaribus et terminalibus bracteatis. *Perianthium* sexfidum angustè infundibuliforme superne reflexè patens. *Filamenta* recta. *Antheræ* parte inferiore affixæ rectæ serius versatiles. *Stylus* rectus. *Capsula* oblonga chartacea vix operculata. *Semina* testâ nigrâ. *Habitat* montes Syriae, Persiæ septentrionalis, &c.—W. H.

I. *montanum*; cormo nuciformi tunicis duris membranaceis obscure brunneis; foliis amplexicaulibus profundè canaliculatis acuminatis 6-11-uncialibus $\frac{3}{8}$ unc. latis glaucis; caule subsesquipedali bracteis foliiformibus gradatim minoribus inferne alternis superne sæpius oppositis pedunculis axillaribus 1-3-floris; germine viridi declinato, perianthio $1\frac{1}{8}$ unc. saturatè cæruleo-purpurascente laciniis inferne plus minùs subalbescentibus, capsulâ oblongâ trisulcâ sulco nervato, loculis extus dorso trinervi rotundato, operculo brevissimo dehiscente dissepimento axe persistenter 3-apiculato, seminibus subrectis vix biseriatis testâ nigrâ ultra hilum attenuatè productâ angulatè oblongis chalazâ rugosâ depressâ hili puncto albescente.—W. H.

Ixiolirion montanum, *Herbert Append. Herb. Amaryll.* 125.

Amaryllis montana, *Red. Lil.* 241. *Labill. Syr. dec.* 2. p. 5. t. 1.

Amaryllis tatarica, *Pallas*, vol. 3. D. (fide Fischeri in litt.)

This long-desired and very ornamental plant was sent to Spofforth by the kindness of J. Cartwright, Esq. He received it at Constantinople from Colonel Shiel, who with equal kindness exerted himself to discover it, where it was found, on the hills in the neighbourhood of Teheran. The bulbs are very remarkable, looking rather like large nuts with a dark chocolate-coloured smooth coat. When they are ready to vegetate, the fibres prepare to burst out at bottom with the same appearance as those of a tulip. The plants are perfectly hardy; for, having produced leaf in the autumn, and their growth having been encouraged by the unusual mildness of the first portion of the winter, they were not in the least discoloured by the snow and the very severe frosts of February;

and, having flowered beautifully in May and June, they perfected good seed in July. Whether or not it will be the better to take up the bulbs to be dried in summer and reset in the autumn, is not yet ascertained; but it will probably not be necessary.

Ixiolirion Tataricum is distinguished from *montanum* by expanded rotate flowers, not tubularly closed in the lower part, and circinate anthers, and is confined to the Altaic region, while *montanum* extends from Syria to the southern part of Songaria. Dr. Fischer has named it *I. Ledebouri*, referring to *Amaryllis Tatarica*, Led. Fl. Altaica, but the plant had been previously figured, Herb. Am. pl. 19. & pl. 20. f. 1., as *Ixiolirion Tataricum* from Altaic specimens, of which Dr. Fischer is now aware.—W. H.



TETRATHÈCA hirsūta.

Hairy Tetratheca.

OCTO-DECANDRIA MONOGYNIA.

Nat. ord. TREMANDRACEÆ.

TETRATHÈCA, Smith. *Calyx* 4-5-partitus. *Petala* 4-5. *Stamina* 8-10; *antheræ* biloculares, loculis sæpe biloculatis, tubulo apicis deliscentes. *Ovarium* biloculare, loculis biovulatis. *Stylus & stigma* simplex. *Capsula* bilocularis, compressa, loculicidè bivalvis. *Semina* in loculis solitaria, inversa.—Frutices *ericoides*, interdum *juncei*; foliis parvis, alternis, verticillatisve, sæpe pilis glandulosis conspersis v. setosis.—Endl. Gen. 5644.

T. hirsuta; ramis tomentosis nunc setosis, foliis oblongis sparsis oppositisve subtus tomentosis supra hispidis, pedunculis setosis scabrisve, floribus pentameris —Lindley, *Sketch of Swan River Flora*, p. xxxviii.
Tremandra Hugelii, Hort.

Where the name has been published which this pretty greenhouse plant bears in our gardens I have failed to ascertain. It is certainly no other than *Tetratheca hirsuta*, and by no means a *Tremandra*, if, as seems clear, the essential character of that genus consists in its anthers not terminating in a tube nor opening by a pore at the point.

Messrs. Rollissons received it from Baron Hugel in the summer of 1843, and flowered it last March, when the accompanying drawing was made; it has since spread to many collections.

Fig. 1. represents the stamens, with the calyx and corolla removed; 2. is an ovary, style, and stigma, with one side of a cell cut away to shew the curious ovule with its hooked point.

It is a very nice greenhouse plant, gay with purple starry blossoms. It grows freely in a compost of peat loam and sand in equal proportions, and if a few potsherds are mixed with it so much the better. In summer plenty of air and water should be given, and shade in sunny weather. In

winter the plant should be placed in some airy part of the house where it will be secure from damp. Fire heat should not be applied except to keep off frost. It may be propagated by cuttings in the usual way.

MISCELLANEOUS MATTER

OF THE

BOTANICAL REGISTER.

1844.

1. CŒLOGYNE fuscescens.

Lindl. Gen. & Sp. Orch. p. 41.

A plant of this rare species flowered at Sion in the end of last November. Its blossoms are perhaps the largest in the genus, but want the brilliancy necessary to render them very striking. They are of a pale greenish yellow, without any markings except on the lip, which has a few brown spots towards the base, a broad brown band along the middle of each side lobe, and three vermilion coloured streaks in the centre. We fear that brighter suns than those of November will hardly destroy the green sufficiently to render this comparable with some species, notwithstanding its large flowers.

2. LÆLIA virens.

L. virens; sepalis sub erectis ovatis petalisque lanceolatis subæqualibus, labello oblongo obsolete trilobo cucullato apice ovato crispo lineâ obsolete elevatâ versus basin, columnæ cardine unidentato.

A Brazilian plant, of which I have only seen a single flower. Mr. Loddiges, whose number 647 it is, informs me that it has quite the habit of *Cattleya crispa*. The flowers are very pale yellowish green, of no beauty, and about the size of *Maxillaria alba*, which they are something like. The number of pollen-masses is certainly eight, which makes the plant a *Lælia* and not a *Cattleya*.

3. WARREĀ cyanĕa.

W. cyanĕa; spicâ brevi, bracteis ovarii longitudine, sepalis ovatis acutis, petalis subconformibus, labello subrotundo-cuneato apiculato undulato lineis quinque elevatis.

The purest blue known in the vegetable kingdom colours the lip of this beautiful flower, which is otherwise white. It has quite the habit of *Warrea tricolor*, but is very much smaller in all its parts. Its most distinctive character is found in the form of its lip, which has a distinct point, and five ribs, not three, near the base. Messrs. Loddiges imported it from Columbia, and it is no. 860 of their last catalogue.

4. HEXADESMĪA crurigĕra.

(*Hexopia crurigera*, *Bateman mss.*)

H. crurigera; caule fusiformi, foliis exacte linearibus, racemis flexuosis paucifloris, bracteis ovatis membranaceis, mento valdĕ producto, labello obovato altĕ bilobo.

A small-flowered inconspicuous Epiphyte, of no beauty, introduced from Guatemala to Mr. Bateman, with whom it flowered some years since, when it received the name of *Hexopia*. Its flowers are not half the size of *H. fasciculata*.

5. HEXADESMIA micrantha.

H. micrantha; racemo multifloro, bracteis linearibus acuminatis membranaceis, sepalis acuminatis, labelli trilobi laciniis lateralibus rotundatis intermediâ apiculatâ.

The flowers of this are very much smaller than even those of *H. crurigera*, and white with a very little green. It is from Guatemala, and is the no. 389 of Messrs. Loddiges' catalogue.

6. ALSTRŒMERIA Chorillensis.

A. Chorillensis; supra 1843, misc. 95, et cum icone sub nomine *A. lineatifloræ*, 1843, 58; una eademque est, foliis oblongis obtusis basi angustatis nitidĕ glaberrimis.

A. lineatiflora; Flor. Peruv. 3. 60. 289 (*A. ligtu* v. 2. *lineatiflora*, Herb. Am. 92. quoad *A. ligtu* Feuillé, Obs. 710.) foliis ovatis acutis ferĕ biuncias latis, planta Chilensis valida foliosissima.

The plant figured above, 1843, 58, is the identical species described in the same vol. Misc. 95, under the name *A. Cho-*

rillensis, and grows on the heights near the coast of Peru, a little to the N. of Lima, at Chorillos, intermixed with a Pitcairnia and a white Anthericum. *A. lineatiflora* of Ruiz is a vigorous Chilian (not a Peruvian) plant, with acute oval leaves an inch and three quarters wide. There can be no doubt of the difference between the Chorillensis and the *Ligtu* of Bot. Reg. 1839, 15; but the form and texture of the leaves separate Chorillensis more widely from Ruiz's *lineatiflora*, which is not stated to have glossy leaves. I consider the *Ligtu* of the Bot. Mag. not to be the true plant of Feuillé, which I still hope to obtain from Conception, whence we have had few plants; and I have long named it *A. Lindleyana*, allied to *A. pulchra*, not, as printed by mistake, 1843, misc. 94, to *pulchella*.—W. H.

7. CROCUS vernus.

It is stated by Dr. B. Biasoletto of Trieste (*Relazione, &c.* 1841) that *Crocus vernus*, which appears always to affect very elevated flat places, is found in profusion in Dalmatia, on a flat between the highest point of the Triglaw, and of Sweti Jure (St. George) which is 5521 feet high, flowering amidst withered grass in June. He also cites *C. biflorus* Mill. *C. Pallasianus*, and *C. minimus* of Rehb. ic. pl. cit. as found in either Istria or Dalmatia; but the accurate recognition of the species may perhaps be doubted. W. H.

8. CROCUS Cartwrightianus.

Supra 3.

Our colourer has inadvertently left out the purple star and prolonged purple lines on the inside of this flower, and the dark purple lines at the base of the limb of *C. Pallasianus*.

9. MAXILLARĪA Meleāgris.

M. Meleagris; caulescens; pseudobulbis ovalibus ancipitibus, foliis solitariis angustis obtusis emarginatis undulatis, sepalis petalisque acuminatis, labelli oblongi lobo medio submarginato sub apice carinato lateralibus nanis duplò longiore, tuberculo transverso subcrenato basi 3-costato.

B.—1844.

b

A caulescent species of little beauty. Its flowers are spotted with purple upon a yellowish white ground ; the lip is dark purple. Our specimen is from Messrs. Loddiges, who imported it from Oaxaca. We have also received it from Mr. Brocklehurst's garden at the Fence.

10. TROCHETIA grandiflora.

Bojer's MSS. ?

This is a very handsome stove shrub which was received, under the name it now bears, from the Mauritius in 1839, by His Grace the Duke of Northumberland. It has oblong dark green leaves covered over on the under side with brown hairy stars. The flowers are large, white, quite pendulous, and appear in threes. We regard it as a great acquisition. The name is probably one of M. Bojer's; for we do not find it in the most recent compilations of species. A figure of it will soon appear in our pages.

11. ONCIDIUM oblongatum.

O. oblongatum; facie et structurâ *O. reflexi*; sed petalis oblongis obtusis apiculatis patulis planis, labello altè bilobo, columnæ alis rotundatis crenulatis dimidiatis.

It is almost impossible to find words that will well distinguish the *Oncidiums* allied to *O. reflexum*; and yet they appear to merit distinction. This, which is from Messrs. Loddiges, has very much the appearance of *O. Wentworthianum*, with the same clouded pseudo-bulbs and speckled flower-stem; but its petals are perfectly flat, not at all reflexed or wavy, obtuse with a little point and clear yellow, with a few reddish brown bars near the base. It is a very handsome species, on account of its flowers having as much yellow in them, and being as large, as the best variety of *O. sphacelatum*.

12. MAXILLARIA concava.

M. concava; acaulis, racemosa, pseudobulbis oblongis altè sulcatis, foliis gesmini 3-costatis nitidis in petiolum angustatis, bracteis setaceis, sepalis

lateralibus falcatis acuminatis sub apice carinatis, petalis duplo minoribus obtusis apice plano-convexis, labello oblongo obsolete trilobo apice carnoso concavo rotundato extus scabriusculo, tuberculo lineari apice obtusè 3-dentato.

At first sight this species might be mistaken for *M. bractescens*; but its flowers are smaller; the bracts very small and setaceous, and the lip of quite another form. It has little beauty, and was found in Guatemala by Mr. Hartweg, by whom it was sent to the Horticultural Society in 1841.

13. BRASSIA.

This genus consists of American Epiphytes, with pseudobulbs and a radical spiked inflorescence, of which many species are in our gardens. Its great features are a very dwarf wingless column, a sessile flat undivided labellum, with two (or occasionally more) short plates at its base, and a spreading perianth. Recent discoveries have considerably enlarged it, so that from consisting of a single species, as it did when first defined in 1813, or of two, as was the case when the Genera and Species of Orchidaceæ were published in 1833, we have now fourteen well defined and clearly known. Of these the following is an enumeration:

1. *B. Lanceana* (Lindl. in Bot. Reg. t. 1754.); sepalis lateralibus elongatis labello oblongo undulato acuminato subrepando vix duplò longioribus: callo baseos simplici canaliculato truncato pubescente dentibus 2 liberis membranaceis in fronte.—*Surinam*.—A charming species, with bright yellow flowers spotted with lively brown, and very sweet-scented.
2. *B. Lawrenceana* (Lindl. in Bot. Reg. 1841. misc. 6. t. 18.); sepalis lateralibus elongatis labello oblongo apice lanceolato subundulato plus duplò longioribus: callo baseos simplici canaliculato truncato pubescente.—*Brazil?*—This plant is I fear only a variety of the last, and is perhaps from the same country, for there is no proof of its being Brazilian, as is stated. The principal differences that distinguish it from *B. Lanceana* are, the lateral sepals being more than twice as long as the lip, and the want of free extra tubercles in front of the callus at the base of the lip. The flowers are pale yellow, faintly spotted with brown, and very sweet-scented.
3. *B. angusta*; pseudobulbis oblongis ancipitibus, foliis binis oblongis sessilibus subundulatis racemi longitudine, sepalis linearibus acuminatis lateralibus caudatis, petalis linearibus acuminatis, labello lineari-lanceolato acuminato lamellis baseos connatis pubescentibus anticè denticulo auctis.—*Brazil*.—The first knowledge I had of this plant was derived from a specimen sent by Mr. W. Masters of Canterbury, who

had received it from Brazil; at that time I took it for a starved specimen of *B. Lawrenceana*. Since that time it has flowered in the garden of the Horticultural Society, with the same peculiarity of structure; and hence I conclude it to be a distinct species. It is readily known by its having extremely narrow sepals and lip, which are of a pale dull yellow, with little marking, except a few brown spots at the base of the sepals, petals, and lip. In this respect it varies, for in some cases the spots at the base of the petals are few and distinct, in others they are run together into one brown stain.

4. *B. macrostachya* (Lindl. Sertum. Orch. t. 6.); pseudobulbis compressis margine obtusis 2-3-phyllis, scapo mutante multifloro, sepalis linearibus acuminatis lateralibus longissimis, labello oblongo-lanceolato acuminato petalis longiore: lamellis baseos liberis villosis dentibus tribus liberis in fronte. — *Demerara*. — No species can be compared with this most graceful and brilliant plant, whose long nodding racemes of flowers bend gently over the rich and verdant foliage, while the slender sepals are so long, so light, and so delicate as to be agitated by every impulse given them by the air. They are of a clear golden yellow, slightly spotted with brown, and many degrees darker than the lip.
5. *B. caudata* (Lindl. in Bot. Reg. t. 832. *Epidendrum caudatum*, L. *Malaxis caudata*, W.); pseudobulbis compressis margine acutis, scapo erecto, sepalis ovato-linearibus acuminatis lateralibus longissimis, labello ovato acuminato petalorum longitudine, lamellis baseos liberis villosis denticulis 2 liberis in fronte. — *West Indies*. — Very nearly allied to *B. macrostachya*, from which it is distinguished by its pseudo-bulbs being acute at the margin, not obtuse, by its flowers being smaller, greener, and much more mottled with deep brown, and by its labellum being ovate, acuminate, and the same length as the petals, not oblong-lanceolate, and longer than them. The little free teeth, too, in front of the calli at the base of the lip, are much smaller.
6. *B. bidens*; pseudobulbis angustis ancipitibus, foliis oblongo-lanceolatis scapo stricto multifloro æqualibus, sepalis acuminatis lateralibus labello duplo longioribus, labello rhombico undulato petalis brevioribus: lamellis baseos lævibus rectis appendice membranaceâ bilobâ in fronte. — ? — The native country of this species is unknown. I had it from the collection of Mr. R. Harrison in 1837. It is allied most nearly to *B. caudata*, from which it differs in the form of its lip, and in having two large teeth connected at their base in front of the calli, which are quite smooth. The lip is spotted with brown on a yellow ground. The sepals and petals appear from the dried specimen to be unspotted.
7. *B. cochleata* (Knowles & Westcott, Floral Cabinet, t. 53.); sepalis petalisque subæqualibus linearibus acuminatis, labello elongato cochleato acuminato. — *Demerara*. — Now known only from the above figure. We have seen no specimen. Possibly it is the *B. Henchmanni* of Mr. Loddiges' catalogue, or his *B. cuspidata*, (no. 1467), both of which are unknown to me.
8. *B. verrucosa* (Lindl. in Bot. Reg. 1840. misc. 66. Bateman Orch. Mex. & Guat. t. 22.); foliis scapis gracilibus duplo brevioribus, sepalis lateralibus acuminatis labello unguiculato obovato apiculato verrucoso plus duplo longioribus; lamellis baseos liberis villosis apice recurvis. —

Guatemala.—Flowers on long slender scapes, pale green except the lip, which is white with green warts. The pseudo-bulbs are rounder at the edge, and more furrowed than is usual in this genus.

9. *B. guttata* (Lindl. in Plant. Hartweg. p. 94. *B. Wrayæ*, Bot. Mag. t. 4003.); pseudobulbis oblongis ancipitibus diphyllis, foliis oblongis obtusis racemo multifloro brevioribus, bracteis membranaceis patentibus squamæformibus, sepalis linearibus acuminatis, petalis conformibus brevioribus, labello supra basin cordato ovato crispo, lamellis baseos connatis pubescentibus edentulis apice divergentibus.—*Guatemala*.—A fine species with broad leaves, and large greenish yellow flowers spotted with green; they vary greatly in size; in Mr. Hartweg's wild specimens from the Chono they are very small, in a specimen found by Mr. Skinner at San Salvador twice as large, in the plant figured in the Botanical Magazine larger still, and in a specimen before me from the garden of the Horticultural Society they are considerably larger than even the last. In the gardens the name of Br. Wrayæ is also applied to *B. brachiata*, a far handsomer species.
10. *B. brachiata* (Lindl. in Plant. Hartweg. p. 94.); pseudobulbis oblongis angustis compressis diphyllis, foliis obtusis racemo multifloro brevioribus, bracteis patentibus squamæformibus, sepalis petalisque brevioribus linearibus acuminatis longissimis, labello supra basin cordato subrhomboideo acuminato crispo, lamellis baseos bidentatis obtusis.—*Guatemala*.—A most noble species, with very large flowers, having brown spots on a pale ground. In a specimen which flowered with Mr. Bateman the lower sepals were fully five inches long. The lip is much waved at the edge, and rather lobed. It is sometimes called *B. Wrayæ*.
11. *B. aristata*; racemo secundo nutante multifloro, sepalis linearibus strictis acuminatis lateralibus labello quadruplò longioribus, petalis ex ovata basi acuminatis aristatis, labello obovato basi angustato sub apice aristato secus medium verrucoso: lamellis baseos glabris apice liberis divergentibus rotundatis.—*Guatemala*.—Flowers the smallest in the genus, apparently whole-coloured. Very distinct in the petals, ending in bristle points, and in the presence of a distinct awn beneath the point of the labellum. Only known to me by a dried specimen from Mr. Skinner, without leaves.
12. *B. peruviana* (Pöppig & Endl. gen. & sp. 2. p. 12. t. 117.); foliis elongatis acutissimis, "sepalis anguste linearibus acuminatissimis æqualibus; floribus resupinatis, labello oblongo lanceolato acuto undulato crenulato" sepalis subæquali.—*Peru*, in dry thickets on the eastern face of the Andes, in the district of Chihuamccala, towards Cuchero.—The flowers are represented as growing in one-sided spikes, not exceeding ten in number, about an inch apart, yellowish-green spotted with purple.
13. *B. maculata* (Brown. in Hort. Kew. 5. 215. Bot. Mag. t. 1691.); sepalis petalisque linearibus acuminatis æqualibus, labello postico subrotundo.—*Jamaica*.—Sepals and petals dull olive brown, with purple blotches. Lip cream colour, very large, spotted with purple.
- * * *
14. *B. Clowesii* (*Miltonia Clowesii*, Lindl. in Sert. Orchid. t. 34. *Odontoglossum Clowesii*, Lindl. in Bot. Reg. 1839. misc. 153.); pseudobulbis

ovalibus diphyllis, foliis ensiformibus angustis erectis scapo longioribus, racemo paucifloro laxo, bracteis minimis setaceis, sepalis petalisque lanceolatis aequalibus, labelli cordati in medio constricti apice subrotundo acuto basi lamellis 5 inæqualibus abruptis quincuncialibus auctâ.—*Brazil*.—A fine species, with the sepals blotched with chocolate brown upon a yellow ground. Lip white at the tip, violet-coloured at the base. Now that the true limits of the genera allied to *Brassia* are better understood, this plant it is hoped will rest without further change. It is evidently a transition from *Brassia* to *Miltonia*; but upon the whole is better placed in the former than the latter genus, on account of its column having no trace of wings.

14. MAXILLARIA corrugata.

M. corrugata; pseudobulbis ovatis subimbricatis, foliis lanceolatis solitariis breviter petiolatis, racemis paucifloris petiolo multò longioribus, bracteis minimis, sepalis petalisque obtusiusculis, labello oblongo utrinque emarginato (ideoque obsolete trilobo) venis elevatis flexuosis corrugato, tuberculo mediano obtusè tricarinato.

This plant, belonging to the same division of *Maxillaria* as *M. squalens*, was found by Linden between Maracaibo and Bogota, and has just flowered in Mr. Barker's collection. It has pale brownish purple flowers of no beauty; and a lip with numerous purple elevated zigzag veins on a pale yellow ground. The long tubercle in the middle, which in these plants is usually undivided, or merely 3-lobed at the extremity, is here broken up into 3 distinct contiguous elevated ribs.

15. ZYGOPETALUM.

This genus, founded by Sir W. Hooker on the *Z. Machaui*, is extremely near *Eulophia*, from which it principally differs in having a deep ridge or bridge lying across the labellum near the base. The union of the sepals and petals, from which the name is derived, is too inconsiderable to merit attention, and is not constant among the species now known. The presence of blue, or some marked shade of that colour, upon the labellum, is another characteristic feature, by which the genus is to be distinguished from *Eulophia*, in which that tint is, as far as I am aware, unknown.

In consequence of the additions that have been of late years made to the genus, all of which, with one exception, are

in our gardens, it seems desirable to amend the generic character, and to bring together all that is now known concerning them.

ZYGOPETALUM.

(*Hooker. in Bot. Mag. t. 2748. Lindl. Orch. no. 113.*)

Perianthium explanatum, sepalis petalisque ascendentibus, subæqualibus, cum ungue producto columnæ connatis. Labellum muticum, planum, indivisum, patens, ungue ascendente : cristâ magnâ transversâ carnosâ. Columna brevis, arcuata, marginata, sæpius utrinque subdilata, nunc in cucullum expansa. Anthera subbilocularis carnosâ, nunc vertice rostrato. Pollinia 2, bipartibilia, in glandulam transversam subsessilia. —Herbæ terrestres, subacaules, foliis plicatis patentibus. Flores speciosi, suaveolentes, labello cœrulescente.

1. *Z. Mackaii* (Hooker. Bot. Mag. t. 2748. Lod. Bot. Cab. t. 1664. *Eulophia Mackaiana*, Lindl. in Bot. Reg. t. 1433.) ; foliis lorato-lanceolatis striatis apice recurvis racemo brevioribus, sepalis petalisque oblongo-lanceolatis acutis, labello obcordato glaberrimo, callo crassissimo bilobo. —*Brazil.*—Known from all the genus by its blue-veined perfectly smooth lip, and two-lobed crest. The blotches on the sepals and petals are somewhat smaller than in the other species.
2. *Z. intermedium* (Lodd. Cat. no. 1136. *Z. velutinum*, Hoffmannsegg in Bot. Zeit. 1. 835. ?) ; foliis ensiformibus racemo brevioribus, sepalis petalisque oblongis acutissimis, labello subrotundo undulato basi angustato altè bilobo pubescente, callo crenulato indiviso. —*Brazil.*—This is generally confounded in collections with *Z. Mackaii*, from which it is readily known by its downy labellum. It is perhaps the finest of the genus.
3. *Z. brachypetalum* ; foliis ensiformi-lanceolatis scapo elato multifloro brevioribus, sepalis petalisque oblongis obtusis, labello transverso subrotundo emarginato basi vix angustato pubescente, callo integerrimo. —*Brazil.*—Flowers most like those of *Z. intermedium*, but less than half the size. The sepals and petals are short, stiff, convex, and hardly acute, very much more brown than green, in consequence of the blotches running together. The lip is entirely covered with blue veins and spots, firm, hardly at all narrowed to the base, and very little emarginate. I received it from Mr. Waterhouse, of Halifax, in December, 1840.
4. *Z. crinitum* (Lodd. B. Cab. t. 1687. Bot. Mag. t. 3402. *Z. pubescens*, Hoffsgg. in Bot. Zeit. 1. 835. ?) ; foliis lato-lanceolatis, bracteis cucullatis, sepalis petalisque linearilanceolatis acutissimis, labello obovato emarginato basi longè angustato venis villosissimis, callo angusto incurvo emarginato. —*Brazil.*—There are varieties of this with pink, blue, and almost colourless veins to the lip. They all agree in having those veins quite shaggy, and a lip which, instead of being broader than long, narrows very sensibly towards the base. From the manner in which Count Hoffmannsegg describes his *Z. pubescens*, “with the tracery of the lip

- scarcely at all verging upon blue, and having a broad white margin," I presume he must have had in view some variety, perhaps the pink one, of this.
5. *Z. stenochilum* (Lodd. Bot. Cab. t. 1923.); foliis latioribus racemo æqualibus v. longioribus, sepalis oblongis acuminatis, petalis brevioribus duplò angustioribus, labello angusto oblongo obtuso villosò, callo emarginato.—*Brazil*.—Of this very distinct species the sepals are blotched, and somewhat striped with brown. The lip is white, with blue or violet veins in the middle only. Its small petals and very narrow lip readily indicate it.
 6. *Z. maxillare* (Lodd. Bot. Cab. t. 1776. L. no. 2. Bot. Mag. t. 3686.); foliis lineari-lanceolatis undulatis acuminatis racemo flexuoso longioribus, sepalis petalisque ovato-oblongis acutis, labello glabro obovato, cristâ unguiformi maximâ crenatâ.—*Brazil*.—Sepals and petals green, with blotches and broken bands of chocolate brown. Lip violet, with a deep blue bridge. According to Mr. Gardner this species always occurs on Tree-ferns.
 7. *Z. Murrayanum* (Hooker in Bot. Mag. t. 3674.); pseudobulbis ovatis profundè sulcatis, racemis foliis brevioribus, sepalis petalisque ovato-lanceolatis, labelli 3-lobi lobis lateralibus ovatis erectis intermedio ovato-lanceolato reflexo glabro, callo integro sulcato.—*Brazil*.—A species of little beauty. The sepals and petals are pale green and unspotted. The lip is white, with some dark claret-coloured spots at the base. It was found on the Organ Mountains, "at the height of about 4000 feet above the sea."
 8. *Z. gramineum*; foliis lineari-lanceolatis, scapo subunifloro capillari brevi ascendente, vaginulis laxis unâ in medio duabus sub pedicello, labello subrotundo fimbriato tenui supra basin appendicibus 2 ovato-lanceatis acutis aucto. Flores 3 *Z. Murrayani* magnitudine, magis membranacei. Scapus 2-pollicaris. Folia spithamæa.—*Popayan*; in woods rare.—This is much smaller than the other species, and is the only one yet found west of the Andes. It is not in cultivation.
 9. *Z. cochleare* (Lindl. in Bot. Reg. t. 1857.); foliis obovato-oblongis pedunculis unifloris multò longioribus, sepalis petalisque ovato-lanceolatis conniventibus inferioribus multò majoribus, labello cochleato subrotundo bilobo velutino, cristâ arcuatâ crenatâ, antherâ ecrisatâ.—*Trinidad*.—Leaves unusually broad in this genus. Flowers pure white, except the lip, which is of a rich lapis lazuli blue, and very fragrant. Remarkable in this genus for its solitary flowers.
 10. *Z. rostratum* (Hooker in Bot. Mag. t. 2819.); foliis lato-lanceolatis patentibus scapo paucifloro longioribus, sepalis petalisque lineari-lanceolatis undulatis acuminatis, labello subrotundo-ovato, callo baseos lunato crenato, columnâ apice cucullatâ dentatâ, antherâ rostratâ.—*Demerara*.—The broad short leaves of this plant readily distinguish it. The sepals and petals are greenish, dashed with purple, but not at all blotched. The lip is white, with a violet crest, and a few pink radiating lines. It has no scent.

16. CLEISOSTOMA decipiens.

C. decipiens; foliis distichis loratis obliquè emarginatis leviter undulatis, spicis recurvis compositis, sepalis petalisque oblongis rotundatis, labelli laminâ rotundatâ transversâ saeco subventricoso pubescente.

This little epiphyte, which was received from Ceylon by Col. Fielding, is so like *Saccolabium micranthum*, that it might easily be mistaken for it. The one is, however, a genuine *Saccolabium*, the other a true *Cleisostoma*. *S. micranthum* has pink flowers with a tooth proceeding from the base of the blade of the labellum; *C. decipiens* has dirty ochre-coloured flowers, with a tooth springing from the back of the spur just below the column. It is an insignificant plant. Our specimen was communicated by Messrs. Loddiges.

17. SPIRANTHES lobata.

S. lobata (*Sarcoglottis*); foliis oblongis acutis immaculatis, scapo rufescente ovarioque pubescente, sepalis lateralibus deflexis, labello trilobo cucullato lobo medio reniformi lateralibus ascendentibus rotundatis; ungue utrinque villosa: callis elongatis liberis gyratis.

A fine species of that section of the terrestrial genus *Spiranthes* to which the name of *Sarcoglottis* has been applied. It is near *S. picta*, but has yellow flowers, spotless leaves, a brown hairy scape, and a three-lobed lip, the lateral segments of which are erect, in the manner of a *Bletia*. For a specimen we are indebted to Sir C. Lemon, who received it from Mr. Rule, of the Real del Monte mines.

18. DENDROBIUM Kingianum.

Bidwill MSS.

D. (*Desmotrichum*) *Kingianum*; pseudobulbis ovatis in collum longum extensis apice bifoliis, foliis ovalibus emarginatis, pedunculo terminali (2-flo-ro foliis æquali?), sepalis ovatis mento emarginato, petalis obovatis apiculatis duplò brevioribus, labelli trilobi pubescentis laciniis lateralibus acutis intermediâ paulo longiore transversè rhombeâ angulis lateralibus rotundatis apiculi acuto axi elevatâ trilineatâ apice tridentatâ.

This curious epiphyte was bought by the Messrs. Loddiges at the sale of Mr. Bidwill's New Holland Plants. It has pseudo-bulbs between four and five inches long, tapered from an ovate base into a very long and narrow neck, on the

top of which stand two oblong emarginate dark-green rather wavy leaves. Between these is a flower-stalk having two pink flowers gaily spotted with crimson in the inside. It will probably flower more profusely when in better health, and will then be a plant of considerable interest.

19. HABROTHAMNUS purpureus.

H. purpureus; ramis petiolisque tomentosis, foliis ovato-lanceolatis acuminatis subtus pubescentibus supra glabriusculis, cymis terminalibus corymbosis, calyce glabro, corollæ laciniis acutissimis.

We last year (No. 73) mentioned the existence in Europe, in a living state, of the magnificent *Habrothamnus fasciculatus*, one of the finest of all the gorgeous forms of Mexican vegetation. It is with great satisfaction that we are enabled now to announce another species, also in the possession of Mr. Van Houtte, Nurseryman, Ghent, to whom we are indebted for a fresh specimen. Though not so handsome as the other, it promises to be a very desirable species, and will no doubt soon form a decoration of our English exhibition rooms. The flowers are more purple than scarlet, about $\frac{3}{4}$ of an inch long, and in terminal clusters. Mr. Van Houtte gives us the following information concerning its habits. "This plant is from a district cooler than that which produces *H. fasciculatus*, and at the utmost does not require more protection than is afforded by a common greenhouse (*orangerie*). In the stove it runs away into a multitude of slender shoots, from which indeed it is easily propagated, and becomes a rambling shrub, with an appearance by no means agreeable. Both the species of this genus should be kept as cool as possible, require to be skilfully pruned, and so arranged as to grow strong and short-jointed. Otherwise the flowers are badly coloured, as always, indeed, happens when the plants are grown in much heat."

20. SPIRANTHES diaphana.

S. diaphana; foliis hysteranthiis (?), vaginis inflatis acuminatis glabris diaphanis, floribus capitatis extùs tomentosis, labello apice plano oblongo integerrimo.

For a fresh specimen and drawing of this new species of terrestrial Orchidacæ I am obliged to Mr. Van Houtte of

Ghent. It is a curious plant, flowering without leaves, about 8 inches high, smooth, with 3 or 4 large semi-transparent loose sheaths, streaked with rose-colour. The flowers are enclosed in a head of such sheaths, are downy outside, white, with green streaks outside, and a yellow blotch below the point of the white lip. Probably a native of Mexico.

21. SCHOMBURGKIA undulata.

S. undulata; floribus dense racemosis, bracteis longissimis spathaceis, sepalis petalisque æqualibus undulato-crispis labello longioribus, labelli lobis lateralibus rotundatis intermedio ovali acuto trilamellato lineis minoribus elevatis interjectis.

This is a beautiful species received by Mr. Rucker from Linden, who gathered it in La Guayra. It has fine rich brownish purple sepals and petals, and a clear violet-purple lip. From *S. crispa* it differs in having the middle lobe of the lip oval acute, and only 3-ribbed, while the side lobes are much smaller and flatter; from *S. marginata*, with which it corresponds in the form of the lip, it is distinguished by its very long narrow crisp sepals and petals. The flowers are as large as those of *S. tibicinis*, but the inflorescence is quite different. Unless my memory fails me, there is a representation of this plant among Plumier's figures, which I have not just now an opportunity of consulting.

22. COBURGIA miniata.

C. miniata; foliis virentibus 3-pedalibus scapo compresso æqualibus, perianthii tubo anguste clavato limbo triplo longiore, ovario pedicello sub-æquali, filamentis basi membranaceis utrinque dilatatis vix in coronulam brevissimam connatis.

The leaves of this plant are full three feet long, and less than an inch broad, bright green, but nevertheless coated by a bloom too thin to render them distinctly glaucous. The scape is of the same height, very slightly glaucous. The flowers, when young, are almost white, with a vermilion tinge on the back, and a little green at their points. When full grown they are two inches and a half long, and the vermilion colour overspreads them almost entirely. The filaments are very slightly dilated at the base into a membrane, and scarcely form a cup. This has the slenderest flowers of any species

that we know of. It flowered in the nursery of Mr. Groom, who received the bulbs from Peru.

23. *ERIA cochleata*.

E. cochleata (Tonsæ); foliis lanceolatis coriaceis 5-costatis, sepalis glabriusculis petalisque lineari-lanceolatis, labello basi costis 5 apice 3 undulatis lincato: lobis lateralibus obtusis intermedio oblongo-spathulato, scapo elongato radicali multifloro ovarioque altè costato cochleari glabris.

A plant from Manilla, with very much the appearance of *E. stellata*, from which it differs in having smaller flowers, a smooth scape, and a shining ovary with high ribs, which are twisted so as to have the appearance of a very deep-threaded screw. The sepals are very pale green, the petals and lip white, the latter painted with crimson veins and margin. From Messrs. Loddiges.

24. The Section of *EPIDENDRUM* named *AMPHIGLOTTIUM*.

Many years ago, in the Transactions of the Horticultural Society, Richard Anthony Salisbury proposed the name of *Amphiglottis* for the *Epidendrum elongatum* of Jacquin. More recent writers have, however, preferred to retain that species in the genus where it was first stationed. In the year 1841, in attempting to form natural subdivisions of the great genus *Epidendrum*, I proposed, in Hooker's *Journal of Botany* (vol. 3. p. 81.) several sections, among which was one of which the aforesaid *Epidendrum elongatum* was taken as the type, and to which the name of *Amphiglottium* was applied: Salisbury's name being a little altered, so as to be of the same gender as *Epidendrum*, in order to enable those who prefer to regard the plants collected under it as a distinct genus, to do so without at all disturbing the nomenclature.

The characters by which it was proposed to distinguish the section *Amphiglottium* were the long leafy stem, with distichous leaves, the want of any tendency to form pseudobulbs, a terminal peduncle covered with close sheaths, and a labellum entirely united to the column. Three years additional experience has brought me acquainted with many more species than I then possessed, and, not having induced me to

modify my views, it will now be as well to give an enumeration of what is at present known about this section, more especially as the greater part of the species is to be found in cultivation.

§. AMPHIGLOTTIUM.

AMPHIGLOTTIS, *Salisbury in Hort. Trans.* 1. 261. AMPHIGLOTTIUM, *Lindl. in Hooker. Journ. Bot.* 3. 81. (1841.)

A. *Flowers in spikes or racemes.*

* Lip in no degree lobed.

1. *E. Skinneri* (Bateman in *Bot. Reg.* fol. 1881.); foliis distichis lanceolatis acuminatis, caule apice longè aphylo squamoso, racemo cylindræo multifloro, floribus cernuis, sepalis lineari-lanceolatis, petalis ovalibus acutis, labello ovato acuminato integerrimo basi callo sulcato cristato. — *Guatemala.* — One of the most beautiful of its race. Flowers large, deep rose colour, in long racemes. It is difficult to cultivate. Mr. Skinner says that it inhabits a middling temperature, and will thrive best in a climate graduated from 56° to 70°. He directs us not to put it in earth, but to permit it to have free scope for the young roots and shoots, which it throws out in August.
2. *E. biforatum* (Lindl. in *Lodd. cat. ed. 2. no. 566. Bot. Reg.* 1842. sub t. 25.); foliis elongato-lanceolatis pedunculo squamato longioribus, racemo paucifloro cernuo, bracteis carinatis rigidis floribus brevioribus, labello subrotundo-ovato per medium elevato basi biforato. — *Brazil.* — The habit of this is something like that of *E. fuscatum*, but its entire lip, with a central ridge and two pores at the base distinguish it. The only specimen I have examined was out of health, and possibly the flower-stem, which in it was very short, may lengthen out under more favourable circumstances.
3. *E. setiferum* (Lindl. in *Ann. Nat. Hist.* vol. 4.); foliis distichis lanceolatis acutis, caule simplici squamis lineari-lanceolatis acuminatis sub floribus foliaceis vaginato, racemo cernuo, bracteis longissimis setaceis, petalis linearibus obovatis obtusis sepalis angustioribus, labello cordato integerrimo reticulato acuto basi trituberculato.

—*Brazil*.—With the habit of *E. fuscatum* and bifuratum, but with much shorter leaves, and longe bracts than the latter. The flower-stem is about ten inches long in the Brazilian specimens. (Not in cultivation.)

** Lip more or less lobed, but in no degree fringed.

4. *E. cornutum* (Lindl. in Hooker's Journal, 3. 86.); foliis gramineis lineari-lanceolatis acutissimis, racemo elongato cylindraceo cernuo, sepalis lineari-lanceolatis acuminatis striatis, petalis filiformibus, labelli trilobi laciniis lateralibus nanis rotundatis intermediâ cornutâ basi 3-callosa. —*Peru, Columbia*.—Spathaceous bracts acuminate, imbricated, as long as the flower-stem. Flowers white, very fragrant. (Not in cultivation.)
5. *E. ovalifolium* (L. no. 39); foliis distichis ovali-lanceolatis acutis, sepalis oblongo-lanceolatis, petalis linearibus, labelli trilobi cordati lobis lateralibus rotundatis: intermedio lineari bilobo disco 3-carinato basi bituberculato, racemo elongato. —*Mexico*.—A Mexican species with green flowers like those of *E. nutans*, but not paniced, nor proceeding from a spathe, and smelling very like a sliced cucumber. Some of the old stems are three feet long.
6. *E. Clowesii* (Bateman in litt.); foliis lanceolatis racemo longioribus (an semper?), bracteis minimis mucronatis, sepalis oblongo-linearibus, petalis filiformibus reflexis, labelli trilobi 3-carinati ecallosi lobis subundulatis rotundatis intermediobilobo. —*Guatemala*.—Nearly allied to *E. ovalifolium*, from which it differs in having three distinct raised lines on the lip, but no basal calli, and a very short raceme overtopped by the leaves. Flowers yellowish white.
7. *E. fuscatum* (Swartz, L. no. 38. B. R. t. 67. B. M. t. 2844. Bot. Cab. t. 887. *Ep. anceps*, Jacq. Amer. 224. t. 138. *Amphiglottis lurida*, Salisb.—VAR. β , floribus minoribus magis viridibus. *E. virescens*, Lodd. Bot. Cab. t. 1867. *E. musciferum*, Lindl. in Hooker's Journal, 1. 6.—VAR. γ , floribus multo majoribus, labello violaceo luteo-marginato. *E. viridipurpureum*, Hooker in Bot. Mag. t. 3666.); foliis oblongis undulatis apice recurvis, sepalis oblongis, petalis linearibus, labello car-

noso cordato trilobo laciniis rotundatis intermediâ emarginatâ apice calloso basi 2-tuberculato, spicâ globosâ recurvâ.—*Jamaica, Panama, Martinique, Guayana, Grenada.*—One of the most common of all plants in some of the tropical parts of America, and varying greatly in the size of its flowers and length of the flower-stem. Hence have arisen several species, proposed by myself and others, which a better acquaintance with these plants induces me to believe mere varieties. In colour the flowers vary from dull greenish purple to green and almost yellow. Sir W. Hooker's *E. viridipurpureum* has unusually large flowers, and a flower-stem shorter than common; but in real structure I perceive no difference. There is a little difference among these plants in the degree of lobing observable in the lip; but I find no limit to that kind of variation.

8. *E. orchidiflorum* (L. no. 29.); foliis distichis lineari-oblongis obtusis, caule apice nudo obtusè vaginato, racemo brevi terminali, floribus carnosis, sepalo supremo obovato lateralibus oblongis dimidiatis, petalis linearibus cuneatis, labello subrotundo basi bicalloso apice tridentato: dente intermediâ minore.—*Bahia.*—Leaves very small, fleshy and shining. Flower-stem a foot long, stout, clothed with blunt somewhat rough sheaths. Flowers as large as in the *Ep. viridipurpureum* of Hooker. (Not in cultivation.)
9. *E. fruticosum* (L. no. 22.); foliis distichis ovato-oblongis acutis, caule ramoso fruticoso, racemo terminali nutante, sepalis cartilagineis petalisque membranaceis ovato-lanceolatis acutis erectis, labello subrotundo cordato retuso apiculato undulato callis 5 magnis confluentibus in disco.—*Mexico.*—Stem branching, without a trace of sheaths, as thick as a crow-quill. Bracts linear-lanceolate, about as long as the ovary. (Not in cultivation.)
10. *E. campestre*; foliis distichis lineari-lanceolatis, pedunculi elongati squamis distantibus appressis, racemo cylindraceo, sepalis lateralibus falcatis labello duplò brevioribus, petalis conformibus angustioribus, labello subrotundo obsolete 4-lobo margine integerrimo basi lineis duabus elevatis confluentibus alterâ intermedia axin percurrente, clinandrio 4-lobo: laciniis quadratis.—*Brazil*; in dry upland Campos, Serro do Frio, Diamond

District, Gardner 5207.—Nearly related to *Epidendrum elongatum*. Remarkable for its short falcate lateral sepals and round lip, without any sort of fringing. (Not in cultivation.)

*** Lip distinctly fringed more or less, and usually deeply lobed.

|| *Lip with a concave lobed tubercle occupying the disk.*

11. *E. xanthinum* (*E. ellipticum* β *flavum*, Lindl. in Ann. Nat. Hist. vol. 4.); foliis distichis oblongis carnosis, caule longè aphylo, sepalis petalisque patentibus lineari-lanceolatis æqualibus, labelli trilobi lobis lateralibus truncatis grossè serratis intermedio cuneato denticulato, callo concavo acuto serrato.—*Brazil*.—This is very like *E. ellipticum*, of which I formerly considered it a variety. Its yellow flowers are however peculiar; and upon further examination I find the central tubercle of the lip destitute of the shoulders that run off into the side lobes in *E. ellipticum*. According to Martius its stems are three feet high. Mr. Gardner's (no. 5205), from the province of Mines, are not half that size. (Not in cultivation.)
12. *E. elongatum* (Jacq. B. M. t. 611. L. no. 54. *Amphiglottis secunda*, Salisb. *E. secundum*, Linn. L. no. 57.); foliis distichis oblongo-lanceolatis acutiusculis, caule apice longè aphylo nunc ramoso squamoso, sepalis petalisque patentibus lineari-lanceolatis æqualibus, labelli trilobi lobis lateralibus truncatis denticulatis: intermedio duplò majore dilatato cuneato emarginato biloboque denticulato basi calloso: callo carnosio concavo acuminato crenato utrinque verrucâ crenatâ aucto.—*West Indies*.—Flowers bright rose colour. Leaves longer and thinner than in *E. ellipticum*. It can hardly be doubted that the *Ep. secundum* of Linnæus belongs here; its character having been taken from a crushed and damaged specimen.
13. *E. ellipticum* (Graham in Hook. Exot. Bot. t. 207. L. no. 56. Bot. Cab. t. 1216. *E. crassifolium*, L. no. 55.); foliis distichis ellipticis obtusis concavis succulentis, caule apice longè aphylo nunc ramoso squamoso, sepalis petalisque patentibus lineari-lanceolatis æqualibus, labelli trilobi lobis lateralibus rotundatis laciniatis: intermedio minore truncato apice denticulato basi calloso, callo concavo plicato acuminato utrinque in lobos laterales decur-

rente. — *Brazil*. — Very near *E. elongatum*, from which it differs in its elliptical blunt succulent leaves, small middle segment of the labellum, paler flowers, and especially in the form of the tubercle, which is deeply furrowed, or plaited, and shoulders off to the lateral lobes of the lip, and is not furnished there with a free tubercle as in *E. elongatum*. Flowers light rose colour.

14. *E. ibaguense* (Humb. et Kunth. Nov. Gen. et Sp. 1, 352. L. no. 53.); foliis distichis oblongis obtusis carnosis, caule simplici apice aphylo nunc ramoso, sepalis suboblongis acutis patentibus, petalis conformibus paulò minoribus, labelli trilobi lobo intermedio obcordato crenulato-fimbriato lateralibus fimbriatis ovatis dimidiatis apice rotundatis, callo concavo carnosio trilobo apiculato. — *Peru*. — A very fine species, with orange-coloured flowers. The leaves are an inch and a quarter broad, and the stems as thick as a swan's quill, and apparently often branched. When old they become as smooth as bamboo. (Not in cultivation.)
15. *E. cochlidium* (Lindl. in Ann. Nat. Hist. vol. 4.); foliis distichis ovato-oblongis obtusis emarginatisque coriaceis, sepalis petalisque lineari-lanceolatis patentibus æqualibus, labelli laciniis laceris subæqualibus callo carnosio maximo excavato trilobo parùm majoribus. — *Peru*. — Only known from a specimen found by Mathews in Peru. The flowers seem to be yellow. The very large tubercle which covers the whole centre of the lip is very remarkable. (Not in cultivation.)
16. *E. dichotomum* (Presl. Rel. Hænk. 101. L. no. 58.); foliis distichis lanceolato-oblongis obtusis, caule apice aphylo squamoso ramoso, sepalis petalisque lanceolatis acutis reflexis, labelli tripartiti laciniis fimbriatis: lateralibus rotundatis patentissimis intermediâ majore obcordatâ, callo concavo crenulato indiviso tuberculis 2 prope basin. — *Peru*. — A very fine species with yellowish? flowers, which are perhaps the largest of any in this section. Mathews found it in Peru, and it is no. 1024 of his collections. The unlobed tubercle, with a pair of calli near its base, affords a good mark of distinction. (Not in cultivation.)
17. *E. lacerum* (Lindl. in Bot. Reg. 1838. misc. 18.); foliis distichis lineari-oblongis obtusis, caule simplici apice

aphyllo laxè squamato, sepalis petalisque patentibus lineari-lanceolatis æqualibus acutis, labelli trilobi lobis æqualibus laceris pectinatis intermedio apice mucronato integro: lamellis duabus membranaceis sub apice conniventibus duabusque callosis parallelis e basi ortis.—

Cuba.—A very slender species with narrow grassy leaves, pale rosy flowers, and a distinct entire point to the middle lobe of the lip. The tubercle is very peculiar; not fleshy as in the allied species, but consisting of a pair of plates converging just below the apex, and another pair of more fleshy calli near the base.

|| | *Lip with a distinct middle elevated ridge, and two calli at the base.*

18. *E. Blepharistes* (Barker in litt.); sepalis ovalibus, petalis acuminatis, labelli quadrilobi laciniis æqualibus lineari-bus apice multifidis lineâ mediâ elevatâ callisque duobus semiliberis arcuatis ad basin.—*La Guayra*.—This plant was received by Mr. Barker from Linden. It is closely allied to *E. elongatum*; but differs in the structure of the labellum, which approaches nearer to that of *E. Schomburgkii*. The sepals and lip are a rich rose colour; the column has the deepest tint of the garnet, which gives the flowers a very gay appearance.
19. *E. imatophyllum* (L. no. 52.); foliis distichis ligulatis obtusis submarginatis, caule simplici apice aphylo vaginato, sepalis lineari-lanceolatis patentibus, petalis duplo latioribus serratis, labelli trilobi carinati basi bicornis lobis lateralibus nanis laciniatis: intermedio cuneato-rotundato subundulato basiserrato.—*Demerara*.—Flowers pale rose colour, larger than in *E. ellipticum*. Leaves very long, strap-shaped. The column is sometimes green, and the same colour occurs to a small extent in the sepals.
20. *E. radicans* (Pavon. Mss. L. no. 35. *E. rhizophorum*, Bateman in Bot. Reg. 1838. misc. 10.); foliis distichis subcordatis ovatis obtusis, caule simplici apice aphylo vaginato, sepalis petalisque lanceolatis acutis patentibus, labelli carinati basi bicallosi lobis lateralibus rotundatis denticulatis intermedio cuneato apice fimbriato emarginato utrinque integro.—*Mexico, Guatemala*.—One of the finest of its race; with flowers as much as $1\frac{1}{2}$ inch

across, according to Mr. Skinner. It is in gardens, and has long white roots proceeding from the sides of the stem ; but it has not flowered.

21. *E. cinnabarinum* (L. p. 106. Bot. Reg. 1812, t. 25.); foliis distichis oblongis apice sub-recurvis, sepalis petalisque lanceolatis subæqualibus, labello trilobo carinato basi bituberculato : laciniis lateralibus inciso-laceris intermediâ basi obtusâ sub apice constrictâ apice cuneatâ truncatâ angulis acuminatis simplicibus fissisque.—*Brazil*.
 —In this section of *Amphiglottium* are three species of great beauty, so nearly related to each other that their limits are with difficulty determined. They all have bright scarlet or crimson flowers, a pair of tubercles at the base of the labellum, and a ridged line running from between the tubercles to nearly the apex of the lip. They however differ thus : *E. radicans* has the lateral lobes of the labellum rounded and toothletted only, not lacerated, and it produces coarse pale green roots from its stems ; *E. cinnabarinum* has the lateral lobes of the labellum deeply lacerated, while the central lobe is contracted in the middle, and then *suddenly* wedge-shaped, with its angles prolonged into one or two fine teeth ; *E. Schomburgkii* has the lateral lobes only toothed, with the centre lobe gradually widened to the point, and there toothletted, without being at all truncate ; the lobes of the lip are confluent in what I take to be a variety of that species.
22. *E. Schomburgkii* (Lindl. in Bot. Reg. 1838, misc. no. 16. t. 53.) ; foliis distichis oblongis obtusis margine sanguineo-punctatis, caule simplici apice aphylo, sepalis petalisque lineari-lanceolatis acutis æqualibus patentissimis, columnâ clavatâ elongatâ, labelli trilobi carinati basi bicallosi lobis lateralibus latis rotundatis laceris : intermedio cuneato apice triangulari crispo medio et utrinque acuminato.—*Demerara*.—Flowers rich scarlet. Leaves sometimes bordered with crimson. Very handsome. I have a dried specimen of what I suppose to be a variety of this plant, with all the lobes of the lip run together into one, a little toothed at the edge, and more so at the point. It may however be distinct.
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23. *E. ? flexuosum*, (Meyer Fl. Essequib. p. 260. L. no. 34.) ; foliis distichis carnosissimis lanceolatis emarginatis, caule

flexuoso, sepalis lanceolatis, petalis rhomboideis, labello acuminato subquadrato margine lacero.—*Essequibo*.—Stem two or three feet high, compressed, zigzag from sheath to sheath. Leaves six inches long. Flowers purple. A doubtful plant, of which little is known. (Not in cultivation.)

B. *Flowers panicled.*

24. *E. Martianum* (Lindl. in Ann. Nat. Hist. v. 4.); foliis distichis angustis lanceolatis, caule apice ramoso squamis concavis obtusiusculis vaginato, racemis corymbosis, petalis linearibus obovatis obtusis sepalis multo angustioribus, labello cordato subrepando basi bituberculato axi elevatâ.—*Brazil*.—Allied to *E. fuscatum*. Stem from $1\frac{1}{2}$ to 2 feet high. Flowering stem stiff, erect, branched, much longer than the leaves, which are narrow and sharp pointed. (Not in cultivation.)
25. *E. laxum*, (Pöppig et Endlich. n. g. et sp. 2. p. 2.); “caulibus basi repentibus, adscendentibus, ancipitibus; foliis lanceolato-oblongis, acutis; panicula terminali elongata, laxa, multiflora; sepalis erectis, subæqualibus, lanceolatis, acutis; labelli columna triplo longioris, ovalis, subcordati, apice breviter trifidi, nudi laciniis integerrimis, intermedia majore, acutiore.”—*Peru*.—Stems above a foot high on a long creeping rhizoma. Leaves seldom more than three on each, with a spiny point. Panicle a foot long or more. Flowers small, pale green. (Not in cultivation.)
26. *E. rubrocinctum* (Lindl. in Bot. Reg. 1843, misc. 20. *E. densiflorum*, Hooker in Bot. Mag. t. 3791 ??); foliis oblongo-ligulatis acuminatis apice carinatis paniculâ amplâ cernuâ subsessili parum brevioribus, sepalis oblongis concavis acutis coriaceis, petalis angustè linearibus, labello transverso cordato trilobo suprâ tricarinato; lobi medii trilobi dente intermedio minuto, columnâ inappendiculatâ.—*Brazil*.—If *E. densiflorum* is the same as this, which I suspect, then the name of *rubrocinctum* must be changed, but I am not certain. The sweet-scented flowers are a dull yellowish green, bordered with dull purple; the lip is more yellow than the sepals. It has much the habit of *E. nutans*, but is a plant of more beauty. Not having seen sufficient specimens, I

formerly regarded it as a species of the section *Spathium*. It is however an *Amphiglottium* with a nearly sessile panicle, and only two or three herbaceous sheaths at the base. It connects *Spathium* and *Amphiglottium*.

27. *E. pallidiflorum* (Hooker Bot. Mag. t. 2980. L. no. 41.); foliis distichis oblongis linearibus obtusis pedunculo distanter vaginato brevioribus, floribus paniculatis, sepalis petalisque lanceolatis obtusis patentibus, labelli trilobi lobis subæqualibus rotundatis: intermedii trisulci 2-callosi marginibus involutis.—*St. Vincents*.—Flowers pale yellowish white, with a purple stain on the end of the column. The specimen figured in the Botanical Magazine was very weak. Its inflorescence is really a loose panicle.
28. *E. gladiatum* (L. no. 47.); foliis paucis distichis gladiiformibus, racemis subsessilibus terminalibus fasciculatis corymbosis recurvis, sepalis oblongis obtusis margine reflexis petalisque spatulatis patulis, labelli trilobi carinati basi bituberculati lobis lateralibus subquadratis rotundatis intermedio multò minore emarginato.—*Mexico*.—A small species, not more than eight or twelve inches high. The leaves are three or four inches long, and as many lines broad. Mr. Hartweg found it in Mexico, and therefore the habitat of Peru given by me formerly, on authority of Pavon's herbarium, was probably a mistake.
29. *E. anisatum* (La Llave. L. no. 62.); foliis distichis elliptico-lanceolatis, sepalis petalisque patentibus linearibus obtusis, labelli tripartiti laciniis lateralibus obtusis intermediâ profundè bilobâ: lobis acutis.—*Mexico*.—This is very near *E. gladiatum*, and is perhaps the same species. The flowers are described as being of a dingy colour, and emitting a smell of Anise at night. The lip is said to have three purple lines at the base. (Not in cultivation.)
30. *E. polyanthum* (L. no. 50. Bateman Orch. Mex. et Guat. t. 34. *E. bisetum*, Lindl. in Bot. Reg. 1841. misc. 148.); foliis distichis ovali-lanceolatis acuminatis, caule ramoso, racemis plurimis multifloris cernuis basi spathaceis, sepalis ovato-lanceolatis acutis striatis, petalis linearibus reflexis, labelli trilobi tricostati lobis lateralibus subcuneatis retusis: intermedio lineari retuso, ovario scabro.—*Mexico, Guayaquil*.—Flowers bright

orange, or salmon-colour, with a strong smell of cowslips. The ovaries are rough with elevated points, the sepals are brownish orange, the lip dull fawn colour. The petals are in the form of two fine bristles.

31. *E. Hænkeanum* (Presl. Rel. Hænk. 100. L. no. 40.); foliis distichis ovato-lanceolatis nervosis acutis, spicâ paniculatâ, sepalis oblongo-lanceolatis acutiusculis in basin attenuatis, petalis spatulatis, labelli trilobi lobis lateralibus rotundatis, medio minore obcordato.—*Peru.*—Scape a foot high. Sepals ten lines long. Leaves ten lines broad. (Not in cultivation).
32. *E. porphyreum* (Lindl. in Hook. Journal, 3. 86.); foliis distichis oblongis acutissimis, squamis spathaceis dense imbricatis acuminatis pedunculo longioribus, paniculâ simplici multiflorâ, sepalis oblongis acutis lateralibus falcatis, petalis lineari-spathulatis, labelli trilobi laciniis lateralibus rotundatis intermediâ quadratâ bidentatâ: disci axi elevatâ apicem versus bicallosâ basi bicornutâ.—*Peru.*—A fine species, with an oval panicle and large flowers like those of *E. nutans*, but purple or dark orange. (Not in cultivation).
33. *E. læve*; foliis distichis lanceolatis apiculatis, paniculâ simplici multiflorâ, sepalis oblongis lævibus, petalis filiformibus, labelli quadrilobi laciniis posticis cuneato-rotundatis anticis linearibus divaricatis, disco callis tribus et lamellis duabus.—*Popayan, Pasto.*—A very fine species in the way of *E. paniculatum*; but its leaves are lanceolate, the panicle simple, the flowers larger, and the sepals smooth. It is one of Mr. Hartweg's discoveries. (Not in cultivation).
34. *E. paniculatum* (Fl. Peruv. L. no. 61.); foliis distichis oblongis acuminatis, caule apice vaginis acuminatissimis membranaceis vestito, paniculâ confertâ compositâ, sepalis oblongis venis extûs varicosis, petalis filiformibus, labelli quadrilobi laciniis posticis brevibus oblongis obtusis: anticis linearibus divaricatis, disco callis tribus et tuberculis duabus.—*Guayaquil, Peru.*—A most noble looking species when dried; its panicle, which is eight or nine inches long and nearly a foot broad, being crowded with flowers. Mr. Hartweg found it in woods on the western declivity of Pichincha. (Not in cultivation).

25. BUDDLEA Lindleyana.

Fortune in litteris.

B. *Lindleyana*; glabra, fruticosa, foliis ovatis acuminatis serratis, racemis verticillatis spicatis tomentosis, calycis dentibus brevibus triangularibus, corollæ tubo elongato infra medium ventricoso laciniis obtusis.

Seeds of this shrub, found by Mr. Fortune in Chusan, have been sent by him to the Horticultural Society, in whose garden they have been raised. He describes it as a handsome small bush, and, from a coloured figure which he has sent home, it appears to merit the description. Its flowers are in close terminal racemes, about two inches long, and are themselves nearly three-quarters of an inch in length. Their colour is a rich violet or lilac. This plant affords a striking illustration of the rapid communication that now exists between England and the East. Its seeds were put into the post in Chusan on the 13th November, 1843, and on the 4th March, 1844, they were actually growing in the garden of the Horticultural Society.

26. STENOMESSON aurantiacum.

Herbert Amaryll. 198.

This pretty bulbous plant has been raised in the garden of the Horticultural Society, where it was sent by Mr. Hartweg, who found it by the road from the Hacienda del Isco, on the ascent to Antisana, at an elevation of 11,000 feet above the sea. It has pretty drooping orange-coloured flowers, and narrow leaves with the edge remarkably rolled back. It will certainly be easy to grow in a greenhouse, if not hardy.

27. CRYPTANDRA suavis.

C. *suavis*; pilosa, foliis obovato-linearibus, floribus in ramulos laterales axillaribus glabris, calycis tubo cylindræo.

A pretty little greenhouse Swan River bush, raised by Mrs. Wray from seeds. It has small foliage like a broad-leaved heath, and minute white flowers appearing in profusion from the little side branches. It is as fragrant as Hawthorn, and therefore worth cultivation.

28. MILTONIA *cuneata*.

M. cuneata; pseudobulbis ovato-oblongis, foliis oblongis striatis subundulatis, racemo plurifloro, sepalis petalisque lanceolatis undulatis, labello cuneato rotundato basi bilamellato utrinque subrependo, columnâ medio bidentatâ, clinandrio integerrimo.

A beautiful Epiphyte, allied to *M. candida*, with flowers nearly four inches in diameter; the sepals and petals are a rich brown tipped with green. The lip is pure white, with a tinge of pink near the base. It has lately flowered with Messrs. Rollissons.

29. ANGULOIA *Clowesii*.

A. Clowesii; pedunculo unifloro radicali laxè squamato, flore carnoso resupinato, sepalis petalisque ovatis convexis conniventibus, labelli trilobi lobo medio piloso infundibulari bilabiato: labio altero emarginato altero tridentato, columnâ integrâ.

At last a genuine species of the genus *Anguloia*, which has hitherto puzzled every one, has made its appearance in the collection of the Rev. J. Clowes, of Broughton Hall near Manchester, who obtained it from Linden's Columbian collections. It is indeed a noble plant. The flowers are four inches in diameter, of a clear lemon colour, with a pure white lip. We refrain from doing more than announcing it, because it will soon be published with a plate in an early number of this work.

30. GONGORA *maculata*, *var. tricolor*.

This also is from Mr. Clowes's collection, where it was received from Liverpool, with a statement that it came from Peru. It is a most beautiful variety of *G. maculata*. The ground colour of every part of the flower, except the lip, is clear yellow; the column and petals are delicately banded with rich sienna brown, and a few large clear distinct blotches of the same colour occur on the sepals. The lip itself is white, with a cinnamon stain on the ends of the lateral tubercles and the sides of its upper half.

31. ASTYRIA rosæa.

This is a fine stove plant from the Mauritius, with the habit of a *Dombeya*, and with nearly the same structure, but essentially distinguished by the want of sterile stamens. The only species known to us has large soft cordate crenated leaves, and dense panicles of large pinkish flowers seated on a woolly footstalk, much shorter than that of the leaf. It has blossomed with his Grace the Duke of Northumberland, and will shortly be figured in this work; till which time a full account of the plant is deferred.

32. HYPOCALYMMA suavis.

H. suavis; foliis oppositis filiformibus plano-convexis glandulosis mucronatis, floribus geminis axillaribus sessilibus, staminibus corollâ longioribus.

This plant is very near *H. angustifolium*, and may be a mere variety. It seems, however, to differ in having longer leaves and stamens, in addition to which the flowers are white not pink. It is a graceful greenhouse shrub, very sweet-scented, and altogether a very nice plant. It was raised in the garden of the Horticultural Society from Swan River seeds.

33. ANDROMEDA phillyræfolia.

Hooker. Ic. Plant. 2. t. 122.

For the introduction of this beautiful greenhouse shrub we are indebted to Messrs. Loddiges, with whom it flowered in January last. It is a narrow-leaved evergreen, with convex leaves serrated near the point, and short horizontal racemes of white flowers. In habit it is not very unlike a large broad-leaved form of *Andromeda polifolia*.

34. DENDROCHILUM ? abbreviatum. ?

Blume Bijdragen, 398. Lindl. Gen. & Sp. 35.

D. abbreviatum; pseudobulbis ovatis diphyllis, foliis oblongis basi angustatis racemo æqualibus, ovario hexaptero bracteæ striatæ oblongæ acutæ citò deciduæ longitudine, labello saccato cordato apice dilatato retuso den-

E—May, 1844.

e

ticulo interjecto internè bicalloso, columnæ truncatæ denticulatæ angulis anticis dentiformibus.

Messrs. Loddiges having imported this little Orchidaceous plant from Java, it is to be presumed that it must be one of those enumerated by Dr. Blume; and as none of his definitions suit it well, except that of *D. abbreviatum*, we must conclude that this must be what he intended by that name. Nevertheless, it is difficult to reconcile his statement that the lip of that plant has a reflexed tooth on each side at the base, unless we suppose that he intended to describe the heart-shaped base of the lip. The plant has little beauty. The flowers are small, green, with a white lip, having a yellow stain in its middle. The column is a deep cinnamon brown, truncated and notched, with the front angles a little lengthened into teeth. The lateral lobes of the column, found in other species, are deficient in this. The pollen is white, separates into 4 soft masses, having as many thread-like tails by which they adhere to the point of the stigma, which will even come off with them, like the gland of *Vandææ*. This structure requires to be investigated with more care than we have yet been able to give it.

35. NARCISSUS montanus.

In our last vol. at p. 3, 4, 5, of art. 33, it was stated that the native place of this plant was unknown, and that it might perhaps be made by crossing *N. dubius* with pollen of the whitest musk daffodil, *N. candidissimus* of Redouté. Cultivated above 200 years ago by Parkinson, who received it as a mountain plant from a collector whose honesty he praises, it was understood to have been brought from the Pyrenées; but, as it did not appear to have been found since, and seems to be sterile by its own pollen, I suspected it of fraudulent hybrid origin. Thinking, however, that the yellow and red cup of *N. poeticus* could not be sufficiently discharged by a cross with the musk daffodil, I fancied that *N. dubius* must be the female parent. It appears however that I had underrated the power, always predominant, of the male type, and that I had already made the plant, having obtained a single seedling from *N. poeticus* v. *stellaris*, by the whitest *Ajax moschatus*. It has now flowered, and does not differ more from *N. montanus* (*Tros poculiformis* of Haworth) than might occur amongst

seedlings from one capsule, certainly not more than might be expected considering the varieties of the two parents, especially of *N. poeticus* which differ greatly from each, and the improbability of the two having proceeded from precisely the same varieties. The Spofforth mule has the tube green, above five-eighths of an inch, at first perpendicularly curved, afterwards rising half the right-angle, cup three-eighths long, five to six eighths wide, so indented as to look fringed, at first faintly tinged with yellow, turning the next day pure white, limb stellate acute, an inch long, white, anthers all out of the tube, equalling the style, shorter than the cup; leaves glaucous, one-quarter wide, about nine inches high or more. *N. montanus poculiformis* has the limb less stellate, it and the cup about an eighth of an inch longer, the white not so clear, the tube scarcely five-eighths, and is subject to great disturbances and deficiencies. I have two flowers of it now before me, of which one has only three segments and three anthers and the cup split, the other has seven segments, three anthers, and the cup split in two places. The Spofforth mule has the flower very perfect and neat. Haworth's *galanthifolius* is a third variety a little smaller. It has taken two centuries to unmask the many frauds of Parkinson's supposed collector. The leaf of *N. montanus* in the figure quoted is twice as broad as it should be. In the same manner the figure of *N. trilobatus* Bot. Mag. is probably *Ganymedes concolor* of Sweet, exaggerated in size and colour, for no such plant is either forthcoming or remembered by any nurseryman or cultivator that I have known. Whenever the cross between *dubius* and *candidissimus* shall be obtained, it will probably have the cup pure white, and will be perhaps two-flowered. By crossing the paper white, or the unicolor of Tenore with *N. poeticus* a white-cupped *N. biflorus* would be obtained. W. H.

36. ASPARAGUS *lucidus*.

A. lucidus; ramis longissimis aculeis rectis scandentibus, foliis solitariis linearibus falcatis lucidis, pedunculis unifloris.

This is a scrambling plant of the most vivid green, forming an entangled mass many feet in length, when cultivated in the stove, but in its natural state not even a foot high. It is a native of Macao, whence it was received by his Grace the Duke of Northumberland, with whom it has produced its

little green flowers at Syon. It is nearly allied to *A. falcatus*, from which it differs in its smaller solitary leaves, and in the flowers not growing in racemes.

37. CROCUS mediŭs.

Balbis.

C. mediŭs; corni tunicis tenuiter cribrosè reticulatis, vaginaceâ interiore prope basim, foliaceis brevibus summo corno affixis, foliis 2-3, flore autumnali, scapo involucrato, spathâ longè exsertâ ebracteâtâ, tubo spatham superante, limbo purpureo.—*W. H.*

Bulbs of this have been received by the Dean of Manchester from meadows about Varése, on the mountains of Liguria. These having flowered at Spofforth, Mr. Herbert has favoured us with the true character of the plant.

38. ONCIDIUM lacerum.

O. (TERETIFOLIA) lacerum; foliis longis teretibus carinatis, paniculâ contractâ multiflorâ, sepalis petalisque conformibus obovatis concavis, labelli elongati laciniis lateralibus linearibus refractis intermediâ longè et angustè unguiculatâ bilobâ margine lacerâ, cristæ dente altero transverso altero majore compresso a fronte, columnæ brevis pubescentis alis semiovatis.

Panama has furnished this very pretty species to Messrs. Loddiges, who flowered it in April 1844. It has very much the habit of *O. longifolium*, but has rather denser flowers, with a lacerated and rather crisp middle lobe to the lip, and a crest consisting of one transverse tubercle, like that of *O. nudum*, and another larger, compressed, rounded, and at right angles to it in front.

39. TULĪPA humilis.

T. humilis; foliis tribus (rariùs quatuor) humum prope divaricantibus cymbiformibus ferè linearibus subobtusis rectis glaucis margine purpureo, scapo sesquiunciali lævi purpurascente, perianthio subsesquiunciali laciniis acutis, petalis latioribus pallidissimè purpurascentibus inferne lætè luteis extus viridi striatis, sepalis intus veluti petala extus virescentibus margine purpurascente basi livido-virente, filamentis luteis inferne complanatis prope basim uti petalorum margines albo pubescentibus antheras longitudine superantibus, germen petalinis ferè sepalinis æquantibus.—*W. H.*

This beautiful little Tulip is undescribed as far as I know. It agrees with nothing in the books within my reach. It is

not tricolor, of which I have no description, because I have two little bulbs of it, and its leaves are bright green; but it may have been named in the Petersburg Acts. I received it from Mr. Kotschy, who collected it on Mount Elburz. It flowered at Spofforth in April, 1844.—*W. H.*

40. The Species of CATASETUM.

This genus was founded by Louis Claude Richard upon two plants from tropical America, one of which he called *C. macrocarpon*, the other *C. maculatum*. Among the peculiarities of the genus were two long feelers or cirrhi directed downwards from the column into the cavity of the lip, and a large fleshy helmet-shaped lip.

As soon as the attraction of European gardeners began to be turned to the cultivation of tropical Orchidaceæ, other species of the genus were made known, and now it has become a very considerable group, the greater part of which is scattered through various writings. In the course of gathering together these materials certain plants were obtained, which appeared to form distinct genera; one was called *Myanthus*, the other *Monachanthus*. *Myanthus* was thought to be distinguished by having a flat lip, and *Monachanthus* by want of feelers on the column. But, strange to say, both these flowers were afterwards ascertained to be monsters of genuine *Catasetum*, as was fully explained at tab. 1951 of the Botanical Register.

The following are, we believe, all the *Catasetum* now on record, divided into two sets, one of which has a plane lip, and answers to *Myanthus*; the other a helmetted lip, answering to the original *Catasetum*.

§ 1. *Labellum galeatum*; *Catasetum*.

1. *C. tridentatum* (Hooker Exot. Fl. t. 90. 91. L. no. 2. *C. macrocarpon* H. B. K. 7. 158. t. 631. *C. Claveringii* Lodd. Bot. Cab. t. 1344.—var. *floribus majoribus sepalis petalisque acutis*. *C. Claveringii* Lindl. Bot. Reg. t. 840. *C. floribundum* Hooker Exot. Fl. t. 151.—var. *floribus viridibus concoloribus*. *C. Wailesii*, Hooker in Bot. Mag. t. 3937.) ; foliis oblongo-lanceolatis acuminatis, perianthiis compressis conniventibus, sepalis petalisque acuminatis, labello galeato aperto apice tridentato

margine lævi.—All parts of tropical South America, east of the Andes.—There is no doubt that *C. macrocarpon* is this plant, whose name should therefore, according to the strict laws of priority, be changed. But the name *macrocarpon* is unmeaning, and much inconvenience would arise from the restitution of it. It is a very common variable plant, sometimes even losing its spots, as in *C. Wailesii* from Honduras.—MONSTROUS FORMS. *Monachanthus viridis*, Lindl. no. 1. Bot. Reg. t. 1752, from Brazil is a monster with no cirrhi to the column, and the lip perfectly undivided. *C. cristatum* L. no. 7. is another monster, as is proved, at plate 1951 of the Botanical Register.

2. *C. maculatum* (H. B. K. 7. 157. t. 630.); “foliolis calycinis duobus interioribus maculatis, labello ciliato.”—*Turbaco in New Grenada*.—All that can be said about this species is that it certainly is not the *C. maculatum* of our gardens. At the time I referred the latter to it I was not aware that it had been figured. Nothing like it in a cultivated state has yet been seen.
3. *C. integerrimum* (Hooker Bot. Mag. t. 3823. *C. maculatum* Lindl. Bot. Reg. 1841. t. 62. Bateman Orch. Mex. et Guat. t. 11. nec H. B. K.); sepalis petalisque conniventibus, labello carnosio galeato basi inflexo lateribus suis invicem imbricantibus margine lævi vel serrato.—*Guatemala*.—This is very nearly the same as *C. tridentatum*, from which it differs in its helmet-shaped lip, having the lower edges brought together so as to press upon the column, instead of being wide apart, and being generally serrated, although sometimes smooth. It is certainly not the species so named by Humboldt, which was found near Turbaco in New Grenada. That plant is represented with the labellum quite open, not contracted and curved inwards near the column, and surrounded by a broad plaited border, called in the description “ciliatum.”
4. *C. planiceps* (Lindl. in Bot. Reg. 1843. t. 9.); sepalis petalisque ovatis conniventibus, labello carnosio galeato rotundato compresso apiculato indiviso margine serrato.—*Spanish Main*.—Flowers green and yellow. The habit is that of *C. integerrimum*, *tridentatum*, and *semi-apertum*, from the second of which it differs from its ser-

rated lip, from the first and the last in its lip not having the edges incurved, and from all in the singular truncate form of this helmet-shaped organ, which is flattened from front to back and not laterally.

5. *C. fuliginosum* (Lindl. in Bot. Reg. 1841. misc. no. 168); *C. tridentati vultu*, sepalis petalisque oblongis acutis reflexis, labello cucullato carnosio integerrimo v. minutè serrulato patente, columnâ brevi ecirrhosâ apice in setam productâ, antherâ parvâ (effœta?).— ? — This singular plant has the habit of *C. tridentatum*, but its flowers are in a dense erect raceme, and of a deep green colour, spotted with a dull blackish purple, so as to look as if they were soiled with soot. The sepals and petals are spotted, oblong, acute, and reflexed, so as to hang downwards. The lip, on the other hand, is fleshy, hooded, stained with pale purple, and either entire at the margin, or very slightly serrated; but it does not cover over the column as is usual in the hooded *Catasetums*: on the contrary it spreads away at almost right angles. The column itself is short, deep green, and produced at the point into a straight bristle, in front of which is placed a small and imperfect anther. Judging from the evidence we possess concerning *C. tridentatum* and *cristatum*, we should suspect it to be a male form of *C. atratum*, or some such species. That, however, must remain for future inquiry.
6. *C. luridum* (Lindl. Gen. & Sp. Orch. p. 156. Bot. Reg. t. 1667. *C. abruptum*, Hooker in Bot. Mag. t. 3939. *Anguloa lurida*, Link in Verhandl. des Vereins. z. bef. des Gartenb. in dem Königl. Preuss. Staat. 1. p. 289. t. 6.); caulibus defoliatis angustis sulcatis, perianthio subgloboso parum maculato, sepalis petalisque oblongis apice rotundatis, labello cucullato carnosio mutico apice paulò producto truncato, racemo brevi nutante.— *Brazil*.— Flowers green, globose, with a blunt shovel-shaped lip, having some brown spots on a yellowish ground.
7. *C. semiapertum* (Hooker. Exot. Fl. t. 213. Bot. Reg. t. 1708.); foliis oblongo-lanceolatis multiplicatis racemo compacto longioribus, perianthiis subpatentibus, labello galeato apice incurvo: lateribus denticulatis.— *Brazil*.— Flowers small, green, whole coloured.

8. *C. purum* (Nees ab Esenb. Plantarum in h. med. Bonnens. Icon. p. 1. t. 1. L. no. 5.); foliis lineari-lanceolatis, perianthio patente obsolete punctato, labello ventricoso apice incurvo concolore ciliato integerrimo.—*Brazil*.—Much like the two last, from which its very narrow leaves seem to distinguish it. Flowers green, and scarcely spotted, about as large as those of *C. Hookeri*.
9. *C. Hookeri* (Lindl. Coll. Bot. t. 40. Gen. & Sp. no. 3.); foliis lanceolatis triplicatis, perianthiis globosis, labello apice incurvo: lateribus denticulatis.—*Brazil*.—Flowers small, yellowish brown. Petals green. Lip green, yellow at the point, spotted with purple inside.
10. *C. globiflorum* (Hooker in Bot. Mag. t. 3942.) spicâ elongatâ multiflorâ, perianthio globoso, sepalis petalisque subconformibus ovatis acutis concavis arctissimè imbricatis, labello hemisphærico-globoso, ore contracto oblongo inferne dilatato basi columnæ longitudine denticulato, columnæ brevis setis rectiusculis.—*Brazil*.—Much like *C. Hookeri*, and perhaps a variety of it. The sepals and petals are olive-brown, and closely applied to a glaucous globular labellum, the greater part of which is uncovered.
11. *C. longifolium* (Lindl. in Bot. Reg. 1839. misc. 154. Sertum Orchid. t. 31.); foliis longissimis gramineis, racemo cylindræo pendulo multifloro, sepalis ovatis subrotundis petalorum conformium dorso applicitis, labello urceolari a tergo incurvo limbo truncato apiculato intus cereaceo glabro margine fimbriato.—*Demerara*.—Leaves very long and narrow. Flowers bright orange, a little bordered with violet, in a drooping raceme, over which they are closely packed for the length of a foot or more; they are extremely beautiful, and the species is beyond comparison the handsomest of its genus.
12. *C. discolor* (*Monachanthus discolor* Lindl. in Bot. Reg. t. 1735. *M. Bushnani* Hooker, Bot. Mag. t. 3832. *M. roseo-albus* Hooker, l. c. t. 3736.); racemo laxo multifloro, labello hemisphærico marginibus planis medio fimbriatis.—*Brazil*.—Leaves rather narrow. Flowers in a loose erect raceme, dull pale purple, with the inside of the lip yellow. They vary in colour to yellowish green, or French-white; and sometimes the lip, which

is usually whole coloured, is tipped and banded with red. In *M. rosco-albus* the fringes of the lip are unusually long.

13. *C. atratum* (Lindl. in Bot. Reg. 1838. misc. 111. t. 63.); racemo decurvo, sepalis petalisque patentibus ovatis acutis, labello carnoso cucullato margine tenui pectinato apice rotundato reflexo crasso denticulato.—*Brazil*.—Flowers deep green outside; sepals rich purple inside; petals spotted with the same colour; lip dull green, fringed, with a yellow recurved flap at the end.
14. *C. Russellianum* (Hooker in Bot. Mag. t. 3777.); pseudo-bulbo elliptico magno, foliis lato-lanceolatis, racemo amplo, labello membranaceo anticè inflato ore contracto margine anteriore producto undulato fimbriato disco membranâ cristato, columnâ nudâ (ecirrhosâ).—*Guatemala*.—A large species with green flowers, a little relieved by the greater whiteness of the labellum, which is almost membranous. It is very near *C. laminatum*. The absence of cirrhi from the column, if constant, is remarkable.

§ 2. *Labellum planum, sæpius foveatum v. saccatum*;
Myanthus.

15. *C. laminatum* (Lindl. in Ann. nat. hist. vol. 4. p. 384. Bentham, Plantæ Hartwegianæ, p. 72. Sertum Orchidaceum, t. 38.—*Var.* 1. *maculatum*; labello, columnâ petalisque purpureo-fusco maculatis, *Sert. Orch. t.* 38.—*Var.* 2. *eburneum*; labello eburneo columnâ petalisque immaculatis, *Bot. Reg. 1841. t. 5. f. 4.*); labello lanceolato basi saccato apice marginibusque incurvo basin versus fimbriato per axin lamellâ unicâ carnosâ altâ integrâ v. denticulatâ basi bilobâ instructo, columnâ cirrhatâ.—*Mexico*.—Flowers spread open, large, purple, or greenish spotted with that colour. Lip sometimes pure white, sometimes speckled with purple, with a deep plate running along its middle from end to end.
16. *C. tabulare*; vegetatione sepalis petalisque omninò *C. laminati*, labello oblongo antico concavo basi cornuto fimbriato extùs sub apice lineis serrulatis elevatis striato secus medium cristâ tabulari latâ transversè corrugatâ anticè dentatâ aucto.—*Grenada*.—This is very like the Guatemala *C. laminatum*; but the structure of the

- lip is different. In place of the thin knife-like crest of that species, there is a broad raised oblong fleshy table of a yellowish brown colour, closely wrinkled across and broken up into asperities, which, at the front of the table where it forms a kind of cliff above the lip, are extended into strong teeth. On the outside of the lip near the point the veins are raised and somewhat toothed. The colour and size of the flowers are much the same as in *C. laminatum*.
17. *C. saccatum* (Lindley in Botanical Register, 1840. misc. 179. Sertum Orch. t. 41.); sepalis lanceolatis patentibus dorsali petalisque fornicatis, labello subrotundo abruptè acuminato fimbriato medio saccato: ostio contracto reniformi posticè dentato, columnâ cirrhatâ.—*Demerara*.—This has very large flowers, with rich purple-spotted sepals and petals, and a bright yellow lip covered closely with crimson dots. The latter is pierced in the middle by a narrow aperture, that leads into a conical chamber or bag, which is not observed till the back of the lip is turned up.
18. *C. Naso* (Lindl. in Bot. Reg. 1843. misc. 111.); spicâ brevi erectâ, sepalis oblongo-lanceolatis complicatis petalisque lanceolatis ascendentibus æqualibus, labello hemisphærico apice abruptè in appendicem carnosum ovatum obtusum producto: marginibus basi tenuibus laceris amplexicolumnibus: lineâ intramarginali carnosâ inflexâ connivente ostium cordiforme efficiente.—*Caraccas*.—This is a singular plant whose flowers before opening might be mistaken for *C. tridentatum*, but when expanded they are totally different. The sepals and petals, which are very pale dull green outside, are slightly pink inside, and richly spotted, in irregular bars, with a deep crimson-purple. The lip is a most singular organ, and very difficult to describe. Viewed from the side it has a hemispherical form, and is green except at the base, where it is extended into a black-purple lacerated margin embracing the column, and at the point where it is extended into a long flat horn or *nose*. Seen in front it is almost wholly of the same rich black-purple, and looks as if it were a solid hemisphere pierced in the middle with a large heart-shaped hole; but this appearance is owing to a thick fleshy rim which rises from within the true

edge of the lip, and directing itself inwards horizontally with an uneven outline, at last touches in front of the column and presents the appearance of a junction.

19. *C. Trulla* (Lindl. in Bot. Reg. 1840. misc. 176. 1841. t. 34.); sepalis petalisque patentibus ovalibus planis, labello latè ovato acuminato obtuso subcordato concavo fimbriato apice lævi, columnâ brevi.—*Tropical America*.—Flowers green, unspotted; lip of the same colour, but whitish near the base, with a deep brown spot in the middle.
20. *C. callosum* (Lindl. in Bot. Reg. 1840. misc. 183. 1841. t. 5. f. 1.); petalis concoloribus lineari-lanceolatis sepalo dorsali conformi suppositis, labello ovato-oblongo obtuso basin versus saccato supra saccum callo magno (aurantiaco) instructo margine obsolete crenato, columnæ acuminatæ cirrhis vix ultra callum extensis.—*La Guayra*.—Exactly like *Catasetum tridentatum*, var. floribundum in habit, but its flowers are different. The sepals and petals are of a dull reddish brown, without spots; the column is of the same colour, which may perhaps be best compared to that of old spoilt port wine. The lip is green, flat, with a yellow tubercle near the base above the hollow, and a stain of the same colour near the apex.
21. *C. poriferum* (Lindl. in Bot. Reg. 1838. misc. 164.); labello plano cordato-ovato truncato crenato, lobo apicis elevato carnosio ovato medio nectarifero, dente baseos ovato incurvo, columnâ cirrhosâ.—*Demerara*.—Similar in appearance to *C. deltoideum*, like which its flowers are richly spotted with deep purple broken fasciæ, closely arranged upon a clear green ground. The lip is dull green, nearly flat, deeply cordate, truncate at the apex, with an obscurely crenated margin. At its base is an elevated yellow-tipped broad tooth, and at its apex an ovate yellow fleshy raised lobe, with a pore in the middle secreting honey.
22. *C. deltoideum* (Lindl. Bot. Reg. 184 . misc. 157. *Myanthus deltoideus* Bot. Reg. t. 1896.); labello imberbi sagittato triangulari, angulis posticis rotundatis dentatis apice dilatato calloso margine recurvo basi tuberculato.—*Demerara*.—Flowers deep green, spotted with purple. Lip purple, flat, fleshy, with a dash of green in the

- centre.——MONSTROUS STATE. This has been observed to sport in the same way as *C. tridentatum*. A case is mentioned in the Botanical Register for 1840, misc. 157. where the scape became three times as stout as usual, the length of the raceme much reduced, the sepals and petals retaining their form and colour; but the labellum, instead of being arrow-headed, flat, deep purple, toothed at the base, and placed in front of the flower, was of exactly the same form as that of *Monachanthus viridis*, hooded, undivided, and of a dull greenish colour tinged with dull purple. The column too, in like manner lost its cirrhi, shortened, and its lengthened beak disappeared.
23. *C. trifidum* (Hooker in Bot. Mag. t. 3262. *Myanthus cernuus*, Lindl. p. 155. Bot. Reg. t. 1721.); racemis elongatis cernuis multifloris, sepalis petalisque lanceolatis convergentibus, labello transverso plano altè trifido laciniâ intermediâ minore.——*Brazil, Trinidad.*——Flowers green, with a few purple spots.
24. *C. cornutum* (Lindl. Bot. Reg. 1840, misc. 182. 1841. t. 5. f. 2.); petalis maculatis lineari-lanceolatis sepalo dorsali conformi suppositis, labello subcordato-ovato basin versus saccato sub sacco cornu valido inflexo instructo processibus teretibus rigidis fimbriato basi dentato, columnæ acuminatæ cirrhis cornu labelli attingentibus.——*Demerara.*——Flowers dull green, richly spotted with deep blackish purple.
25. *C. lanciferum* (Lindl. in Bot. Reg. 1841. t. 5. f. 5.); petalis maculatis lineari-lanceolatis sepalo dorsali conformi suppositis, labello subcordato-ovato fimbriato basin versus saccato sub sacco cornu tripartito instructo, sub apice laminâ lineari-lanceolatâ aucto, columnæ cirrhis vix columnâ longioribus.——*Brazil.*——Very like *C. cristatum*; but the margin only of the lip is broken up into fringes; and at the point is a broad lancet-shaped spine.
26. *C. barbatum* (*Myanthus barbatus*, Lindl. Bot. Reg. t. 1778 *C. spinosum*, Lindl. Bot. Reg. 1841. misc. 136. *Myanthus spinosus*, Hooker Bot. Mag. t. 3802. *C. proboscideum*, Lindl. in Bot. Reg. 1839. misc. 140. 1841. t. 5. f. 3.); petalis versus apicem serratis, labelli infra medium saccati margine pilis tenuibus succulentis albis longè fimbriato apice angustè attenuato recurvo supra ad

basin spinâ tripartitâ infra apicem spinâ magnâ dentatâ porrectâ, cristæ pilis opacis subulatis apice sæpe bifidis per paria tria quatuorve basi connatis. — *Brazil, Demerara.* — Sepals and petals narrow, green, blotched with purple. Lip green or pink, with narrow delicate fibres arising from its margin. No doubt the supposed species quoted above are mere varieties of the same natural form.

27. *C. cristatum* (Lindl. in Bot. Reg. t. 966.) ; foliis oblongo-lanceolatis perianthiis explanatis, sepalo supremo petalisque conniventibus, labello fimbriato cristatoque expanso cristæ pilis crassis lucidis compressis obtusissimis emarginatisque simplicibus. — *Brazil.* — Both this and the last have a strong smell of Tarragon ; they are probably varieties of each other. — **MONSTROUS STATE.** — Has been found to sport into *C. tridentatum* ; see Botanical Reg. t. 1951.

41. LYCASTE crinita.

L. crinita ; sepalis petalisque intus crinitis, labello intus villosio altè trilobo laciniis angustis obtusis intermediâ ovali, appendice lineari adnato ; facie *L. cruenta*.

This plant is much like *L. cruenta*, and has flowers of nearly the same colour ; but it differs in being smaller, with the interior clothed with very long silky hairs, and in the very different form of the lobes of the lip ; which is moreover destitute of the crimson stain that gives its name to *L. cruenta*. The appendage of the lip is moreover long and elevated, not very short and inconspicuous. We have received a specimen from Messrs. Loddiges.

42. VANDA furva.

V. furva (Lindl. Gen. & Sp. Orch. p. 215. *V. Roxburghii unicolor*, Hooker in Bot. Mag. t. 3416. *Angræcum furvum*, Rumph. Amb. 6. t. 46. f. 1. *Epidendrum furvum*, Linn. sp. pl. 1348. *Cymbidium furvum*, Willd. Sp. Pl. 4. 103.) ; caule alto, foliis laxis membranaceis apice obliquè tridentatis, racemis lateralibus plurifloris, floribus distantibus, sepalis petalisque oblongo-obovatis undulatis unicoloribus obtusis, labelli trilobi lobis lateralibus obtusis intermedio cuneato bilobo.

I am indebted to Mr. Loddiges for suggesting that this is in all probability the *Vanda furva* about which there has been so much uncertainty. It certainly corresponds very closely

with Rumphius's figure ; but it comes from China, and not from Amboyna. It has the habit of *V. Roxburghii*, to which Sir W. Hooker has referred it ; but it differs not only in the whole colour of its sepals and petals, and the other characters above indicated, but also in being a large lax growing plant, five or six feet high, with much thinner and longer leaves. The former is a short growing plant, with the leaves very closely set together. The middle lobe of the lip of *V. Roxburghii* is oblong and contracted at the point ; here it is wedge-shaped and two-lobed.

43. HINDSIA violacea.

Bentham MSS.

H. violacea ; incano-tomentosa, foliis ovalibus acutis sulcatis subtus rugosis longè petiolatis, pedunculis brevibus 2-floris, bracteis calycisque laciniis exterioribus hirsutis spatulatis acutis, corollæ 4-5-lobæ tubo longissimo laciniis ovalibus acutis carnosis fauce nudâ, stigmatibus filiformibus exsertis.

A most beautiful plant imported by Messrs. Veitch and Sons from South Brazil, and exhibited by them at the late meeting in the Garden of the Horticultural Society, on which occasion it received the large silver medal. We presume it to be a hardy stove or tender greenhouse shrub. Its habit is not unlike that of *H. longiflora*, but it is infinitely handsomer. The flowers are of the most intense violet or ultramarine, two inches and a half long, and in clusters near the ends of the branches. It was only excelled at the late exhibition by the *Cereus crenatus* ; and will doubtless prove a most useful as well as beautiful addition to our hothouses.

We long ago pointed out the probability that the plant called *Rondeletia longiflora* by Chamisso and Schlechtendahl would prove to be really a different genus ; and we are glad to find our suspicions confirmed by Mr. Bentham ; who proposes to name this species and the *R. longiflora* after R. B. Hinds, Esq. the zealous and indefatigable naturalist, whose plants, collected for his private use, are now in course of publication at the public expense.

HINDSIA will be found to differ from *Rondeletia* in its funnel-shaped, not strictly hypocrateriform, corolla, which is moreover destitute of that faucial coronet which in *R. odorata* is so conspicuous.

44. HEXADESMIA bicornis.

H. bicornis; caulibus fusiformibus elongatis, foliis linearibus obliquè bidentatis, floribus subsolitariis cernuis, labello ovato retuso subserrato, columnâ utrinque bicorni.

An addition to the insignificant genus *Hexadesmia*, sent to Mr. Loddiges from Columbia by Linden. It is very like *H. fasciculata*, but differs in the leaves and column.

45. DENDROBIUM criniferum.

D. criniferum; caulibus teretibus erectis ramosis, foliis oblongis subundulatis emarginatis, floribus axillaribus lateralibusque solitariis cernuis, sepalis ovatis, petalis linearibus acuminatis, labelli trilobi crenulati lobis lateralibus nanis intermedio apice in filis intricatis multifido lamellis binis undulatis

An orchidaceous plant with small yellowish flowers of little beauty, introduced by His Grace the Duke of Northumberland, who received it from Mr. Power in Ceylon. It is closely allied to *D. Scopa*, but is readily distinguished by its slender stems, wavy leaves, and the shortness of the lateral lobes of the labellum. The breaking up the point of the lip into numerous threads is remarkable, and resembles what occurs in the bearded *Bolbophylla*, which are no doubt the *Desmotricha* of Blume.

46. COLLETIA serratifolia.

Vent. Choix. t. 15. DeCand. Prod. 2. 28.

This is a half hardy Peruvian shrub, with oblong serrated deciduous deep green leaves, and small, short-stalked, axillary white flowers. It is a plant of little interest, except as indicating how very different are the species of *Colletia* from each other in habit.

47. LYCASTE aromatica; var. retusa.

L. aromatica (Supra 1843. misc. p. 16.; var. *retusa*; floribus vitellinis, labelli lobo medio dilatato retuso.)

We have received a flower of this from Geo. Barker, Esq. of Birmingham, who obtained it from Lima. It differs from *L. aromatica* in having very clear yolk-of-egg-yellow flowers, without a tinge of green, and the middle lobe of the lip dilated and almost 2-lobed.

48. LYCASTE gigantēa.

Lindl. in Bot. Reg. 1843. misc. p. 16.

This very fine plant, formerly described from Mr. Hartweg's dried specimens, has just flowered with Mr. Barker. It proves to have a very different aspect from any of the species associated with it; its flowers, whose sepals are $3\frac{1}{2}$ inches long, being of a warm yellowish olive, and its lip a deep rich morone, bordered with orange, and looking like the finest velvet. As we shall soon figure it, a more particular account is deferred.

49. ASPASIA lunāta.

Lindl. in Bot. Reg. sub t. 1907.

We have received this curious Brazilian epiphyte from J. C. Lyons, Esq. of Ladiston near Mullingar, by whom it was obtained from the country about Rio. It has exactly the structure of the other *Aspasias*, and not a double caudicula, as appeared from the drawing of M. Descourlitz, on which the species was founded. The flowers have long narrow sepals and petals, yellowish blotched with brown; the lip is large and white, and is stained in the middle with pale purple, which had not, in the specimens sent us, that distinct crescent form from which the name has been derived. The anther has a large tumour in front, and a serrated sharp-ridged crest, which gives the column much the appearance of a parrot's head.

50. MYOPORUM ascendens.

R. Brown Prodrumus, p. 371.

We have received from an anonymous correspondent a flowering specimen of this very pretty shrub, which he states that he purchased in a nursery under the name of *Anthocercis multiflora*. It forms a compact evergreen bush, with obovate serrated leaves, from amongst which appear multitudes of white flowers delicately spotted with violet, and as large as those of a *Leptospermum*. It is quite an acquisition to our gardens. Being a native of the mountains of Tasmania, (Van Diemen's Land), it is not impossible that it may prove hardy.

51. LYCASTE *Barringtoniæ*.

L. *Barringtoniæ* (*Epidendrum Barringtoniæ*, Smith. ic. pict. t. 25. *Dendrobium Barringtoniæ*, Swartz. Nov. Act. Ups. 6. 82. Willd. Sp. Pl. 4. 132. Hooker Exot. Fl. t. 119. *Colax Barringtoniæ*, Lindl. Bot. Reg. 897. *Dendrobium ciliatum*, Swartz. Pers. Syn. 2. 523. *Maxillaria ciliata*, Fl. Peruv. Syst. p. 221. ? Lindl. in Bot. Reg. 1206. *Maxillaria Barringtoniæ*, Lodd. Bot. Cab. t. 1824. Lindl. Gen. & Sp. Orch. no. 23.) ; pseudobulbis oblongis compressis costatis, foliis subternis oblongo-lanceolatis acuminatis plicatis, scapo radicali vaginato unifloro erecto pseudobulbo vix longiore, bracteâ ovarii longitudine, sepalis petalisque ovato-lanceolatis obtusis, labelli trilobi lobo medio ovato rotundato fimbriato apice concavo, callo lato omninò adnato altè sulcato apice dentato.

An examination of fresh specimens of this old plant, enables me to state that it is a true Lycaste, readily distinguished by its stout flower-stems, drooping flowers, and very deeply furrowed callus. The blossoms appear to vary in colour from green to a tawny yellow.

52. FRITILLARIA *Kotschyana*.

Herbert in litteris.

F. *Kotschiana*; caule unifloro 5-6-unc. purpureo superne glauco rorato, foliis 4-6 viridibus glauco roratis semiamplexicaulibus gradatim minoribus acutioribus imo semunciam lato triunciali obtuso [variat foliis 6 omnibus alternis, vel mediis subobtusis, vel tertio et quarto angustis subæqualibus oppositis] summo angustiore in pedunculo brevi curvato, perianthio pendulo 1½ unc. unciam patente viridi purpurâ [intus præcipuè] tessellato nectarii foveolis brevibus viridibus petalis rectis latioribus sepalis apice recurvis, antheris pallidè luteis stigmata tenuia superantibus perianthio brevioribus.—*W. Herbert.*

From a mountain called Hazartschall, in the neighbourhood of Mount Elburz, whence it was sent by M. Kotschy to the Hon. and Very Rev. the Dean of Manchester, with whom it flowered at Spofforth in April last.

53. HYMENOCALLIS *bistubata*.

Herbert in litteris.

H. *bistubata*; foliis viridibus subpetiolatis 21-uncialibus 4 unc. latis acutis, scapo ancipite 17-unc. spathâ pallidâ triunciali octoflorâ, germine sessili, tubo 5½ unc. limbo pendulè recurvo 3½ unc. coronâ ultra biunciali inferne cylindricâ superne rotatâ 1½ unc. patente spatii interstamineis

dentatis dentibus bis incis, filamentis $\frac{3}{4}$ - $1\frac{1}{4}$ unc. tantum liberis crateriformiter dispositis, stylo circiter bianciam excluso.—*H. Herbert.*

This is one of Mr. Hartweg's discoveries; but it is uncertain where the bulbs were found. Among the various forms of the genus it is known by the long cylinder of its crown, which gives it a sort of "hose in hose" appearance, whence its specific name. It blossomed at Spofforth in April last.

54. DENDRŌBIUM chlorops.

D. chlorops; caulibus teretibus, floribus laxè corymbosis, pedicellis filiformibus glaucescentibus, sepalis lineariblongis, petalis duplo latioribus obovatis, labelli trilobi plani lobis lateralibus nanis acutis intermedio lineariblongo apice paulò latiore basi villosa, cornu brevi conico.

A species from Bombay, with the habit of *D. Heyneanum*. It has small flowers of a pale nankin colour, while the base of the lip is a light pea green; this gives the flower the appearance of having a green eye, whence the specific name. It has lately flowered with Messrs. Loddiges.

55. CATASĒTUM ochraceum.

C. ochraceum; sepalis petalisque ovatis secundis, labello cucullato integerrimo lævi apice in rostrum brevem latum obtusum carnosum contracto, cirrhis brevibus.

A new species in the way of *C. luridum*, with deep yellow ochre-coloured flowers. The lip is hooded, but contracted at the point into a kind of beak, thick at the edges and short. Mr. Hartweg sent it to the Horticultural Society from the Hacienda del Hospicio, in the province of Bogota.

56. BOLBOPHYLLUM Cheiri.

B. Cheiri; foliis oblongis coriaceis basi canaliculatis apice emarginatis, floribus solitariis (magnis), sepalis lanceolatis lateralibus basi ventricosis petalisque e latâ basi linearibus acuminatis in manû speciem velut digiti conniventibus, labello mobili basi ovato concavo apice longè rostrato, columnâ edentulâ, polliniis 4 geminatis.

This very singular species was sent from Manilla to Mr. Loddiges, with whom it blossomed a few days since. The flowers are very large for the genus, the sepals being as much as an inch and a half long, a clear olive green, neatly

marked with brownish stripes. The lip is jointed so loosely with its support that it falls forward every time the flower is waved by the wind; a phenomenon common, if not universal, among the Bolbophylla, but in none of them more remarkable than in this case. Both sepals and petals are so arranged that they converge very much like the human fingers when they are brought together without being bent; this circumstance has suggested the specific name.

57. VANDA parviflora.

V. parviflora; racemo simplici, sepalis oblongis, petalis linearibus spathulatis, labelli trilobi lobis lateralibus ascendentibus acutis intermedio oblongo canaliculato spongioso bilamellato apice circulari denticulato, calcare angusto obtuso.

This little plant is a native of Bombay, whence Messrs. Loddiges received it. The flowers are small, pale ochre-coloured, with a lip sprinkled all over with extremely fine purple points; the middle lobe of the lip is rather spongy, has two broad ridges, between which runs a channel, and at the point it is almost exactly circular, with a few small toothings. The four pollen-masses adhere to a narrow strap connected with a broad gland; but the rostellum is not in any degree extended into a beak. The habit of the plant is, I am informed, that of *Vanda lamellata*.

58. SPATHOGLOTTIS plicata.

Blume Bijdragen, p. 401. t. 76.

This very pretty plant has flowered with Messrs. Loddiges, who received it from Penang. It has light purple flowers, and has quite the appearance of *Paxtonia*.

59. ANEMONE Govaniāna.

Wall. Cat. No. 4688.

This pretty little alpine plant, from great heights on the mountains of Nepal, has flowered in the Garden of the Horticultural Society, where it was raised from seeds presented by the East India Company. It has woolly palmated rather leathery radical leaves, and umbels of white long-

stalked flowers of the *Omalocarpus* section, and not unlike those of *A. rivularis*, but the anthers are yellow, and the ovaries tail-less and smooth. It is a hardy herbaceous plant, well worth cultivation.

60. EPIDENDRUM Hanburii.

E. (*Encyclium*) *Hanburii*; pseudobulbis ovatis, foliis ensiformibus coriaceis recurvis, floribus racemosis distantibus, sepalis petalisque spathulatis patentibus, labelli tripartiti lobis lateralibus falcatis obtusis nanis erectis intermedio oblongo bilobo venis elevatis dichotomis sulcato ungue obtusè bicarinato glabriusculo.

A Mexican plant, with something the appearance of *E. porphyreum*, but far less handsome. The leaves are very coriaceous, shorter than the raceme, which is about two feet long. The sepals and petals are deep dull purple, the lip is pale rose, with crimson radiating veins. We owe it to R. Hanbury, Esq. of Stamford Hill.

61. PHYSŪRUS pictus.

Lindl. Gen. & Sp. Orch. p. 504.

Messrs. Loddiges have flowered this beautiful little thing, which rivals the Wana Rajah of Ceylon (*Anæctochilus setaceus*) in the singular beauty of the foliage. The leaves are curiously veined, and appear as if covered with a film of silver, especially when they are turned so as to allow the light to strike them obliquely. The flowers are small, white, in a short spike, and have a bar of blackish brown along the middle of each petal and sepal. It is a native of Brazil, where it has been found by several travellers. Martius met with it on the hills of Botofogo near Rio Janeiro, growing among decayed leaves.

62. DENDROBIUM.

When we some time since succeeded in breaking up the old genus *Maxillaria*, we had hoped to find some means of performing the same good office for *Dendrobium* (the *Maxillaria* of the East), which, as at present limited, is composed of species exceedingly different from each other in general appearance. We must confess, however, that up to the

present time, we have met with little or no success; the peculiarity of habit being accompanied with almost no differences in the structure of the flowers. Indeed, it is not an easy matter to say how *Bolbophyllum* and *Cirrhopetalum* are to be strictly defined.

Under these circumstances, we think the most useful course to be taken will be to collect the species into groups, which shall be so limited as to bring together no species that do not quite correspond in habit; and then it is to be hoped that the arrangement will be but little disturbed, in case distinctions good enough for genera should be hereafter made out. In doing this I shall endeavour to observe as nearly as possible the course already taken by Blume, whose plants, however, I have never had the advantage of examining.

Among the crowd of species which constitute this genus, there is a large set, of which *D. Pierardi* may be taken as the example, all which have thin flat leaves, slender stems, and flowers growing uniformly in pairs from the sides of the stem opposite the leaves. They may be regarded as constituting *Dendrobium* proper, and therefore the first step will be to place them in one group, of which the following is the enumeration.

Sect. 1. *EUDENDROBIUM*. *Stems slender; Leaves, thin and flat; Flowers in pairs, or threes, opposite the leaves.* (*Grastidium* Blume.)

A. Lip undivided.

1. *D. macrophyllum* (Lindl. in Bot. Reg. 1839. p. 36. *Sertum Orchidaceum*, t. 35. *Dendrobium macranthum*, Bot. Mag. t. 3970); caulibus pendulis, foliis ovato-oblongis obtusis nervosis basi subcordatis, sepalis lanceolatis lateralibus parùm productis, petalis oblongis acutis, labello pubescente convoluto denticulato subunguiculato ovato callo baseos elevato transverso obsolete trilobo. — *Manilla*. — This is one of the handsomest species. The flowers are nine inches in circumference. The sepals and petals are a clear and bright rose-colour, the lip is downy and deeply stained with two large broad blood-red blotches at its base.
2. *D. moniliforme* (*Fu Ran*, Kæmpf. amœn. t. 865. *Epidendrum moniliforme*, Linn. sp. pl. 1352. *Dendrobium moniliforme*, Swartz act. Holm. 1800. p. 246. Willd.

- no. 19. Bot. Reg. t. 1314. L. no. 40); caulibus erectis ramosis, internodiis tumidis, foliis oblongis obliquè emarginatis obtusis, floribus geminatis foliis longioribus, sepalis petalisque oblongis acutis, labello cucullato acuto serrulato intus pubescente.—*Japan*.—This is very near *D. cœrulescens*, from which it is mainly distinguished by its stem contracted at every joint, and its serrated lip.
3. *D. cœrulescens* (Lindl. Sertum, t. 17); facie omnino *D. nobilis*, floribus nunc ternatis, petalis angustioribus margine reflexis valdè undulatis, labello ovali acuminato intus villoso.—*E. Indies*.—The form of the petals, and especially of the lip, principally distinguish this from *D. nobile*. Its flowers are also smaller.
4. *D. nobile* (Lindl. Gen. no. 24. Sertum, t. 3); caulibus teretibus erectis, foliis oblongis obliquè emarginatis obtusis, floribus geminatis, sepalis ovalibus, petalis duplo majoribus undulatis, labello ovato subrotundo cucullato villoso.—*China*.—Flowers large, showy, violet, with a very dark purple stain in the interior of the lip.
- * * *
5. *D. pulchellum* (Roxb. L. 35. Lodd. Bot. Cab. t. 1935); caulibus teretibus pendulis, foliis oblongo-lanceolatis subplicatis, racemis lateralibus strictis multifloris, bracteis brevibus ovatis obtusis, sepalis ovatis acuminatis subcostatis, petalis oblongis obtusis tenuioribus et latioribus, labello unguiculato cochleariformi obtusissimo ciliato.—*Sylhet*.—Sepals whitish. Petals pink. Lip pink at the edge with a yellow centre. A most charming species.
6. *D. Devonianum* (Paxton Mag. 7. 169); caulibus pendulis, foliis ovato-lanceolatis acutis, pedunculis 2-3-floris, sepalis oblongis acutis integris, petalis duplò latioribus fimbriatis, labello maximo cochleariformi margine plumoso.—*Khoseea Hills of India*.—The King of Dendrobiums. Sepals rose-colour. Petals and lip lemon-colour, tipped with purple, the latter with a broad yellow blotch in the middle.
7. *D. Pierardi* (Roxb. ! Fl. ind. 3. 482. Hooker Exotic Flora, t. 9. Bot. Reg. t. 1756); caulibus pendulis glabris, foliis ovato-lanceolatis acutis, floribus geminatis, sepalis acuminatis membranaceis, petalis sepalo supremo

majoribus acuminatis, labello cucullato dilatato subtruncato pubescente ciliato.—*E. Indies*.—Flowers delicate pink, with a pale yellow lip, not sweet-scented.

8. *D. cucullatum* (R. Brown in Bot. Reg. t. 548. *ibid.* t. 1756, fig. 2); facie omnino *D. Pierardi* sed labello subrotundo-ovato basi in unguem brevem convoluto.—*E. Indies*.—Extremely like *D. Pierardi*, but it has larger flowers, with a broad roundish ovate lip, the base of which is rolled up into a sort of short stalk; while in *D. Pierardi* the lip is rounded and very blunt, with its base rolled into a much longer stalk which quite conceals the column. It is moreover remarkably incurved.
9. *D. transparens* (Wallich. Cat. no. 2008); caulibus pendulis teretibus, foliis ovato-lanceolatis acuminatis apice obliquis, floribus geminatis, sepalis acuminatis, petalis obtusis sepalo supremo majoribus, labello oblongo undulato ciliolato obtuso intus levissimè pubescente.—*Nepal*.—Flowers pale rose-colour, with a lip of the same tint. Very like *D. Pierardi*, from which it is distinguished by its leaves being longer and emarginate at the apex, by the petals being obtuse and the labellum much less hairy, and pink not yellow. The stems are also far shorter.
10. *D. amœnum* (Wall. L. no. 21. *Limodorum aphyllum*, Roxb. *corom.* 1. t. 41. *Cymbidium aphyllum*, Willd. sp. f. 4); caulibus pendulis gracilibus nebulosis floriferis aphyllis, foliis lanceolatis acutis, floribus geminatis racemum spurium formantibus longè pedunculatis divaricatis, sepalis oblongis obtusis, petalis obtusis sepalo supremo paulò majoribus, labelli cucullati limbo ovato obtuso crenulato leviter ciliato: disco villosa.—*Nepal*.—This lovely species is abundantly distinguished by its slender stems, leafless, and clouded with dusky brown when in blossom; and also by its delicate white flowers, the tips of whose segments are remarkably blunt and tinged with delicate violet. Dr. Wallich remarks in his MSS. that its fragrance is exquisite, not unlike that of *Olea fragrans*.
11. *D. heterocarpum* (Wall. L. no. 20); caulibus teretibus pendulis, foliis oblongis acutis planis, floribus geminatis odoratis racemum spurium formantibus, sepalis lineariblongis acutis, petalis ovatis acutis sepalo supremo

majoribus, labello unguiculato, limbo subpanduriformi holosericeo medio elongato acuminato plano.——*Nepal*.——Very near *D. cucullatum* from which it is distinguished by its pale yellow fragrant flowers, and the form of the labellum.

12. *D. macrostachyum* (L. no. 19. Bot. Reg. t. 1865); caulibus teretibus pendulis flagelliformibus, foliis ovato-lanceolatis submembranaceis, floribus ternatis racemum spurium formantibus, sepalis ovatis acutis, petalis lanceolatis sepalo supremo subæqualibus, labello cucullato venoso: limbo ovato obtuso ciliato intus pubescente.——*Ceylon*.——Flowers pale yellow, smaller than in *D. Pierardi*. Lip streaked with purple veins.

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13. *D. foliosum* (Ad. Brongn. in Duperr. Voy. t. 41).
14. *D. gemellum* (L. no. 28. *Pedilonum biflorum*, Blume, p. 322); foliis membranaceis lanceolatis acuminatis, pedunculis oppositifoliis subbifloris, labello ovali acuto apice subcrispo lamellis tribus serrulatis inconspicuis.——*Singapore, Java*.——A long-stemmed grassy-leaved plant, with small pale yellowish green flowers, growing in pairs from short rigid two-valved truncated compressed spathes, placed opposite the leaves. In this respect it is like *D. biflorum*, of which it has all the habit; but the lip is perfectly entire and not three-lobed.
15. *D. rugosum* (L. no. 57. *Grastidium rugosum*, Blume, p. 333); foliis subcoriaceis lanceolatis apice emarginatis, sepalis et labelli limbo acuminatis, labello intus membranaceo-rugoso.——*Java*.——Flowers pale yellow.
16. *D. salaccense* (L. no. 56. *Grastidium salaccense*, Blume, p. 333); foliis membranaceis lineari-lanceolatis obliquè retusis, sepalis acutis, labello obtuso intus 1-lineato.——*Java*.——Flowers deep yellow.
17. *D. acuminatissimum* (L. no. 55. *Grastidium acuminatissimum*, Blume, p. 335); foliis membranaceis linearibus sepalisque acuminatissimis.——*Java*.——Flowers greenish.

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18. *D. chrysanthum* (Wall. Cat. no. 2012. Bot. Reg. 1299 & 25); caulibus teretibus pendulis, foliis contortis ovato-lanceolatis acuminatis, floribus inter folia nascentibus, sepalis carnosis oblongis obtusis: venis extus tuber-

culatis, petalis obovatis retusis carnosis sepalo supremo latioribus, labello eucullato denticulato retuso obsolete trilobo.—*Nepal*.—Flowers dark yellow, occasionally in threes, marked externally with distinct warts. Lip with a deep purple spot on each side.

19. *D. Paxtoni* (Lindl. in Bot. Reg. Misc. 1839, no. 56); caulibus teretibus sulcatis, foliis ovato-lanceolatis acuminatis apice hinc obsolete emarginatis, pedunculis bifloris, sepalis oblongis acutis lateralibus basi parum productis, petalis latioribus obovatis acutis serrulatis, labello unguiculato ovato concavo indiviso villosa margine multifido fimbriato.—*Khossea Hills of India*.—This has orange-yellow flowers, with a deep brown spot in the middle of the lip. It differs from *D. chrysanthum* in having the petals serrated, and the surface and edge of the lip hairy.
20. *D. ochreatum* (Lindl. in Wall. Cat. no. 7410. Bot. Reg. sub fol. 1756. *D. Cambridgeanum*, Paxton, Mag. Bot. vi. 265); caulibus pendulis medio incrassatis, foliis ovalibus acutissimis, pedunculis bifloris, petalis lanceolatis sepalis latioribus, labello cucullato rotundato indiviso supra piloso.—*Khossea Hills of India*.—A beautiful species, with large rich yellow flowers, having a deep purple stain in the middle of the lip, which is entire and hairy.
21. *D. aureum* (Lindl. Gen. & Sp. Orch. p. 78. Bot. Reg. 1839. t. 20); caulibus erectis teretibus clavatis internodiis brevibus, foliis lineari-oblongis apice obliquis emarginatis, pedunculis subbifloris aggregatis lateralibus, sepalis lineari-ovatis acuminatis obtusis, petalis latioribus ovatis acutis undulatis, labello ovali undulato obtusiusculo indiviso medio serrulato per axim pubescente.—*Ceylon*.—The species varies with pale yellow and white flowers. In both varieties the fragrance is remarkable, forming a something intermediate between violets and primroses.
22. *D. sulcatum* (Lindl. in Bot. Reg. 1838. t. 65); caule erecto clavato sulcato subflexuoso compresso, foliis oblongis acutis 3 nerviis, pedunculis lateralibus trifloris, bracteis minimis acutis appressis, petalis oblongis obtusis glabris sepalis subæqualibus, labello obcordato hirsuto ungue canaliculato sulcato.

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23. *D. nutans* (L. no. 73.); caulibus erectis subclavatis hispidis apice foliosis, foliis ovato-lanceolatis apice valdè obliquè uncinato-bilobis, pedunculis subterminalibus bifloris foliis brevioribus, bracteis minimis, petalis sepalisque lineari-lanceolatis acuminatis æqualibus membranaceis, labello conformi carnosio crenulato indiviso, capsulis oblongis nutantibus.— *Ceylon*.—Leaves small. Flowers small, white, slightly tinged with green; lip yellow.
24. *D. candidum* (Wallich in Bot. Reg. 1838, misc. 54); caulibus erectis flexuosis teretibus, foliis ovato-lanceolatis apice obliquis obtusis, pedunculis axillaribus erectis bifloris, sepalis patulis lateralibus basi parùm productis, petalis conformibus, labello ovato-lanceolato obtuso medio barbato supra basin calloso lateribus erectis cucullatis.— *Khooseea Hills of India*.—Flowers small, pure white, sweet-scented. Stems about a foot high.
25. *D. stuposum* (Lindl. in Bot. Reg. 1838, misc. 94); caule erecto tereti, foliis lineari-oblongis obliquè emarginatis, pedunculis bifloris, bracteis obtusis cucullatis, sepalis petalisque erectis lateralibus carinatis, labello oblongo cucullato obtuso sub apice calloso stuposo.— *E. Indies*.—Flowers white, small. Lip with a deep orange callus below its point, where it is thickly covered with a coarse tow-like hairiness.

B. Lip 3-lobed.

26. *D. Ruckeri* (Lindl. in Bot. Reg. 1843, misc. 38, t. 60); caulibus teretibus, foliis ovato-lanceolatis acuminatis planis, floribus gemellis, sepalis patulis obtusiusculis convexis margine reflexis lateralibus subtriangularibus, labelli trilobi lobis rotundatis intermedio undulato axi elevatâ villosâ.— *Philippines?*—A fine species. Flowers large, yellow. Lip white outside, yellow and brown inside.
27. *D. sanguinolentum* (Lindl. in Bot. Reg. 1842, misc. 73, 1843, t. 6); caulibus teretibus pendulis, foliis ovato-lanceolatis, floribus gemellis, sepalis petalisque ovatis obtusiusculis patulis, labello trilobo glabro: laciniâ intermediâ retusâ nunc utrinque plicatâ; ungue concavo brevi appendice cornuformi pubescente retrorsâ aucto.—

ribus, sepalis lateralibus in calcare longo acuminato connatis, petalis sepalo supremo conformibus, labello infundibulari cucullato integro dentato basi cum pede columnæ accreto.——*Nepal*.——Flowers large, white. Lip yellow, with orange-coloured veins. A very fine species.

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32. *D. tridentiferum* (Lindl. in Hooker's Journal of Botany, vol. 3); foliis oblongo-lanceolatis obliquè emarginatis, gemmis paleaceis, floribus geminis, sepalis lateralibus ovatis carnosis obliquis, petalis lanceolato-oblongis acutis membranaceis, labello carnosio trifido basi tuberculo carnosio lineâque utrinque elevatâ acuto: lobis acutis lateralibus antrorsum curvis intermedio ovato, cornu brevi obtuso.——*New Guinea*.——A broad-leaved species looking like *D. biflorum* to which it is nearly allied. It has fleshy flowers as large as those of *D. Pierardi*.
33. *D. Luzonense*; foliis distichis angustè lanceolatis apice oblique emarginatis, pedunculis brevibus 2-floris, labello spathulato obtusissimo laciniis lateralibus obsolete denticulatis.——*Luzon*.——A small-flowered plant, with very closely set distichous leaves.
34. *D. Cunninghamii* (Lindl. in Bot. Reg. sub t. 1756. *D. biflorum*, Ach. Rich. sub Astrolab. t. 26); caulibus gracilibus pendulis ramosis vaginis foliorum corneis transversim corrugatis squamatis, foliis ovato-linearibus obtusiusculis, pedunculis oppositifoliis bifloris foliis multò brevioribus, sepalis ovatis acutis, petalis oblongis acutis latioribus, labelli trilobi lobo intermedio subrotundo undulato basi 5-lamellato lateralibus nanis acutis.——*New Zealand*.——Stems very slender, much branched. Flowers white.
35. *D. biflorum* (*Epidendrum biflorum*, Forst. ! Prodr. n. 318. *Dendrobium biflorum*, Swartz. act. Holm. 1800. p. 246. Willd. no. 17. and no. 18); caule pendulo gracili tereti, foliis linearilanceolatis acuminatis planis, pedunculis bifloris lateralibus e paleis corneis erumpentibus, sepalis petalisque acuminatissimis, labello rhomboideo medio bilamellato trilobo lobis lateralibus acutis nanis intermedio deltoideo acuminato margine fimbriato.——*Society Islands*.——Leaves very narrow and grassy. Flowers very small, with setaceous points.
36. *D. calcaratum* (Lindl. in Bot. Reg. 1840. misc. 219); caulibus nigro-pubescentibus, foliis linearibus obliquè

bilobis, floribus resupinatis, sepalis ovatis lateralibus revolutis basi in cornu conicum pedicelli longitudine productis, petalis lineari-lanceolatis, labelli linearis carnosius lævis trilobi laciniâ intermediâ subrotundâ marginibus incurvis ungue cum columnæ pede in calcar verum conato.—*Sincapore*.—A slender inconspicuous species, allied to *D. revolutum* and *biflorum*; with green flowers growing in pairs opposite the leaves.

37. *D. bilobum* (Lindl. in Hook. Journ. Bot. vol. 3); foliis linearibus obtusis apice subæqualibus bilobis, floribus membranaceis minutis (solitariis?), sepalis obtusis, petalis duplò minoribus apiculatis, labello libero elongato obovato apice carnosio trilobo: laciniâ mediâ verrucosâ, cornu elongato obtuso.—*New Guinea*.—A small inconspicuous species, with the appearance of *Isochilus linearis*.

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38. *D. pugioniforme* (A. Cunn. in Bot. Reg. 1839. misc. 34); caulibus repentibus nodoso-articulatis radicalibus setosostipulatis, foliis elliptico-lanceolatis apice attenuatis acutis carnosius infra fere convexis carinatis lævibus nitentibus, floribus (resupinatis) subsolitariis axillaribus, perianthii foliolis oblongo-lanceolatis acutis patentibus, labello longitudinaliter tricarinato, lobo intermedio dilatato undulato-crispato apice acuto recurvato.—*N. Holland*.—A beautiful epiphyte, hanging loosely from the stems of trees, so as to swing freely to the wind that sweeps through the forests on the summit of the belt of mountain bounding the coast district of Illawarra, on the west (lat. $34\frac{1}{2}$ S.)

VERY nearly allied to this section of the genus are those *Dendrobia*, which, with slender stems and thin flat leaves, have flowers growing in racemes. They form a group which may be subdivided upon the same principle as the last.

Sect. II. STACHYOBIMUM. *Stems slender; Leaves thin and flat; Flowers in racemes.*

A. Lip undivided.

39. *D. aduncum* (Lindl. in Bot. Reg. 1842. misc. 62); caulibus pendulis, foliis lineari-lanceolatis acutis integris,

floribus ternis patentibus, sepalis petalisque ovatis obtusis lateralibus duplò latioribus, cornu rotundato, labello unguiculato ovato concavo apiculato columnæ arcuè appresso intùs villosò disco glabro, columnâ apice bialatâ sub stigmate villosâ, antherâ glanbulosâ. — *East Indies*. — This is a beautiful species allied to *D. Pierardi*, near which it should perhaps be placed, rather than in this division. The flowers are almost transparent, of the most delicate pink, and nearly as large as in *D. moschatum*.

40. *D. formosum* (Roxb. fl. ind. 3. 485. L. p. 81. Wall. pl. as. rar. t. 39. Bot. Reg. 1839. t. 64); caulibus teretibus pendulis pilosis, foliis distichis ovatis apice obliquè emarginatis obtusis, racemo brevi terminali 4-5-floro, bracteis brevibus ovatis, (floribus maximis), sepalis oblongis acutis: lateralibus basi longè productis, petalis duplò latioribus acutis, labello obovato dilatato retuso cum basi columnæ in calcar obtusum connato. — *East Indies*. — One of the finest of the genus, with very large white flowers in terminal racemes.
41. *D. rhombeum* (Lindl. in Bot. Reg. 1843. t. 17); caulibus teretibus foliosis, foliis lanceolatis acutis, racemis brevibus 4-floris, sepalis ovalibus obtusis, petalis duplò latioribus ovatis, labello rhombeo undulato acuto medio pubescente, columnâ utrinque tuberculatâ pone basin cornu deflexo auctâ, antherâ pubescente. — *Manilla*. — This species has much general resemblance to *D. aureum*, from which however it differs in having smaller blossoms, a labellum without serratures, and the flowers in short racemes instead of pairs. Here, as in some other cases, the column is furnished, near the base, with a deflexed horn lodged in a niche just above the insertion of the lip. This is a remarkable process, whose nature requires to be investigated. Is it the unguiculus of Blume?
42. *D. fimbriatum* (Hooker. Exot. Fl. 71. Wall. Cat. no. 2011. L. no. 38); caulibus teretibus pendulis, foliis ovato-lanceolatis, racemis lateralibus multifloris, sepalis oblongis undulatis patentissimis, petalis majoribus undulatis ciliatis, labello indiviso rotundato convexo fimbriato, fimbriis laceris. — *Nepal, Burma*. — Flowers very deep yellow, sometimes stained with crimson at the base of the lip. It has much the appearance of *Dendrobium*

chrysanthum, from which it is distinguishable both by its inflorescence and the different shape of its petals.

43. *D. polyanthum* (Wall. Cat. no. 2009. L. no. 31); caulibus teretibus pendulis, foliis oblongo-lanceolatis apice integris, racemis 3-4-floris lateralibus foliis brevioribus, sepalis lanceolatis: lateralibus supremo subæqualibus, petalis majoribus oblongis undulatis, obtusis, labello obovato cucullato ciliato, capsulis fusiformibus apteris. — *Moolmayne*. — This plant is evidently very near *D. moschatum*. It however appears to have smaller flowers, with far narrower segments, and, as far as can be ascertained from dried specimens, they are nearly colourless, except the lip, which is yellow.
44. *D. moschatum* (Wallich in L. no. 36. Hooker in Bot. Mag. t. 3837. *Cymbidium moschatum*, Willd. *Epidendrum moschatum*, Hamilt. in Symes' Ava, 3. 315. c. ic. *D. Calceolus*, Hooker ex. fl. t. 184. L. no. 37. *D. cupreum*, Herbert in Bot. Reg. t. 1779. *D. clavatum*, Wall. cat. no. 2004); caulibus teretibus pendulis, foliis lineari-lanceolatis oblongisque, racemis lateralibus laxis 5-6-floris, bracteis pedicellis 3-plò brevioribus, sepalis patentissimis petalisque oblongis obtusis latioribus venosis reticulatis, labello unguiculato calceolari obtusissimo margine abruptè inflexo pubescente. — *Burma, Pegu, Ava, Sylhet*. — This beautiful plant, with large nankin coloured flowers, stained and veined with crimson, is readily known by its labellum, whose edge is turned inwards and delicately fringed with hairs. Its odour is compared by some to musk, by others to rhubarb, and by others to wood-roof.
45. *D. calcaratum* (A. Richard Sert. Astrolab. t. 7); caule ramoso quasi articulado florifero aphylo, foliis lineari-lanceolatis acutis, floribusspicato-corymbosis, bracteis linearibus acutis glabris, sepalis lateralibus in cornu clavatum fissum productis, labello lineari subspathulato plano acuto. — *Vanikoro*. — Known to me only by the figure and description in the Voyage of the Astrolabe. It has the habit of *D. ramosum*. Possibly it should be referred to the § *Pedilonum*.
46. *D. flavescens* (L. no. 48. *Onychium flavescens*, Blume, p. 325); ebulbe, foliis paucis lineari-lanceolatis obtusis basi canaliculatis, floribus alternis subspicatis terminali-

bus pubentibus, labello intùs pubescente, limbo emarginato plicato.—*Java*.—Flowers small, yellow.

47. *D. nudum* (L. no. 49. *Onychium nudum*, Blume, p. 325); foliis lineari-lanceolatis inæquali-acuminatis membranaceis, racemis paucifloris, sepalis interioribus lanceolatis dorsali angustioribus.—*Java*.—Stems jointed, zigzag at the upper part. Flowers pale purple, changing to yellow. Labellum with a little claw at the base; according to Blume.
48. *D. ramosum* (L. no. 34); caulibus pendulis gracilibus ramosis glabris, foliis lanceolatis acuminatis apice integerrimis, floribus subracemosis, bracteis membranaceis reflexis obtusis, sepalis lateralibus magnis in cornu elongatum rectum connatis, petalis minoribus, labello cucullato acuto crispo.—*India*.—This plant is only known by some imperfect specimens distributed by Dr. Wallich. It is much more slender than *D. Pierardi*, has an evident tendency to branch, and appears to be a distinct species. It however requires further examination. It is near *D. herbaceum*; but the flowers have a long and conspicuous spur.
49. *D. herbaceum* (Lindl. Bot. Reg. 1840, misc. 153); caulibus ramosis teretibus glabris, foliis lineari-lanceolatis acuminatis apice obliquè bilobis, racemo paucifloro terminali, sepalis lateralibus basi paulo productis dorsali petalisque linearibus, labello lanceolato integerrimo nudo, clinandrio biauri.—*East Indies*.—A small branching plant, with leaves from two to three inches long, and inconspicuous greenish flowers.
50. *D. mutabile* (L. no. 50. *Onychium mutabile*, Blume, p. 324); foliis lineari-lanceolatis obtusis obliquè retusis membranaceis.—*Java*.—Flowers pale rose-colour, in very close racemes. Column downy in front. Petals broader than the upper sepal. Labellum with three sulphur yellow glands, furnished at the base with a free claw, according to Dr. Blume.
51. *D. sclerophyllum* (*D. rigidum*, L. no. 51. nec R. Br. *Onychium rigidum*, Blume, p. 324); foliis lato-lanceolatis obliquè retusis rigidis.—*Java*.—Flowers whitish, with three yellow glands. Dr. Blume doubts whether it may not be a variety of his *D. mutabile*, but he says that its parts are more firm.

52. *D. auriferum* (L. no. 39); caulibus teretibus pendulis, foliis oblongis obtusis integris, racemis lateralibus horizontalibus clavatis foliorum longitudine, bracteis cucullatis densè imbricatis, sepalis petalis labelloque linearilanceolatis conniventibus acuminatissimis.—*China*.
 —Stem slender, throwing out very long roots from its sides. Leaves oblong-lanceolate. Flowers about an inch long, bright yellow, arising from short broad imbricated bracts, which are much longer than the spaces between them. Known only from a drawing in the possession of the Horticultural Society.

B. Lip 3-lobed.

53. *D. barbatulum* (L. no. 44. *D. chlorops*, Lindl. in Bot. Reg. 1844. misc. 54); caulibus teretibus, floribus laxè corymbosis, pedicellis filiformibus glaucescentibus, sepalis linear-oblongis, petalis duplo latioribus obovatis, labelli trilobi plani lobis lateralibus nanis acutis intermedio linear-oblongo apice paulò latiore basi villosa, cornu brevi conico.—*Bombay*.—A species with the habit of *D. Heyneanum*. It has small flowers of a pale nankin colour, while the base of the lip is a light pea green; this gives the flower the appearance of having a green eye. When dried the parts of the flower become extremely thin and difficult to examine; and I was thus led to suppose that the lip was undivided. I have however ascertained that it is really three-lobed, and that my *D. chlorops* is the same species, more correctly defined.
54. *D. lancifolium* (Ach. Richard Sert. Astrolab. t. 8); caule erecto ramoso folioso tereti glabro, foliis angustè lanceolato-linearibus acutis, floribus purpurascensibus sæpiùs quaternis pedicellatis subspicatis, sepalis lanceolatis acutis, labelli unguiculati trilobi lobo medio latiore ovato margine suberispo lateralibus obtusis suberispis planis.—*Moluccas*.—Only known to us by M. Richard's description. It is a branching species, having little resemblance to the plants here placed near it.
55. *D. bicameratum* (Lindl. in Bot. Reg. 1839. misc. 85); caulibus fusiformibus, foliis linearilanceolatis apice obliquè bidentatis, pedunculis lateralibus squamatis 4-floris, floribus concavis subcarnosis, sepalis petalisque subrotundo-ovatis acutis, labelli trilobi laciniâ intermediâ ro-

tundatâ apiculatâ carnesâ lateralibus triangularibus acutis brevioribus, columnæ facie excavatâ semibiloculari.—*North of India*.——The stems grow nearly upright, and are rather short, fusiform and furrowed when old. The flowers are a little smaller than those of *Maxillaria stapeleoides*, and like them in form; their colour is dull yellow, spotted and streaked with purple. In the only specimen I have ever seen the flowers grew in fours, on a very short peduncle, closely covered with ovate concave bracts, speckled with purple. The excavation of the face of the column, and its division into two cells are remarkable.

56. *D. elongatum* (A. Cunn. Bot. Reg. 1839. misc. 33); caulibus teretibus sulcatis elongatis erectis 4-5-phyllis, foliis ovato-lanceolatis acutiusculis apice obliquis emarginatis, racemo terminali multifloro, foliolis perianthii ovatis obtusiusculis, labelli disco 3-carinato lobo intermedio lato cordiformi.—*Shaded dark woods, on the banks of the Brisbane River, New Holland*.——This plant has erect stems about a foot and a half high, at the end of which grow about four lanceolate leaves, from the midst of which springs a raceme of yellowish flowers spotted with red. They seem unwilling or unable to expand.
57. *D. bicolor* (L. no. 74); caulibus erectis elongatis subclavatis apice foliosis, foliis lanceolatis acutis, racemo brevi erecto terminali v. subterminali 3-4-floro foliis multò brevioribus, bracteis oblongis obtusis petaloideis venosis, petalis sepalisque oblongis obtusis æqualibus, labello trilobo obtuso: lobis lateralibus erectis rotundatis.—*Ceylon*.——Bracts large, oblong, petaloid, veiny, two-coloured, green at the point, brownish red at the base. Flowers nearly white. This is scarcely known except from a drawing, and I am by no means sure that it is not an *Eria*.
58. *D. catenatum* (L. no. 41. *Epidendrum monile*, Thunb. Fl. Jap.); caulibus teretibus erectis: internodiis tumidis, foliis lineari-lanceolatis acutis, racemis lateralibus 4-5-floris, sepalis petalisque lanceolatis acuminatis, labello oblongo apice trilobo.—*Japan, China*.——This has regularly jointed stems, 5 or 6 inches high, small narrow leaves and flowers with green sepals and white petals. I only know it from a Chinese drawing in the possession of the Horticultural Society.

59. *D. denudans* (Don. Prodr. 34. Wall. Cat. no. 2014. L. no. 42); caulibus brevibus cæspitosis erectis vaginis laxis foliorum vestitis, foliis oblongo-lanceolatis submembranaceis apice obliquis emarginatis, racemis lateralibus terminalibusque nutantibus multifloris, sepalis acuminatis: lateralibus basi incurvis, petalis minoribus, labelli trilobi oblongi lobo medio acuminato crispo lateralibus serratis, disco bilamellato.—*Nepal*.—Flowers greenish white. Lip green, whole-coloured. This species is the most variable that I know in point of size. Some of Dr. Wallich's specimens are not more than an inch and half high, with two or three leaves and as many flowers on each individual, while others are six or seven inches high, with numerous distichous leaves, and three or four long nodding racemes, each consisting of eight or nine flowers. The species is always distinguishable by the loose membranous sheaths which clothe the stem when the leaves have fallen off.
60. *D. alpestre* (Royle Illustr. t. 88. fig. 2); caulibus brevissimis ovatis 3-4-phyllis, foliis lineari-oblongis, racemis 3-5-floris erectis, sepalis acuminatis cornu brevi obtuso, petalis minoribus, labelli trilobi lanceolati lobo medio acuminato crispo basi angustato lateralibus laceris, disco bilamellato.—*Himalayas*.—Stems and leaves only a few inches high. Flowers white, with a purplish lip.
61. *D. cuspidatum* (Lindl. no. 43); caulibus brevibus erectis 3-5-phyllis, foliis lineari-oblongis apice obliquis emarginatis, racemis terminalibus 3-4-floris foliis brevioribus, bracteis lineari-ovatis acutis, petalis sepalisque lineari-lanceolatis acuminatis æqualibus: horum lateralibus basi incurvis cornu referentibus, labelli trilobi petalis duplò brevioris lobis lateralibus maximis erectis rotundatis integerrimis: intermedio ovato acuminato.—*Tavoy*.—This resembles in many respects *D. denudans*, from which it is abundantly distinguished by the loose sheaths of the fallen leaves not covering the stem, and by the peculiar form of the lip. My specimens are from three to four inches high. The flowers appear to be white.
62. *D. microbolbon* (Ach. Richard. Ann. Sc. n. s. 15. t. 8); caulibus parvis ovatis aggregatis diphyllis, foliis oblongo-linearibus submembranaceis acutis, scapo gracili foliis longiori apice trifloro, racemo trifloro, petalis linearibus

obtusis, labello crasso erecto arcuato subcanaliculato quasi trilobo, lobis lateralibus minimis medio rotundato obsolete crenulato.—*Nilgherries*.—About three or four inches high. Lip pale green. Sepals whitish flesh-colour.

63. *D. pygmaeum* (Lindl. no. 45. *Dendrobium pusillum*, Don. Prodr. 35); caulibus erectis caespitosis vaginis laxis foliorum vestitis, foliis lineari-lanceolatis, racemis suberectis terminalibus multifloris foliorum longitudine, rachi angulato, bracteis membranaceis acuminatis, sepalis inferioribus ovatis acuminatis ad basin cornu incurvo connatis: supremo petalisque lineari-spatulatis acutis, labello unguiculato cuneato integro: callis duobus longitudinalibus in disco; margine anteriore carnosio crispato lobo intermedio ovato.—*Martaban*.—A very small plant, forming tufts. Very near *D. microbulbon*, but different in the form of the lip; and the flowers are much smaller.

NEARLY allied to the racemose *Dendrobium* just described is that curious race, already enumerated at t. 28 of our volume for last year, under the name of *Spatulata*. They are plants with hard stiff slender stems, clothed with coriaceous distichous leaves, and bear their flowers in long lateral many-flowered racemes. They are all remarkable for having the petals considerably longer than the sepals. In order to preserve some uniformity in nomenclature I would propose the name *Ceratobium* for them.

Sect. III. CERATOBIMUM. *Stems erect, slender. Leaves coriaceous, distichous. Racemes lateral, many-flowered. Petals much longer than the sepals.*

64. *D. taurinum* (Lindl. in Bot. Reg. 1843. t. 28.); foliis oblongis obliquè emarginatis, racemo oblongo, sepalis ovatis obtusiusculis, petalis linearibus contortis duplò longioribus, labello oblongo apice crispo per axin lineis 3 elevatis intermediâ apice flexuosâ aucto.—*Manilla*.—This has large flowers, with yellowish green sepals, rolled back at the points, very long deep purple twisted petals, and a paler purple lip, with three elevated lines along the middle, and a few small tubercles near the apex. The stem is five feet high.

65. *D. Mirbelianum* (Gaudich. Voyage, t. 38.); foliis ovato-oblongis obtusis, racemis ovatis longè pedunculatis, sepalis ovato-lanceolatis acutis erectis, petalis spathulatis unguiculatis obtusis longioribus, labelli trilobi ovato-lanceolati subsessilis lobis lateralibus rotundatis intermedio lanceolato undulato acuto, lineis tribus elevatis lateralibus versus basin duplicibus.—*New Guinea*.—The racemes, including their peduncle, are more than a foot long. The petals are an inch and a half long.
66. *D. veratrifolium* (Lindl. in London Jour. Bot. 2. 235.); foliis oblongis obtusis amplexicaulibus 9-11-nerviis, racemo terminali elongato multifloro, sepalis undulatis acutis, petalis spathulatis obtusis planis vix duplò longioribus, labello oblongo obtuso membranaceo venis tribus elevatis per axin duabusque minoribus lateralibus: lobis lateralibus nanis obtusis intermedio oblongo undulato.—*New Guinea*.—A most beautiful plant, with racemes a foot and a half long, loaded with flowers, whose spatula-shaped petals are an inch and more in length. The inflorescence is very loose in this; in *D. Mirbelianum* it is far more compact.
67. *D. macranthum* (A. Rich. Sert. Astrolab. p. 15. t. 6.); foliis ellipticis apice obliquo subbilobis, racemo longipedunculato versus apicem monophyllo, sepalis ovato-lanceolatis, petalis paulò longioribus unguiculatis lanceolatis acutis, labello lanceolato trilobo per axin tricarinato laciniâ intermediâ acuminatâ lateralibus nanis rotundatis.—*Vanikoro*.—The stem is described as two feet and more high; the leaves from three to four inches long, the raceme about a foot long, the flowers three inches in diameter. It is very near *D. veratrifolium*, but differs in having much shorter petals, and a very acute lip.
68. *D. antennatum* (Lindl. in London Journ. Bot. 2. 235); foliis lanceolatis carnosis obliquè emarginatis racemo oppositifolio brevioribus, sepalis acuminatis, petalis linearibus duplò longioribus reflexis, labello trilobo venis 5 elevatis rectis per axin; lobo medio ovato acuto plano 3-costato.—*New Guinea*.—This is a most curious thing, with flowers having their long horn-like petals directed backwards, and their sepals forwards. The petals are two inches long, and scarcely half a line wide.

The leaves are succulent, brittle, and veinless when fresh.

69. *D. undulatum* (R. Brown, Prodr. 332. L. no. 62. *D. discolor*, Lindl. in Bot. Reg. 1841. t. 52); foliis ovato-oblongis emarginatis, racemis longissimis, sepalis petalisque undulatis, labelli trilobi lobis acutis intermedio lanceolato, lineis quinque elevatis intermediâ apice fluxuosâ.—*Java, Tropical New Holland.*—A species with singular dingy yellow-brown flowers, of little beauty.
- 70? *D. affine* (*Onychium affine*, Decaisne herb. timor. 37); foliis lineari-oblongis acutiusculis coriaceis, pedunculo foliis triplo longiore oppositifolio? laxifloro, floribus spicatis; perianthio erecto, segmentis exterioribus lineari-lanceolatis acutis, interioribus subobovatis rotundatis mucronulatis; labelli unguiculati lobis 3, medio lineari-lanceolato, lateralibus subrotundis.—*Timor.*—Since M. Decaisne compares this with *D. Mirbelianum*, it probably belongs to the present section. The petals are said to be obovate and mucronate.

NEXT after these species must be placed those plants which Dr. Blume calls *Pedilonum*, of which one species only is known to me. In that I long since (Bot. Reg. 1839, misc. 169) stated that the structure is of the following singular nature:—In the first place the lateral sepals and the base of the lip are so united into a spur, that their separate nature is entirely concealed towards the point of the spur. In the next place the rostellum is a deep two-lobed lip curved down over the stigmatic surface. The pollen-masses are in two pairs, and deep purple; and, which is extremely curious, they lie upon a loose hard transverse crustaceous gland, which seems to replace the gland and caudicula of *Vandææ*, and which projects beyond the anterior edge of the anther, resting upon the two-lobed rostellum. The anther-bed itself is deeply excavated, and three-lobed, the anther adhering to the back lobe which is the narrowest.

Should these characters, all or any of them, prove common to the plants now collected into this section, there will be no doubt about their forming a perfectly distinct genus. In the mean while I would not extend its definition beyond that of Dr. Blume.

Sect. IV. PEDILONUM (Blume, Sect. 2.) *Stems erect. Racemes lateral. Lateral sepals united into a pouch, with which the base of the labellum is entirely coherent, without any articulation.* The flowers are said to be in all cases purplish.

71. *D. secundum* (Wallich. Cat. no. 1996. L. no. 29. Bot. Reg. t. 1291. *Pedilonum secundum*, Blume, p. 322); caulibus erectis, foliis oblongis apice obliquè retusis, racemis lateralibus terminalibus quæsecundis, sepalis ovatis: lateralibus basi in cornu longum obtusum incurvum connatis, petalis supremo paulò minoribus, labello integerrimo acuto apice tumido.—*Malacca, Java, Burma.*—Flowers very closely arranged in a one-sided spike, of various shades of purple. Pollen purple.
72. *D. erosum* (L. no. 52. *Pedilonum erosum*, Blume, p. 323); foliis subcoriaceis lanceolatis obtusis, racemis brevibus oppositifoliis subterminalibusve, sepalis obtusis, dorsali interioribus latiore, labelli limbo rotundato concavo eroso.—*Java.*—
73. *D. hymenophyllum* (L. no. 53. *Pedilonum undulatum*, Blume, p. 322. t. 36); foliis membranaceis lanceolatis inæquali-acuminatis, pedicellis brevibus, sepalo dorsali interioribus obtusis æquali, sacco calcariformi longissimo, limbo labelli undulato.—*Java.*—Sepals purplish. Labellum yellow.
74. *D. Kuhlii* (L. no. 58. *Pedilonum Kuhlii*, Blume, p. 321); foliis submembranaceis lanceolatis apice inæquali-obtusis, sepalo dorsali interioribus lato-lanceolatis latiori, labelli limbo spatulato acuto.—*Java.*—Flowers pale purplish.
75. *D. Hasseltii* (L. no. 59. *Pedilonum Hasseltii*, Blume, p. 321); foliis rigidis lanceolatis profundè obliquè emarginatis, sepalo dorsali interioribus lato-lanceolatis æquali, labelli limbo lineari-acuto.—*Java.*—Flowers deep purple.

We shall take an early opportunity of going on with the enumeration of this genus.

63. HYDROTÆNIA lobata.

Herbert in litt.

H. lobata; caule foliigero pedali vel ultra, foliis plicatis viridibus subpedalibus acutis $\frac{3}{4}$ unc. latis, spathâ multiflorâ biunciali vel ultra bivalvi, pedunculos rectos spatham superantes bracteis latis subæquantibus, germine brevi viridi, perianthii majori parte lutescentis laciniis $1\frac{1}{4}$ uncialibus fissurâ profundè lobatis bis (i. e. ungue cymbiformi et laminâ cymbiformi) lati-cymbiformibus, sepalorum unguibus semunciam latis et laminarum $\frac{3}{4}$ unc. latarum basi confertè brunneo-punctatis, petalorum angustiorum unguibus infernè sinu laterali utrinque angustatis brunneo-punctatis fasciâ transversâ mediâ aurantiacâ, summâ confertè purpureo-punctatâ globulis hyalinis pruinosâ, columnâ staminicâ $\frac{3}{8}$ unc. subcylindricâ luteo-virente, styli decidui lobis lutescentibus brevi parte integris superne bifidis (pessulâ mediâ nullâ) superne bifidis subtortuosè decurvis, antheris subrufescentibus dorso styli loborum parti integræ adpressis loculis despicientibus, capsulâ sulcatâ rotundatè trigonâ operculo obtuso.—*W. H.*

“This very pretty little plant, with speckled yellow flowers, was sent to Spofforth by J. Maclean, Esq. who found it on the hills above Lima. It has the habit and hardiness of *Tigridia*, and flowers freely at the same time in the border where the bulbs were set at the end of April, and seems likely to ripen its seed. It differs from *Hydrotænia Meleagris* and the described species of *Beatonia* in not having the little peg-like point in the fork of the style-lobes; it agrees with *Hydrotænia* in having the band across the lower part of the petals frosted with white globules, from which that plant received its name, and also in having the stem leaf-bearing and terminal as in *Tigridia*, instead of being extrafoliaceous, and accompanying or almost preceding the leaves as in the three described *Beatonias*; it seems, however, to me that *Hydrotænia* and *Beatonia* should be considered as sections of one genus, both having species with flowers pendulous and erect. *Hydrotænia* has the precedence in date, but the name by its meaning is limited, and cannot well embrace the *Beatonias*. Qu. *PARDINIA*? § *Hydrotænia*; caule foliigero, petalorum unguibus globulis hyalinis fasciatis; § *Beatonia*; c. extrafoliaceo, unguibus non gl. h. fasciatis.”—*W. Herbert.*

64. CALOSCORDUM.

Herbert.

CALOSCORDUM; (vel, si mavis, *Allium*, § *Caloscordum*.) Tubus cum pedunculo articulatus subsexangularis inferne ampliatus germen breve com-

prehendens ore membranâ inconspiciuâ staminiferâ munito, limbes tubum longè superans reflexè patens laciniis univervibus, filamenta vix inferne dilatata petalina ore tubi sepalina parum infra inserta, antheræ parvæ, stylus cylindricus brevis citò marcescens non deciduus, stigmata tria breviter tenuia patentia, capsula subrotunda, folia linearia, semina obovata, rugosa, nigra, hilo albedo; odor alliaceus nullus.—*W. H.*

Sp. 1. *C. Neriumflorum*; bulbo parvulo, foliis dodrantalibus $\frac{1}{2}$ unciæ latis subglaucis crassis dorso rotundato superficie subcanaliculate planâ, caule 7-unc. vel infra tenui, spathâ $\frac{3}{8}$ unc. univalvi latâ 1-2-bracteata, pedunculis subduodecim $2\frac{1}{2}$ unc. vel infra, perianthio vix semunciali roseo-purpurascente striâ mediâ obscuriore. *Habitat insulam Chusan dictam. Allium Chinense fl. dilutè violacèis proculdubio Caloscordi species.*

This plant was sent to Spofforth by J. Trevor Alcock, Esq. who received it from Chusan when that island was occupied by our troops, and it has since flowered three seasons. The foregoing description renders it almost necessary to advert to Prof. Kunth's Enumeratio, &c. art. Aspicdeleæ. The name Pseudoscordum was proposed (Herbert Amaryllidaceæ, Prelim. Tr. p. 11 & Index) for the scentless race of Allium, as a genus distinguished from the rest; Prof. Kunth has thought fit to separate them by the name Nothoscordum, an alteration without cause which is not admissible; but in fact all these plants (as well as Hesperocordum, which does not appear very clearly separable from Allium senescens and some other species,) are perhaps to be considered rather as sections of Allium. The public, when told that Prof. Kunth's character of Pseudoscordum (named by him Nothoscordum) extends to twenty-six closely printed lines, may perhaps expect to find that its separation from Allium is strictly defined; but it will be found that it is not directly distinguished therefrom by him in any one respect, and even the important fact of the absence of the alliaceous scent is omitted; the plant being contrasted not with Allium, but with Dr. Lindley's Hesperocordum, which name he has also thought fit to alter without reason to Hesperoscordum. And here it is necessary to pause and enter a protest on behalf of the public against Prof. Kunth's work altogether, as compiled on such an injudicious plan, that as to generic characters it perplexes, instead of assisting, the inquirer. If the compiler and arranger of such a work has any useful and legitimate office, it is to simplify and render manifest the important points by which vegetables are connected with each other, and, subordinate to those demarcations, the lesser points by which they are distinguished. Prof. Kunth, on the con-

trary, has heaped together in each character every feature he could pick up whether trivial or important, without reference to the character of the plants most nearly allied, except occasionally in a subsidiary remark; and he absolutely confounds his reader, who has to compare these long characters with each other word by word to ascertain wherein they differ, and to his distress finds that they are not prepared in antithesis to each other, and that, although in most respects they may be substantially one, the same point is perhaps expressed in different words, while, concerning other points stated as to one genus, it does not appear how the fact stands with respect to others allied thereto. The further evil is, that as the Professor cannot have personally inspected such a multitude of features in every species of every genus, the facts asserted concerning the whole genus will be found in many respects incorrect; and, if they were correct, the reader has no means of judging which are the real points, a departure from which must cause a plant to be removed from the genus. Such a work therefore becomes a public encumbrance, and Professor Kunth is earnestly entreated in his further volumes to pursue the plain course of simplifying the generic characters, inserting no features which are not essential, and from which a departure would not be inconsistent with generic identity; and to place all minor points in the mass of subsidiary observations, amongst which any accidental inaccuracy will not disturb the basis of classification. Prof. Kunth, in attempting to distinguish *Pseudoscordum* from *Hesperoscordum* of Dr. Lindley, gives three points, spathe with only two valves, (though Dr. Lindley did not mention the absence of secondary valves or bractes as characteristic of *Hesperoscordum*), style persistent and not articulate, (a fact which seems to be incorrect, for I have *Hesp. lacteum* now before my eyes, perfecting its seed with the style firmly persistent on every capsule), and the want of three glands on the summit of the ovary; but he omits the main feature, viz. the membranaceous dilatation and connection of the filaments, and the articulation of the perianth with the footstalk, which is correct, though he puts a ? to it in the character, and adds to "stigma simplex" therein, that it is three-lobed in the figure, which is not the case, for it is merely triangular even in the magnified figure. The facts concerning *Pseudoscordum* as a section of *Allium* rather than a genus are, *Folia linearia*,

tubus turbinatus germine brevior, pedicello continuatus, laciniaë limbi subæquales tubo valde longiores, filamenta complanata apice filiformi, sepalina ori tubi petalina supra inserta, antheraë parvulaë, stigma trigonum, stylus persistens, germen obtusum breve trisulcum, odor alliaceus nullus. *Quoad, vidi, petala sepalis parum augustiora.* Caloscordum is therefore distinguished therefrom thus, — tubi germen comprehendentis formâ et articulo, filamentis profundius insertis non membranacè dilatatis, stylo marcescente, limbi flexu. The subject cannot be dropped, without adverting to the next genera *Triteleia* and *Brodiaëa*, concerning the first of which Professor Kunth says, that it differs in nothing but a trifid stigma and emarginate anthers from *Pseudoscordum*, and is rather a section thereof, entirely discarding the connection of the latter with *Allium*. Such trivial differences would not even constitute a section. Germe tenuiter productum basi longè stipitata, tubus longè infundibuliformis limbum valde longitudine superans, are amongst other differences which separate *Triteleia* from *Allium* and its subordinates. Concerning *Brodiaëa*, which Prof. Kunth has confined to one species, *grandiflora*, elevating *congesta* into a genus which he names *Dichelostemma*, it must be remembered that both were figured and described by Salisbury in *Paradisus Londinensis* under the name *Hookera*, in compliment to the excellent artist of that work, and that Salisbury therein accused Sir J. E. Smith of having read a paper, wherein he named the plants *Brodiaëa* without noticing his name and definition after it had been published. I do not know the correct facts, so as to decide whether the name *Brodiaëa* did properly supersede *Hookera*, but if *congesta* is not of the same genus (as Prof. Kunth asserts) with *grandiflora*, on which Salisbury founded *Hookera*, that name should remain to the latter plant, and Smith's *Brodiaëa* be confined to *congesta*. Professor Kunth's new character for *congesta* is contained in 21 lines, ending thus, *It is distinguished from Brodiaëa by the habit and form of the sterile stamens.* Let us see what difference he states. None distinctly! but on comparing the two descriptions we find that in the latter they are merely stated to be "*petaloid, much longer, lance-spathulate*;" in the former they are stated to be also petaloid, and their length is not noticed, leaving no point but *lance-spathulate* for contrast with his description,

(as to *congesta*) “ bifid, shortly cuspidate between lobes tending to the shape of a knife, having the appearance of a triple crown.” The upshot of this is merely that the barren stamens in one are entire, and in the other split into two acute lobes at the end, with sometimes an irregular side-tooth, a very good specific feature. Who ever thought of separating *Iris* into genera on account of the indentures of the margin of its crests? I shall perhaps surprise the reader by stating, that, as far as I know, the asserted hypogynous scales in *Brodiaea* seem to be a fallacy, and that no such thing has existed in any of the flowers I have examined of either species. The perianth is thick, and Salisbury was deceived by remaining fragments thereof when he thought he had pulled it off, and others have, I suppose, taken them for granted. Therefore “*squamæ hypogynæ nullæ*” in other genera is superfluity. The supposed scales in *Pyrolirion*, which deceived Ruiz, were an articulate base to the alternate filaments. The difference stated by Kunth that *B. congesta* has the sepals, and *grandiflora* the petals, widest, is incorrect: the petals are widest in both. Prof. Endlicher places *Triteleia* and *Hesperoscordum*, with genera intervening between them, in *Agapantheæ*, and *Allium* in *Asphodeleæ*, dividing the original *Asphodeleæ* into suborders, which Prof. Kunth wisely, (because they are not correct) but, I believe, silently, rejects. On examination of the characters of those new suborders, (as well as of *Aloineæ* which intervenes) it will be found that there is no true distinction, the one suborder by alternatives admitted in its character comprising the points to which the other is limited, while other distinctions are incorrectly assumed. The only positive difference asserted is in the seeds, and that in some respects inaccurately, in others insignificantly. It is not a fact that his *Agapantheæ* have a black or pale membranaceous, and his *Asphodeleæ* a black crustaceous shell, nor are those distinctions true even as to genera. Some of the Cape *Ornithogala* have a less crustaceous shell, more compressed and less globosc, than most other *Ornithogala*, or the genera *Triteleia*, *Brodiaea*, and above all *Calliprora*, in his *Agapantheæ*; and *Scilla amœna* in his *Asphodeleæ* has the shell rufous brown amongst its black-seeded congeners.

W. Herbert.

65. *CESTRUM aurantiacum*.

C. aurantiacum; glabrum, foliis petiolatis ovalibus acutis undulatis, floribus sessilibus spicatis, bracteis deciduis, calyce lucido 5-costato 5d-entato, corollâ glabrâ infundibulari limbo reflexo, filamentis basi pubescentibus denticulo auctis.

This beautiful shrub rivals *Jacquinia aurantiaca* in colour. It has smooth, wavy, light green leaves, and spikes of glowing orange-coloured flowers, a full inch long. The Horticultural Society raised it from Guatemala seeds communicated by G. U. Skinner, Esq., and it has lately flowered in the Chiswick Gardens. Its native place is said to be Chimalapa. It will form a most beautiful greenhouse shrub, and as its habit is good, while its flowers do not easily drop off, it will doubtless become a favourite with exhibitors.

66. *MAXILLARIA scabrilinguis*.

M. scabrilinguis (*Cyrtopera scabrilinguis*, Lindl. Gen. & Sp. no. 3.) ; pseudobulbis ovatis elongatis sulcatis, foliis basi angustatis scapo erecto multifloro longioribus, bracteis acutissimis ovario brevioribus, sepalis petalisque lineari-oblongis acutis lateralibus falcatis, labelli trilobi lobis lateralibus rotundatis intermedio ovato carnosissimo subtereti obtuso longiore : utrâque facie papillis densissimis versus callum oblongum tricostatum decrescentibus obsitâ, antherâ pubescente.

By an error, resulting from the examination of insufficient specimens, this plant, which is nearly allied to *M. squalens*, was referred to *Cyrtopera* in the "Genera and Species of Orchidaceous Plants." It is a native of the neighbourhood of Loxa, where Mr. Hartweg found it, and it has flowered recently in the Garden of the Horticultural Society. The flowers are dull purplish yellow. The labellum is remarkable for having all its end, inside and out, covered over with stiff short pale tubercules, terminated by a purple stain.

67. *DICHÆA glauca*.

Lindl. Gen. & Sp. Orch. no. 7.

This, the finest of its curious genus, and delightfully sweet-scented, has flowered with Messrs. Loddiges, who have received it from Oaxaca, where, as in other parts of Mexico, it is common. The leaves, which are placed in two rows, in

an imbricated manner, are quite blue with bloom on the underside. The flowers are pure white, except a spot of yellow at the very base of each division.

68. HABROTHAMNUS cyanëus.

H. *cyaneus*; incano-tomentosus, foliis ovato-oblongis undulatis acuminatis petiolatis, floribus aggregatis axillaribus pedunculatis, calyce ventricoso basi obtuso 5-dentato irregulari, corollâ cylindraceâ truncatâ 5-dentatâ margine albo pubescente, staminibus corollæ longitudine, filamentis infra medium villosis.

This promises to be a plant of some importance, notwithstanding a coarse grey downy foliage; for it produces in great profusion clusters of long flowers of a deep porcelain blue colour. The corolla has so abrupt a termination that it looks as if it had been eaten off by some insect. Mr. Hartweg found it forming a shrub four to six feet high, on the mountains of Yangana, near Loxa. It has lately flowered in the garden of the Horticultural Society.

69. GALEANDRA cristata.

G. *cristata*; sepalis petalisque lineari-lanceolatis reflexis, labello convoluto margine crispo intus pubescente et basi bicarinato calcare acuminato horizontali, antheræ cristâ rhombeâ unguiculatâ.

A native of Cayenne, whence it was received by Messrs. Loddiges (Cat. 1308) in 1840. It has the habit of G. Devoniana, but the flowers are much smaller and paler, and the anther has a very singular crest, resembling a purple lozenge mounted on a white shaft.

70. BOLBOPHYLLUM recurvum.

Lindl. Gen. & Sp. Orch. p. 53. no. 30.

It is a very curious fact that this little plant, originally brought from Sierra Leone, should prove to be also an inhabitant of the New World. That it is so has been ascertained by Messrs. Loddiges, who received it from Guiana in 1839; the specimens that have just flowered having proved to be identical in all respects with the African plant. *Angræcum* or *Æccoelades maculatum* is another instance of the same kind.

71. CAMAROTIS obtusa.

C. obtusa; labello calceiformi lobulo terminali truncato obsolete tridentato inflexo intus appendice bilobâ canaliculatâ aucto, columnâ tortâ, rostello ungue labelli vix longiore.

I have only seen a few flowers of this, which was given by Mr. Bateman to Messrs. Loddiges. It is of Indian origin, and has dull dirty rose-coloured flowers, with a yellow lip. They are much larger than in *C. purpurea*, but by no means so handsome. The little lobe at the end of the lip is fleshy, slightly 3-lobed, and furnished with a singular 2-lobed channelled appendage. The column is twisted half round, as in *Mormodes*.

72. ARALIA macrophylla.

A. macrophylla; lævis, inermis, herbacea, foliis tripinnatis, foliolis petiolatis cordatis oblongis serratis acuminatis nunc trilobis, umbellis composito-racemosis.

This is an herbaceous plant from the North of India, looking like *A. racemosa*, but much larger in all its parts. The flowers, which are greenish-yellow, have been produced in the garden of the Horticultural Society, where the plant has been raised from seeds presented by the East India Company.

73. BOLBOPHYLLUM pileatum.

B. pileatum; floribus solitariis glabris, sepalis oblongis obtusis lateralibus convexis longioribus, petalis conformibus duplò angustioribus, labello linguiformi obtuso lævi pone basin bijugato inter juga subaspera nectare lucido obducto, columnâ tereti muticâ, antherâ conicâ cum dente postico columnæ subulato articulatâ, polliniis 4 inæqualibus.

A native of Singapore, and No. 178 of Messrs. Loddiges' last catalogue, by whom it was received from Singapore in the year 1840. It has a large yellow-ochre-coloured flower, with a nearly flat moveable labellum stained with two purple ridges near the base, between which is a little bright yellow valley, secreting a mucilaginous matter along its whole length. The anther is conical, like an old-fashioned high-crowned hat.

74. PILUMNA laxa.

Among the curious plants that have flowered this year with Mr. Barker is the present, which is said to have been pur-

chased at Mr. Skinner's sale, and which, if there is no mistake in the matter, must have come from Guatemala. It is, however, so exactly like specimens found in Popayan by Mr. Hartweg, that we cannot help suspecting some error. Its general appearance may be understood by its having been mistaken for a *Trichopilia*. Its flowers are produced in loose erect racemes, out of broad obtuse short membranous spotted bracts. The stalks and ovary are an inch and half long; the latter with three very stout and strong ribs. The sepals and petals are a pale watery green, erect, linear-lanceolate, equal, faintly tinged with purple. The lip is cream-colour, rolled round the column at the base, to which it also is united at the lower end. The column has a singular fringed hood, overlying the anther, and a nearly vertical stigma, closed in by fleshy inflected cheeks. In these circumstances it differs from *Aspasia*, to which the genus is nearly akin. Mr. Hartweg found in the same country another species, of which and the present the following are the technical characters.

PILUMNA. *Ovarium* tricostatum. *Sepala* et *petala* æqualia patula obliquè inserta. *Labellum* basi columnæ adnatum, subintegrum, unguiculatum, convolutum, inappendiculatum. *Columna* clavata, teres, clinandrio cucullo dentato membranaceo circumdato; buccis duabus carnosis semiclausum. *Stigma* verticale. *Pollinia* 2, posticè fissa, caudiculæ brevi et glandulæ ovatæ adnata.—*Herbæ epiphytæ, pseudobulbis vaginatis, foliis coriaceis, pedunculis radicalibus.*—Genus *Aspasiæ* proximum, clinandrio cucullato, columnâ tereti, nec non stigmatè verticali nec faciali diversum.

- Sp. 1. *Pilumna laxa*; folio lineari-oblongo, racemo laxo multifloro breviorè, bracteis laxis cucullatis obtusis, sepalis petalisque lineari-lanceolatis, labello oblongo indiviso rotundato medio constricto per axin unilamellato. —*In the woods of Timbio near Popayan.*
- Sp. 2. *Pilumna fragrans*; folio lato oblongo, racemo 2-3-floro breviorè, bracteis lanceolatis erectis obtusis, sepalis petalisque oblongo-lanceolatis acuminatis, labello oblongo apiculato subtrilobo lævi.—*Near the city of Popayan.* —Flowers large, white, sweet-scented, with an orange-coloured spot on the lip, according to Mr. Hartweg.

75. EPIDENDRUM purum.

E. purum (§ *Eucpidendrum*); caule elongato tereti, foliis ensiformibus obtusis, floribus paniculatis ramis (3) racemosis gracilibus foliis paulo erectioribus, sepalis angustè lanceolatis, petalis linearibus, labelli tripartiti basi 5-costati laciniis ovatis acutis.

A Caraccas plant, sent by Linden to Mr. Rucker, with whom it flowered in the beginning of September. The leaves are not half an inch wide, and six or eight inches long. The flowers are in a thin paniced raceme, of a light pale green colour, and about the size of those of *E. nutans*.

76. ONCIDIUM spilopterum.

O. spilopterum (*Euoncidia*, *Pentapetala*, *micropetala*, *pandurata*); pseudobulbis compressis oblongis diphyllis, foliis erectis oblongis scapo erecto racemoso brevioribus, sepalis ovatis acutis liberis, petalis conformibus latioribus, labello maximo trilobo subrotundo emarginato apiculato lobis lateralibus nanis obtusis, cristâ anticè trilobâ jugis quibusdam verrucisque utrinque pone basin quasi 5-lobâ, columnæ alis semicordatis crenulatis maculatis.

A handsome *Oncidium*, with quite a peculiar habit, imported from Brazil by Messrs. Loddiges. Its flowers are large and yellow, with small brownish purple sepals and petals; the base of the labellum is the same colour; while the wings of the column are clear yellow, spotted with crimson. The flowers grow in an erect raceme, longer than the leaves. It may be stationed between *O. Lanceanum* and *Carthaginense*.

77. HABENARIA candida.

H. candida; caule diphylo, foliis undulatis acuminatis, spicâ pauciflorâ (4-5), bracteis acuminatis herbaceis ovario brevioribus, sepalis ovatis acutis subæqualibus dorsali horizontali, petalis indivisis galeatis obtusis, labello integerrimo ensiformi, calcare pendulo ovario duplò longiore apice bilobo.

The flowers of this rare Orchidaceous plant are scentless and snow-white, without the least trace or stain, except on the spur, which is pale green. They are of the size of those in *Cynorchis fastigiata*, of which the plant has the habit. Messrs. Loddiges received it from Sierra Leone, and it is No. 1901 of their last catalogue.

78. WARREA bidentāta.

W. *bidentata*; bracteis pedicello 4-plo brevioribus, labelli apice bidentati venis valdè convexis flabellatis lamellis altis intermediâ duplò majore.

At first sight we took this for Warrea tricolor. Its lip is however regular, slit at the end, the veins are much more convex, and the central plates thinner and deeper than in that species. The bracts too are not half the length. Sent from the Caraccas to Sigismund Rucker, Esq. with whom it flowered in the beginning of September.

79. ERIA vestita.

(*Dendrobium vestitum*, Wall. *Cat. no.* 2005. *Lindl. gen. & sp. no.* 33.)

E. caulibus pendulis villis deciduis densè vestitis, foliis coriaceis lanceolatis apice obliquis obtusis integris suprâ sparsè subtùs deusissimè villosis, racemis elongatis multifloris flexuosis bracteis ovatis coriaceis persistentibus floribus capsulisque villosis, sepalis lanceolatis lateralibus in cornu obtuso porrecto connatis mucronulatis, petalis conformibus obtusis brevioribus glabris, labelli trilobi laciniis lateralibus obtusis intermediâ subrotundâ crispâ emarginatâ pilosâ per axin lineâ elevatâ interruptâ velutinâ dentibusque paucis auctâ, lamellis 7 quarum duæ lanceolatæ sinus fere attingentes et quinque parvæ dentiformes.

This singular plant, with the structure of a woolly Eria, and the habit of a pendulous Dendrobium, is a native of the Indian Archipelago. Dr. Wallich's collectors had it from Sincapore, and Mr. Cuming sent it from Manilla(?) to Messrs. Loddiges. It is singularly clothed with a thick reddish brown hairiness. The flowers are reddish brown externally, white inside, and hang down in pendulous spikes, which are longer than the leaves.

80. AMARYLLIS Slateriana.

(*Herbert MSS.* Amaryllis Banksiana, *supra* 1842. t. 11.)

In the opinion of the Dean of Manchester this is not the plant to which he gave the name of Banksiana in his work on Amaryllidaceæ (p. 279. t. 32. f. 2.), and he proposes that it should bear the name of James Henry Slater, Esq. of Newick Park, near Uckfield, to whom we are indebted for our knowledge of it, and whose great success in cultivating

Cape bulbs has conduced so much to our knowledge of these beautiful things. We are most happy to give effect to Dr. Herbert's recommendation, for certainly, be its name what it may, it is one of the finest species we yet possess. "The flowers are very much smaller than those of *A. Banksiana*," but we are not sufficiently acquainted with the genus to be able to draw up a satisfactory specific character.

81. NAPOLEONA imperialis.

Palisot de Beauvois Fl. d'Oware et de Benin, 2. 33.

Among the most remarkable plants that have hitherto been discovered ranks this rare species, of which living plants have been lately brought from Sierra Leone by Mr. Whitfield. That indefatigable collector having given me a dried specimen with a seed, and the Earl of Derby having most kindly placed in my hands a bottle containing the flowers in different states, an opportunity has arisen for clearing up the history of one of the most obscure genera in the records of Systematical Botany.

Napoleona was so named by the late M. Palisot de Beauvois, who first found it in the kingdom of Oware, in Western Africa, where it was common, especially in the woods behind the King of Oware's residence. From fragments preserved by that naturalist a good figure, so far as general appearance goes, was published; but with extremely inaccurate and incomplete details. The flowers were represented as being sky blue, with a sort of 5-rayed star of a pink colour in the middle, and upon the whole the account which he gave of it was so unsatisfactory, that the very existence of the plant has been doubted by some people. In what De Beauvois was right and in what wrong, the following description will shew.

It forms a *bush* about as large as a *Camellia*, according to Mr. Whitfield. The *wood* is soft, whitish, with large medullary rays, an abundance of dotted vessels, intermingled with brittle acicular tubes of woody tissue, very like what is found in the germinating radicle of a Mangrove. No hairs are to be found on any part of the plant.

The *leaves* are alternate, leathery, between three and six inches long, obovate-lanceolate, tapering to an obtuse point,

and narrowed at the base into a thick channelled petiole about $\frac{1}{2}$ of an inch long ; there is no trace of *stipules*.

The *flowers* grow in threes, sessile in the axil of the leaves, and are surrounded at their base by several round imbricated scales, as in *Camellias* ; when expanded they measure two inches in diameter ; Mr. Whitfield states that when decaying they assume a bluish tint, which has probably led to De Beauvois' error in representing them as almost wholly blue in their perfect state.

The *calyx* is a thick leathery cup, divided into five ovate segments, having a perfectly valvate æstivation.

Within this is placed the *corolla*, which consists of three distinct rings, each of which is monopetalous. *The first ring* is apricot colour, divided into five lobes, each of which has seven stiff ribs, between which the texture is membranous ; the lobes have seven broad teeth, corresponding with the points of the ribs, and much curled and crumpled ; by means of the ribs and intervening membrane, this part of the corolla is strongly plaited both before and after expansion ; when fully blown it turns quite back over the calyx, so as to hide it completely. *The second ring* is very small and thin ; it is in fact a narrow membrane, stationed at the foot of the first ring, and cut into an indefinite number of fine narrow sharp-pointed segments ; this ring was overlooked by De Beauvois. *The third ring* is rich crimson, according to Mr. Whitfield, membranous, but erect, and assuming the form of a cup, whose edge is cut into many fine segments, turned downwards, so as not to be at all conspicuous. De Beauvois makes this a flat star of many points, which is altogether an error.

The *stamens* are in number 20, standing erect in the form of another cup, of a rich apricot colour, and unequally united at their base ; they have linear-lanceolate filaments, which are much thinner next the anthers, and are there turned inwards ; the anther itself is oblong, 2-celled, and erect ; it is difficult to conceive how De Beauvois could have made out of this five petal-like filaments, each of which bears two anthers.

Next the stamens comes a deep fleshy *cup* or *disk*, standing as high as the stigma, and having ten sides, of which the narrowest are alternate with the lobes of the stigma, and two-ribbed in the inside.

The *ovary* is buried beneath the mass formed by the base

of the corolla, stamens and disk, so that unless you cut into the very base of the ovary the cells may be overlooked; it has five cells, in each of which two ovules hang from the top of an axile placenta, which is so attached to the partitions that there is a clear opening from the hollow centre of the style, over the ovules, into the cells of the ovary; the *ovules* are oblong, with a depression in the middle on each side, and a foramen next the base, the nucleus being curved like a horse-shoe, so that its base and apex are both nearly in contact; the *style* is 5-angled, or rather 5-winged, and terminated by a table-shaped *stigma*, with five sides, five rays, and a small elevation at each angle, which elevations are perhaps the true stigmatic surfaces.

The *fruit*, according to De Beauvois, is a soft spherical berry, surmounted by the calyx, one-celled, many-seeded, the seeds lying in a fleshy matter; this is evidently incorrect. Mr. Whitfield found it to be as large as a Pomegranate, and very like one, containing a mucilaginous pulp which is eatable, and a rind so full of tannin, that the natives make an ink from it.

The *seeds* (of which I have seen one, dead and without its skin) are large amygdaloid bodies, kidney-shaped, and as much as $1\frac{1}{4}$ inch long, with the taste (in that state) of a Spanish chesnut, but with a bitter aftertaste; at their contraction the plano-convex cotyledons hold together by an axis whose radicle and plumule are both immersed in the substance of the cotyledons.

Such being the true structure of this plant, its generic character may be stated thus.

NAPOLEONA.

(*Palisot de Beauvois fl. d' Oware et de Benin, vol. 2. p. 29. t. 78.*)

Calyx adhærens, coriaceus, 5-fidus, æstivatione valvatus.

Corolla e verticillis tribus plicatis monopetalis constans, quorum *exterior* maximus, 5-lobus reflexus, laciniis 7-costatis dentibusque totidem crispis acuminatis; *secundus* ascendens, annuliformis, altè multipartitus, laciniis linearibus acuminatis crispis; *tertius* erectus, cyathiformis, plicatus, margine multifido inflexo. *Stamina* 20, corollæ interioris basi inserta, serie simplici, basi irregulariter

monadelphæ; *filamentis* linearilanceolatis, membranaceis, apice tenuiori incurvis; *antheris* deflexis, oblongis, bilocularibus, basi fixis. *Discus* cyathiformis, altus, carnosus, 10-angularis, subplicatus. *Ovarium* adhærens, carnosum, loculis 5, in imâ basi pedunculo proximâ sepultis; *ovulis* 20, campylotropis, superpositis, per paria apici placentæ axilis semiliberæ affixis. *Stylus* pentagonus, angulis subalatis; *stigma* disciforme, pentagonum, 5-radiatum, intra angulos glandulam verruciformem (an verum stigma) gerens. *Fructus* (Mali Punici magnitudine, pulpâ mucosâ faretus, cortice austerâ *Dom Whitfield*). *Semina* fabæ magnitudine, reniformia, exalbuminosa; *cotyledonibus* plano-convexis, radiculâ immersâ.

In the total absence of all correct information as to the real structure of this curious genus, Botanists have been unable to arrive at any satisfactory conclusion as to its affinities. All that they have been able to settle is its not belonging to any known natural order.

Palisot de Beauvois stated (1807) that in the opinion of Jussieu, it constituted a new order between *Cucurbitaceæ* and *Passifloraceæ*; a view that was probably taken in consequence of the double-ringed corolla, which is analogous to the coronet of the Passion-flowers, and the plaited corolla with an inferior ovary, which brings to mind the flowers of the Gourd Tribe.

Desfontaines, on the contrary (1820), refers it, and another genus which he calls *Asteranthus*, without any doubt, to *Symplocaceæ*, because of its monopetalous perigynous corolla, its stamens inserted in the base of the corolla, its oblong two-celled anthers, single style, inferior ovary, axillary solitary flowers, shrubby stem, and alternate leaves.

Him follows Dr. Robert Brown (1822), who formed it and *Asteranthus* into an order called *Belvisiæ*, without, however, attempting to settle its position in the natural system. He objected to approximating it to *Symplocaceæ*, doubted its affinity to *Passifloraceæ*, and compared its structure with that of *Rafflesia*.

Latterly no one seems to have attempted to suggest anything new as to its relationship. Endlicher puts it next *Symplocaceæ*. Meisner next *Passifloraceæ*, adding to what had been previously known of it, that its seeds are arillate, a

mistake (?) that probably originated in De Beauvois' description of them "Semina in pulpâ carnosâ nidulantia." Finally, I myself, feeling that these could not be its true affinities, placed it in the Campanul alliance, with marks of great doubt.

It is obvious, from the foregoing description, that *Napoleona* has nothing to do with any of the orders to which it has been referred. From *Cucurbitaceæ* it differs utterly in its hermaphrodite flowers, axile placentation, highly developed corolla, and whole habit; it has in fact no resemblance to that order. *Passifloraceæ* seem at first sight to claim a much nearer relationship; because of the triple-rowed corolla of *Napoleona*, which much resembles the coronet of a *Passiflora*; but there the resemblance ceases. The tendrils, parietal placentæ, free ovary, distinct styles, polypetalous corolla, imbricated calyx of *Passifloraceæ*, are all most essentially at variance with the genus. *Symplocaceæ* were a far better guess, for the monopetalous corolla, indefinite epipetalous stamens, axile placentæ, adherent calyx, and definite seeds of *Napoleona* find there a parallel; but the ovary of that genus is wholly adherent, with a great epigynous disk, the calyx is valvate, and the seeds have no albumen, to say nothing of the lacerated condition of the corolla, which is not to be wholly disregarded in a consideration of this kind.

To me it appears that the true affinity is in the neighbourhood of the Mangroves (*Rhizophoraceæ*); for the following reasons. The ovary is in both inferior, few-seeded, with axile placentæ; both have a coriaceous valvate calyx; both have large amygdaloid seeds without albumen. The placenta of *Kandelia* is almost the same as that of *Napoleona*, and in the former genus the petals are broken up into numerous fringes quite analogous to those of the genus in question. To this may be added the great resemblance that exists between the wood of *Napoleona* and of young *Rhizophora*, in consequence of both consisting in part of slender acicular tubes, which give the wood, when broken across, the appearance of containing slender bristles. Finally, the ribbing, which is so conspicuous in the outer corolla of *Napoleona*, is repeated in the calyx of *Bruguiera gymnorhiza*. It is true that the one genus is monopetalous and the other polypetalous, but I cannot attribute much importance to that character in a case where the stamens adhere so slightly to the corolla.

While, however, there is this reason to believe that *Rhizo-*

phoraceæ will prove most nearly related to Napoleona, the affinity of the genus to some Myrtaceæ, is not to be overlooked; as, for example, to Verticordias, in which there is the same tendency to a multiplication of the series of the corolla, to Careyas, whose fruit has a very similar structure, and to Barringtonias to which Napoleona is very similar in foliage; but these affinities are less striking than that of the Mangrove tribe. They shew, however, pretty clearly that Belvisiaceæ, for so it is most convenient to call the order of which Napoleona is the most conspicuous member, belongs to the great Myrtal alliance.

82. The Section of EPIDENDRUM named SPATHIUM.

This is one of the divisions of Epidendrum proposed in *Hooker's Journal of Botany*, vol. 3. p. 81, and is distinguished by its stem being slender leafy and erect, its flowers placed on a long peduncle, which proceeds from a spathe consisting of one or more equitant bracts, and by its labellum being wholly attached to the corolla. It differs from § AULIZEUM in its stem being covered with leaves and not pseudobulbous, with two or three leaves at the end only. It is also very near § AMPHIGLOTTIUM, from which it is distinguished by the branches not being excessively lengthened and covered with close pressed scales below the flowers. In their stead there is usually a long sheathing spathe, like that of Cattleya, out of which the inflorescence proceeds: occasionally there are several of such spathes. *E. (Amphiglottium) cornutum* is one of the connecting links between the two sections.

§ SPATHIUM.

SPATHIUM, *Lindl. in Hooker's Journal of Botany*, 3. 81. (1841).

* *Lip undivided.*

1. *E. grandiflorum* (*Lindl. in Hook. Journ.* 3. 86); foliis distichis ensiformibus obtusis, racemo denso terminali basi flexuoso e spathâ duplici orto, sepalo dorsali ovali lateralibus duplo latioribus dimidiatis, petalis linearibus, labello subrotundo cordato emarginato margine postico crispo venis baseos 2 elevatis.—*Peru.*—A plant with the inflorescence of *E. variegatum*. Flowers coriaceous,

about twice as large as in that species.—(Not in cultivation.)

2. *E. Scutella*; foliis coriaceis ovato-lanceolatis distichis, spathâ brevi latâ acinaciformi pedunculo æquali, racemo umbellato paucifloro, sepalis petalisque linearilanceolatis, labello oblongo cordato plano ecalloso.—*In the woods of Guayan, on the western slope of Pichincha, rare.* (Hartweg.)—Flowers greenish yellow, very large. Lip full an inch long. Spathe very broad, about half an inch long.
3. *E. mancum*; foliis 3-4 oblongis obtusis carnosis obliquè emarginatis supremo spathæ longitudine, racemo stricto multifloro foliis multò longiore, floribus carnosis, sepalis subrotundo-oblongis obtusissimis, petalis spathulatis apice concavis, labello minimo postico carnosio concavo indiviso callo magno margine membranaceo in medio.—*On the Cordillera, near Loxa, flowering in July.* (Hartweg.)—Flowers rather small, orange and yellow.
4. *E. adenoglossum* (Lindl. in Hook. Journ. 3. 86); foliis carnosis linearilanceolatis obtusis, racemo elongato simplici terminali e spathâ ancipiti pedunculo brevioro orto, sepalis ovatis reticulatis, petalis linearibus 3-veniis acutis, labello linearilanceolato basi callis 3 instructo.—*Peru.*—Flowers small, in a thin spike.—(Not in cultivation.)
5. *E. ventricosum* (Lindl. in Hook. Journ. 3. 86); foliis linearilanceolatis acutis, racemis angustis multifloris e spathâ linearilanceolata orto, floribus membranaceis, sepalis subæqualibus oblongis acutis, petalis filiformibus, columnâ ventricosâ, labello ovato cordato acutissimo basi bicalloso.—*Peru.*—A slender plant, with the stem about six inches up to the commencement of the spathe. Racemes from 4—5 inches long, including the spathe which covers the whole peduncle. Flowers purple, small, membranous.—(Not in cultivation.)

* * *Lip more or less three-lobed.*

6. *E. brachyglossum*; foliis linearilanceolatis apice rotundatis obliquis, racemo elongato simplici terminali nutante e spathâ ancipiti pedunculo brevioro orto, floribus carnosis, sepalis obovatis concavis, petalis linearibus 3-veniis acutis, labello brevi trilobo: laciniis lateralibus nanis intermediâ ovatâ: callis duobus lamellæformibus tuberculoque inter-

jecto instructo.—*On the western face of the Andes, near Nanegal.* (Hartweg.)—A slender creeping rooted plant, with small flowers and the appearance of *E. adenglossum*, but the leaves are narrower and the lip has a different form.

7. *E. leucochilum* (Klotzsch in *Gartenzeit.* 1843. p. 145); foliis distichis coriaceis patenti-recurvis obtusis emarginatis subtus costato-carinatis, racemo simplici terminali 6-floro e spathâ ancipiti pedunculo brevioro orto floribus magnis arcuato-pedicellatis odoratis perigonii foliolis linearibus acutis versus basin attenuatis margine recurvis interioribus patenti-arcuatis exterioribus deflexis, labelli trilobi lobis lateralibus brevioribus integerrimis oblique orbicularibus intermedio elongato acuminato venis baseos 3 elevatis instructo, columna elongata candida inferne ad apicem biloba.—*Caraccus.*—Found by Mr. Edward Otto, growing on the stems of trees at the height of 4500 feet above the sea. It is said to prefer a cool house, and to have been shewn at the Botanical exhibition at Prague by Professor Tausch. It is fully described by Messrs. Klotzsch and Edward Otto in the above-mentioned place. The flowers are yellowish green with a white lip.
8. *E. armeniacum* (Lindl. in *Bot. Reg. t.* 1867. *Encyclia macrostachya*, Pöppig. & Endl. n. g. et sp. 2. t. 114); caulibus teretibus erectis indivisis, foliis lanceolatis coriaceis acutis subplicatis, racemis pedunculatis cylindraceis nutantibus, sepalis patulis ovatis acutis, petalis setaceis, labelli subcucullati laciniis lateralibus rotundatis intermedia ovata acuminata: callo magno oblongo in discum.—*Brazil and Peru.*—Flowers small, apricot coloured, in a slender drooping spike.
9. *E. nutans* (Swartz *Prodr.* 121. *Fl. Ind. Occ.* 1. 1499. Willd. no. 13. Hooker *Exot. Bot.* 1. t. 50 optime. Lindl. *gen. et sp. orch.* no. 44); foliis oblongis distichis undulatis obtusis, paniculâ nutante multiflorâ, sepalis oblongo-lanceolatis petalisque lineari-lanceolatis obtusis patentibus, labelli trilobi lobis lateralibus cordatis ovatis: intermedio transverso truncato apiculato basi bicalloso venis tribus elevatis.—*West Indies, and Brazil.*—This well known plant has been found by Dr. Von Martius on the Corcovado in Brazil, in rocky places. Its green flowers are sweet-scented in an evening. Many varieties are found in our gardens.

10. *E. refractum* (Lindl. in Ann. Nat. Hist. xii.); folio carnososo ovato-oblongo coriaceo obtuso, pedunculo elongato spathis plurimis falcatis obtusis distinctis vaginato, racemo brevi 4—5-floro cernuo, floribus carnosis, sepalis oblongis acutis dorsali refracto, petalis ovalibus subconformibus, labello subrotundo cordato trilobo basi biverrucoso per medium calloso, lacinia intermedia abbreviata truncata. — *Caraccas*. — A very singular plant, with six or seven herbaceous, equitant, distinct falcate spathes on a peduncle about nine inches long. The sepals are about three-quarters of an inch long.
11. *E. geminiflorum* (Humb. et Kunth. Nov. Gen. et Sp. Pl. 1. 354. Lindl. Gen. et Sp. no. 26); caule repente ramoso, foliis oblongis obtusis coriaceis, pedunculis subbifloris, sepalis lanceolatis acuminatis patulis margine revolutis, petalis conformibus planis, labello ovato cordato subcucullato trilobo: lobis lateralibus rotundatis ab intermedio sinu brevi sejunctis. — *Popayan*. — Stem with dwarf, stiff, erect side branches. Flowers middle-sized, very fleshy, with extremely sharp pointed divisions. (Not in cultivation.)

*** *Lip three-parted.*

12. *E. longiflorum* (Humb. et Kunth. Nov. Gen. et Sp. Pl. 1. 354. Lindl. Gen. et Sp. no. 45); foliis oblongis obtusis striatis coriaceis, racemi nutantis pedunculo spathâ maximâ brevior, sepalis petalisque lanceolato-linearibus acuminatis margine revolutis, labelli tripartiti laciniis lateralibus ovatis obliquè truncatis revolutis: intermediâ lanceolatâ acuminatâ margine revolutâ duplè longior. — *New Granada and Popayan*. — A most noble plant, with its yellow flowers more than four inches across. Some of the leaves are about a foot long. (Not in cultivation.)
13. *E. spathaceum* (Lindl. in Hook. Journ. 3. 85); foliis . . . , racemis alternis densissimis pendulis spathis foliaceis falcatis conduplicatis vix longioribus, sepalis rigidis striatis acutis, petalis filiformibus, labelli trilobi laciniis lateralibus subintegris intermediâ ovali obtusâ basi bilamellatâ brevioribus. — *Peru. Obtained by Mr. Mathews out of the herbarium of Ruiz and Pavon, preserved at Lima*. — The masses of inflorescence of this plant are upwards of

one and a half foot long, and consist of dense racemes proceeding from the axil of falcate spathes, so as to have a great resemblance to that of some Palm. Perhaps this ought to be rather referred to *Amphiglottium*; but its large sheathing spathes, full six inches long, under each branch of the inflorescence, seem to justify its being placed in this section. (Not in cultivation.)

14. *E. excisum*; foliis latis oblongis apice rotundatis excisis, spathâ latâ coriaccâ pedunculo longiore, floribus laxè paniculatis, petalis filiformibus, labello hastato basi bicalloso laciniis lateralibus cordatis crenulatis intermediâ lineari divergenti bilobâ.—*On the ascent to Sotara, near the village of Totoro, in Popayan.* (Hartweg.)—This is very much like *E. floribundum*, of which it has quite the habit, but it has a great sheathing spathe.—(In cultivation?)
15. *E. cylindraceum*; caule ramoso, ramulis basi vaginatis glabris, foliis cuique ramulo 2 ovato-oblongis, pedunculo spathis 2-3 equitantibus elongatis herbaceis vestito, racemo elongato cylindræo, sepalis obovatis acutis dorso scabris, petalis linearibus lævibus, labelli 3-partiti basi tricallosi laciniis lateralibus angustis antrorsum falcatis postice serrulatis intermediâ lineari basi latiore apice in lobos 2 subrotundos serrulatos divisâ.—*In the woods of Pitayo, in the province of Popayan, at the height of 10,500 feet.* (Hartweg.)—Flowers small, in a very dense cylindrical raceme, about six inches long. (Not in cultivation?)
16. *E. Trinitatis*; caulibus foliosis ancipitibus, foliis lineari-lanceolatis glaucescentibus apice obtusis obliquè emarginatis, racemo terminali nutante pedunculato basi vaginis herbaceis equitantibus imbricato, sepalis petalisque lineari-lanceolatis, petalis piliformibus, labelli lobis lateralibus concavis denticulatis intermedio lineari-lanceolato acuminato basi 3-callosa.—*Trinidad.*—Flowers small, in a long raceme, pale greenish yellow, with a deep apricot-yellow lip. Not very ornamental, but pretty.

* * * * *Lip six-parted.*

17. *E. raniferum* (L. no. 64. Bot. Reg. 1842. t. 42.); foliis distichis lanceolatis, racemis terminalibus lateralibusque

divaricatis multifloris, sepalis ligulatis convexis obtusis petalisque linearibus cuneatis mucronulatis patentissimis, labelli sexlobi basi 3-callosi laciniis integerrimis dentatisque: posticis rotundatis—intermediis linearibus—anticis linearibus obtusis retrosum falcatis.—*Mexico and British Guayana* (Schomburgk, no. 421.)—Although a good deal like *E. nutans*, this species is really very distinct, and indeed far handsomer; in consequence of the rich purplish brown spots with which the sepals and petals are profusely decorated. Like so many of the order this species varies a good deal in the amount of toothing observable in its lip. In the original specimens the divisions were perfectly entire; in other plants they are all toothed, or both the one and the other.

83. CALIPHRURIA Hartwegiana.

AMARYLLIDACEÆ; § PANCRATIFORMES. CALIPHRURIA; *Herbert*.
 Germen breve trisulcè obovatum; tubus angustè subinfundibuliformis subsulcatus rectus ferè; limbus regularis sepalis parum latioribus reflexè stellatus; filamenta laciniarum basi inserta setâ utrinque subparallelâ munita; antheræ subsagittatæ dorso infra medium supra lobos affixæ rectæ apice parum curvato introrsum versæ; stylus rectus stigmatè subrecurvè trilobo lobo inferiore parum protruso; ovarium loculis 2-3-spermis; ovula subquadratè oblonga in loculis transversè posita.—*W. H.*

Caliphruria Hartwegiana; bulbo ovato, foliis petiolatis subdepressis perennibus petiolo subbinuciali superficie planâ dorso rotundato laminâ sexunciali vel ultra acuminatè ovali interdum subplicatè canaliculatâ saturatè viridi, scapo vix compressè subtereti pedali colore glauco florido superfuso, spathâ acutâ bivalvi intus braeteatâ pedunculos parum curvatos æquante, umbellâ 7-florâ, germine subdeclinato, tubo semunciali viridi, limbo semunciali albo stylum album æquante, filamentis cum setis lateralibus albis, antheris luteis.—*W. H.*

This plant, found in New Granada near Guaduas by Mr. Hartweg, is evidently akin to *Eurycles* of Amboyna and Australia, forming a link between that genus and *Griffinia*. It is not improbable, that the white bristle on each side the filament may be found obsolete in other species, for the genus *Stenomesson* shews great diversity of such appendages, even in plants which are evidently varieties of one species, and differ in no other respect. This plant, except in the inflorescence, has much the appearance of an *Eucrosia*, but with the blade of the leaf more horizontally depressed. I apprehend that it will have fleshy seeds.—*W. H.*

84. HABRANTHUS nobilis.

H. nobilis (Herbert); foliis subcrassis subobtusis ultra $\frac{1}{2}$ unc. latis viridibus, scapo subcompresso subpedali viridi, spatulâ binuciali valvis acuminatis marcescentibus, pedunculis sex inæqualibus $\frac{1}{2}$ - $2\frac{1}{2}$ -unc. viridibus, germine $\frac{1}{4}$ unc. viridi, tubo brevi (vix ultra $\frac{1}{3}$ unc.) virescente membranâ fauciali minutè barbatâ, limbo saturatè rubro $2\frac{1}{4}$ unc. vel infra costâ extus virescente intus albescente, filamento sepalino superiore elongato, stylo superne rubro inferne pallido antheras luteas superante limbo semunciam brevior.

This fine species flowered out of doors in front of the pine-stove of the Rev. F. Belfield, jun. at Primley Hill, near Torquay, in October, having been cultivated there a few years. Though of much stronger habit, it should perhaps be considered a variety of *H. kermesinus*.—*W. H.*

85. TRIMEZIA Meridensis.

TRIMEZIA; *Salisbury*, absque caractere. Perianthium valde dispar basi laciniarum coherens, unguis sepalini lati crateriformes petalini angustiores incurvi, laminæ sepalinæ semipatentes petalinæ recurvæ, filamenta filiformia spiræ modo torta disci papillis inserta, antheræ styli lobis firmè adhærentes partibiles sublateraliter fissæ connectivo lineari, stylus inferne linearis superne trilobus lobis laminæformibus cucullatis stigmatibus mollibus bilobis lobis bifariis; semina glabra, badia, subrotunda, testâ durâ.—*W. H.*

T. Meridensis (Herbert); perianthio lætè luteo fasciâ subfuscâ transversâ leviter pubescente ad laminarum sepalinarum basim maculis quinque contiguas constante, maculâ magnâ unguis sepalini medio tribusque parvulis ad utrumque latus tribusque ad basim mediæ magnitudinis, maculâ rotundâ ad lam. petalinarum basim leviter pubescente sex parvulis in ungue mediâ biserialim dispositis, ad basim unâ. Cætera ut in *T. Martinicensi*. *Ex montibus Meridæ prope Maracaibo*.—*W. H.*

This plant, handsomer than the old species, long called *Iris Martinicensis*, was imported by Mr. Harris, having been found on the snowy mountains of Merida by his collector Mr. Mackenzie.—*W. H.*

86. BELLEVALIA Syriaca.

B. Syriaca (Herbert); foliis 12-14 glaucis vix semunciam latis subpedalibus canaliculatis subacutis margine sub lente scabro, scapo 5-10-unciali superne purpurascete, pedunculis subrectè patentibus sæpissime tribus ferè pariter insertis, inferis $\frac{1}{4}$ unc. superioribus gradatim brevioribus, bracteis brevissimis bilobis, tubo $\frac{1}{4}$ unc. pallidè cærulescente, limbo pari

subalbescente apice subrufescente, filamentis albis complanato-subulatis, antheris fusco-purpureis, seminibus rotundis.—*W. H.*

Bulbs of this plant, received by the Hon. W. Fox Strangways from Aleppo, (whether found near Aleppo or Damascus is not ascertained) were sent four years ago to Spofforth. They remained sulky two years; one sprouted and flowered in the third and fourth year, and another in the fourth, the rest having perished. They are hardy, and have ripened seed. Allied to *B. Romana* and *dubia*.—*W. H.*

87. GLADIÖLUS festivus.

G. festivus (Herbert); caule præcoce sesquipedali bracteato decemfloro, floribus confertis (i. e. semunciam distantibus) secundis bracteis subæqualibus $\frac{5}{8}$ unc. longis, perianthio sesquiunciali, tubo bractearum æquante inferne tenuiter cylindrico albo, limbo pallidè roseo, petalo superiore laciniis cæteris valde majore concavo incurvato plus semunc. lato, sepalis superioribus $\frac{1}{2}$ unc. latis compressis, labio inferiore superius fere æquante laciniis obtusis inferne pallidis mediâ costâ luteâ, petalis inferioribus inferne et mediâ parte a lineâ luteâ marginem tenuis albo-lutescentibus; foliis hysteranthis lævibus angustis acutis.—*W. H.*

This Cape species has flowered in the Royal Botanic Garden, Kew.

88. PLANTIA flava.

PLANTIA; *Herbert*. Cormus tunicatus; folium sublineare amplexicaule; caulis multiflorus bracteis foliiformibus superne spicatè breviter ramosus; involucrum bivalve pedunculis et germine oblongum gracile includens; perianthium non tubatum sexfidum laciniis distinctis germine articulis regularibus; filamentorum columna monadelphia inferne ampliata stylum amplexa; antheræ breves dorsi imæ parti affixæ sessilibus stigmatum lobos interpositæ; stylus tenuis superne trilobus erectus; stigmata biloba lobis brevibus acutis depressè divaricantibus; capsula obovata triloc. triv. trisule. Semina angulata testâ brunneâ.—*W. H.*

P. flava (Herbert); folio unico angusto elongato, ramis brevissimis, involucris circiter 4-floris vel ultra valvâ exteriori et interiore acuminatis ultra uncialibus pedunculis et germine gracile oblongum acumine superantibus, perianthio pallidè flavo stellâ saturatiore laciniis subconniventibus petalis minoribus inferne magis angustatis, genitalibus flavis.—*W. H.*

This pretty and florid little plant was first introduced into this country as a *Moræa* by Synott; and has been since raised at Spofforth from Cape seed under the name of *Sisyrinchium*. It is named after Mr. Plant, a zealous and industrious experimental cultivator and nurseryman at Cheadle, to whom we are indebted for some curious hybrids in this order, and who

now believes that he has succeeded in crossing *Lilium lanceæfolium* with *Chalcedonicum*. It forms a genus between *Sisyrinchium* and *Homeria* — *W. H.*

89. BIDWELLIA glaucescens.

BIDWELLIA; *Herbert*. [Vel. si mavis, *Asphodeli* sectio, *Bidwellia*.] Ab *Asphodelo* et *Asphodeline* filamentis superne clavatis eum acumine secerenda, cætera ferè conformis.—*W. H.*

B. glaucescens (*Herbert*); foliis angustis glaucis crassis linearibus superne planis dorso rotundato, caule inferne simplicei medio 2-4-divaricatè furcato pedunculis brevibus bracteatîs subalternatim dispositis duobus terminalibus, germine brevi bracteam subæquante, perianthio regulari sub sole patente subtortiliter deciduo basi brevi sexsulcatâ ovario adnatâ pedunculo continuatâ laciniis $\frac{5}{16}$ unc. uninervis albis costâ et intus linearâ subrubrâ striatis petalis latioribus, filamentis basi dilatatâ pubescente concavè ovarium tegente mediâ parte filiformibus superne clavatis cum acumine, antheris brevibus versatilibus introrsis dorso supra lobos affixis inferne bilobis latioribus superne acutis, stylo tenui stigmate lobis tribus brevibus rotundis fimbriatis, capsulâ subrotundâ utrinque attenuatâ trilvalvi valvis medio septiferis loculis dispermis dehiscente, seminibus testâ subfuscâ dorso rotundo transversè tricoestado angulata loculi dimidio conformibus (i. e. corporis obovati quarta pars) sulcis 2 dorsalibus 3-4 lateralibus transversis hilo subalbido inconspicuo a tertiâ parte anguli interioris pendulis. Obs. *Genus* occidentale Americanum, mihi *Trichesperus*, simili ratione ob filamenta triformia inferne filiformia superne clavata cum acumine, (seu sectio, si mavis,) a *Phalangio* seu *Antherico* secernendum est. Spec. 1. *Glaucus*, *Bot. Mag.* 3610, et alter apud me ex *Limæ* viciniâ in colle *Chorillos* dicto v. foliis non glaucis. 2. *Latifolius*, *Humb. et K.* 1. 276.—*W. H.*

This plant was introduced, with others, into Europe by Mr. Bidwell of Sydney. It is a native of an elevated tract of table-land called New England, on the south-eastern mountains of the Australian continent.—*W. H.*

90. LEOCHILUS herbaceus.

L. herbaceus; labello obovato emarginato apice denticulato medio convexo levi basi excavato villosa.

An inconspicuous plant from La Guayra, imported by George Wailes, Esq., of Newcastle. Its sepals and petals are green, with a single red stripe along the middle. The lip is white slightly tinged with green, and irregularly banded with pale purple. It differs from *L. oncioides* in the form and surface of the lip. I believe, too, that the flowers are in pairs; but I have only seen fragments.

91. LEOCHILUS sanguinolentus.

L. sanguinolentus; labello pandurato sepalis multò majore apice bilobo: laciniis subrotundis imbricatis superficie planâ lævi supra basin 3-tuberculatâ basi ipsâ villosâ, columnæ alis abbreviatis, clinandrii dorso elevato, antherâ parvâ.

This also comes from La Guayra, whence Mr. Barker received it. Although the flowers are small they are very beautiful, having a deep crimson lip richly studded with clear purple spots. In the smallness of its anthers, the extension of the anther-bed behind into an elevated rim, and in the shortness of the column wings, it is somewhat different from the rest of the genus. I have only seen a couple of flowers.

92. EPIDENDRUM ceratistes.

E. ceratistes (Encyclium III.*); pseudobulbis conicis 2-3-phyllis, foliis ensiformibus strictis scapo duplo brevioribus, paniculâ longâ cernuâ racemiformi ramulis lævibus divaricatis, sepalis petalisque obovatis acutissimis subconformibus (herbaceis), labelli trilobi lobis lateralibus erectis obtusis ovatis apice recurvis intermedio subrotundo unguiculato acuminato crispo striato, ungue medio depresso versus basin 4-costato, columnâ bicornutâ, antherâ tricostatâ.

A native of the Spanish Main, whence it was brought by Mr. Hartweg to the Horticultural Society, with whom it flowered in October last. Its panicle is very narrow, and about three feet long; the leaves resemble those of *E. virgatum*, but are not so glaucous; the flowers are extremely similar to those of *E. selligerum*, but they are a clear green with a whitish lip, and the column has two horn-like arms. It is rather sweet-scented.

93. PHYCELLA obtusa.

P. obtusa; folio synanthio sesquipedali horizontali oblongo in petiolum longè angustato (4 poll. lato), scapo stricto tereti glauco subspirali, umbellâ 6-florâ pedunculis tubo brevioribus, tubo cylindraceo basi abruptè obtuso sexcostato (carneo) apice (viridi) patulo, staminibus stylo multò brevioribus.

This species is so very like *P. chloracra*, that it might be mistaken for it; but it has stamens considerably shorter than the style, and the tube, instead of being green at the

bottom, where it gradually tapers into the ovary, is wholly flesh colour, and ends above the ovary in six abrupt prominent ribs. Mr. Hartweg sent it to the Horticultural Society from Peru.

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<i>Batatas betacea</i>	1839	.. 152	— — paucifolia	1841	.. 108
— — —	1840	56 ..	— — —	1843	63 50
— — bonariensis	1838	.. 99	— — — eriocarpa	1843	.. 51
<i>Bauhinia corymbosa</i>	1839	47 ..	<i>Bouvardia splendens</i>	1840	37 ..
<i>Beatonia purpurea</i>	1842	.. 84	<i>Brachycome iberidifolia</i>	1840	.. 148
— atrata	1843	.. 114	— — —	1841	9 ..
— curvata	1843	.. 115	<i>Brasavola angustata</i>	1838	.. 67
<i>Becium bicolor</i>	1842	.. 44	— Martiana	1839	5 ..
— — —	1843	15 ..	— glauca	1839	.. 67
<i>Begonia crassicaulis</i>	1842	44 21	— — —	1840	44 89
— diversifolia	1840	.. 44	— — grandiflora	1839	.. 14
— punctata	1841	.. 34	— venosa	1840	39 24
— incana	1841	.. 73	<i>Brassia cochleata</i>	1840	.. 37
— papillosa	1841	.. 74	— brachiata	1843	.. 2
— vitifolia	1842	.. 20	— Lawrenceana	1841	18 6
<i>Berberis empetrifolia</i>	1840	27 ..	— Lanceana	1844	.. 13
— trifoliata	1841	.. 149	— macrostachya	1838	.. 31
— tenuifolia	1838	.. 121	— verrucosa	1840	.. 66
— — —	1844	26 ..	<i>Bravoa geminiflora</i>	1838	.. 98
— coriaria	1841	46 ..	<i>Bromelia discolor</i>	1838	.. 85
— umbellata	1842	.. 42	<i>Bromheadia palustris</i>	1841	.. 184
— — —	1844	44 ..	— — —	1844	18 ..
— pallida	1843	.. 28	<i>Brongniartia sericea</i>	1843	.. 93
— — —	1844	16 ..	<i>Broughtonia aurea</i>	1840	.. 22
<i>Bessera elegans</i>	1839	34 ..	<i>Brownæa grandiceps</i>	1841	30 ..
<i>Betula Bhojpattra</i>	1840	.. 169	<i>Bryobium pubescens</i>	1838	.. 145
<i>Bidwellia glaucescens</i>	1844	.. 89	<i>Buddleia Lindleyana</i>	1844	.. 25
<i>Bifrenaria longicornis</i>	1838	.. 177	<i>Bulbine suavis</i>	1838	.. 78
— inodora	1843	.. 63	<i>Burlingtonia maculata</i>	1839	44 ..
<i>Bignonia picta</i>	1842	45 ..	— — rigida	1841	.. 11
— Carolineæ	1844	54 ..	<i>Calandrinia discolor</i>	1839	4 ..
— Tweediana	1840	45 ..	<i>Calanthe discolor</i>	1840	55 ..
<i>Billiardiera daphnoides</i>	1840	.. 38	— — —	1838	.. 32
<i>Billevalia Syriaea</i>	1844	.. 86	— furcata	1838	.. 34
<i>Blandfordia marginata</i>	1842	.. 93	— Masuca	1842	.. 52
<i>Bletia havanensis</i>	1838	.. 35	— — —	1844	37 ..
— Shepherdii	1838	.. 73	— bicolor	1838	.. 38
— secunda	1840	.. 120	— veratrifolia	1839	.. 39
<i>Bolbophyllum cupreum</i>	1838	.. 183	<i>Calathea villosa</i>	1843	.. 87
— clandestinum	1841	.. 166	<i>Calectasia cyanea</i>	1841	.. 13
— calamarium	1843	.. 109	<i>Caliphurria Herbertiana</i>	1844	.. 83
— Cheiri	1844	.. 56	<i>Calliopsis eucrosioides</i>	1842	.. 49
— adenopetalum	1842	.. 95	<i>Callistemon microstachyum</i>	1838	7 ..
— flavidum	1840	.. 195	<i>Calosecordum Neriniflorum</i>	1844	.. 64
— imbricatum	1841	.. 65	<i>Calostemma carneum</i>	1840	26 ..
— fuscum	1839	.. 5	— luteum	1840	19 ..
— limbatum	1840	.. 171	<i>Calystegia sepium</i>	1838	.. 104
— macranthum	1844	13 ..	<i>Calydorea</i>	1843	.. 138
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-----	1843	50 ..	----- capitosum	1843 .. 49
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-----	1841	5 ..	----- maculosum	1842 12 ..
----- callosum	1840	.. 183	----- Thouarsii	1841 .. 173
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-----	1840	.. 99	----- picturatum	1839 .. 120
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----- Naso	1843	.. 111	-----	1840 .. 107
----- ochraceum	1844	.. 55	----- vaginatum	1843 .. 61
----- poriferum	1838	.. 164	-----	1840 .. 173
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----- atratum	1838	63 114	Citrus deliciosa	1841 .. 44
----- globiflorum	1842	.. 48	Cleisostoma latifolium	1840 .. 127
----- proboscideum	1839	.. 140	----- dealbatum	1844 .. 5
-----	1841	5 ..	----- decipiens	1844 .. 16
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----- longifolium	1839	.. 154	----- tridentatum	1838 .. 46
----- laminatum	1841	5 ..	----- roseum	1838 .. 150
----- lanciferum	1841	5 ..	Clematis florida, var. bicolor	1838 25 ..
----- discolor	1841	.. 12	----- lathyriifolia	1839 61 ..
----- fuliginosum	1841	.. 168	----- montana	1840 53 ..
----- roseo-album	1840	.. 135	Cleome lutea	1840 .. 117
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----- tridentatum	1844	.. 40	----- splendens	1841 .. 177
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----- Arembergii	1843	.. 123	Clowesia rosea	1843 39 39
----- bicolor	1838	.. 148	Cobæa stipularis	1840 .. 50
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----- Perrinii	1838	2 ..	Coburgia humilis	1842 46 ..
----- pumila	1844	5 ..	----- miniata	1844 .. 22
----- Mossiæ	1840	58 ..	----- versicolor	1842 66 ..
----- Skinneri	1840	.. 83	Codonopsis lurida	1839 .. 126
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----- divaricatus	1843	.. 55	Cœlogyne fimbriata	1838 .. 172
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-----	1840	28 ..	----- testacea	1842 .. 34
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Centradenia rosea	1843	20 ..	-----	1840 24 ..
Centropogon cordifolius	1841	.. 192	----- ovalis	1838 .. 171
Cereus leucanthus	1840	13 ..	----- Cumingii	1840 .. 178
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Chænanthe Barkeri	1838	.. 60	----- elata	1839 .. 151
Cheiranthus ochroleucus	1840	.. 29	----- oculata	1839 .. 25
Cheirostylis parvifolia	1839	.. 20	Colea floribunda	1841 19 ..
Chirita sinensis	1844	59 ..	Colletia serratifolia	1844 .. 46
Chorozema cordatum	1838	10 ..	Columnæ Schiedeana	1841 60 ..
----- spectabile	1841	45 66	Comarostaphylis arbutoides	1843 30 ..
----- varium	1839	49 63	Comparettia coccinea	1838 68 ..
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----- bractescens	1840	.. 131	Commelina orchoides	1838 .. 96
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<i>Convolvulus floridus</i>	1840	199	<i>Cyrtochilum maculatum</i>	1841	87
— — — <i>verrucipes</i>	1841	45	— — — —	1841	14
— — — <i>scoparius</i>	1841	43 152	<i>Cyrtopodium Andersonii</i>	1841	8 49
<i>Corethrostylis bracteata</i>	1844	47 ..	— — — <i>cristatum</i>	1841	8 ..
<i>Cornus grandis</i>	1840	59	— — — <i>Wilmorei</i>	1841	8 ..
<i>Corvisartia indica</i>	1842	61	<i>Cytisus Weldenii</i>	1839	122
<i>Coryanthes speciosa alba</i>	1840	75	— — — —	1843	40 ..
<i>Corycium orobanchoides</i>	1838	45 ..	— — — —	1842	38
<i>Cosmos scabiosoides</i>	1838	15 ..	<i>Dahlia glabrata</i>	1840	29 ..
<i>Cotoneaster denticulata</i>	1840	58	<i>Daphne australis</i>	1838	56 ..
<i>Cotyledon cristatum</i>	1839	134	<i>Daubinya fulva</i>	1839	53 ..
<i>Cratægus crenulata</i>	1844	52 ..	<i>Delphinium laxiflorum</i>	1838	30 ..
<i>Crinum brachynema</i>	1842	28	— — — <i>intermedium,</i>		
— — — <i>variabile var. roseum</i>	1844	9 ..	— — — <i>sapphirinum</i>	1838	52 ..
<i>Crocorum synopsis</i>	1843	132	— — — <i>intermedium,</i>		
<i>Crocus Cartwrightianus</i>	1843	131	— — — <i>var. palmatifidum</i>	1838	38 ..
— — — —	1844	8	— — — <i>decorum</i>	1840	64 ..
— — — <i>nivigena</i>	1843	130	<i>Dendrobium aciculare</i>	1840	188
— — — <i>landerianus</i>	1843	129	— — — <i>aduncum</i>	1842	62
— — — <i>lagenæflorus Hæ-</i>			— — — <i>aquicum</i>	1843	54 6
<i>micus</i>	1843	128	— — — <i>calcaratum</i>	1840	219
— — — <i>nubigena</i>	1843	127	— — — <i>cucumerinum</i>	1842	63
— — — <i>medius</i>	1844	37	— — — —	1843	37 ..
— — — <i>insularis</i>	1843	21 ..	— — — <i>chlorops</i>	1844	54
— — — <i>pulchellus</i>	1843	126	— — — <i>denudans</i>	1838	156
— — — <i>speciosus</i>	1839	40 ..	— — — <i>andidum</i>	1838	54
— — — <i>vernus</i>	1844	7	— — — <i>discolor</i>	1841	52 50
<i>Crotalaria undulata</i>	1840	32	— — — —	1842	6
<i>Crucianella stylosa</i>	1838	55 ..	— — — <i>secundum</i>	1841	169
<i>Cryptandra suavis</i>	1844	56 27	— — — <i>junceum</i>	1842	11
<i>Cyrtochilus sanguineus</i>	1838	23 ..	— — — <i>formosum</i>	1838	86
<i>Cryptosanus scriptus</i>	1843	122	— — — <i>formosum</i>	1839	64 ..
<i>Cupressus thurifera</i>	1839	101	— — — <i>stuposum</i>	1838	94
<i>Cyclamen neapolitanum</i>	1838	49 ..	— — — <i>scopa</i>	1842	55
<i>Cyclosia maculata</i>	1839	7	— — — <i>sulcatum</i>	1838	65 ..
<i>Cyclogyne canescens</i>	1840	68	— — — <i>sanguinolentum</i>	1842	73
<i>Cyrenoches ventricosum</i>	1840	98	— — — —	1843	6 ..
— — — <i>ventricosum &</i>			— — — <i>bicameratum</i>	1839	85*
<i>Egertonianum</i>	1843	117	— — — <i>compressum</i>	1842	76
— — — <i>maculatum</i>	1840	8	— — — —	1844	53 ..
— — — <i>pentadactylon</i>	1843	22 26	— — — <i>Heyneanum</i>	1839	41
<i>Cymbidium iridifolium</i>	1839	37	— — — <i>macrophyllum</i>	1839	56
— — — <i>bicolor</i>	1839	69	— — — —	1842	94
— — — <i>madidum</i>	1840	6	— — — <i>Paxtoni</i>	1839	56
— — — <i>pendulum</i>	1840	25 ..	— — — <i>aurem, palli-</i>		
— — — <i>var. brevilibre</i>	1842	67	<i>dum</i>	1839	20 ..
— — — —	1844	22 ..	— — — <i>crumenatum</i>	1839	22 ..
— — — <i>chloranthum</i>	1843	108	— — — <i>Jenkinsii</i>	1839	37 ..
— — — <i>pubescens</i>	1840	177	— — — <i>linguæforme</i>	1839	26
— — — —	1841	38 ..	— — — <i>teretifolium</i>	1839	29
— — — <i>virescens</i>	1838	59	— — — <i>tetragonum</i>	1839	30
<i>Cynoglossum anchusoides</i>	1842	14 ..	— — — —	1841	8
— — — <i>cœlestinum</i>	1839	36 ..	— — — <i>tortile</i>	1839	31
— — — <i>glochidiatum</i>	1839	128	— — — <i>pygmaeum</i>	1839	32
— — — —	1841	15 ..	— — — <i>Cambridgea-</i>		
— — — <i>grandiflorum</i>	1838	127	<i>num</i>	1841	171
— — — <i>longiflorum</i>	1840	50 ..	— — — <i>acerosum</i>	1841	86
<i>Cypella plumbea</i>	1838	130	— — — <i>Kingianum</i>	1844	18
<i>Cypripedium barbatum</i>	1841	110	— — — <i>moschatum</i>	1841	15
— — — —	1842	17 ..	— — — <i>calamiforme</i>	1841	26
<i>Cyrtochilum mystacinum</i>	1838	38	— — — <i>criniferum</i>	1844	45
— — — —	1839	62 ..	— — — <i>excisum</i>	1841	165
— — — <i>stellatum</i>	1839	54	— — — <i>elongatum</i>	1839	33
— — — <i>graminifolium</i>	1841	180	— — — —	1841	53
— — — <i>filipes</i>	1841	59 72	— — — <i>Ruckeri</i>	1843	60 38
— — — <i>maculatum</i>	1838	44 39	— — — <i>pugioniforme</i>	1839	34
— — — —	1840	86	— — — <i>planibulbe</i>	1843	70
			— — — <i>crassulæfolium</i>	1839	53

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<i>Dendrobium complanatum</i>	1839	.. 36	<i>Epidendrum</i>	<i>Grahami</i>	1841 .. 145
— <i>herbaceum</i>	1840	.. 153	— <i>tripunctatum</i>		1841 .. 143
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— <i>plicatile</i>	1840	.. 7	— <i>pteroearpum</i>		1841 .. 128
— <i>revolutum</i>	1840	.. 110	—	1844	34 ..
— <i>rhombicum</i>	1843	17 ..	— <i>radiatum</i>		1841 .. 123
— <i>tercs</i>	1840	.. 111	—	1844	45 ..
— <i>taurinum</i>	1843	28 ..	— <i>raniferum</i>		1841 .. 122
— <i>gemellum</i>	1840	.. 192	—	1842	42 ..
<i>Dendrochilum filiforme</i>	1840	.. 113	— <i>virgatum</i>		1841 .. 189
— <i>abbreviatum</i>	1844	.. 34	— <i>gladiatum</i>		1841 .. 29
— <i>glumaceum</i>	1841	.. 58	— <i>glutinosum</i>		1843 .. 124
— <i>latifolium</i>	1843	.. 74	— <i>viviparum</i>		1841 .. 27
<i>Deutzia corymbosa</i>	1839	.. 49	— <i>miserum</i>		1841 .. 62
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<i>Dianthus Bisignani</i>	1838	29 ..	— <i>limbatum</i>		1843 .. 104
— <i>ferrugineus</i>	1839	15 ..	— <i>leiobulbon</i>		1841 .. 63
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— <i>glauca</i>	1844	.. 67	— <i>hastatum</i>		1841 .. 90
<i>Dicrypta discolor</i>	1839	.. 145	— <i>aciculare</i>		1841 .. 98
<i>Dienia cordata</i>	1838	.. 134	— <i>lacinatum</i>		1841 .. 109
<i>Dinema paleaceum</i>	1840	.. 112	— <i>leucochilum</i>		1843 .. 120
<i>Dion edule</i>	1843	.. 82	— <i>phœniceum</i>		1841 .. 120
<i>Dipladenia crassinoda</i>	1844	64 ..	— <i>selligerum</i>		1838 .. 66
<i>Diploleena Dampieri</i>	1841	64 ..	— <i>tibicinis</i>		1838 .. 12
<i>Diplopeltis Hugelii</i>	1839	69 70	— <i>tessellatum</i>		1838 .. 9
<i>Drymonia bicolor</i>	1838	4 ..	— <i>tridactylum</i>		1838 .. 81
— <i>punctata</i>	1842	.. 77	— <i>varicosum</i>		1838 .. 37
<i>Duvaua longifolia</i>	1843	59 ..	— <i>verrucosum</i>		1844 51 ..
<i>Dyckia altissima</i>	1841	.. 183	— <i>vesicatum</i>		1838 .. 89
<i>Earina suaveolens</i>	1843	.. 88	— <i>aurantiacum</i>		1838 .. 11
<i>Echeandia terniflora</i>	1839	.. 144	—	1840	.. 82
<i>Echeveria acutifolia</i>	1842	29 ..	— <i>aspersum</i>		1838 .. 36
— <i>secunda</i>	1838	.. 112	— <i>altissimum</i>		1838 .. 61
—	1840	57 ..	— <i>Boothianum</i>		1838 .. 7
— <i>lurida</i>	1841	1 ..	— <i>cucullatum</i>		1838 .. 47
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<i>Echinacea Dicksoni</i>	1838	27 ..	— <i>cauliflorum</i>		1838 .. 82
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<i>Echium petraeum</i>	1843	26 ..	— <i>ionosum</i>		1838 .. 87
<i>Eleagnus parvifolia</i>	1843	51 ..	— <i>longicolle</i>		1838 .. 49
<i>Eleutherine anamola</i>	1843	57 ..	— <i>lacerum</i>		1838 .. 18
<i>Elisena longipetala</i>	1838	.. 79	— <i>lividum</i>		1838 .. 91
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<i>Entelea palmata</i>	1838	.. 126	— <i>Ovulum</i>		1843 .. 71
<i>Epacris impressa</i> , var.	1839	19 ..	— <i>variegatum</i>		1839 11 ..
<i>Epidendrum pictum</i>	1838	.. 43	— <i>glumaceum</i>		1839 .. 50
— <i>cubense</i>	1843	.. 24	—	1840	6 ..
— <i>pachyanthum</i>	1838	.. 42	— <i>grandiflorum</i>		1844 .. 82
— <i>papillosum</i>	1838	.. 8	— <i>Candollei</i>		1839 .. 77
— <i>collare</i>	1843	.. 85	— <i>inversum</i>		1839 .. 135
— <i>Pastoris</i>	1838	.. 3	— <i>uniflorum</i>		1839 .. 13
— <i>polyanthum</i>	1842	.. 2	— <i>Skinneri</i>		1840 .. 81
— <i>Schomburgkii</i>	1838	53 16	—	1844	.. 24
— <i>ceratistes</i>	1844	.. 92	— <i>incumbens</i>		1840 .. 84
— <i>cinnabarinum</i>	1842	25 ..	— <i>machrochilum</i>		1840 .. 85
— <i>smaragdinum</i>	1838	.. 44	— <i>Stamfordianum</i>		1840 .. 88
— <i>calocheilum</i>	1841	.. 181	— <i>rhizophorum</i>		1840 .. 91
— <i>latilabrum</i>	1841	.. 163	—	1838	.. 10
—	1842	.. 70	— <i>rubrocinctum</i>		1843 .. 20
— <i>bisetum</i>	1841	.. 148	— <i>Hanburii</i>		1844 .. 60

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		pl. misc.			pl. misc.
<i>Epidendrum arbuscula</i>	1843	54	<i>Fuchsia Standish's</i>	1840	2
— <i>aromaticum</i>	1840	93	<i>Funkia Sieboldi</i>	1839	50
— <i>bractescens</i>	1840	122	<i>Galbanum</i>	1839	107
— <i>densiflorum</i>	1840	134	<i>Galeandra Baneri</i>	1840	49
— <i>purum</i>	1844	75	— <i>cristata</i>	1844	69
— <i>crispatum</i>	1840	35	<i>Gardoquia betonicoides</i>	1838	159
— <i>lanceifolium</i>	1840	152	<i>Garrya laurifolia</i>	1840	53
—	1842	50	<i>Gaylussacia Pseudo-vaccinium</i>	1842	62
— <i>falcatum</i>	1840	20	<i>Genista bracteolata</i>	1840	23
— <i>Parkinsonianum</i>	1840	20	— <i>virgata</i>	1844	11
— <i>glaucum</i>	1840	56	<i>Geranium rubifolium</i>	1840	67
— <i>vitellinum</i>	1840	35	— <i>erianthum</i>	1841	91
— <i>stenopetalum</i>	1840	40	—	1842	52
— <i>Trinitatis</i>	1840	128	— <i>tuberosum</i>	1839	10
— <i>viscidum</i>	1840	190	<i>Gesneria reflexa</i>	1840	39
<i>Epimedium violaceum</i>	1840	43	— <i>Suttoni, white var.</i>	1842	40
<i>Epiphora pubescens</i>	1840	143	— <i>longifolia</i>	1841	190
<i>Eria clavicaulis</i>	1840	220	—	1842	40
— <i>cochleata</i>	1844	23	— <i>discolor</i>	1841	63
— <i>acutifolia</i>	1842	32	— <i>Zebrina</i>	1842	16
— <i>bipunctata</i>	1841	179	<i>Gladiolus crispiflorus</i>	1842	81
— <i>ferruginea</i>	1839	35	— <i>caucasicus</i>	1842	82
— <i>bractescens</i>	1841	46	— <i>æquinoctialis</i>	1842	97
—	1844	29	— <i>festivus</i>	1844	87
— <i>longilabris</i>	1841	69	— <i>oppositiflorus</i>	1842	98
— <i>armeniaca</i>	1841	42	— <i>splendens</i>	1843	61
— <i>pulchella</i>	1841	106	<i>Glaucium rubrum</i>	1839	78
— <i>profusa</i>	1842	3	<i>Glossocomia ovata</i>	1842	3
— <i>floribunda</i>	1843	56	<i>Gloxinia speciosa</i>	1844	48
—	1844	20	<i>Glumosa</i>	1843	139
— <i>multiflora</i>	1843	72	<i>Godetia albescens</i>	1841	131
— <i>polyura</i>	1841	114	—	1842	9
—	1842	32	— <i>grandiflora</i>	1841	132
— <i>mucronata</i>	1842	27	—	1842	61
— <i>convallarioides</i>	1841	62	<i>Gompholobium versicolor</i>	1839	62
— <i>paniculata</i>	1842	33	<i>Gonatanthus sarmentosus</i>	1841	83
— <i>pannea</i>	1842	79	<i>Gongora fulva</i>	1839	51
— <i>nutans</i>	1840	196	— <i>bufonia</i>	1841	2
— <i>planicaulis</i>	1840	4	— <i>vitellina</i>	1841	4
— <i>pumila</i>	1838	147	— <i>maculata</i>	1841	101
— <i>velutina</i>	1840	209	— <i>maculata var tri-</i>		
— <i>vestita</i>	1844	79	— <i>color</i>	1844	30
<i>Erica chloroloma</i>	1838	17	— <i>nigrita</i>	1839	86
<i>Erigeron squarrosus</i>	1841	92	— <i>truncata</i>	1843	52
<i>Eriphilema</i>	1843	137	<i>Goodyera rubicunda</i>	1839	92
<i>Erysimum Perofskianum</i>	1839	79	<i>Govenia Gardneri</i>	1839	51
<i>Erythrochiton Brasiliensis</i>	1843	47	— <i>lagenophora</i>	1839	66
<i>Eucalyptus calophylla</i>	1841	157	— <i>liliacea</i>	1838	13
<i>Eulophia squalida</i>	1841	164	— <i>fasciata</i>	1843	107
<i>Euonymus japonicus</i>	1844	6	<i>Grammatophyllum multi-</i>		
<i>Euphorbia rigida</i>	1838	43	— <i>florum</i>	1838	80
— <i>veneta</i>	1838	6	—	1839	65
<i>Eurybia glutinosa</i>	1839	112	— <i>var. tigrinum</i>	1842	69
— <i>chrysotricha</i>	1841	47	<i>Grevillea Thielemanniana</i>	1839	72
<i>Euthales macrophylla</i>	1840	119	<i>Grobya galeata</i>	1840	197
—	1841	3	<i>Guaiacum officinale</i>	1839	9
<i>Eysenhardtia amorphoides</i>	1839	55	<i>Gunnia picta</i>	1838	77
<i>Fabiana imbricata</i>	1839	59	<i>Habenaria candida</i>	1844	77
<i>Fernandezia lunifera</i>	1839	147	<i>Habranthus pratensis</i>	1842	35
<i>Friesia peduncularis</i>	1843	108	— <i>nobilis</i>	1844	84
<i>Fritillaria Kotschyana</i>	1844	52	<i>Habrothamnus fasciculatus</i>	1843	73
<i>Fuchsia fulgens</i>	1838	1	— <i>purpureus</i>	1844	19
— <i>cylandracea</i>	1838	66	— <i>cyaneus</i>	1844	68
— <i>cordifolia</i>	1841	70	<i>Hæmanthus magnificus</i>	1841	153
— <i>radicans</i>	1841	66	<i>Hakea ruscifolia</i>	1841	158
— <i>corymbiflora</i>	1840	70	<i>Hardenbergia digitata</i>	1840	142
— <i>splendens</i>	1842	67			

SPECIES DESCRIBED.

		pl. misc.			pl. misc.		
Hartwegia	purpurea	1840	96	Ipomœa	ficifolia	1841	12
	var.				cymosa	1843	24
	angustifolia	1843	58		longifolia	1839	124
Heimia	salicifolia	1841	60			1840	21
Helichrysum	scorpioides	1838	84		batatoides	1841	36
Helleborus	lividus	1848	55		pendula	1840	201
	orientalis	1841	112		Purga	1839	136
		1842	34		tyrianthina	1838	162
	olympicus	1841	113		Schiedeana	1838	22
		1842	58	Iris	deflexa	1840	42
Hemiaudra	emarginata	1841	156			1840	62
Herbertia	Drummondiana	1842	83		fragrans	1840	1
Heteropteris	undulata	1841	48	Ismene	deflexa	1839	142
Hexadestia	fasciculata	1842	46		virescens	1841	12
		1843	21	Isochilus	lividum	1839	45
	bicornis	1844	44		grandiflorum	1841	1
	micrantha	1844	5		graminifolium	1841	1
Hexopia	crucigera	1840	90	Isopogon	roseus	1842	37
		1844	4	Isotropis	striata	1839	61
Hibbertia	perfoliata	1841	94	Ixiolirion	montanum	1844	66
		1843	64	Jasminum	caudatum	1842	36
Hibiscus	Cameroni	1840	31		subulatum	1842	58
	Cameroni fulgens	1844	28	Juniperus	tetragona	1839	102
	Wrayæ	1840	69		flaccida	1839	103
Higginsia	mexicana	1841	137		mexicana	1839	104
Hindsia	violacea	1844	43		squamosa	1839	189
Hippeastrum	organense,			Lælia	furfuracea	1839	26
	var. compressum	1842	35		autumnalis	1839	27
Holtzia	mexicana	1838	21		albida	1839	54
Horridium		1839	13			1843	16
Hoteia	japonica	1839	133		flava	1839	143
Houletia	vittata	1841	69			1842	62
Hovea	crispa	1839	19		majalis	1839	42
	pungens	1839	28			1844	30
	Manglesii	1838	62		caulescens	1841	1
	racemulosa	1842	36		acuminata	1841	24
		1843	4		peduncularis	1842	10
	ilicifolia	1844	58		superbiens	1840	87
Hoya	coriacea	1839	18		rubescens	1840	41
		1840	1		virens	1844	2
Huntleya	Meleagris	1838	20	Lacœna	bicolor	1843	101
		1839	14			1844	50
	violacea	1839	17	Lalage	hoveæfolia	1841	75
Hydrangea	japonica	1844	61	Lathyrus	Armitageanus	1840	14
Hydromestus	maculatus	1843	46	Lavatera	maritima	1838	140
Hydrotenia	Meleagris	1838	128	Lemonia	spectabilis	1840	59
		1842	39	Leochilus	carinatus	1842	22
	lobata	1844	63		cochlearis	1842	22
Hymenocallis	Harrisiana	1840	63		herbaceus	1844	90
	bistubata	1844	53		oncidioides	1842	22
	panamensis	1841	146		sanguinolentus	1844	91
	rotata	1840	55	Leptodermis	lanceolata	1839	131
	Skinneriana	1843	59	Leschenaultia	biloba	1842	2
Hypocalymna	robustum	1843	8	Lycesteria	formosa	1839	2
	angustifo-			Lilium	testaceum	1842	51
	lium	1843	78			1843	11
	suavis	1844	32		Thunbergianum	1839	38
Impatiens	candida	1840	204	Linaria	delphinoides	1840	15
		1841	20		glandulifera	1841	51
	rosea	1841	27		venosa	1841	151
	glanduligera	1840	22	Lindenia	rivalis	1841	130
	macrochila	1840	8	Lindleya	mespiloides	1843	83
	tricornis	1840	9			1844	27
Indigofera	Dosua	1842	57	Liparis	pendula	1838	180
	stachyodes	1843	14		alata	1843	12
Inga	Harrisii	1839	41		spatulata	1840	189
Ionopsis	teres	1838	181	Lissanthe	stellata	1840	2
Ipomœa	ficifolia	1840	221			1840	13

SPECIES DESCRIBED.

	pl. misc.		pl. misc.
Lissauthe verticillata	1840	26	
Lissochilus parviflorus	1838	14	
roseus	1843	37	
_____	1844	12	
Loasa lateritia	1838	22	
Lobelia discolor	1840	211	
pyramidalis	1841	170	
subnuda	1840	211	
fenestralis	1838	47	
multiflora	1840	17	
Lonicera diversifolia	1843	118	
_____	1844	33	
Lopezia lineata	1840	60	
Laisia alpina	1838	101	
Lupinus arboreus	1838	32	
arvensis	1844	1	
Hartwegii	1839	31	
Barkeri	1839	56	
bilineatus (note)	1839	56	
mexicanus (note)	1839	56	
leptocarpus	1840	38	
Lycaste plana	1842	96	
_____	1843	35	
Barringtoniæ	1844	51	
_____ crinita	1844	41	
aromatica var. retusa	1844	47	
gigantea	1844	48	
tetragona	1843	64	
Lysimachia lobelioides	1841	150	
_____	1842	6	
spuria	1843	133	
Macleania longiflora	1844	25	
Macradenia mutica	1839	22	
Malachadenia clavata	1839	110	
Malaxis Parthoni	1840	214	
Mulva lucida	1839	130	
mauritanica	1839	82	
Mandevilla saucocens	1840	7	
Manglesia glabrata	1840	27	
Marcetia excoriata	1843	31	
Marianthus cœruleopunctatus	1841	15	
Marlea begonifolia	1838	61	
Martynia fragrans	1840	206	
_____	1841	6	
Masdevallia infracta	1838	64	
floribunda	1843	112	
cuprea	1843	125	
Matthiola odoratissima	1839	25	
maderensis	1841	97	
Maxillaria Colleyi	1838	161	
cruenta	1842	13	
Rollissonii	1838	40	
galeata	1843	13	
aromatica	1842	13	
vitellina	1838	116	
_____	1839	12	
porrecta	1838	173	
macrophylla	1838	174	
_____	1840	191	
bractescens	1842	92	
concava	1844	12	
corrugata	1844	14	
costata	1838	175	
variabilis	1838	92	
Brockelhurstiana	1841	28	
candida	1841	59	
Harrisoniæ	1841	168	
placantha	1841	103	
Maxillaria jugosa	1841	104	
barbata	1841	141	
purpurascens	1841	142	
madida	1838	74	
Boothiana	1838	95	
tenuifolia	1839	8	
stapelioides	1839	17	
xanthina (note)	1839	17	
foveata	1839	2	
acutifolia	1839	148	
acutipetala	1843	36	
lentiginosa	1839	93	
aureofulva	1840	43	
stenopetala	1840	43	
scaberrimugis	1844	66	
cucullata	1840	12	
rhombea	1840	12	
Macleei	1840	155	
Melcagris	1844	9	
Skinneri	1840	101	
_____	1840	145	
_____	1842	13	
rugosa	1843	121	
Medicago clypeata	1839	90	
Medinilla erythrophylla	1838	158	
Megaclinium oxypterum	1839	10	
Bufo	1841	82	
Microstylis excavata	1838	93	
histionantha	1840	214	
caulescens	1841	1	
Miltonia candida	1838	29	
var. grandiflora	1843	110	
cuneata	1844	28	
Mimosa marginata	1838	152	
urugensis	1842	33	
Mina lobata	1842	9	
_____	1842	24	
Mirbelia speciosa	1841	58	
Morina longifolia	1840	36	
Mormodes buccinator	1840	9	
buccinator, var.	1841	191	
pardinum	1838	176	
_____	1839	7	
lineatum	1841	107	
_____	1842	43	
luxatum	1842	66	
_____	1843	33	
aromaticum	1841	163	
_____	1843	56	
Morna nivea	1838	9	
Morrenia odorata	1838	129	
Mucuna pruriens	1838	18	
Napoleona imperialis	1844	81	
Narcissi	1843	38	
Narcissus montanus	1844	35	
Mycaranthes obliqua	1840	184	
Nelumbium Caspium	1844	14	
Myoporum ascendens	1844	59	
Nemaconia gracillifolia	1839	15	
Nemesia floribunda	1838	39	
Nepeta salviaefolia	1839	123	
Nicotiana rotundifolia	1838	110	
Niphaea oblonga	1841	172	
_____	1842	5	
Notylia punctata	1838	166	
pubescens	1842	72	
aromatica	1841	77	

SPECIES DESCRIBED.

	pl. misc.		pl. misc.
<i>Notylia incurva</i>	1838	167	
— <i>Barkeri</i>	1838	168	
— <i>tenuis</i>	1838	169	
— <i>micrantha</i>	1838	170	
<i>Oberonia cylindrica</i>	1840	23	
— <i>miniata</i>	1843	8	
— <i>recurva</i>	1839	8	
— <i>Wightiana</i>	1839	9	
<i>Octomeria gracilis</i>	1838	55	
— <i>grandiflora</i>	1842	80	
— <i>diaphana</i>	1839	145	
— <i>tridentata</i>	1839	43	
<i>Odontoglossum Bictoniense</i>	1840	66	
— <i>constrictum</i>	1843	25	
— <i>stellatum</i>	1841	25	
— <i>Ehrenbergii</i>	1841	85	
— <i>palehellum</i>	1841	48	
— <i>Clowesii</i>	1839	153	
— <i>laeve</i>	1844	39	
— <i>citrosimum</i>	1842	68	
—	1843	3	
— <i>cordatum</i>	1838	90	
— <i>grande</i>	1840	94	
— <i>maculatum</i>	1840	30	
— <i>Rossii</i>	1839	48	
—	1843	19	
<i>Oenothera fruticosa indica</i>	1841	11	
<i>Olinia capensis</i>	1840	212	
— <i>acuminata</i>	1841	135	
— <i>cymosa</i>	1841	136	
<i>Oncidium tetrapetalum</i>	1838	56	
— <i>candidum</i>	1843	76	
— <i>brachyphyllum</i>	1842	4	
— <i>confragosum</i>	1838	92	
— <i>cuneatum</i>	1843	15	
— <i>ascendens</i>	1842	4	
— <i>pulvinatum</i>	1838	115	
—	1839	42	
— <i>Forkelii</i>	1843	14	
— <i>Cebolleta</i>	1842	4	
— <i>pergameneum</i>	1842	7	
— <i>hians</i>	1838	124	
— <i>bicolor</i>	1843	66	
— <i>raniferum</i>	1838	48	
— <i>longifolium</i>	1842	4	
— <i>luridum guttatum</i>	1839	16	
— <i>Suttoni</i>	1842	8	
— <i>trulliferum</i>	1839	57	
— <i>bicallosum</i>	1842	14	
—	1843	12	
— <i>Forbesii</i>	1839	140	
— <i>ensatum</i>	1842	15	
— <i>excavatum</i>	1839	150	
— <i>sphaelatum</i>	1842	30	
— <i>sphagiferum</i>	1843	23	
— <i>spilopterum</i>	1844	76	
— <i>sanguineum</i>	1839	68	
— <i>nanum</i>	1842	30	
— <i>unicorne</i>	1839	76	
— <i>uniflorum</i>	1843	43	
— <i>urophyllum</i>	1842	54	
— <i>carinatum</i>	1840	45	
— <i>intermedium</i>	1840	46	
— <i>barbatum</i>	1842	74	
— <i>unicornutum</i>	1840	47	
— <i>Carthaginense</i>	1840	215	
— <i>pelicanum</i>	1840	216	
— <i>macrantherum</i>	1841	33	
<i>Oncidium Wrayæ</i>	1841	57	
— <i>monoceras</i>	1841	160	
— <i>Barkeri</i>	1841	174	
— <i>nebulosum</i>	1841	175	
— <i>Iluntianum</i>	1840	137	
— <i>pachyphyllum</i>	1840	138	
— <i>Insleyi</i>	1840	21	
— <i>incurvum</i>	1840	174	
— <i>laecerum</i>	1844	38	
— <i>leucochilum</i>	1840	79	
— <i>ornithorhynchum</i>	1840	10 95	
— <i>oblongatum</i>	1844	11	
— <i>ampliolum</i>	1840	97	
— <i>microchilum</i>	1840	193	
—	1843	23	
— <i>Wentworthianum</i>	1840	194	
— <i>pallidum</i>	1840	108	
— <i>ramosum</i>	1840	154	
— <i>suave</i>	1843	22	
— <i>stramineum</i>	1840	14	
—	1838	63	
<i>Ophelia purpurascens</i>	1840	158	
<i>Opoidia galbanifera</i>	1839	107	
<i>Ornithogalum geminiflorum</i>	1838	109	
— <i>divaricatum</i>	1841	111	
—	1842	28	
— <i>montanum</i>	1838	28	
<i>Osbeckia stellata</i> , var.	1844	55	
<i>Oxalis Darvalliana</i>	1840	11	
— <i>Ottonis</i>	1840	213	
— <i>fruticosa</i>	1841	41	
— <i>brocincta</i>	1842	64	
<i>Oxyanthus versicolor</i>	1840	150	
<i>Oxylobium capitatum</i>	1841	80	
—	1843	16	
— <i>obovatum</i>	1843	36 49	
<i>Pæonia (Onopelia) Brownii</i>	1839	30	
<i>Panætia fulva</i>	1838	83	
<i>Papaver amoenum</i>	1839	80	
<i>Passiflora hispida</i>	1840	3	
—	1840	16	
— <i>onychina</i>	1838	21 1	
— <i>verrucifera</i>	1840	52 105	
<i>Patersonia sapphirina</i>	1839	60	
<i>Paxtonia rosea</i>	1838	60 113	
<i>Pedicularis megalantha</i>	1842	57	
— <i>pyramidata</i>	1841	155	
<i>Pentas carnea</i>	1844	32	
<i>Pentlandia miniata</i>	1839	68	
<i>Pentstemon barbatus car-</i>			
— <i>neum</i>	1839	21	
— <i>crassifolium</i>	1838	16	
— <i>gentianoides</i>	1838	3	
<i>Peristeria guttata</i>	1840	33	
— <i>Humboldti</i>	1843	18	
<i>Peristylus goodyeroides</i>	1840	187	
<i>Pernettya angustifolia</i>	1840	63	
<i>Pesomeria tetragona</i>	1838	6	
<i>Phacelia fimbriata</i>	1841	126	
<i>Phaius grandifolius</i>	1839	40	
— <i>bicolor</i>	1839	91	
— <i>Wallichii</i>	1839	58	
— <i>albus</i>	1838	33	
<i>Phalenopsis amabilis</i>	1838	34	
<i>Pharbitis Learii</i>	1841	56	
— <i>ostrina</i>	1842	51	
<i>Philadelphus hirsutus</i>	1838	14	
— <i>Gordonianus</i>	1838	23	

SPECIALS DESCRIBED.

		pl. misc.			pl. misc.
Philadelphus Gordonianus	1839	32	..	Pleurothallis villosa	1840 .. 40
----- triflorus	1838	..	51	----- ciliata	1840 .. 41
----- laxus	1839	29	..	Podolepis contorta	1838 .. 120
----- mexicanus	1840	..	70	Podolobium berberifolium	1841 .. 89
-----	1841	..	118	Pogonia plicata	1841 .. 129
-----	1842	38	..	Polemonium cœruleum	
Philibertia grandiflora	1843	13	..	grandiflorum	1840 .. 76
Philomus simplex	1841	..	102	Polygonum amplexicaule	1838 .. 117
--- Cashmuciana	1844	22	..	----- molle	1841 .. 66
Phlox Van Houtte's	1843	5	..	Polystachya zeylanica	1838 .. 144
Pholidota articulata	1839	..	57	--- clavata	1842 .. 71
--- undulata	1841	..	19	--- ramulosa	1838 .. 142
--- conchoidea	1840	..	108	--- luteola	1838 .. 143
Phycella biflora	1838	..	72	--- reflexa	1841 .. 43
--- obtusa	1844	..	93	--- bracteosa	1840 .. 102
Physinga prostrata	1838	..	45	--- cerea	1840 .. 208
Physosiphon carinatus	1838	..	152	Poncra graminifolia	1839 .. 15
Physurus pictus	1844	..	61	-----	1842 .. 17
Pieris asperima	1838	..	108	--- juncefolia	1842 .. 17
--- barbarorum	1838	..	107	--- striata	1842 .. 17
Pieris ovalifolia	1842	..	50	Populus balsamifera	1843 .. 29
Pilumna laxa	1844	..	74	--- tristis	1843 .. 30
Pimelia incana	1838	24	..	--- longifolia	1843 .. 31
--- erinita	1838	..	109	--- candicans	1843 .. 32
--- spectabilis	1841	33	18	--- pseudo balsamifera	1843 .. 33
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Pinus oocarpa	1839	..	23	--- suaveolens	1843 .. 35
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Pisonia Olfersiana	1841	..	34	Psithyrisma	1843 .. 135
Pitcairnia undulata	1843	..	44	Psoralea obovata	1838 .. 57
--- micrantha	1843	..	57	--- brachytrapis	1841 .. 76
Pittosporum bicolor	1843	..	27	Puya Altensteinii	1840 .. 210
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Plagianthus Lampenii	1838	..	25	--- heterophylla	1840 71 ..
Plautia flava	1844	..	88	--- recurvata	1843 .. 43
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--- stenopetala	1838	..	182	--- mexicana	1840 .. 164
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--- pectinata	1839	..	1	--- sideroxylla	1840 .. 166
--- recurva	1841	..	1	--- lancifolia	1840 .. 167
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--- strupifolia	1839	..	3	Rhodorhiza	1841 .. 152
--- bicarinata	1839	..	11	Rhodostoma gardenioides	1843 .. 47
--- scabripes	1839	..	155	Ribes Menziesii	1838 .. 52
--- pachyglossa	1840	..	146	Rigidella flammea	1840 16 64
--- seriata	1840	..	175	--- immaculata	1841 68 133
--- Smithiana	1843	..	79		

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	pl. misc.		pl. misc.
<i>Rivea filixfolia</i>	1841	<i>Sobralia sessilis</i>	1841
<i>Rodriguezia crispa</i>	1840	<i>Solanum betaceum</i>	1840
-----	1839	-----	1840
----- <i>carnea</i>	1843	----- <i>candidum</i>	1839
----- <i>laxiflora</i>	1839	----- <i>concaevum</i>	1842
----- <i>maculata</i>	1840	----- <i>macrantherum</i>	1840
<i>Roepera aurantiaca</i>	1838	-----	1841
<i>Rondeletia longiflora</i>	1843	----- <i>Rossii</i>	1840
<i>Roscóea purpurea</i>	1840	----- <i>uncinellum</i>	1840
----- <i>lutea</i>	1841	----- <i>vernucatum</i>	1838
<i>Saccobolium gemmatum</i>	1838	<i>Sollya linearis</i>	1839
----- <i>densiflorum</i>	1833	-----	1840
----- <i>Baumei</i>	1841	<i>Sophronitis violacea</i>	1840
----- <i>calcolare</i>	1833	-----	1841
----- <i>bifidum</i>	1838	<i>Sowerbaea laxiflora</i>	1844
----- <i>compressum</i>	1840	<i>Spathoglottis plicata</i>	1838
----- <i>micanthum</i>	1839	<i>Specklinia orbicularis</i>	1838
----- <i>ochraceum</i>	1842	----- <i>ciliaris</i>	1833
<i>Salvia Moorerofii</i>	1839	----- <i>obovata</i>	1839
----- <i>patens</i>	1839	<i>Sphærolobium acuminatum</i>	1843
----- <i>excelsa</i>	1841	<i>Spiræa barbata</i>	1838
----- <i>tubiformis</i>	1841	----- <i>fissa</i>	1842
----- <i>confertiflora</i>	1839	----- <i>Kamschatica</i>	1841
----- <i>canescens</i>	1838	----- <i>lanccolata</i>	1841
----- <i>hians</i>	1840	----- <i>cuneifolia</i>	1839
-----	1841	----- <i>vacciniifolia</i>	1839
----- <i>prunelloides</i>	1840	-----	1840
----- <i>Reala</i>	1840	----- <i>Reevesiana</i>	1844
-----	1841	----- <i>rotundifolia</i>	1840
<i>Saponaria perfoliata</i>	1839	----- <i>laxiflora</i>	1839
<i>Sarcantlus filiformis</i>	1842	----- <i>fissa</i>	1840
----- <i>pallidus</i>	1840	----- <i>cerina</i>	1842
----- <i>oxyphyllus</i>	1840	----- <i>diaphana</i>	1844
<i>Sarcophilus olivaceus</i>	1839	----- <i>diuretica</i>	1838
----- <i>parviflorus</i>	1838	----- <i>Lindleyana</i>	1841
----- <i>unguiculatus</i>	1840	----- <i>lobata</i>	1844
<i>Satyrion papillosum</i>	1838	----- <i>rosulata</i>	1843
----- <i>carneum</i>	1838	<i>Spironema fragrans</i>	1840
----- <i>candidum</i>	1838	<i>Sprekelia cybister</i>	1840
----- <i>postulatum</i>	1840	----- <i>glauca</i>	1840
<i>Saussurea pulchella</i>	1842	-----	1851
<i>Saxifraga ciliata</i>	1843	<i>Stanhopea quadricornis</i>	1838
<i>Scaphyglottis reflexa</i>	1839	----- <i>Lindleyi</i>	1838
----- <i>stellata</i>	1839	----- <i>aurea</i>	1841
<i>Seelochilus Ottonis</i>	1842	----- <i>tigrina</i>	1839
<i>Schizanthus candidus</i>	1843	----- <i>oculata</i>	1839
<i>Schizonotus tomentosus</i>	1840	-----	1840
<i>Schomburgkia marginata</i>	1839	----- <i>graveolens</i>	1840
----- <i>tibicinis</i>	1841	----- <i>guttulata</i>	1843
----- <i>undulata</i>	1844	----- <i>inaculosa</i>	1840
----- <i>crispa</i>	1844	----- <i>Martiana</i>	1840
<i>Schubertia graveolens</i>	1838	-----	1841
<i>Schweiggeria pauciflora</i>	1841	----- <i>var. bicolor</i>	1843
<i>Scilla pratensis</i>	1839	----- <i>Wardii</i>	1840
----- <i>Peruviana, var. discolor</i>	1843	<i>Statice arborea</i>	1839
<i>Sclerocyon oleinum</i>	1843	----- <i>pectinata</i>	1840
<i>Scutellaria splendens</i>	1841	----- <i>monopetala</i>	1841
<i>Sedum miserum</i>	1838	----- <i>var. denudata</i>	1842
----- <i>multicaule</i>	1840	<i>Stelis argentata</i>	1842
<i>Senecio populifolius, lacteus</i>	1839	----- <i>crassifolia</i>	1842
----- <i>cruentus</i>	1839	----- <i>atropurpurea</i>	1842
----- <i>odoratus</i>	1839	----- <i>tristylis</i>	1838
<i>Severinia brevifolia</i>	1841	<i>Stenia pallida</i>	1838
<i>Sieversia elata</i>	1842	<i>Stenochilus longifolius</i>	1839
<i>Sisyrinchium junceum</i>	1840	----- <i>incanum</i>	1839
----- <i>majale</i>	1841	<i>Stenomesson eustephioides</i>	1843
<i>Sobralia macrantha</i>	1842	----- <i>Hartwegii</i>	1844
		----- <i>vitellinum</i>	1843
		----- <i>aurantiacum</i>	1843

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	1844	pl. misc.		1840	pl. misc.
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Stenocoryne longicornis	1843	.. 68	-----	1841	22 ..
Stevia fascicularis	1838	59 ..	Triteleia aurea	1841	.. 161
Stigmaphyllon ciliatum	1841	.. 121	Tritonia fucata	1838	35 ..
----- jatrophae-			Trochetia grandiflora	1844	.. 10
----- folium	1843	.. 80	-----	1844	21 ..
-----	1844	7 ..	Trollius acaulis	1842	.. 56
Strobilanthes seabra	1841	32 ..	-----	1843	32 ..
Styidium proliferum	1841	.. 78	Tropaeolum azureum	1842	65 ..
----- pilosum	1841	.. 79	Trymalium odoratissimum	1838	.. 30
-----	1842	41 ..	Tulipa Gesneriana	1838	46 ..
----- Brunonianum	1841	.. 95	----- humilis	1844	.. 39
-----	1842	15 ..	----- maleolens	1839	66 ..
Tabernaemontana dichotoma	1841	53 ..	Turraea lobata	1843	.. 86
Talinum teretifolium	1843	1 ..	-----	1844	4 ..
Tanacetum longifolium	1840	.. 78	Ureocliina pendula	1838	.. 151
Tetrancna mexicanum	1843	52 ..	Valeriana Napus	1840	.. 180
Thalictrium cultratum	1840	.. 77	Van Houtte's Phlox	1843	5 ..
Thomasia canescens	1840	.. 203	Vanilla bicolor	1838	.. 58
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----- proliferus	1838	8 ..	----- furva	1844	.. 42
----- isantherus	1839	.. 75	----- parviflora	1844	.. 57
Tigridia violacea	1841	.. 134	----- violacea	1841	.. 32
Tillandsia Gardneri	1842	63 ..	----- lamellata	1838	.. 125
----- rubida	1842	63 ..	Veronica diosmæfolia	1840	.. 30
Tradescantia iridescens	1840	34 160	----- formosa	1839	.. 85
----- tumida	1840	42 ..	----- nivea	1842	.. 43
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----- Stirlingii (note)	1839	28 ..	Vriscia psittacina	1843	10 ..
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----- recurvum	1843	.. 17	----- bidentata	1844	.. 78
----- candidum	1843	.. 18	Weinmannia venosa	1840	.. 36
Trichonema edule	1842	.. 99	Xerotes longifolia	1839	3 ..
Trichosma suavis	1842	21 ..	Zichya tricolor	1839	52 ..
Trifolium involueratum	1840	.. 116	----- angustifolia (note)	1859	52 ..
Trigonidium acuminatum	1838	.. 136	----- villosa	1841	.. 81
----- Egertonianum	1838	.. 135	-----	1842	68 ..
-----	1840	.. 100	Zigadenus glaucus	1838	67 ..
----- ringens	1840	.. 121	Zygopetalum africanum	1840	.. 139
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- Dietrich, Synopsis Plantarum seu Enumeratio Systematica, &c, 1842, *misc.* p. 7.
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- Encycelia, characters of, 1842, *misc.* p. 28.
- Endlicher's Genera Plantarum, 1839, *misc.* p. 40.
- Genera Plantarum, noticed, 1840, *misc.* p. 31.
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- Gray's Notes of a botanical excursion to the mountains of N. Carolina, 1842, *misc.* p. 11.
- Guatemala Orchidaceæ, 1840, *misc.* p. 43.
- Gum, its motion in plants, 1840, *misc.* p. 14.
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- Kunth, Enumeratio plantarum, Vol. III. 1842, *misc.* p. 6.
- Lantana, list of sp. of, 1843, *misc.* p. 53.
- Lælia, sp. described, 1842, *t.* 62.
- Ledebour's Flora Rossica, 1842, *misc.* p. 6.
- Leiophylla, 1842, *misc.* p. 15.
- Link, Klotzsch, and Otto, Icones plantarum, 1840, *misc.* p. 87.
- Leptotes bicolor, its fruit aromatic, 1840, *misc.* p. 14.
- Lomandra, note upon, 1839, *sub t.* 3.
- Lycaste, sp. described, 1843, *misc.* p. 15.
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- Monstrum Planti, 1843, *misc.* p. 1.
- Mormodes, sp. described, 1843, *t.* 33.
- Moquin Tandon, Chenopodearum Monographica enumeratio, 1840, *misc.* p. 78.
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- Nolana, division of the genus, 1844, *t.* 46.
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- Perrine on acclimatising tropical plants in the United States, 1839, *misc.* p. 5.
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- Pisonai tree, 1839, *misc.* p. 18.
- Plant's Vegetable Monster, 1843, *misc.* p. 1.
- Pleurothallis, sp. described, 1842, *misc.* p. 67.
- Pollen covered with starch, 1839, *misc.* p. 74.
- Primary distribution of the Vegetable Kingdom, 1839, *misc.* p. 76.
- Proceedings of the Royal Asiatic Society, 1839, *misc.* p. 24.
- Promenæa, sp. described, 1843, *misc.* p. 13.
- Pyralia oleifera, 1842, *misc.* p. 13.
- Ribes, list of hardy sp. 1843, *misc.* p. 37.
- Royle's Illustrations of the Botany, &c. of the Himalayas, 1839, *misc.* p. 26.
- Salep roots, their anatomy, 1841, *misc.* p. 16.
- Schauer, Chamælancieæ, 1841, *misc.* p. 88.
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 Wight's Illustrations of Indian Botany
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