ICONES PICTAE

PLANTARUM RARIORUM,

ILLUSTRATAE.

FASC. I - III

auctore

JACOBO EDVARDO SMITH, M.D.

LONDINI :

TYPIS J. DAVIS,

1790-93.

NOBILISSIMÆ

MARCHIONISSÆ DE ROCKINGHAM,

CUJUS OFFICIA VERE LIBERALIA

HISCE CHARTIS PLURIMUM ORNAMENTI TULERUNT,

CUJUSQUE ERGA AUCTOREM BENIGNITAS,

MULTOTIES MULTIMODISQUE MANIFESTATA,

GRATES SUAS AMPLISSIMAS

JURE POSTULAT,

HOC OPUS MERITO DATUR,

SERVO GRATISSIMO

HUMILLIMOQUE

J. E. SMITH.


EARL. OF. AYLESFORD
PACKINGTON. WARWICKS.

P R Æ F A T I O.

IN præfatiunculâ nostrâ, Plantarum Iconibus, cal. April. 1789 evulgatis præmisi, lectorem monui, me animum iconibus, ad plantas exsiccatas Linnæano aliisque herbariis conservatas et nondum delineatas, adumbrandis, inprimis adjuncturum fore; et profectò illud opus tales solummodò amplecti volo. Verumtamen novæ plantæ, numerosæ admodum, rarè etiam et speciosæ, queis horti Anglici hodiè scatent, jamdudum labores botanici doctioris, ne longâ nocte oblivionis obtectæ lateant, sibi vindicaverunt. Neque ideò huic operi aliquid subsidii ferre ardor impulit Dom. Sowerbeii, qui cum certè inter peritissimos rerum botanicarum pictores habeatur, haud modico quidem desiderio flagravit in se suscipiendi opus studio suo et virtute dignum. Neve equidem socio nemet adjunxissem, nisi cui, sive de veritate sive de peritiâ res agatur, plenissimè fidendum fuerit.

Hujusce igitur operis institutum est, icones dare maximè fidendas, elegantiâ spectabiles, plantarum apud nostrates vivarum, quæ hactenus parum innotuerint, aut iconibus nondum ornatæ sint: necnon iisdem descriptiones scientificas addere. Rarissimæ solummodò pulcherrimæque plantæ locum hoc opere invenient. Descriptio systematica si quid de historiâ aut œconomiâ memoratu dignum sit amplectetur. Porrò autem quo nostrum opus quam utilissimum fiat, etiam his qui parum literis Græcis et Latinis imbuti fuerint, descriptiones separatim, cum in linguâ Latinâ tum vernaculâ dedi, adeò ut qui velit ex hoc vel illo fonte scientiam hauriat, neque pretio supervacaneo cogatur ambas comparare.

In Anglicis descriptionibus ad normam immori. Linnæi conficiendis, malui liberè loqui (nonnunquam etiam Latina quædam verba, quasi voces technicas retinens) quam fide nimis religiosâ verbum de verbo reddere; cautus ne inconsultus in sermonem inciderem, cincluitis Cethegis vix auditum, elegantiæ et perspicuitatis vacuum. Summoperè quidem optandum est, quod indocti in consuetudinem cum sermone classico scientifico, quasi blanditiis allecti, adducantur; adeò ut demum docti indoctique sensim invicem accedant, et cum eandem scientiam excolant, iisdem utantur vocibus.

Præsens opus plantas staturæ plerumque grandioris sistit. Alterum mox prodibit quod minores adhibebit, quibus scilicet paginâ breviori, ad partes necessarias exponendas, opus fuerit.

Dedum Londini Cal. Octobr. 1790.

PASSIFLORA lunata.

GYNANDRIA Pentandria.

Char. Essent. Trigyna. *Corolla* decemfida. *Nectarium* radiis exterioribus. *Bacca* pericellata.

Sectio 2. *Foliis bilobis.*

PASSIFLORA foliis bilobis punctatis basi tuberculatis, bipalmatim dissectis, nectarii radiis exterioribus compresso-clavatis obtusis.

Passiflora bellora. *Caspar. Diff. de Passifl.* 457. t. 988.

——— punctata. *Hortulanorum.*

Granadilla folio sinuato, flore parvo, albo. *Plumier. manuscr. ex auctoritate specimenis in Herb. Burm.*

Angl. Crescent-leaved Passion-flower.

Ad Veram Crucem, Mexico, degit Houstoun, qui et Horto Chelseano misit. In Jamaica invenit Gul. Wright, M. D. Anton. Hort. Kew. Figura nostra ad exemplarium ex Horto Chelseano delineata est. Toto anno floret in calidario D. Salisbury, Allertonæ in Comit. Eboracensi.

Frutex cultus altitudine pedes triginta superat.

Radix ramoso-fibrosa.

Caules plures, basi lignosi, teretiusculi, superne acutanguli, striati, fere herbacei, laeviusculi, circinis scandentes, alterne ramosi, foliosi.

Folia alterna, petiolata, patentia, basi obliquiter cordata, bilobo. lobis valde divaricatis, elongatis, integerrimis, obtusis, apice setula armatis (porro setula media inter lobos lata est); venosa, laete viridia, pertinentia, superne laevia, alterne subglaucescentia, utrinque inter venas majores nitea punctarum mellifera notata.

Petiola brevea, teretiusculi, levissime pubescentes, eglandulosi.

Stipulæ parvæ, semi-lanceolatæ, acutæ, integerrimæ, caducæ.

Cirrhi axillares, simplices, pirales, longissimi, glabri.

Flores axillares, bini, pedunculati, nutantes, mane expansi, odore mellis.

Pedunculi petiolis duplo longiores, uniflori, teretes, apice incrassati, levissime pubescentes, aut cuti.

Bractea ovata, minutissima, fusca, ultra articulum, subsparsa.

Calyx nullus: nisi bracteae [illegible] calyx [illegible] angulatus [illegible]

Corolla hypocrateriformis, monopetala, profunde dimidiata, albula, [illegible] [illegible] obovatis, obtusis quinque exterioribus rudioribus, extus viridibus [illegible] interioribus angustioribus brevioribusque.

Nectar: **Corona exterior** radiis circiter triginta, corollâ paulo brevioribus, compressis et [illegible], luteis; *media* radius capillaribus, longe crassioribus, viridulis; *intima* monophylla, plicata [illegible] ciliata, foliolum nectariferum arcte obducens, viridis.

Genitalia corollam aequantia, laevia.

Filamenta cylindracea, crassiuscula, alba.

Antherae luteae.

Germen ovale, obsolete tripolinum.

Pistillum recurvum. *Stigmata* obtusa.

Fructus [illegible] nondum vidi maturum.

OBSERVATIONES.

Descriptio Passiflorae punctatae (non verò differentia specifica) in Linn. Syst. Veg. ad nostram pertinet plantam, cum etiam observato in Mant. p. 492. sed haec definitio et etiamnea neque cum MS. neque cum planta convenit.

Passiflora punctata ex icone et descriptione Feuillei dignosci potest. Hinc profecto descripsit Linnaeus plantam, neque ipsi ac mihi invisam. Nuper in horto regio Parisiensi florentem vidit ac depinxit cel. Cavanilles.

EXPLICATIO TABULAE

1. Bractea.
2. Petalum exterius.
3. Petalum interius.
4. Corona exterior.
5. [illegible] media.
6. 6. [illegible] intima plicata.
7. Foliolum nectariferum intergerinum.
8. Columna genitalium.
9. Anthera.
10. Germen.
11. Stigma.

Passiflora lunata

ANTIRRHINUM reticulatum.

DIDYNAMIA Angiospermia.

Char. Essent. *Calyx* pentaphyllus. *Corollae* basis deorsum prorumpens, neutiquam *Capsula* bilocularis.

Sectio 3. *Foliis alternis*

ANTIRRHINUM foliis linearibus canaliculatis sparsis surculorum radicalium subquinis, caycibus hirsutis, pedunculis bracteis brevioribus

Angl. Reticulated Toad-flax.

In Angliae regni peregrinator indefessus Renatus Louiche Desjontaines hodie Botanices Professor Parisiis, qui et horto regio Parisiensi misit. Hinc favente amicissimo Thouino, semina ejus accepi, quae in horto Chelseano, solito adhibito optimi Fairbairni cura, laete germinaverunt, ac flores pertellos primo anno (1788) tulerunt.

Radix perennis, ramosa, fibrosa.

Caules herbacei erecti, ramosi, foliosi, teretes, glauci, glabri. *Surculi radicales* plures, decumbentes, foliosi, breves.

Folia caulina sparsa, linearia, obtusiusculata, integerrima, canaliculata, nuda, glauca *surculorum radicalium* brevioris, obtusiora, verticillata, plerumque quina, subinde quaterna vel sena, rarius ad basin alterna. *Stipulae* nullae.

Flores racemosi, caulem ramulosque terminantes, verticillati, valde speciosi, inodori. *Pedunculi* alterni, simplices, breves, uniflori, erecto-patentes, hirsuti et subviscosi. *Bracteae* solitariae ad basin pedunculorum, patentes, longitudine pedunculi cum calyce lanceolatae, ciliatae, margine subinde membranaceae

Calyces foliola inaequalia, lanceolata, acuminata, carinata, margine membranacea, extus hirsuta, subviscida, persistentia.

Corolla calyce triplo longior. *Caudex* subconicus, acutus, parum incurvus, pedunculo duplo longior, pallide flavam striatum. *Labium superius* [illegible] obtusum [illegible] striatis [illegible] maculatis striatis, inde explicationem purpureis, dein [illegible] postea violaceis, dorso pubescentibus pallidioribusque [illegible] brevior, ac hirsutum, [illegible] longitudine. *Palatum* magnum, bilobum [illegible] longitudinis [illegible] reticulatum, extus laeve, intus [illegible] duplici villorum [illegible] fauciem decorantium notatum.

Stamina inclusa, per paria approximata, albida, laevia. *Antherae* flavae

PISTILLUM

Pistillum. *Germen* parvum, didymum, laeve. *Stylus* longitudine staminum, laevis, apicem versus parum incrassatus, persistens. *Stigma* bifidum, album.

Capsula didyma, glabra, pallide fusca, bilocularis, calyce brevior.

Semina numerosa, parva, angulata, nigra, superficie corrugata.

OBSERVATIONES.

Pulcherrima planta facile multiplicanda. Flores tantopere colore ludunt ut nec verbis nec arte pictoria per omnes mutationes exprimi queant.

Haud facile est differentiam specificam fortium palefacere inter hanc et duas Linnaeanas species, partim folia verticillata in furculis radicalibus munitas, *A. pubescens* nempe et *viscosum*. Differentias frequentes precipue observavi. *A. junceum* ab utraque speciebus longe minus est; tota planta fere glabra, bracteis glabris, pedunculis triplo brevioribus, ejusdem calyx levissime pubescens, corolla flava, paulo aureo; folia in furculis radicalibus terna, ut plura. *A. viscosum* plantam nostram quam maxime refert facie, nec non furfure calycum et pedunculorum, fatis tamen ni fallor distinguitur pedunculis filiformibus caule adpressis, bracteis duplo longioribus, ne dicam corollis (si videtur) totus flavis. Hanc speciem in herbario Linnaeano, nec vivam, vidi. Notandum est quod figura nostra, e planta junioris facta, furcularum radicalem haud satis ut folia verticillata conspicianturexpansum exhibet.

EXPL. TAB.

1. Calyx.
2. 2. Corolla.
3. Stamina, paria duo florum.
4. Pistillum.

Capsula matura.

6. Semina.

Omnia naturali magnitudine.

Antirrhinum reticulatum.

E U P H O R B I A punicea.

D O D E C A N D R I A Trigynia.

Char. Essent. *Corolla* 4 sive 5 petala, calyci adidens. *Calyx* monophyllus, ventricosus. *Capsula* tricocca.

Sectio 6. *Umbella quinquefida.*

EUPHORBIA umbella quinquefida trifida, involucellis ovalibus acuminatis coloratis, capsulis glabris, foliis obovato-lanceolatis.

E. punicea. *Swartz. Prod. 76. Aiton Hort. Kew. v. 2. 14.*

Angl. Scarlet Spurge.

In Jamaica, perpaucè tamen, legit vir generosus Matthæus Wallen, qui Nobilissimo Marchioni de Rockingham anno 1778 ipsam misit stirpem quam apud vidimus Marchionissam pulchrè adhuc florentem & deinde curavimus.

Caulis humanæ altitudinis, fruticosus, lubcarnosus, lactescens, teres, determinatè ramosus. *Rami* adscendentes, terni ramuli subinde quaterni vel quini. *Cortex* lævis, albidus, e cicatricibus foliorum jampridem deciduorum depresso-punctatus, vel maculatus.

Folia in summitatibus ramulorum conferta, subsessilia, undique patentia, obovato-lanceolata, obtusiuscula, mucronata, æqua, opaca, atro-viridia, subtus glaucescentia; *juniora* involuta, prope umbellas colorata. *Nervus* principalis in omnibus fulva, in junioribus ad umbellas sæpe rubro quasi maculatus. *Stipulæ* nullæ.

Umbellæ terminales, erectæ, quinquefidæ, sæpe sex vel septemfidæ. *Pedunculi* subclavati, glabri, dichotomi. *Involucella* bina vel terna, opposita, sub singulum florem, ovalia, acuminata, vividissime coccinea.

Flores solitari, carbunculi, flavescentes, rubicundi.

Calyx monophyllus, ventricosus, quinque-dentatus, persistens.

Petala quinque, curvata, crassa, truncata, divaricata, cum dentibus calycis alterna, margine ejus imposita, intus, nectariferia, pertillosa. Ac. albicantia, dulcissimum sinu involuta.

Stamina quindecim sed viginti ferunt, plurima abortiva. Filamenta tenuia, inarticulata, superne rubra. Antheræ bilobæ, flavæ.

Pistillum. Germen pedicellatum, sellosum, subrotundum, trilobum, glabrum. Stila tres, reflexi, rubri. Stigmata simplicia. Receptaculum paleaceum, paleis ramosis.

Capsula glabra, viridis, tricocca, trilocularis.

Obs. Speciosissima hujusce generis planta, ornamentum magnæ calidario præbet, sed adhuc rara et infrequens. Nec tamen difficilime propagatur, quippe semina ex insulâ Jamaicensi missa, tum etiam quæ in Angliâ maturuerint, istè germinant. Tales multiplicari posse verisimile est.

EXPL. TAB.

1. Calyx.
2. 2. Petala.
3. 3. Stamina.
4. Antheræ.
5. Staminia abortiva.
6. Germen.
7. Stigmata.
8. Frutus.

Omnia magnitudine naturali.

Euphorbia punicea.

HEDERA capitata.

PENTANDRIA Monogynia. *Fl. pentapetali, superi.*

CHAR. ESSENT. *Petala* 5, oblonga. *Bacca* 5-sperma, calyce cinctu.

HEDERA foliis ellipticis integris, racemis compositis terminalibus, floribus sessilibus capitellatis.

Aralia capitata. *Jacq. Stirp. Amer.* 89. t. 61. *Swartz. Prod.* 55. *Aiton. Hort. Kew.* v. 1. 382.

ANGL. Cluster-flowered Ivy.

In Martinico sylvas legit illustr. Jacquin. In Jamaicâ invenerunt Gul. Wright, M. D. et Franciscus Masson. (Herb. Banks.) Apud Nobiliss. Marchionem de Rockingham, qui anno 1782 omnibus ponis flebilis occidit, jamdudum ante annum 1777 vigent formosus frutex, sed unde delatus non constat. In cultario Marchionissæ primum in Europâ anno 1787 et jam inde quotannis florui, at semina nondum perfecturuerunt. Taleas propagantur. ♄

CAUL. arboreus, erectus octopodalis, teres, determinate ramosus. *Cortex* fuscus, parum rimosus. *Rami* adscendentes, foliosi, apice floriferi.

FOL. sparsa, in apicibus ramulorum confertiora, petiolata, patentissima, elliptica, acuminata, integerrima, margine undulata, glabra, subtinervia, venosa, laete viridia. *Petioli* longitudine varia, teretiusculi, læves, basi ampliata subtriangulari ramis fortiter affixi. *Stipulæ* nullæ. *Gemmæ* e squamis plurimis, subrotundis, magnis, glabris, flavescentibus, brevi decidiis, foliis rudimento sæpe mucronatis, unde folia abortiva dicerer.

RACEMUS terminalis, erectus, compositus, ramulis plerumque alternis, in capitula densa multiflora desinentibus. *Pedunculi communes* obsolete angulati, pallide virides, ferrugineo-pulverulenti, *partiales* teretes. *Bracteæ* solitariæ ad basin pedunculorum partialium, parvæ, concavæ, acutæ, integerrimæ, pulverulentæ.

FLORES in capitulis terminalibus, sessiles, numerosi, albi, exigui in structura difficillime eruendi, unusquisque flos infidet *ovolucello* proprio calyciforme, monophyllo, quinquefido, extus pulverulento, persistente.

CAL. x germen cingens, minimus, quinquedentatus, pallidè viridis, glaber, persistens.

PETALA quinque, margini calycis infidentia, ovata, acutiuscula, patentia, alba, decidua.

STAMINA. *Filamenta* quinque, dentibus calycis opposita, petalis alterna, longitudine corollæ, patentia, albida. *Antheræ* subrotundæ, bilobæ, flavæ.

PISTILLUM

[illegible] [illegible] inferum, calyce coronatum, ſubrotundum, glab[illegible] [illegible] in unum [illegible] coalit[illegible] max [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] nudus exhibete[illegible] [illegible] [illegible] ſimplicia.

B[illegible] ſubrotunda, glabra, ſulca, loculamentis [monoſpermis ni fallor [illegible] [illegible] [illegible] ſed fructum ex herbario Banksiano ſolummodo detractum, nec maturum vidimus.

OBSERVATIONES.

De hujuſce ſtirpis genere haud levis eſt inter botanicos diſſenſio. Inventor ejus primarius vir cl. Jacquin [illegible] [illegible] eſt [illegible] ad Hederas pertinere [illegible] tamen inter Aralias recenſuere. Hanc [illegible] [illegible] [illegible] differentiam ſolummodo dignoſcere inter duo hæc genera. Procul dubio ſtylorum numerus [illegible] [illegible] [illegible] [illegible] [illegible] arborea [illegible] flore gaudet monogyno, mox polygyno, diſſilis [illegible] poſt antheſin ſtylis, [illegible] [illegible] ad [illegible] uſque ut e ſpeciminibus Linnæanis patet. Sic ſe res habet omnino in noſtrâ plantâ; et anthac habitu et fructu [illegible] [illegible] cum Hederâ Helice conveniunt vulgari, ut hanc et illam in eodem genere militare mihi luce clarius eſt. His etiam ſocia Sciodaphyllum *Brownei* (*Hiſt. Jam.* 190, *t.* 19, *f.* 1, 2) *Aralia Sciodaphyllum Swartz. Prod.* 55 arbor a Linnæo non deſcripta, ſeſe adjungit. Annon Araliæ Linnæanæ ſpecies aliæ Hederis etiam conſociandæ ſint, futura dijudicabit dies, ſcilicet cum flores fructuſque in plantis [illegible] [illegible] res pollulat inveſtigare conceſſum fuerit. Hiſce inſuper, modo genera diſtincta eſſe probatum ſit, detur nomen Aralia, uti antiquioribus.

EXPL. TAB.

1. Flos ſeorſim.
[illegible] [illegible] [illegible] [illegible] & neſlito [illegible].
3. Stamina.
4. Styli jam diſcrependi.
Racemi [illegible] fructifera ex herbario Banksiano.
6. Fructus immaturus involucello fulfultus.
7. Fructus ad perpendiculum ſectus.
8. 9. Idem ſtylis orbatus ut calyx diſtinctè conſpiciatur.

Hedera capitata

WACHENDORFIA paniculata.

TRIANDRIA Monogynia.

Char. Essent. *Corolla* hexapetala, inaequalis, infera. *Capsula* trilocularis.

WACHENDORFIA scapo polystachio, folius plicatis.

W paniculata. *Linn. Sp. Pl.* 59. *Burm. Monogr.* 4. *f.* 1

Asphodelus latifolius, floribus paulis, flavescentibus, rubicundis intus maculis notatis. *B. cyn. Prod.* 3. 22. *t.* 9. *f.* 1

Angl. Panicled Wachendorfia.

Ad Capum Bonæ Spei, locis arenosis, legit Franciscus Masson. R. A. Salisbury. Figura nostra ex horto Domini Lee delineata est.

Planta florens pedalis.

Radix perennis, paululum repens tuberculis oblongo-cylindricis, subverticalibus.

Folia radicalia, bifaria, sessilia, equitantia, verticalia, patentia, basi margine interiore dentata, canaliculata, lineari-lanceolata, acuta, uninervia, nervosa, plicata, glabra, ate viridia, W thyrsiflorae simillima, sed triplo minora, post florescentiam deradiata, nec nisi post aliquos menses renascentia, qui nota a W thyrsiflori secundum Cl. Salisbury praecipue hac nostra distinguitur.

Scapus erectus, teres, folio unico vel altero parvo instructus, ramosus, inaequiferus. *Pedunculi* alterni, patentes, racemosi, 3—5 flori, teretes, pubescentes. *Pedicelli* breves, pubescentes, secundi, erecti, uniflori. *Bracteae* solitariae ad basin pedunculorum & pedicellorum, oblongae, acutae, membranaceae, extus pubescentes, citò marcescentes, superiores sensim minores.

Calyx nullus.

Petala sex, parum inaequalia, obovata, acuta, patentia, flava, extus pubescentia et rubicunda, quorum tria superiora magis approximata maculis communibus tinctis purpureis vel violaceis versus basin notantur.

Stamina. *Filamenta* longitudine corollae, teretiuscula, geniculata, adscendentia, glabra, flava. *Antherae* versatiles, pallide rubrae.

Pistillum. *Germen* superum, subrotundum, parvum. *Stylus* adscendens, longitudine staminum, superne tubar. *Stigma* depresso-peltatum, glabrum, parvum.

Pericarpium coccoli, marcidi, pentagoni, vesiculosi, trilocularis, trivalve. *Semina* solitaria, oblongo-ovata, fusca.

OBSER

OBSERVATIONES.

Wachendorfia paniculata à [illegible] [illegible], [illegible] apud nos floret. A diverſiſſima [illegible] [illegible] [illegible] ſub [illegible] [illegible] [illegible] [illegible]. Hac [illegible] [illegible] [illegible] ſtatim poſt [illegible] folia demittit [illegible] demum accedente hyeme nova audet protrudere. Vernali tempore floribus ſpecioſis ſuis [illegible] ſuperbus.

EXPL. TAB.

1. Stamen cum anthera.
2. Germen ſtylum ferens.
3. Stigma microſcopio auctum.
4. Capſula matura dehiſcens, corollâ marcidâ tecta.
5. Semen.
6. Idem auctum.
7. Semen tranſverſè ſectum, magnitudine naturali.

Wachendorfia paniculata

PORTLANDIA grandiflora.

PENTANDRIA Monogynia. *Fl. monopetali, supera.*

Char. Essent. *Corolla* clavato-infundibuliformis. *Antheræ* longitudinales. *Capsula* pentagona, ventrosa, bilocularis, bivalvis, polyspermia, coronata *calyce* pentaphyllo.

PORTLANDIA floribus pentandris, foliolis calycinis ovatis.

P. grandiflora. *Linn. Sp. Pl.* 244. *Browne Jam.* 264. *t.* 11. *Jacq. Stirp. Amer.* 62, *t.* 44? *Gærtn. Sem.* 139. *t.* 31. *f.* 1. *Aiton. Hort. Kew. v.* 1. 228.

Angl. Large-flowered Portlandia.

In locis rupestribus ad pedes montium Jamaicæ copiose crescit Browne. In hortis nostris infrequens est planta, quæ ægrè multiplicatur, nec nisi æstivo calidiore viget. Frequentius floruit apud Marchionissam de Rockingham. ♄

Caulis fruticosus, erectiusculus, ramosus, nodosus. *Cortex* glaber, longitudinaliter striatus. *Rami* oppositi, patuli, teretes, subsimplices, foliosi; *cortice* glaberrimo, viridi. *Gemmæ* gummosæ.

Folia opposita, patentia, lanceolato-elliptica, subacuminata, basi æqualia, integerrima, glaberrima, subtus pallidiora, venosa, venis utrinque eminentibus alternis. *Petioli* brevissimi, crassi, subtus gibbi, supra planiusculi, subalati. *Stipulæ* intrafoliaceæ, connatæ, deltoideæ, acutæ, glaberrimæ, pallidæ, arctè ramo adpressæ.

Flores axillares, subfoliatim intrastipulatim, pedunculati, subnutantes, maximi, albi, speciosi, nocte suaviter fragrantes, ante explicationem flavescentes apice incarnati.

Pedunculi breviusculi, teretes, glabri.

Bracteæ nullæ.

Calyx omnino superus, pentaphyllus foliolis ovatis, acuminatis, subrevolutis, basi carinatis, apicem versus rubicundis, persistentibus.

Corolla monopetala, infundibuliformis. *Tubus* quinquangularis, angulis acutis pubescentibus, apice ventricosus. *Limbus* quinquefidus, subæqualis *laciniæ* sub-deltoideæ, marginatæ, patulæ, demum revolutæ.

Stamina. *Filamenta* quinque, gemmæ impositæ, declinata, subfiliformia, vix longitudine tubi, basi pubescentia. *Antheræ* longissimæ, lineares, verticales, rectæ.

Pistillum. *Germen* superum, quinquangulare, glabrum. *Stylus* staminibus paulo longior, declinatus, spiraliter contortus, angulatus. *Stigma* mox trifidum, laciniis revolutis.

Capsula

Capsula secundum Gaertnerum coriacea, bilocularis, bivalvis, *dissepimento* tenui valvis contrario.

Semina plurima, dissepimento affixa, elliptica, compressa, scabra.

OBSERVATIONES.

Amicus noster integerrimus R. A. Salisbury hanc plantam genere omnino cum Catesbæa convenire suspicatus est. Nec recusarem ego quoad florem; sed fructus Catesbææ baccæ nempe unilocularis, integè obstat, modo hujus inventor et delineator haud sane primæ auctoritatis, fidendus sit. Videant autopsæ. Synonymon Jacquini mihi dubium est ob foliorum basis inæqualitatem in ejusdem tabula, quam nunquam vidi in nostra plantâ, nec in aliis Portlandiæ exemplaribus quibus difficilimum Banksianum gaudet herbarium. Delenda sane observatio Linnæi in Mantissa, p. 45, ubi hac inæqualitate P. grandiflorum a P. hexandra distinguit. Hæc enim totius dignoscitur facies calycinis lanceolatis, pedunculis ternatis, foliis ovatis, floribus quam in nostra triplo minoribus (*Herb. Banks. et Jacq. Am.* t. 182 f. 10), nec tantum floribus fertilibus hexandris, quibus aliquando varias planta nostra apud Marchionissam de Rockingham et Ducem de Northumbriæ.

EXPL. TAB.

1. Filamentum cum antheris.
2. 2. Bases filamentorum abortivorum.
3. Stylus cum stigmate.
4. 4. Germinis apex et latus.
5. Pars interna germinis transverse secti.

Portlandia grandiflora

OXALIS verficolor.

DECANDRIA Pentagynia.

CHAR. GEN. *Calyx* pentaphyllus. *Petala* unguibus connexa. *Capsula* angulis dehiscens, pentagona.

Sectio 3. *Folis ternatis. Caulescentes.*

OXALIS caule erecto fubfimplici, pedunculis unifloris, folus ternatis conferis folious linearibus apice fubtus callofis.

Oxalis verficolor. *Linn. Sp. Pl. ed.* 1. 434. *ed.* 2. 622. *Thunb. Oxal.* n. 19. *Act. Hort. Kew.* V. 2. 114. *Curt. Mag. t.* 255.

O. bulbofa, trifolia, foliis linearibus, obtufis, flore externe rubro, interne carneo. *Burm. Afr.* 65. *t.* 27. *f.* 1. malè.

ANGL. Striped-flowered Wood Sorrel.

In collibus et campis infra montes ad Promontorium Bonæ Spei copiofe legerunt Cel. Thunberg et Sparrmann. In Horto Chelfeam hyberna culis, abunde floret hyeme. ♃

RADIX bulbofa, ovata, folida, intus alba, extus tunicis multiplici, firmâ, fuscâ, glabra, arctè vellita; bafi radicula plurima, ramofiffima, tortuofa, tenuiffima exferens.

CAULIS ex fingulo bulbo folitarius, e bafi ejufdem intra tunicas enatus, erectus, fpithameus, plerumque fimplex; ratus ramulis uno alterove laterali in planta culta, teres, glabriufculus, fubflexuofus, bafi valde gracilis, albus; apice fofolius et multiflorus.

FOLIA terminalia, confertiffima, longius petiolata, ternata, patentia, *foliola* feffilia, linearia, obtufa vel potius angufte obcuneata, emarginata, integerrima, fupra glabra, subtus fubpilofa, parumque infra apicem glanduliis duabus, prominentibus, fulvis notata. *Petioli* filiformes, fuperne parum complanati prope bafin obfolete unarticulati, fubpubefcentes. *Stipulæ* nullæ.

PEDUNCULI terminales inter folia, numerofi, erecti, fimplices, unifori. folius parum longiores prope bafin, more petiolorum fed magis evidenter, unarticulati, teretes, striati, levitè pubefcentes, plus horizontaliter patentibus. *Bracteæ* parum ultra medium pedunculorum binæ, fuboppositæ, pedunculo adpreffæ, parvæ, lanceolatæ, acutæ, rubræ, glabræ.

FLORES erecti, non nisi fub folis intus expanti, inodori, formofi, e viteo rubro, claufi, ut vulgo quoque pulcherrimi.

Calyx foliola æqualia, linear-lanceolata, obtusiuscula, pallide viridia, albo marginata, extus pilosa, persistentia.

Petala calyce quadruplo longiora, obovata, obtusa, basi libera, parum supra basin in tubum connata, dein separata, sibi invicem incumbentia, alba, omnium coecinea, albo marginata, basi flava.

Stamina decem, quorum quinque longiora corolla duplo breviora, fabaceo-adelpha, albida. Antheræ luteæ, didymæ. Adsunt etiam inter stamina breviora filamenta quinque brevissima, antica, longioribus adnata.

Pistillum. Germen superum parvum, pentagonum, feminum rudimentis extus prominentibus inutilibus, glabrum, persistens. Stylus quinque esset longitudine filamentis longioribus, albo villosus. Stigmata penicilliformia, flava.

Fructus et maturum nondum apud nos perfecit.

EXPL. TAB.

1. Calyx pedunculo insidens.
2. Corolla floribus expansis.
3. clausa.
4. stamina.
5. Antheræ, auctæ.
6. Germen cum stylis.
7. Idem auctum.

OXALIS verficolor.

Striped-flowered Wood-sorrel.

DECANDRIA Pentagynia

GEN. CHAR. *Calyx* five-leaved. *Petals* united by their claws. *Capsule* pentagonal, bursting at its angles.

Section 3. *Leaves ternate. Stem* [illegible]

SPEC. CHAR. Stem erect, generally simple. Flower-stalks single flowered. Leaves ternate, clustered, leaflets smear callous on the under side at the tip.

SYN. Oxalis verficolor *Linn. Sp. Pl. ed. 1. 434. ed. 2. 622. Thunberg. Diss. on Oxalis. No. 19. Ait. Hort. Kew. t. 2. Curt. Mag. t. [illegible]*

O. bulbosa, trifolia, foliis linearibus, obtusis, flore externe rubro, interne carneo. *Burm. Afr. 65. t. 27. f. 1. bad.*

Gathered plentifully on hillocks and in fields at the foot of mountains at the Cape of Good Hope, by the celebrated Professor Thunberg and Dr. Sparrmann. It flowers abundantly in the hot-houses of Chelsea Garden in the winter. [illegible]

ROOT bulbous, ovate, lobed, white within, closely invested with a manifold, firm, brown, smooth external covering; throwing out from its base several very slender, zigzag, and much branched *radicles.*

STEMS solitary from each bulb, arising from the [illegible] bulb, [illegible] a span high, mostly simple, rarely producing in a cultivated state one or two lateral branches, round, nearly smooth, a little zigzag, very slender and [illegible] at the base, [illegible] leaves and flowers.

LEAVES terminal, [illegible] thick fed, on long footstalks, [illegible] for [illegible] with [illegible] meat, obtuse (or rather narrow wedge-shaped), emarginated, entire, smooth above, beneath a little hairy, and marked with two small prominent deep-yellow glands very near their extremity. *Foot-stalks* thread-shaped, slightly downy, somewhat flattened on the upper side, and having an indistinct kind of joint near the base. [illegible]

FLOWER-STALKS terminal, among the leaves, numerous, erect, [illegible] three, [illegible] a little longer than the leaves, furnished with a joint near the base, like that of the foot-stalks, but more evident, round, pale, slightly downy, with spreading horizontal hairs. *Bracts* two, a little beyond the middle of each flower-stalk, nearly opposite, prefixed to the flower, small, lanceolate, acute, red, smooth.

LOW-

Flowers erect, expanded in the sunshine only, scentless, beautiful, extremely elegant even when closed.

Calyx Leaves equal, linear-lanceolate, blunish, pale green bordered with red, externally downy, permanent.

Petals four times as long as the calyx, obovate, obtuse, separate at the base, but a little above is united into a tube, then again separated, folded over each other to the left, white with an exquisite red border, yellow at the base.

Stamens ten, of which the five longest are but half the length of the corolla, a little united at their base, whitish. *Anthers* yellow, didymous. Five other very short filaments, destitute of anthers, are observable attached to the longer ones, and standing between the shorter.

Pistillum. *Germen* superior, small, five sided, smooth, pellucid, full of little protuberances occasioned by the prominent rudiments of the seeds. *Styles* five, erect, the length of the longer stamina, white, shaggy. *Stigmas* ufted, yellow.

Fruit a capsule, which has not yet come to perfection in this country.

EXPLANATION OF THE FIGURE

1. Calyx standing on the flower-stalk.
2. Corolla separate, in its expanded state.
3. The same closed.
4. Stamina.
5. Anthers magnified.
6. Germen and styles.
7. The same magnified.

Oxalis versicolor

JUSTICIA coccinea.

DIANDRIA Monogynia. *Flores inferi, monoferuli, irregulares. Fructus capitatus.*

CHAR. GEN. *Corolla ringens. Capsula bilocularis, angulo elastico dehiscens.*

Sectio 1. *Fruticosæ.*

JUSTICIA fruticosa, corolla bilabiata; labio superiori integro, foliis bracteisque spicarum ellipticis acuminatis, antheris parallelis. *Solander.*

Justicia coccinea. *Aublet. Guian. V. 1. 10. t. 3. Ait. Hort. Kew. V. 1. 26.*

ANGL. Scarlet-flowered Justicia.

In Cayenna insula ad ripas rivulorum, mensibus Octobri, Novembre, et Decembri florentem invenit Aublet. In cultaria Marchionissæ de Rockingham nostro tempore vulgatissima. ♄

CAULIS fexpedalis, fruticosus, erectiusculus, teres, ramosus, cortice levi, fusco, longitudinaliter rimosus. *Rami* erecti, foliosi, ad foliorum insertionem incrassati, *juniores* obsolete quadrangulati, glabri.

FOLIA apicem versus ramulorum, opposita, petiolata, patenti-deflexa, elliptico-lanceolata, acuminata, integra, repanda, venosa, venis alternis, obscure viridia, glabra. *Petioli* teretes, teretiusculi. *Stipulæ* nullæ.

SPICÆ terminales, subsolitariæ, erectæ, simplices, densæ, multifloræ, ramulis excrescentibus candem lateraliter videntur. *Pedunculus communis*, ramulo conformis, teretiusculus. *Bracteæ majores* subalternæ, foliorum figurâ, sed longè minores, adscendentes, teretiusculæ, pubescentes, sub singulo flore unica, *minores* binæ supra majorem, minutæ, lineares, acutæ, in parte spicæ superiori obsoletæ.

FLOS sessilis, inter minores bracteolarum interiorem, erectus, magnus, speciosus, coccineus, marcescens helvolus.

CALYX parvus, quinquefidus, laciniis acutis, reflexis, subpubescentibus.

COROLLA sesquipedalis, tubulosa, ringens, incurva, angulosa, angulis pubescentibus. *Limbus* quadrifidus, laciniis superioribus ovatis, apice obtusis, emarginatis, *inferiori* tribus æqualibus linear-oblongis, obtusis, integris, deflexis, dependentibus.

STAMINA

Stamina. *Filamenta* duo, basi corollæ, e parte antica, inserta, tubo vix æquantia, patum incurva, simplicia, linearia, angulosa, pubescentia, helvola. *Antheræ* oblongæ, obtusæ, basi bilobæ, incumbentes, helvolæ.

Pistillum. *Germen* superum, receptaculo albido, carnoso insidens, ovatum, compressum, lateribus sulcatum, viride, glabrum. *Stylus* filamentis paulo longior, sulcatus. *Stigma* minutum, bifidum.

OBSERVATIONES.

Specialis hæc Jussieæ species ex India occidentali delata, omnes alias, cultas saltem, magnitudine superat, et in caldario fere arboreflet, flores vero speciosos suos rarius, nec nisi adulta profert. Talea non difficile propagatur. Folia trita odorem herbaceum, Trifoliorum quorundam haud absimilem spirant. Flores modon sunt

EXPL. TAB.

Bracteæ minores cum calyce

2. Inserto filamentum in tubo corollæ.

3. Germen cum stylo, receptaculo insidens.

JUSTICIA coccinea.

Scarlet-flowered Justicia.

DIANDRIA Monogynia. *Flowers inferior, monopetalous, irregular. Fruit capsular.*

GEN. CHAR. *Corolla* ringent. *Capsule* two-celled, bursting from the elasticity of its base.

Section 1. *Shrubby.*

SPEC. CHAR. Shrubby. Corolla two-lipped; the upper one indivisible. Leaves and the bracteæ of the spikes elliptical, acuminated. Anthers parallel. *Solander.*

SYN. Justicia coccinea. *Aublet's Guiana, V. 1. tab. 4. 3. Ait. Hort. Kew. V. 1. 26.*

Found by Aublet on the banks of rivers, in the island of Cayenne, flowering in October, November and December. In the Marchioness of Rockingham's stove it flowers in summer. ♄

STEM six feet high, shrubby, nearly erect, round, branchy; *bark* smooth, brown, cracking longitudinally. *Branches* erect, nearly, swelled at the insertion of the leaves; the *younger* ones slightly quadrangular, smooth.

LEAVES about the tops of the branches, opposite, on foot-stalks, spreading but a little deflexed, elliptico-lanceolate, pointed, entire, waved, nearly dull green, smooth, veins alternate; *foot-stalks* short, roughish. *Stipulæ* none.

SPIKES terminal, mostly solitary, erect, simple, dense, many-flowered, at length appearing lateral from the growing out of young branches. *Common Flower-stalk* resembling the branch, roughish. *Larger Bracteæ* nearly alternate, shaped like the leaves, but much smaller, nearly erect, slightly downy; one to each flower, [illegible] together above each of the single, minute, linear, acute, scarcely perceptible in the upper part of the spike.

FLOWERS sessile, one between each pair of the smaller bracteæ, erect, large, handsome, scarlet, becoming pale in decay.

CALYX small, five-cleft; segments acute, unbreaded, slightly downy.

COROLLA [illegible] and half long, tubular, ringent, incurved, angular; the angles slightly downy; the upper lip [illegible] of two segments or subdivisions, recurved at the apex; the lower one [illegible] equal, linear-oblong, obtuse, entire, pendulous.

STAMENS

STAMINA. *Filaments* two, inserted into the base of the corolla before, scarcely so long as the limb, a little incurved, simple, linear, angulated, downy, tawny. *Anthers* linear, obtuse, cloven at the base, incumbent, tawny.

PISTILLUM. *Germen* superior, standing on a white fleshy receptacle, ovate, compressed, furrowed on the edges, green, very smooth. *Style* a little longer than the filament, thread-shaped. *Stigma* minute, cloven.

OBSERVATIONS.

The elegant well-Indian Justicia is the largest species, of all those at least that are cultivated, and grows in the hot-house almost to the size of a tree. It presents us but rarely however with its beautiful flowers, which are only to be found on old plants. It is not difficult to propagate by cuttings. The leaves when bruised have an herbaceous smell like some trefoils. The flowers have no [illegible]

EXPLANATION OF THE FIGURE.

1. Smaller bracteas with the calyx.
2. The insertion of the filaments into the tube of the corolla.
3. Germen, standing on the receptacle, with its style.

1 2

3

Justicia coccinea

SISYRINCHIUM striatum.

MONADELPHIA Triandria.

Char. Gen. Monopetala. Spatha [illegible] Perianthium [illegible] Stigmata [illegible]

SISYRINCHIUM [illegible] generibus, [illegible] [illegible] exceedere [illegible].

Ascend. Vellosi. Striated Sisyrinchium.

Habitat [illegible]

Radix tuberosa, carnosa, [illegible].

Caulis bipedalis, erectus, ancepsque, glaber, ramosissimus, foliosus, [illegible] floribus.

Folia enciformia, acuta, integerrima, obliqua, [illegible] glabra, [illegible] bracteis radicalibus equalibus, [illegible] alterna, amplexicaulia, [illegible] [illegible].

Flores in capitulis terminalibus, lateralibusque [illegible] [illegible] [illegible] [illegible] purpureo striatis, extus [illegible] [illegible] [illegible] [illegible].

Spathae in hac specie potius monophyllae, concavae, carinatae, acutae, [illegible] [illegible] bracteae, quarum exteriori maxima, floribus [illegible] [illegible] [illegible] [illegible]

OBSERVATIONES.

Hoc genus ad Monadelphiam cum Cl. Schreberi reducere vix dubitamus. Altiusque de charactere ejus atque affinibus mihi incerti loquimur. Accuratissimus R. A. Salisbury cum hoc conjungit Ferraciam et Marcgraviam, quarum proxime differunt flylo apice bifido, posteriori flaminibus diffinctis, modo pro albicant. In medio tam naturali difficilium fuit invenire charactères generici stabiles, nec non quadam affinia perse labunt.

EXPLICATIO

1. Petalum extremum e parte interna
2. [illegible]
Germen cum genitalibus
Stigma bifidum cum anthera
Stigma
Operculum [illegible]

SISYRINCHIUM striatum.

Yellow striated Sisyrinchium.

MONADELPHIA Triandria.

GEN. CHAR. *Style* one. *Spatha* two-leaved. *Petals* six, plane. *Capsule* three-celled, inferior. *Stigmas* three.

SPEC. CHAR. Leaves sword-shaped. Stem two-edged, branched, leafy, many flowered. Flowers advance beyond the spatha.

This plant was sent from Stowe by P. Stephens, Esq. to Mr. Curtis; of whom we are obliged for this specimen. It thrives and flowers abundantly in his garden, but its native country we have yet to learn.

ROOT tuberous, tufted, perennial.

STEM two feet high, erect, two-edged, smooth, much branched, leafy, many flowered.

LEAVES sword-shaped, pointed, entire, slightly ribbed, glaucous, smooth, with a little membranous border; sometimes equitant, from the base, embracing the stem. *Stipulae* none.

FLOWERS terminal and lateral heads, a little drooping, very quickly fall; short-lived, with scarcely any smell; pale yellow streaked with purple; the colours strongest on the outside.

SPATHA in this species rather to be said to consist of a single leaf, concave, cuneiform, nearly ribbed, with a membranous margin; the external one longest, out-lasting the flowers, and enfolding them along with the internal spathae which are much smaller, and one to each flower.

FLOWER STALKS about the length of the outer spatha, triangular, single-flowered.

PETALS obovate, obtuse, with a little point, at the base slightly connected and spotted within, somewhat concave, with a spreading limb; the three outermost a little the smallest.

STAMENS *Filaments* shorter than the corolla, united into a tube for more than one third of their length, spreading at the upper part, smooth. *Anthers* versatile, small.

PISTILLUM. *Germen* inferior, roundish, smooth, green. *Style* the length of the filaments, three-cleft at the upper part. *Stigmas* simple.

CAPSULE roundish, three-celled, three-valved, four-seeded.

OBSERVATIONS.

We have scarcely any scruple in removing this genus to the Monadelphia, as Professor Schreber has done: it were to be wished we could as easily decide concerning its character and limits. The very accurate Mr. Salisbury unites with it the genera of Ferraria and Moræa, the first of which differs in having its style divided at the top into six parts, the latter in having separate stamens, if such marks may be judged sufficient. In so natural an order of plants nothing is more difficult than to find generic characters that shall be stable, and not set aside by every new species that occurs in our way.

EXPLANATION OF THE FIGURE.

1. An outer petal, seen on its inside.
2. An inner petal.
3. Germen and organs of fructification.
4. Stamen and anthera.
5. Stigma.

All of their natural magnitude.

Sisyrinchium striatum

TRADESCANTIA difcolor.

HEXANDRIA Monogynia. *Fl. calyculati.*

CHAR. GEN. *Calyx* triphyllus. *Petala* tria. *Filamenta* villis articulatis. *Capfula* trilocularis.

TRADESCANTIA acaulis lævis, bracteis equitantibus compreffis, foliis lanceolatis fubtus coloratis.

T difcolor. *L. Herit. Sert. Angl. 8. tab. 12. Aiton. Hort. Kew. V. 409.*

T. Spathacea. *Swartz. Prod. Fl. Ind. Occ. 57.*

ANGL. Purple-leaved Spider-wort.

In Jamaicâ cultam vidit Franciscus Masson, nare quidem ex Americâ meridionalis littore illo qui Mosquito Shore nuncupatur delatam hinc, manente eodem egregio viro, a botanicis Anglicis acute quæsita est, et curante clariss. Wallen Europæos tandem delatæ hortos. =

RADIX perennis, carnosa, verticalis, nodosa. *Radicules* verticillatæ, fubfimplices, filiformes, villofæ. *Caudex* fupra terram fubcaulescens, viridis.

FOLIA radicalia, numerofa, equitantia, patentia, pedalia, lanceolata, acuminata, integerrima, carnofa, fub-cavva, utrinque glabra, bafi ad marginem fubpubefcentia, fupra viridia, infra marginefque late purpurea, junora fubcaruleofcentia. *Stipulæ* nullæ.

SCAPI axillares, folio quadruplo breviores, foliaris [illegible] fuppleti, rarius ramofi, compreffiufculi, glabri, albidi. *Bracteæ exteriores* fpathaceæ obfolete nervofæ, purpurascentes, glabræ, totus ambitu quarum *interiores* minores, ovatæ, cuspidatæ, alternatim *fubovatæ* bifariam vix plures, maximæ, naviculares bafi fubcordatæ, acutæ, equitantes, *interiores* fquamaceæ, membranaceæ, albæ, pellucidæ, exteriorum ipfo brevores.

FLORES numerofi, inter bracteas exteriores fuprema, eafque vix fuperantes, bracteis minoribus afcaculatim obtectum, nodiculati, albi, ex ipfo nodo. *Pedicelli* fimplices, uniflori, teretiufculi, fuperne parum incraffati, albidi, apice fubinde virescentes, glabri, nudi, post anthefin incurvi.

CALYX triphyllus, corollaceus, albidus, pellucidus, glaber, laciniis æqualibus, ovatis, obtufis, concavis, patentibus.

PETALA tria, calyce parum longiora, laciniis, ut calycis, alternis, circitiis, æqualia, lato-ovata, obtufa, ipsa gaudet reparata, albi, ab marcescentia, et dein involuta.

STAMINA.

STAMINA. *Filamenta* sex, longitudine corollæ, æqualia crectiuscula, filiformia, alba. Intum supra basin vestita pilis numerosis, tenuissimis, albis, pellucidis. Conferuæ instar pulcherrimæ attollunt, erecto-patentibus apice flamine paulo brevioribus. *Antheræ* cuneiformes, vel ovatæ, luteæ, glabræ, apice integræ, marginibus pollinis, fulvis.

PISTILLUM. *Germen* superum, subtetraedrum, trigonum, glabrum, album, sicut erectus, longitudine flaminum, simplex, teres, glaber, albus. *Stigma* parvum, obtusum, scabrum.

CAPSULA trilocularis, trivalvis, vix magnitudine pisi, rubicunda, glabra. *Semina* solitaria, subrotunda.

OBSERVATIONES.

In caldario coetus, floribus fœmineisque abunde multiplicatur formosa planta, olim desideratissima quoque rarissima, hodie in hortis Angliæ etiam cota, et quasi "Crambe decies repetita." Apud amicissimum Salisbury eximie luxuriantem vidi.

EXPL. TAB.

Flos e bracteis liberatus.

2. Stamen cum antheris.

Idem auctum.

4. Germen cum stylo.

5. Fructus.

TRADESCANTIA discolor.

Purple-leaved Spider-wort.

HEXANDRIA Monogynia. *Flowers with a Calyx.*

GEN. CHAR. Calyx [illegible] *Petals* three. *Filaments* furnished with pointed [illegible]. *Capsule* [illegible]

SPEC. CHAR. Plant smooth. Stem none. Bracteæ embracing each other, compressed. Leaves lanceolate, colour red on the under side.

SYN. Tradescantia discolor. *Herit. Sert. Angl.* 8. t. 1. *Aiton Hort. Kew.* i. 403.

T. Spathacea. *Swartz. Prod. Fl. Ind.* [illegible] 47.

Mr. Mason observing this plant cultivated at Jamaica, to which place it had been brought by a ship from the parts of South America, called the Mosquito-flower, no sooner discovered it to the English Botanists, than they became anxious to acquire a further acquaintance and fuller knowledge, and as it might, by the favour of Mr. Mullen, it was sent to Europe.

ROOT perennial, vertical, fleshy, knotty. *Fibres* verticillated, thready, mostly simple, downy. *Body* of the root partly above ground, resembling a thick stem, green.

LEAVES alternate, numerous, embracing each other, spreading, a foot long, lanceolate, sharpish, entire, fleshy, slightly ribbed, smooth on both sides, a little downy at the edges of the hair, green above, bright purple on the margins and under side; the youngest ones somewhat channelled. *Stipulæ* none.

STALK axillary, four times shorter than the leaves, solitary, erect, simple, rarely divided, a little compressed, smooth, whitish. *External Bracteæ* lanceolate, slightly ribbed, purplish, smooth, solitary, no longer than those of which the *uppermost* are the smallest, hardly embracing the stalk, and alternate; the *uppermost* seldom more than two, very large, formed like a cowl, somewhat heart-shaped at the base, embracing each other, ending in a point. *Internal Bracteæ* sheaths, membranous, white, and polished, three times shorter than the outer ones.

FLOWERS numerous, the whole of the uppermost internal bracteæ, which they scarcely rise above, separately, and modified as follows: each [illegible] the internal one. Standing on flower stalks, white, [illegible] and [illegible] in beds. [illegible] simple, single-flowered, [illegible] a little shorter than the upper part of the stalk, some time green at its [illegible], smooth, polished, [illegible] flowering [illegible] three-leaved, coloured, whitish, smooth, [illegible] [illegible] [illegible]

PETALS three, [illegible] and [illegible] [illegible] spreading [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

STAMENS [illegible]

STAMENS. *Filaments*, five, as long as the corolla, nearly equal, almost erect, thread-shaped, white, slightly a little above the base with numerous very tender white pellucid hairs, which are most beautifully jointed like a necklace, and are somewhat longer than the filaments standing nearly erect. *Anthers* wedge-shaped, vertical, yellow, smooth, entire at the edge, bearing just within at their orange-coloured edges.

PISTIL. *Germen* superior, roundish, angular, smooth, white, not much longer than the filaments, simple, cylindrical, white and smooth. *Stigma* small, obtuse, rough.

CAPSULE, three-celled, three-valved, nearly so large as a pea, smooth, turning red. *Seeds* solitary, somewhat kidney-shaped.

OBSERVATIONS.

This very handsome plant requires the heat of a stove, in which situation it will abundantly propagate itself by seeds and offsets, so that though some time since its rarity made it highly esteemed, it is now superabundant in the English gardens, insomuch as to be almost esteemed an incumbrance. I have no where seen it more luxuriant than at Mr Salisbury's.

EXPLANATION OF THE FIGURE.

1. Flower separated from its bracteæ.
2. Stamen and anthera.
3. The pistil magnified.
   Germen and style
   rest.

Tradescantia discolor

LIGUSTICUM cornubienſe.

PENTANDRIA Digynia. *Umbellatæ.*

CHAR. GEN. *Fructus* oblongus, quinque-ſulcatus utrinque. [illegible] *Corollæ* æquales.
Petala involuta, integra.

LIGUSTICUM foliis radicalibus decompoſitis inciſis: caulinis ternatis lanceolatis integerrimis, tenu[illegible] obſoletis.

Liguſticum cornubienſe. *Linn. Sp. Pl.* 359. *Hudſ. Fl. Angl.* 118. *With. Bot. Arr.* 289.

Smyrnium tenuifolium noſtras. *Raii Syn.* 209. [illegible] 8.

Cornwall Saxifrage. *Petiv. Herb. Brit.* t. 26. f. 9.

Angl. Cornish Lovage.

Habitat in Cornubia Angliæ in dumetis et ad ſepes. Plantam rariſſimam, nunquam poſt Raiide tempus viſam, tandem anno 1788 reperit D. [illegible]. Specimen meum recentem communicavit [illegible] generoſus atque amiciſſimus Thomas [illegible] Harveus [illegible] anno 1789 [illegible] Cornubiam [illegible]. [illegible] ſpecimina [illegible] e horto Muſei Britannici, [illegible] figuram meam confeciendam [illegible].

RADIX [illegible], ſupra ſe attenuata, perpendiculariter in terram deſcendens, longa, [illegible] fibris paucis, elongatis, [illegible].

CAULIS bi- vel tripedalis, erectus, ramoſus, multiflorus, teres, ſtriatus, ſcabriuſculus, baſi purpuraſcens, [illegible].

FOLIA *radicalia* petiolata, erecto-patentia, [illegible], [illegible] quam longa: *foliola* oppoſitis petiolatis, [illegible], [illegible], [illegible], [illegible]venoſis, [illegible], acutis, [illegible] [illegible] margine [illegible] [illegible] ſcabris. *Petiola* [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] atque ſubtus [illegible]. *Caulina* foliola [illegible] omnia [illegible] [illegible], [illegible] [illegible] *foliola* [illegible] lanceolata, acuta, [illegible] *petiolo* dilatato, [illegible] [illegible]. *Suprema* obſoleta, et e petiolo [illegible] [illegible] [illegible] [illegible].

UMBELLA [illegible] [illegible], compoſitæ, multifloræ. *Involucra* e foliolis 6 ad 8 lanceolatis, [illegible] [illegible] [illegible] patentibus, umbella longe breviorbus, [illegible]. *Involucella* [illegible] [illegible]. *Radii* [illegible] [illegible], teretes [illegible].

Flores [illegible], æquales, [illegible] [illegible].

CAL. ſuperus, [illegible], [illegible] [illegible] ſubrotundis [illegible].

P[illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible], æqualia.

Stamina longitudine petalorum, patentia. *Filamenta* simplicia, subulata. [illegible] introrsum, e cuspide. Davelocitus.

Pistillum [illegible] corpuscula-fabriformia, [illegible] dilatata, glabra, collis elevatis quinque, [illegible] quinque sulcis intermediis, latitudine fere aequalibus. Stigmata duo, flavescentia, duplo [illegible] longiora, compressa, incrassata, superne divaricata. *Stigmata* simplicia.

Fructus [illegible] diuticus, e foliolis duobus, ovatis, gibbis, [illegible] quatuor, extro [illegible] longitudine [illegible] rugis elevatis notatus.

OBSERVATIONES.

Planta hæc tam rara atque singularis, ut in Flora nulla alia Europæa. Nutibus eximiis, tale ut Cornubia, eiusmodi inventa est [illegible] per te ab illustrissimo botanicorum Linnæo. Angl. Icorum, avide hoc inquirentium, Fritillaria dioica, [illegible] fere ad 23. Septembrem in lucem prodiisse. Nec tam tamen in [illegible] evolvitur atque difficilis inventu quibus locis natalem adire conigit. Cum nulla impressa exstet referentia, nisi parva illa Petiveriana, ut ex ea completa, ne dicam erronea, Dillenii figuram nostram quamvis ex aspectu plantæ manus formosam, tota tacta cursorie haud cognitam fore spero. Tabula enim Dilleniana in Ran. Synopsi nihil modo confusa est, ut folia aulina pro radicalibus facile desumi possint; hinc etiam erroneo evasit illic recusa specifica Linnæi, qui plantam ex icone tantummodo descripsit.

Radix fusco refusofo flavo fratei

EXPL. TAB.

Flos magnitudine naturali.
2. Idem auctus.
3. Germen cum calyce et floribus.
4. Semen germinans [illegible]
5. Semen maturum e parte externa.
6. Idem e parte interiori.
7. Semen epidermi.

LIGUSTICUM cornubiense.

Cornish Lovage.

PENTANDRIA Digynia. *Umbelliferous.*

GEN. CHAR. *Fruit* oblong, with five furrows on each side. *Corolla* equal. *Petals* rolled in, undivided.

SPEC. CHAR. Radical leaves twice compounded, cut; those on the stem ternate, lanceolate, entire. *Furrows* of the seeds obsolete.

SYN. Ligusticum cornubiense. *Lin. Sp. Pl.* 350. *Huds. Fl. Angl.* 118. *With. Bot. Arr.* 289.

Smyrnium trifoliatum nostras. *Ray. Syn.* 209. *t.* 8.

Cornwall Saxifrage. *Petiv. Herb. Brit. t.* 26. *f.*

Grows *in thickets and hedges in Cornwall. This very rare plant was first found, since the days of Ray, by Mr. Pennington in 1788. A drawing of it was soon after sent by Thomas Cullum, Esq. from a specimen of it gathered by himself near Lostwithiel in that county in 1789, from which, and from a living specimen communicated from the garden of the British Museum by Mr. Dickson, the present figure has been delineated.*

ROOT perennial, spindle-shaped, contracted in the upper part, descending perpendicularly very far, having a few elongated terminal fibres.

STEM two or three feet in height, erect, branched, many flowered, striated, slender, roughish, purple at the base, annual.

LEAVES. *The radical ones* on long footstalks, spreading upwards, twice ternate, broader than long; *stem* opposite, on long footstalks, variously and deeply cut, ribbed, full of net-like veins, their divisions generally alternate, acute, decurrent, entire, rough at the margin as well as at the ribs on both sides. *Footstalk* cylindrical, striated, rough, channelled above, dilated and somewhat membranous at its base. *Stem-leaves* solitary at each division of the stem, finally ternate, very [illegible] lanceolate, acute, finely cut, lobed, *footstalks* dilated, a little membranous, embracing the stem. *Upper* [illegible] obsolete, and confining of the membranous footstalks only.

FLOWER. *Terminal, very* compound, many flowered.

Common [illegible] *Partial* [illegible]

Petals [illegible]

Receptacle [illegible]

Seed [illegible]

CALYX superior, of five small, roundish, blunt, concave leaves.

PETALS five times as large as the calyx, oblong, acute, turned up, deeply channelled on the back, equal.

STAMINA the length of the petals, spreading. Filaments simple, awl-shaped. Anthers roundish, dichotomous, yellowish.

PISTILLUM. Germen roundish, compressed, dichotomous, furnished with five elevated ribs on each side, and intermediate, narrower, about equal to them in breadth. Style two, flat, as long as the filaments, joined together, and thick at the base, spreading in the upper part. Stigmata simple.

PERICARPIUM. Capsule, of two ovate, smooth, fleshy valves, flat on the inside, but externally marked with five slightly elevated lines.

OBSERVATIONS.

This is perhaps one of the rarest and least known plants of Europe. It has never been found growing in any place except Cornwall, and even there it remained for half a century unknown to English botanists, though eagerly sought for. It was at length discovered by Mr. Pennington. Not that it is rare in its native country, or difficult to be met with by those who go where it grows. As there is no representation extant of this species, except the diminished figure of Petiver, and the incomplete, not to say erroneous, one of Dillenius, it is hoped ours will not be unwelcome to the lover of the botanist, though from the nature of the plant it does not make a splendid appearance. The figure in Ray's Synopsis, inserted by Dillenius, is so contrived that the firm leaves may easily be mistaken for the radical ones, hence an error has crept into the Linnæan specific character, which was made from that figure only.

The root contains a yellow resinous juice.

EXPLANATION OF THE FIGURE.

1. A flower of its natural size.
2. The same magnified.
3. Germen with the calyx and styles.
4. A magnified section of the germen.
5. A ripe seed from externally.
6. The same on the inside.
7. Section of a seed.

Ligusticum cornubiense

HYDRANGEA hortensis.

DECANDRIA Digynia.

CHAR. GEN. *Corolla* pentapetala. *Calyx* quinquefidus, superus. *Capsula* [illegible] locularis, birostris, polysperma.

HYDRANGEA folis ellipticis serratis glaberrimis. Flamentis [illegible]

Hortensia. *Tuff. Gen.* 204.

Viburnum serratum. *Thunb. Jap.* 24

Primula mutabilis. *Lourer. Cochinch.* 104. Descriptio bona, at nomen vere inepta.

Spiræa *Kæmpf. Exot.* 659. Ex auctoritate iconis Kæmpferianæ in Musæo Britannico.

L'Obier de la Chine à fleurs incarnates. *Duchos. Plantes de la Chine.* t. 45.

ANGL. Chinese Guilder-Rose.

E Chinæ et Japoniæ hortis, ubi frequentissime colitur. In horto regio Kewensi. [illegible] Hunt. Botan. anno 1790, recepta est. Ex horto Nob. Vicecomitissæ de Cremorne varietatem pulchram [illegible] quæ notatu nobis plane latet.

FRUTEX habitu Viburni vel Sambuci, ob flores ejus elegantissimos, copiosissimos, nostro Viburno Opuli plenos, in delicias antiquorum habetur. Cum itaque hanc varietatem talium volimus, hujus descriptionem, donec flores in forma sua naturali melior dies nobis offerat, huc usque exponere.

RADIX fibrosa, ramosissima, albida.

CAULES plurimi, confertim nascentes, erecti, crassiusculi, ramosi, [illegible] teretes, glabri. *Ramuli* brachiati, teretes, foliosi, glabri, virides, nucculis autumnalibus [illegible] ejusdem.

FOLIA [illegible] petiolata, patentia-recurva, ellipticæ, obtuse [illegible] [illegible] integra, [illegible] [illegible] patentia, utrinque glaberrima, venosa, decidua. *Petioli* [illegible] glabri, gibbosi, supra canaliculati. *Stipulæ* nullæ.

CORYMBI terminales, magnitudine et figura Viburni Opuli, flore globoso, similisque e floribus radiatis albis [illegible] compositæ, pulchere sic roseo, [illegible] [illegible] duas transeuntes, virescentes. *Pedunculi* [illegible] glabri, [illegible] [illegible] [illegible] rotundi. *Bracteæ* nullæ, [illegible] folia diminuta, [illegible] [illegible] [illegible]

CALYX monophyllus, inæqualis, e quatuor (rarius tribus vel quinque) foliolis [illegible] inæqualibus, albicantibus, integris, glabris, roseis, obtuse acutis, persistentibus, [illegible]

PETALA [illegible] majora, quatuor, subæqualia, [illegible] obovata, concava, rosea, nervo [illegible]

Stamina. *Filamenta* octo, subinde [illegible] o. longitudine corollæ, æqualia, patentia, subulata, rubra. *Anthe* didymæ, geminæ [illegible] nutantes.

Pistillum. *Germen* nullum. *Styli* duo vel tres (rarius solitarii) mamillares, conniventes, per [illegible] simplicis duplo brevior [illegible] integerrima obtusa.

OBSERVATIONES.

Ad Cynæ divaricationes subinde inveniuntur flores aliquot magis perfecti, quinquefidi, calyce [illegible] quinquedentato, flavis tribus, divaricatis, germine ovato crinoculari, gaudentes, in vero [illegible] nunquam nascuntur, nec fructus ornant, ut in casse nobis exhibent. De genere itaque minime certi sumus. [illegible] in fructus capitis, post perenne fit, ac hyemem [illegible] bene retuderantur. [illegible] in flato matutis monospermæ, an Viburnum amantaceum erat, neque quam [illegible] vel alii [illegible] commentationis & [illegible] nobis verisimile videtur. Hydrangeam potius, genere fructus, judicamus, 1°. ob flamina petalis duplo numerosiora, neque numero æqualia, 2°. ob habitum Hydrangeæ arborescentis Linn. familiarium, 3°. ob summam affinitatem cum Hydrangea radiata Walt. H. Carol. cujus flores quinquefidi decandri, atque trigyni, saepissime radiati, quadrandi octandri, germine orbati fiunt, fructusque abortivi, ut omnino in nostra planta. Characteres igitur harum specierum præstat dare.

Hydrangea (arborescens) foliis ovatis glabris, flaminibus alternis longioribus.

H. arborescens. *Linn. Sp. Pl. 568. Mill. Ic. 251. optima, Ait. Hort. Kew. V. 2. 76.*

Habitat in Pensylvania, Canada. ♄

2. Hydrangea (radiata) foliis lobatis subtus tomentosis.

H. radiata. *Walt. F. Carol. 254.*

Habitat in Carolina, Walter, in *Florida*, Bartram. ♄

Brevem inflorescentiam dedit optimus defunctus Walter, sed bene monuit capsulam hujusce generis nullo modo circumscissam esse, ut, nescio quis ruinose, voluit Linnæus in supplementis generum plantarum, Mant. 141.

3. Hydrangea (hortensis). Vide supra.

EXPLICATIO TABULÆ.

1. Calyx monophyllus.
2. Flos in centro capitis.
3. Idem floribus auctus.
4. Petalum auctum.
5. Stamen auctum cum anthera.
6. Calyx floris in flatu, ut videtur, naturali.
7. Calyx femininoflorulus.
8. Stylli tres.
9. — floribus, auctis.

HYDRANGEA hortensis.

Chinese Guilder-Rose.

DECANDRIA Digynia.

GEN. CHAR. *Corolla* of five petals. *Calyx* [illegible] five [illegible] two [illegible], two [illegible], and many seeds.

SPEC. CHAR. Leaves elliptical, serrated, very smooth. Stem [illegible] of a [illegible] length.

SYN. Hortensia. *Juss. Gen.* 2. 4.

Viburnum serratum. *Thunb. Jap.* 124.?

Prunella mutabilis. *Lourer. Cochinch.* 104. with a good description, though an altered name.

Sim. *K. mss. Exot.* 894. according to Kæmpfer's drawing in the British Museum.

L'Obier de la Chine à fleurs incarnates. *Bucoz. Plantes de la Chine.* tab. 4.

The native place of this plant is have not been able to learn. It is often [illegible] in Chinese and Japan. From whence it was introduced into the Kew garden by Sir J. [illegible] Banks, in 1790. [illegible] and dedicated to the right honourable Lady [illegible] for the [illegible] ornaments to our work.

This shrub, whose habit approaches to that of the Viburnum and Sambucus, is [illegible] by flowers on account of the great production of its [illegible] regular flowers, which are [illegible] to the same unusual manner as those of the *Linnæan Genus Rosa*. [illegible] have therefore been able to obtain the double variety only, with which [illegible] plant we now present the public; and we are [illegible] enough to procure the flowers in their natural state.

Root [illegible], much branched, [illegible].

Stems [illegible] growing close together [illegible], the new branches, [illegible] with a [illegible] grooved bark. [illegible] opposite, each [illegible] crossing [illegible] with [illegible] plant [illegible] flowering at the [illegible].

Leaves opposite, on long flattish, spreading [illegible] elliptical [illegible] [illegible] derivation [illegible] smooth, [illegible].

[illegible] terminal [illegible] [illegible] young as well as [illegible] [illegible] [illegible] [illegible]

[illegible] and [illegible] except a few [illegible] about the base [illegible]

Co[illegible] [illegible] large, compact [illegible] [illegible] for [illegible] leaves, which [illegible] [illegible] and [illegible]

generally four [illegible] equal, [illegible] [illegible]

S[illegible] [illegible] eight, [illegible] as [illegible] and of equal spreading, [illegible] [illegible] [illegible] [illegible]

P[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

O B S E R V A T I O N S.

A [illegible] [illegible] found a few more complete eye-shell flowers, having a [illegible] [illegible] flyes, and all [illegible] germen confisting of three cell[illegible] [illegible] flowers wither away without coming to maturity, nor can we clear y from [illegible] [illegible] [illegible] [illegible] The genus of the plant therefore cannot as pre[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [

Hydrangea hortensis

The late ingenious Mr. Walker has given a short description of this species, in which he has well remarked that the capsule of the genus is by no means constantly arcuate, as Linnæus. I know not on what grounds has described it in the corrections of his Genera Plantarum, *Mant.* p. 40.

Hydrangea (hortensia). See above.

EXPLANATION OF THE FIGURE.

1. Lineariant calyx.
   Flower in its entire.
   The same magnified separately.
2. Petal magnified.
3. Stamen dito, with its anthera.
6. Calyx of a flower apparently in its natural state.
7. Calyx in part only lineariant.
8. Three styles.
9. The same magnified.

PELARGONIUM crithmifolium.

MONADELPHIA Heptandria.

CHAR. GEN. *Calyx* quinquepartitus lacuna suprema basi defluente in tubum nectariferum pedicello adnatum. *Corolla* pentapetala, irregularis. *Filamenta* decem, inæqualia, quorum 3 (raro 5) castrata. *Fructus* pentacoccus, rostratus. *Rostra* spiralia, introrsum barbata.

Sectio 4. *Fruticosa, Caule carnoso aut crasso.*

PELARGONIUM umbellis multifloris pauciradiatis, foliis bipinnatis carnosis apice dilatatis incisis, petalis obtusis, superioribus basi crispis.

ANGL. Sampbire-leaved Crane's bill.

Habitat ad Promontorium Bonæ Spei. Apud Nobiliss. Marchionissam de Rockingham florum mense Februario 1792. Semina, e celberrimo nautico D. Ross advecta, dedit D. Spragg.

RADIX [illegible] perennis.

CAULIS pedalis vel bipedalis, erectiusculus, fruticosus, simplex, valde carnosus, gibbosus, teres, glaucus, glaber, foliosus, apice floriferus.

FOLIA sparsa, patentissima, carnosa, glauca, glabra, bipinnata; petiolis teretibus; foliolis alternis, e inæqualibus, irregulariter incisis atque apice dentatis, dentibus acutis. *Stipulæ* binæ, parvæ, acutæ, membranaceæ, fuscæ.

PANICULA foliatae, et ad [illegible] apicem caulis alternatim ramulis compositae in umbellas deliquescens, 2 vel 5 floras, multiflorae. *Pedunculi* atque *pedicelli* teretes, sub-carnosi, tenuissime pubescentes. *Bracteæ* ad omnem ramulorum bifurcationem foliaceæ, geminatae, parvae, [illegible] acutae, [illegible], membranaceae, [illegible]. *Involucra* ad basin singulae umbellae obliqua, bracteis [illegible], [illegible], e margine ciliata, reflexa.

[illegible] colorem [illegible], minus fulgidi, nec inelegantes.

Foliola obtusa, [illegible] margine membranacea, apicepque subvariola, [illegible] [illegible] superiorum [illegible] altius, [illegible] [illegible] definit [illegible] [illegible] longitudine [illegible], [illegible] adnatae, [illegible] quintuplo circiter breviores.

[illegible] pro [illegible], irregulariter inæqualia, ovata, obtusa, quorum duo superiora basi [illegible] [illegible]

STAMINA. *Filamenta* decem, quorum quinque duplo brevioria, antheris albis quinque fertilia, [illegible] longitudine petalorum, declinata, supremum caeteris paulo brevius. *Antherae* magnae, incumbentes, oblongae.

PISTILLUM. *Germen* subrotundum, parvum, quinquesulcatum, dense villosum. *Stylus* teretiusculus, [illegible] longitudine filaminum fertilium, parte superiore dense villosus, superiore glabrescens. *Stigmata* quinque, obtusiuscula, rubra.

[illegible] pedicellum vidi.

OBSERVATIONES.

Affinis P. ceratophyllo, *Ait. Hort. Kew. V. 1. 422. L'Herit. Geraniol. tab.* 3. distinctissima tamen mihi procuidubio videtur foliorum laciniis dilatatis acuminatis, nec obtusis, at praecipua petalis superioribus margine utrinque ad basin crispato-undulatis, omnibusque obtusis, ne dicam utrobiis laciniatis nec foliaceis.

EXPL. TAB.

Flos pedunculo villosus, pedicello nudiusculo, cum involucro foliolo.

2. Petala superiora, antice.

3. Petalum [illegible]

4. [illegible]

5. Stamina [illegible] fertilia seorsim.

[illegible]

PELARGONIUM crithmifolium.

Samphire-leaved Cranesbill.

MONADELPHIA Heptandria.

GEN. CHAR. *Calyx* in five segments its upper division ending at the base in a honey-bearing tube connected with the pedicle. *Corolla* of 5 petals, irregular *Filaments* ten, unequal, of which 3 (rarely 5) are abortive. *Fruit* five-obed, beaked *Beaks* spiral, bearded on their inside

Section 4. *Shrubby, Stem fleshy or thick.*

SPEC. CHAR Umbels many-flowered, panicled. Leaves twice pinnated, fleshy dilated, and jagged at the tips. Petals obtuse, the upper ones crisped at the base.

A native of the Cape of Good Hope. Flowered in April 1792, at the Marchioness of Rockingham's; to whom its seeds, brought by Capt. Ross of the Guardian, were given by the Rev. Mr. Sprage.——*.*

ROOT perennial.

STEM a foot or two in height, nearly erect, shrubby, simple, very fleshy, swelled, round, glaucous, smooth, leafy, flowering at the top.

LEAVES scattered, much spreading, fleshy, glaucous, smooth, twice pinnated footstalks round leaflets alternate, wedgeshaped, irregularly cut, and ending in sharp teeth. *Stipule* in pairs, small, acute, membranous, brown.

PANICLES one or more at the top of the stem, alternately thrice-compounded, ending in numerous umbels of from 3 to 5 flowers *General* and *partial* flower-stalks round, a little fleshy slightly downy *Bractlet* solitary or in pairs at each division of the panicle, small, ovate acute, concave, membranous, brown. *Involucra* about five at the base of each umbel, shaped like the bractlet, but less acute, ciliated on the margin, reflexed.

FLOWERS very numerous, inodorous, rather elegant than splendid

CALYX-LEAVES blunish, membranous in the margin, and slightly downy at the tip, bent back in the middle the uppermost of them, a little the broadest, ending in a honey-bearing tube of its own length, and about one fifth as long as the pedicle (an inch in length) with which it is connected.

PETALS spreading, all of an equal length, white, obovate, obtuse, the two uppermost crisped on each side at their base and spotted with purple

STAMINA

STAMINA. *Filaments* ten, of which five are but half as long as the rest, and destitute of anthers; the five fertile ones being scarcely so long as the petals, declining, the uppermost rather shorter than the rest. *Anthers* large, oblong, yellow.

PISTILLUM. *Germen* roundish, small, with five furrows, clothed with thick down. *Style* straight, scarcely as long as the fertile filaments, very woolly towards the base, perfectly smooth above. *Stigmata* five, blunt, red.

FRUIT we have not yet seen.

OBSERVATIONS.

This plant is allied to P. ocratophyllum, *Ait. Hort. Kew.* v. 2. 422. *L'Herit. Geranion.* tab. 23, but appears to me nevertheless to be a perfectly distinct species, on account of the dilated, pointed, and not obtuse divisions of the leaves; and more especially, its upper petals being crisped and waved in their margins on each side near the base, and all the petals obtuse; not to mention its panicled, not solitary, umbels.

EXPLANATION OF THE FIGURE.

The back part of a flower, with its pedicle and a leaf of the involucrum.

1. 2. Upper petals seen in front.
3. Lateral petal.
4. Lowermost disto.
5. Organs of fructification.
6. Stamina expanded, separate.
7. Germen and style.

All of the natural size.

Pelargonium crithmifolium

EPIDENDRUM tripterum.

GYNANDRIA Diandria.

CHAR. GEN. *Nectarium* turbinatum, obliquum, reflexum. [illegible] *Swartz in epiſt. Octob.* 1792

105. *Epid. bulbo* [illegible]

EPIDENDRUM foliis bulbo innatis radicalibuſque enſiformibus, [illegible] caulibus vaginatis multifloris, germine [illegible]lato, labio petalis æquali.

ANGL. Triangular-fruited Epidendrum.

Habitat in Jamaica. In horto Honorab. Dominæ Barrington floruit menſ. [illegible]

RADIX e fibris paucis, craſſis, carnoſis, ſubtomentoſis longis, ſubſimplicibus. *Bulbi* ſupra terram, numeroſi, ovati, ſubcompreſſi, glabri, virides, glaucelcentes, [illegible].

FOLIA vaginantia, erecto-patentia, enſiformia, acuta, integerrima, nervoſa, glaberrima, ſubtus pallidiora: quorum plurima e gemmis prodeunt radicalibus ſquamis oblongis, concavis, acute vaginata; pauciora ex apicibus bulborum.

SCAPI radicales, bulbis [illegible] altiores, erecti; baſi ſquamis minoribus, concavis, obtuſis [illegible] rubicundis, bifariam imbricatis, denſe vaginati; ſuperne teretiuſculi, racemoſi, multiflori.

FLORES pedicellati, patentes, albi, inodori. *Pedicelli* angulati, germine breviores. *Bracteæ* [illegible] lineari-lanceolatæ, acutæ, membranaceæ, floribus ſubæquales, marceſcentes.

PETALA quinque, [illegible] patentia, ovata, obtuſiuſcula, concava, alba, [illegible] [illegible] petala [illegible] conformia [illegible] quod utrumque [illegible] [illegible] ſubcompreſſum [illegible]

CO[illegible] ſlimis, lanceolata, apice [illegible] deſtituta. [illegible] membranaceis, [illegible] [illegible]

OBSERVATIONS.

[illegible]

congestos, atque urnam totam occupantes stupore funemo aiverit. Si melius doctus fuissem, me calido primis viridibus epiteto incidisse dixissem. Patronam nobilissimam sterum atque itemum obseravi, ut dum mirifica haec planta floreret, mecum benevole communicaret. Nec recusavit illa, neque promisse non mansit, specimen enim hac deprimum mense Februarii primum voce florens ad me Londini mansit, mihique dono dedit. Non prius videram nisi speciem in spiritus vini conservatum, quod ex horto Kewensi, jam ante duos annos, acceperat Illustr. Banks.

EXPL. TAB.

1. Flos bracteis fulfultus.
2. Petala.
3. Labium nectaris.
4. Genitalia.
5. Germen transverse sectum.

Omnia magnitudine naturali.

EPIDENDRUM tripterum.

Triangular-fruited Epidendrum.

GYNANDRIA Diandria.

Gen. Char. *Nectary* urbinated, oblique, reflexed. *Corolla* spreading. *Sta*[illegible] none. *Dr*[illegible] *in a letter of Orbi*[illegible]

Sec. 1. *Leaves* [illegible]

Spec. Char. Leaves from a bulb and from the root, sword-shaped. Stalks radical, sheathed, many-flowered. Germen three-winged. Lip equal [illegible] petals.

Given in Botanical, and flowered in the garden of the Adm. Mrs. Bl[illegible] *ngton, Feb.* [illegible] 93. [illegible]

Root of a few, thick, fleshy, long, and nearly simple fibres, slightly downy. *Bulbs* above [illegible] ovate, but little compressed, smooth, green, somewhat glaucous, about [illegible] long.

Leaves sheathing, a little spreading, sword-shaped, pointed, entire, nerved, very smooth, [illegible] beneath, most numerous from the radical buds, clothed with oblong acute concave sheathing scales, fewer from the summits of the bulbs.

Stalks radical, thrice as high as the bulbs, erect, thickly covered at the base with smaller concave, bluntish, reddish scales, imbricated in a two-fold order; in the upper part roundish, ending in a simple cluster of many flowers.

Flowers on foot-stalk, spreading, white within, fragrant. *Petals* angular, shorter than the green *Bract*, solitary, linear-lanceolate, acute, membranous, nearly equal to the flowers, withering.

Petals five, nearly equal, a little spreading, ovate, bluntish, concave, white and semipellucid [illegible] of the *Nectary* equal to the petals, of the same colour, and nearly the same form, except [illegible] that it [illegible] towards the a right angle, which seems [illegible] upwards.

Co[illegible] [illegible] very obtuse, semicylindric, pouched at the top, without any covering [illegible] the rudiment, [illegible] small and yellowish. *Stigma* a transverse chink, [illegible] very [illegible] and [illegible] with [illegible]. *Germen* oblong, with three membranous pointed wings, between [illegible] of the sides of the germen, are [illegible] small intermediate wings.

OBSERVATIONS.

Having had the pleasure of examining many rare plants, especially from jamaica, in the rich collection of Mrs. Barrington at Montgewell, in 1792, I was astonished to meet with a pot entirely filled with the bulbs of this Epidendrum, clustered together, totally destitute of leaves, and not unaptly resembling a dish of green-gage plumbs. earnestly requested their noble possessor to favour me with a sight of this wonderful plant whenever it should bloom, which she very obligingly promised, and has accordingly enriched my collection with the specimen here represented, flowering for the first time in February last. I have never seen any other specimen of the plant, except one from Kew garden, sent two years ago to Sir Joseph Banks, and now preserved in spirits.

EXPLANATION OF THE FIGURE.

1. A Flower with its bracteæ.
2. Petals.
3. Lip of the nectary.
4. Organs of fructification.
5. Germen cut across.

All of the natural size.

Epidendrum triptorum

EPIDENDRUM Barringtoniæ.

GYNANDRIA Diandria.

Char. Gen. *Nectarium* turbinatum, obliquum, reflexum. *Corolla* patens. *Cornu* nullum.

Sectio 5. *Foliis bulbo innatis.*

EPIDENDRUM foliis lato-lanceolatis nervosis bulbo innatis, pedunculis radicalibus subunifloris, labio fimbriato, columna operculata.

Angl. Large-flowered Epidendrum.

Jamaicæ incola gl. Ex Hortorum Domina Barringtonia horto, qui plantas Jamaicensium rarissimas superbus, floccum recepit mense Aprili, anno 1791. In horto Chiffinano figuratur sec. florum.

Radix e fibris numerosis, ramosis, carnosis, fuscis, tomentosis, divaricatis. *Bulbi* supra terram plures, magni, ovati, parum compressi, glabri, superficie inæquali et subfulcati, virides.

Folia ex apice bulborum, tria vel quatuor vaginantia, erecto-patentia, lato-lanceolata, acuta, integerrima, nervosa, glabra, saturate viridia, minus rigida, margine undulata.

Scapi radicales, triunciales, erecto-fusciculati, uniflori, rarius biflori, teretes, virides, glabri, *squamis* tecti quatuor vel pluribus, vaginantibus, alternis, ovatis, concavis, viridibus, ferrugineo-pulverulentis.

Flos e squama suprema, parum mutata, magnitudine Lamodon Tankervillæ, inodorus.

Petala quinque, lanceolata, obtusa, nervosa, patentifusca, virentia, apicem versus olivaceo-ferruginea, quorum duo superiora parum minora, duo infima basi producta, atque connata in faciculum bifidum. *Nectarium* infima e postica parte faciculi interna exortum, furfuris obtusis obtectum, petalis paulo brevius, superne latius oblongo, antice obcordatum, indecente porrecto, tectum imagine nidulum, lobis alternatim parvis, acutis, integerrimis, erectis, terminibus, hyalinis, *cornutulis* maximis, ferrugineo, obtuso, superne concavo, subtus gibbo, toto in ambitu pulcherrime fimbriato et patulo.

Or[illegible] [illegible] alba, basi producta, tubulo colorato postice atque labio nectarii antice adhærente adnata, apice incurva obtusa, dorso obtuse carinata, antice plana, obsolete bifida, [illegible] faciculum, intus subtriloculare [illegible] bina, [illegible] apiculata. *Antheræ* [illegible] filo [illegible] omnino [illegible] latrice, [illegible] magnitudine valde excavatum. *Germen* faciculo [illegible] paulo longius, [illegible], trisulcatum, sex sulcatum.

OBSER-

OBSERVATIONES.

Inter tot Epidendrorum species, in hortos nostros nuper introductas, hæc magnitudine non minus quam aspectu singulari cæteris palmam præripit. Mirror maxime hanc ut et præcedentem in Prodromo Clariss. Swartzii, qui Jamaicam ipse diu ocularis tam avidis, nec minus acuta perdiu avit desiderari. Aliæ forsitan, eademque numerosæ, adhuc latentes, peregrinatorum indagatione quam maxime commendandæ. Vix unicam hujusce generis speciem ipsi exhibitam vidimus ante annum 1783. dum E. Cochlearium *Linn. Jacq. Ic. rar. tom. 2. fasc. 7.*, in caldariis Kewensibus primum floruit, anno sequente, in eodem horto diutissime, E. fragrans *Swartz Prod.* 123. (E. cochleatum *Curt. Mag. tab.* 152. nequaquam Linnæi mense Octobri flores suos elegantes et suaveolentes protulit. Nec rarum est hodie plurimas species, vere vel autumno, in Angliæ floretes videre. In caldario colunturur, summo calore. Cum sint omnes fere parasiticæ, præstat fragmenta corticis arborum semiputridi ad radices congerere; inde semper læta vigent.

EXPL. TAB.

1. 1. Petala, magn. nat.
2. 2. faccatus corollæ.
3. 3. Nectarii labium.
4. 4. Columna.
5. 5. Operculum.
6. 6. ——— auctum.
7. 7. Antheræ.
8. 8. ——— auctæ.
9. 9. Stigma.
10. 10. ——— auctum.
11. 11. Germen.

EPIDENDRUM Barringtoniæ.

Large-flowered Epidendrum.

GYNANDRIA Diandria.

GEN. CHAR. *Nectary* turbinated, oblique, reflexed. *Corolla* spreading. *Spur* none.

Section 5. *Leaves springing from a bulb.*

SPEC. CHAR. Leaves broadly-lanceolate, nerved, arising from a bulb. Flower-stalks radical, mostly single-flowered. Lip fringed. Column with a cover.

A native of Jamaica. It has been favoured with the specimen, flowering in April 179[illegible], from the collection of the Honourable Mrs. Barrington, which abounds with rare Jamaica plants. The same species flowered in the Gardens the year following.

ROOT of numerous branched fleshy fibres, brown, downy, and divaricating. *Bulbs* several, above the surface of the ground, large, ovate, slightly compressed, smooth, green, with an unequal and somewhat furrowed surface.

LEAVES three or four from the top of each bulb, sheathing, a little spreading, broadly lanceolate-pointed, entire, nerved, smooth, dark-green, not very rigid, waved in the margin.

STALK radical, three inches high, nearly erect, bearing one flower. Sheath two, round, green, smooth, about as long as the ovate more sheathing alternate *scales*, which are ovate, concave, green, with a very evident powdery down.

FLOWER from the uppermost scale, a little drooping, about the size of Limodorum Tankervillæ, inodorous.

PETALS three, lanceolate, obtuse, somewhat succulent, slightly spreading, greenish towards the tips, or almost white. The two uppermost rather the smallest, the two outermost lengthened out at the base, and adhering to a short obtuse pouch. *Lip* of the Nectary adhering to the back part of the base of the pouch, uncompressed with every thing above, forming an oblique, the pouch, and the upper lip with an oblong, yellowish, deeply furrowed cellular inverted beard, which is total, its margin is three-lobed, the *lateral lobes* small, erect, lun and obtuse, the middle one very large, of a fully crown, ovate, hollowed above, reaching below pale and warty all fringed all round the margin.

COLUMN [illegible] but so white elongated at the base, connected by a back to the pouch of the corolla, [illegible] at the bottom to the lip of the nectary, incurved and obtuse at

the top; behind obtusely carinated, flat and with two slight furrows before. *Cover* pointed, obtusely three-celled, within. *Stamina* two, very close together. *Anthers* two on each filament, oblong, yellow. *Stigma* large, very much excavated. *Germen* somewhat longer than the pouch of the flower, green, nearly cylindrical, with six furrows.

OBSERVATIONS.

Among the numerous species of Epidendrum of late introduced into our gardens, this is the most distinguished, not only on account of its size, but its singularity. It is very surprising that neither this nor the preceding occurs in the Prodromus of Dr Swartz, who investigated the island of Jamaica with no less assiduity than accuracy. It is therefore to be hoped that still more new species may hereafter be discovered there, the detection of which cannot be too strongly recommended to botanical travellers.

We have scarcely seen any one species of this genus, except in a dry state, before the year 1787, when *E. cochleatum* Linn. *Jacq. Ic. rar. t. 2. fasc. 7.* flowered for the first time in the stoves at Kew; nor was it till October 1788, that *E. fragrans* *Swartz. Prod.* 123. (*E. cochleatum* of *Curtis's Mag. tab.* 152, but by no means of Linn.) exhibited its fragrant and elegant bloom in the same rich collection. At present several species are to be seen, flowering in spring or autumn in our English gardens. They are all cultivated in the stove, with very great care; being mostly parasitical, they flourish best with fragments of half-rotten bark at their roots.

EXPLANATION OF THE FIGURE.

1. *Petal* of the natural size.
2. Same of the corolla.
3. Lip or nectary.
4. Column.
5. Cover.
6. ——— magnified.
7. Anthers.
8. ——— magnified.
9. Stigma.
10. ——— magnified.
11. Germen.

Epidendrum Barringtonia

PERGULARIA odoratiſſima.

PENTANDRIA Digynia. *Fl. monopetali, inferi.*

CHAR. GEN. Contorta. *Nectarium* ambiens genitalia cuſpidibus quinque ſagittatis. *Corolla* hypocrateriformis.

PERGULARIA foliis cordatis glabriuſculis, nectariis genitalibuſque tubo corollæ brevioribus, ſtigmate conico obtuſo.

P. tomentoſa. *Linn. Mant.* 53. quoad deſcriptionem tantum.

Cynanchum odoratiſſimum. *Loureir. Cochinch.* 166.

Flos Siamicus. *Rumph. Amb. V.* 6, 58. *t.* 26. *fig.* 1.

ANGL. Chineſe Creeper.

Patria ſtirpis incerta eſt: in China colitur, unde accepit Nob. Domina Hume, in cujus caldario florentem vidi, Auguſto menſe, anno 1791.

RADIX ramoſa, patentiſſima, albida.

CAULIS fruticoſus, ſcandens, ramoſus, teres, cortice cinereo, ſuberoſo, longitudinaliter rimoſo. *Rami* ſuboppoſiti, longiſſimi, viminei, ſubſimplices, teretes, fuſci, pubeſcentes, folioſi.

FOLIA oppoſita, petiolata, patenti-deflexa, cordata, acuminata, integerrima, concaviuſcula, opaca, venoſa, venis margineque utrinque pubeſcentibus, ſubtus pallidiora. *Petioli* foliis quadruplo breviores, teretes, pubeſcentes, ſupra ſulco exarati, baſi utrinque apiceque glandulis duobus vel tribus acutis apice fuſcis muniti. *Stipulæ* nullæ.

PANICULÆ axillares, ſolitariæ, longius pedunculatæ, dichotomæ, ſubcorymboſæ, multifloræ, pubeſcentes. *Pedunculi* teretes, *pedicelli* ſubangulati. *Bracteæ* ſolitariæ ad omnem paniculæ diviſionem, lanceolatæ, obtuſæ, apice dorſoque fuſcæ.

FLORES magnitudine Aſclepiadis vulgaris, flaveſcenti-virides, odore citreo fragrantes imprimis veſpere.

CALYX campanulatus, profunde quinquefidus, laciniis erectis, lanceolatis, acutis, venoſis, leviter pubeſcentibus, minute ciliatis, apice fuſcis.

COROLLA hypocrateriformis. *Tubus* calyce paulo longior, obſolete pubeſcens, inflatus, cylindricus, baſi inflatus, quinquangulus, fauce pervio, [illegible] valde hirſuto. *Limbus* patens, quinquefidus, [illegible] longitudine tubi, oblongis, obtuſis, glabris, [illegible] obliquis, margine deflexis. [illegible] quinque [illegible] apice acuto. [illegible] quinque membra [illegible] ſubſtantiæ, [illegible] membra [illegible] ſimplex [illegible]

COLUMNA

Corona nectarium nectariis paulo brevior. *Germina* bina, supera, distincta, approximata, parva, ovata, glabra, viridia, basi glandulis pluribus, nectariferis? simplici serie circumdata. *Styli* duo, brevissimi, connati, villosi, apice desinentes in corpus densè villosum, conicum, obtusum, nec truncatum, cujus interstitiis nidulent *glandulæ* quinque laminis nectarii alternæ, fusco purpureæ, utrinque antheriferæ. *Antheræ* duo in omni glandulâ, adscendentes, divaricatæ, obovatæ, pellucidæ, flavæ, pollinæ vix conspiciendo. *Stigmata* obsoleta.

OBSERVATIONES.

Genitalia hunc ordinem naturæ quam maxime obscurantium structura. Planta hæc 5 quæ alia, gynandria est, ut fortasse omnes quæ revera sunt *centrotæ*, quarum antheræ, licet non minus quam subflamiis, cum antheris Orchidum, mirandum in modum concordant. Dum clausis innotuerint, reformatioperi conicum, quod claskem vel ordinem, fecerit præterisse.

Est planta in hortis indiæ Orientalis ob odorem gravissimum cuius eo nomen apud incolas *West Lengh Creeper*, hanc fimilima adeò ut vix varietas dici potest. Illa in hortum Kewensem, sub eodem tempore quo hæc introducta est, nec differre nisi foliis ovatis rotundioribus, floribusque magis in fulvum vergentibus. Hujusce specimina in Indiâ enata me dilexit amicissimus D. Roxburgh, sub nomine P odoratissimæ, quod alle fuit plantæ dedit. Hoc ipse utique varietati, jure cessus, relinit. Nomen nunc P tomentosæ retinere neque. Specimen in herbario Linnæi sic nominatum est reverà nostra planta e Chuli, unde ut videtur in hortum Upsaliensem illata est. Hæc verò, descriptio in Manissa, ut [illegible] folia *glabra* dicuntur. Dissentia autem fere ficta, et locus natalis, longè diversus specias stirpem, Asclepiadem cordatam nempe Forskalii, *Icon. Symb.* t. 23., cujus folia omnium densissimè tomentosa sunt *Flora Ægyp. Arab.* p. 49. Structura florum, ex descriptione Forskalii in *Flora Ægyp. Arab.* 49, omnino Asclepiadis.

EXPL. TAB.

1. Calyx.
2. Basis Corollæ.
3. Corolla ante expansa.
4. Genitalia nectariis cincta.
5. Nectarii exterior corpusculum.
6. ——— auctum.
7. ——— interni laminæ, notata, e parte externâ.
8. ——— e parte internâ.
9. Columna genitalium.
10. ——— aucta.
1. Stamina aucta.
2. Germina glandulis cincta.

PERGULARIA odoratissima.

Chinese Creeper.

PENTANDRIA Digynia. *Fl. monopetalous, inferior.*

GEN. CHAR. Of the order of Contortæ. *Nectary* surrounding the fructification with five arrow-shaped points. *Corolla* salver-shaped.

SPEC. CHAR. Leaves heart-shaped, nearly smooth. Nectary and organs of fructification shorter than the tube of the corolla. Stigma conical, obtuse.

SYN. Pergularia tomentosa. *Linn. Mant.* 53, as to the description only.

Cynanchum odoratissimum. *Loureir. Cochinch.* 166.

Flos Stamineus. *Rumph. Amb. V.* 6, 58. *t.* 26. *fig.* 1.

Its native country is uncertain, the plant is cultivated in China, from whence Lady Hume received that here figured, which flowered in her house in August 1789.

ROOT branched, much spreading, whitish.

STEM shrubby, climbing, branched, round, as *bark* ash-coloured, spongy, and full of longitudinal fissures. *Branches* nearly opposite, very long, flaccid, mostly simple, round, brown, downy, leafy.

LEAVES opposite, on footstalks, spreading and bent downwards, heart-shaped, pointed, entire, slightly concave, opaque, veiny, downy on the veins and margin, paler beneath. *Footstalks* one fourth as long as the leaves, round, downy, with a furrow along the upper side, furnished at the base on each side and at the top with two or three acute brown-tipped glands. *Stipules* none.

[illegible] solitary, or in longish flowerstalks, dichotomous, somewhat corymbose, many-flowered, [illegible] downy. *Corollas* none. *Nectaries* round, *pale* at ones slightly angular. *Bracteas* solitary at each the base of [illegible] lanceolate, obtuse, brown on the back and at the top.

FLOWERS the size of a Primrose, yellowish green, with a sweet lemon-like smell, especially in an evening.

CALYX bell-shaped, deeply five-cleft, its segments erect, lanceolate, acute, veined, slightly downy, minutely dotted, tipped with brown.

COROLLA [illegible] *Tube* scarcely longer than the calyx, slightly downy, striped, cylindrical, [illegible] and with [illegible] at the base, with a perforation or recess with numerous hairs [illegible]. *Limb* spreading, five-cleft, its segments the length of the tube, oblong, [illegible] *Nectary* [illegible] *Anthers* [illegible] *Pistil* [illegible] *Stigma* [illegible] *Seed-vessels* [illegible] *Seeds* [illegible] *Pappus* [illegible] *Receptacle* [illegible]

[illegible]

their sides, and attached together by their pointed membranous tips, embracing the organs of fructification, and on their outside towards the top having two yellow membranous hoods, connected together by their back, formed to embrace the anthers in their natural situation.

COROLLA OF THE FRUIT. [illegible] rather shorter than the nectaries. [illegible] distinct, close together, [illegible] ovate, smooth, green, surrounded at the base with a simple series of numerous, probably nectariferous, glands. Stigma two, very short, united, villous, terminating in one deeply [illegible], conical, obtuse and not [illegible] body, on whose sides stand the glands, alternate with the portions of the nectary, dark purple, with one anthera on each side. *Anthers* two to each gland, curved upwards, divaricating, oblongate, pellucid, yellow, with scarcely any discernible pollen. *Stigma* obtuse.

OBSERVATIONS.

In this natural order, the essential parts of fructification are more than commonly obscure. This plant, if any does, belongs to the Gynandria, as perhaps do all the true *contort*, which anthers indeed have a wonderful affinity in appearance as well as in structure, with those of the Cortus tribe. I decline, however, all reformation as to class and order till these plants are better understood.

The gardens of the East Indies boast a plant cultivated for its agreeable fragrance, and commonly called the *Wax Cast Creeper*. This is extremely like our Chinese one, so as scarcely to be deemed a variety, and was brought to the Kew garden about the same time, nor does it differ from ours, except in having somewhat rounder leaves, and more tawny flowers. For Indian specimens of the last-mentioned I am obliged to my friend Dr. Roxburgh, who named his plant P. odorat. Linn. a name retain for both kinds. That of P. tomentosa is not tenable. The specimen in the herbarium is indeed numerous, as indeed our plant from China, from whence it appears to have been brought to the Upsal garden. To this belongs the description in the Manilla, where the leaves are, as much as is described, smooth. But the specific character, and juice of grooves, relate to a widely different plant, the Asclepias cordata of Forskall (Icon. Synd. t. 23.), whose leaves are clothed with extremely thick down (as in the *Banksian* herbarium) and it appears from Forskall's description, in his *Flora Egypt. Arabica* 49, that the structure of its flowers perfectly agrees with Asclepias.

EXPLANATION OF THE FIGURE.

1. Calyx.
2. Base of the Corolla.
3. Corolla horizontally expanded.
4. Organs of fructification surrounded by the nectaries.
5. One of the bodies which compose the external nectary.
6. The same magnified.
7. Half of the internal nectary, magnified, seen externally.
8. The same [illegible]
9. Column of the [illegible]
10. The same [illegible]
11. Stamina [illegible]
12. Germens [illegible] glands.

Periploca odoratissima.

CONVOLVULUS speciosus.

PENTANDRIA Monogynia. *Fl. monopetali, inferi, angiospermi.*

CHAR. GEN. *Corolla* campanulata, plicata. *Stigmata* duo. *Capsula* bilocularis loculis disperms.

Sectio 1. *Caule volubili.*

CONVOLVULUS foliis cordatis subtus tomentoso-sericeis, pedunculis petiolo longioribus sumbellatis, calycibus acutis, caule volubili. *Dryandr. in Ait. Hort. Kew. V. 1, 211.*

C. speciosus. *Linn. Suppl. 137.*

C. nervosus. *Burm. Ind. 48, t. 20. f. 1.*

Samudra-sjogam. *Hort. Mal. V. xi. 125. t. 61.*

Habitat in Indiae Orientali. In insulis Mauritii legit Commerson. E cataloge Nobiliss. Vicecomitis de Lenesham, anno 1791, accepi.

ANGL. Broad-leaved Bindweed.

RADIX lignosa, tortuosa, perennis.

CAULIS suffruticosus, fere arboreus, tortuosus, volubilis, aculeatus, scandens, ramosus, teres, tomentosus, foliosus et multiflorus. *Rami* elongati, sericeo-tomentosi. *Cirrhi* nulli.

FOLIA alterna, petiolata, patentia, cordata, obtusa, mucronulata, integerrima, uninervia, venis numerosis, alternis, subparallelis, supra viridia, glaberrima, subtus omnium mollissima atque densissime tomentoso-argentea. *Petioli* teretiusculi, sericei, vix longitudine foliorum. *Stipulae* nullae.

PEDUNCULI axillares, solitarii, simplices, teretes, pubescentes, longitudine foliorum, capitato-multiflori. *Involucrum* e foliolis pluribus, inaequalibus, subovatis, acuminatis, subcembranaceis, venosis, intus glabris, extus pubescentibus.

FLORES numerosi, subsessiles, magni, speciosi, sed mollesce.

CALYX proximus quinquefidus, intus glaber, extus pubescens: laciniis ovatis, acuminatis, quarum tria externa majora.

COROLLA

Corolla campanulato-infundibuliformis, calyce quadruplo longior, intus tota pulcherrime violacea, umbo pallidior; tubus extus fericeo-albus, prope basin contractus, et sæpe glabratus, medio ampliatus; limbus integer, extus pallide violaceus, glaber; plicæ quinque, e tubo ortæ, fericeo-albæ.

Stamina. *Filamenta* tubo corollæ qua constrictio fit inserta, recta, filiformia, alba, basi parum barbata, tubo breviora. *Antheræ* ovatæ, basi bilobæ, erectæ, albæ.

Pistillum. *Germen* subrotundum, glandulis cinctum. *Stylus* rectus, filiformis, longitudine staminum. *Stigma* parvum, bifidum, laciniis divaricatis, acutis.

EXPL. TAB.

1. Calyx.
2. Corollæ pars inferior, cum staminibus in situ naturali.
3. Stamen seorsim.
4. Stylus.

CONVOLVULUS speciosus.

Broad-leaved Bindweed.

PENTANDRIA Monogynia. *Fl. monopetalous, inferior. Seeds in a capsule.*

GEN. CHAR. *Corolla* bell-shaped, plaited. *Stigmas* two. *Capsule* two-celled, with two seeds in each.

Section 1. *Stem twining.*

SPEC. CHAR. Leaves heart-shaped, clothed with silky down on the under side. Flower-stalks longer than the foot-stalks, umbelliferous. Calyx acute. Stem twining. *Dryander in Ait. Hort. Kew. V. 2. 211.*

SYN. Convolvulus speciosus. *Linn. Suppl.* 137.

C. nervosus. *Burm. Ind.* 48. *t.* 20. *f.* 2.

Samudra-pjogam. *Hort. Mal. V.* xi, 125. *t.* 61.

A native of the East Indies. Commerson gathered it in the Island of Mauritius. Our specimen was obligingly communicated by the Right Honourable Lord Viscount Lewisham in 1791 from his Lordship's own stove. ♄

ROOT woody, twisted, perennial.

STEM woody, almost arborescent, twisted, twining, and climbing to a great height, branched, round, downy, leafy, bearing many flowers. *Branches* long, covered with silky down. *Tendrils* none.

LEAVES alternate, on footstalks, spreading, heart-shaped, obtuse, with a little point, entire, with one nerve, and numerous, alternate, nearly parallel veins, their upper side green, and very smooth; the lower thickly covered with a most beautiful silvery down. *Footstalks* roundish, silky, scarcely so long as the leaves. *Stipules* none.

FLOWER-STALKS axillary, solitary, simple, round, downy, equal to the leaves in length, and bearing a numerous head of flowers. *Involucrum* of several unequal, nearly ovate leaves, which are pointed, somewhat membranous, veiny, smooth within, downy without.

FLOWERS numerous, almost sessile, large, beautiful, but void of smell.

CALYX

CALYX deeply five-cleft, smooth within, downy without segments ovate, slightly pointed, the three outermost largest.

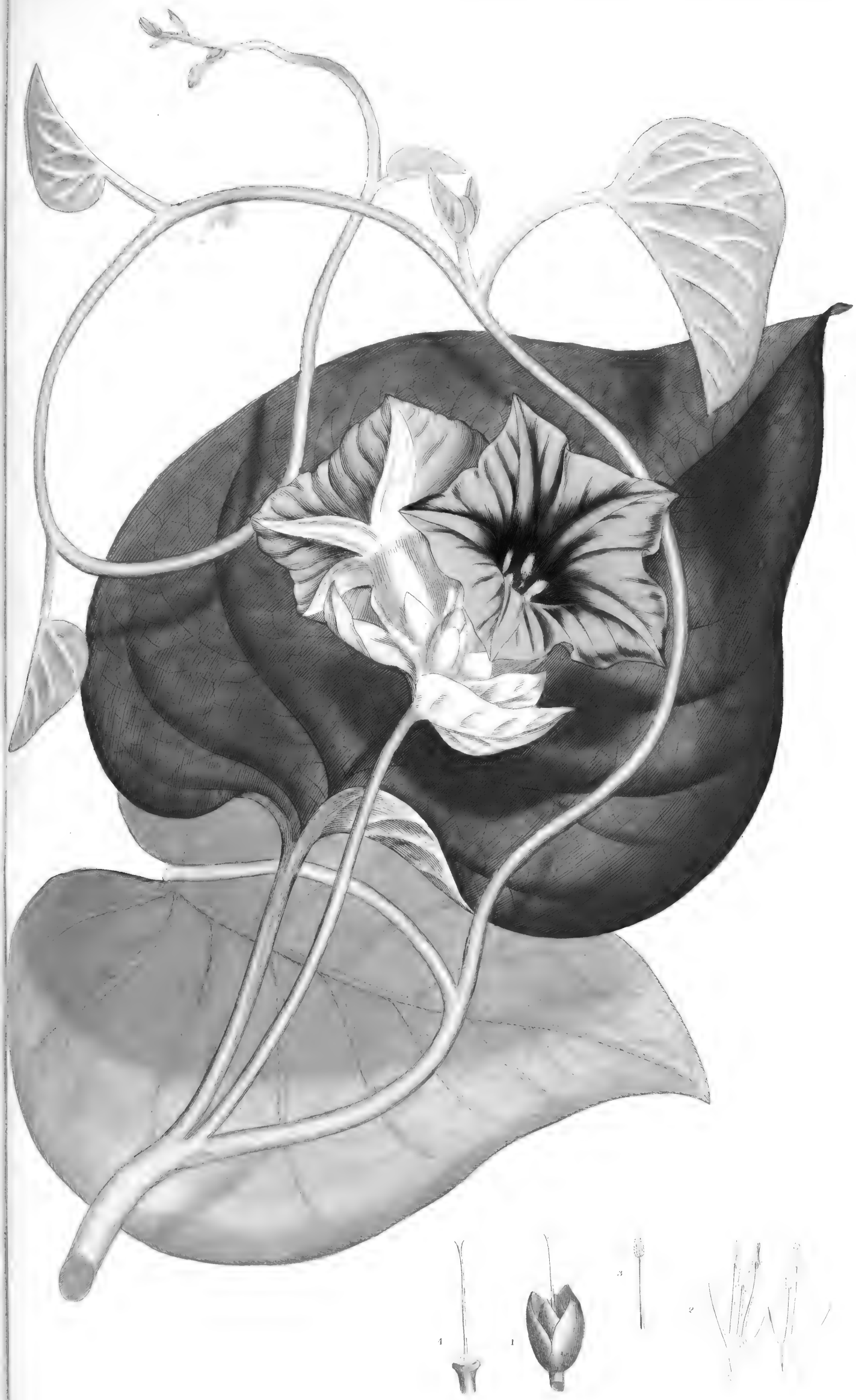
COROLLA of a swelling funnel-shape, four times as long as the calyx, internally of a most beautiful violet colour paler towards the border tube white and silky on the outside contracted, and often smooth, near the base; swelling in the middle limb entire, externally pale purple and smooth, with five white silky plaits arising from the tube.

STAMINA. *Filaments* inserted into the tube of the corolla at its contraction, straight, thread-shaped, white, slightly bearded at the base. Shorter than the tube *Anthers* ovate, cloven at the base, erect, white.

PISTILLUM *Germen* roundish, surrounded with glands. *Style* straight, thread-shaped, the length of the stamina. *Stigma* small, cloven, its segments divaricated and pointed.

EXPLANATION OF THE FIGURE.

1. Calyx.
2. Lower part of the corolla, with the stamina, in their natural situation.
3. A Stamen separate.
4. Style.



Convolvulus speciosus

EXACUM viscosum.

TETRANDRIA Monogynia. *Flores monopetali, monocarpi, inferi.*

Char. Gen. *Calyx* tetraphyllus. *Corolla* hypocrateriformis, tubo ventricoso. *Capsula* bisulca, bilocularis, polysperma, apice dehiscens.

EXACUM foliis oblongis nervosis amplexicaulibus, floribus quinquefidis, bracteis cordato-perfoliatis calyce longioribus.

Gentiana viscosa. *Ait. Hort. Kew, V, p. 321*

Auct. Clammy Gentianella.

In insulis Canariensibus invenit Cel. Franciscus Masson, Hort. Kew. Ex horto D. Sims apud Hackney, anno 1791, accepe. In hybernaculo viget, aestate floreat. ♃

Radix perennis.

Caulis suffruticosus, erectus ramosus, teretiusculus. *Rami* oppositi, erecti, obsolete quadrangulati, virides, foliosi, multiflori.

Folia opposita, sessilia, amplexicaulia, lanceolato-oblonga, acuta, integerrima, tri- vel quinquenervia, reticulato-venosa, utrinque viridia, glabra, basi cordato-dilatata. *Stipulae* nullae.

Panicula terminales erectae, trichotomae, ramosissimae, multiflorae. *Pedicelli* teretiusculi, graciles, uniflori. *Bracteae* binae ad omnem paniculae ramificationem, ut et sub singulo flore, structura foliorum, sed minores, atque cordatae, connato-perfoliatae, nervosae, persistentes.

Flores amoene aurei, inodori, parvum notabiles, magnitudine Chloro perfoliatae.

Calyx bracteis duplo brevior, campanulatus, profunde quinquepartitus, viscosus. Laciniae erectae obtusae, margine subinembranaceae, glabrae.

Corolla hypocrateriformis, tubo calyce duplo longior, hyalinus, viscosissimus, basi ventricosus, ardens, intercepente germine fartus, ovatus, fauce contractus. *Limbus* quinquefidus, laciniis patentibus, longitudine tubi, obovatis, obtusis, subtus pallidioribus.

Stam. a quinque exitantia, limbo duplo brevioria. *Filamenta* fauce tubi inserta, ad superiorem partem floris inclinata, aequalia, albida, apice parum inflexa. *Antherae* oblongae incumbentes, basi bifidae, intus longitudinaliter bifariamque dehiscentes, persistentes, nunquam sparsiter concretae, pallide flavae.

Pistillum. *Germen* ovale, substriatum, viride, laeve, bilociulare, tubo duplo brevius. *Stylus* vix longitudine staminum, declinatus, teres, albidus, apice adscendens. *Stigma* capitatum, obsolete bilobum.

Capsulam nondum vidi, ipsi tomentaturam.

OBSER

OBSERVATIONES.

Genera quæ ordinem naturalem *Gentianarum* Juss. Gen. 141. constituunt, minus clarè definiuntur apud auctores, nec facile definienda sunt, ob calycem corollamque numeramque partium omnium infidum et variabilem. Vix ergo, nisi e staminum vel pistilli structura, characteres eliminare fas sit. Non convenit omnia ea genera hac vice tractare, pauca tamen de Exaci characteres essentiali monenda duxi. Exaco propria sunt, 1. corolla hypocrater formis 2. stylus simplex stigmate capitato, obsoletè bilobo 3. antheræ rectæ, antus longitudinaliter dehiscentes. A Gentiana differt unaque stylo non bifido. a Swertia defectu poronum melliferorum. a Chlora stigmate non quadrifido, numeroque partium omnium longe inverso; a Lisianthio stigmate non bipapillato, a Chironia antheris rectis, nec spiraliter convolutis. Huc forsitan pertinent plures Chironiæ Linnæanæ.

EXPL. TAB.

1. Calyx.
2. Corolla cum tubo longitudinaliter fisso, et staminibus in situ.
3. Germen cum stylo.
4. Stamen anticè et posticè.

EXACUM viſcoſum.

Clammy Gentianella.

TETRANDRIA Monogynia. *Fl. monopetalous, inferior, with a ſingle fruit.*

GEN. CHAR. *Calyx* four-leaved. *Corolla* ſalver-ſhaped, with an inflated tube. *Capſule* with two furrows, two cells, and many ſeeds, burſting at the top.

SPEC. CHAR. Leaves oblong, nerved, embracing the ſtem. Flowers five-cleft. Bracteæ heart-ſhaped, perfoliate, longer than the calyx.

SYN. Gentiana viſcoſa. *Ait. Hort. Kew. V. 1. 321.*

Found, according to Hort. Kew. by Mr. Francis Masson in the Canary Islands. I was favoured with it from the garden of Thomas Sikes, Esq. at Hackney, in 79. It is cultivated in the greenhouse, flowering in summer. ♃

ROOT perennial.

STEM ſomewhat ſhrubby, erect, branched, roundiſh. *Branches* oppoſite, erect, ſlightly quadrangular green, leafy, many-flowered.

LEAVES oppoſite, ſeſſile, embracing the ſtem, lanceolate-oblong, acute, entire, with 3 or 5 nerves, reticulated with veins, green on both ſides, ſmooth, dilated into a heartlike ſhape at the baſe. *Stipules* none.

PANICLES terminal, erect, ſubdivided in a three-fold order, much branched, conſiſting of many flowers. *Pedicles* roundiſh, ſlender, ſingle-flowered. *Bractea* two at each diviſion of the panicle as well as under each flower, formed like the leaves, but ſmaller, and heart-ſhaped, dilated and perfoliate, nerved, permanent.

FLOWERS of an elegant golden colour, inodorous, ſlightly drooping, the ſize of thoſe of Chlora perfoliata.

CALYX one third the length of the bracteæ, campanulate, deeply five-cleft, viſcid; ſegments erect, blunt, ſomewhat membranous in the margin, ſmooth.

COROLLA ſalver-ſhaped; tube twice as long as the calyx, tranſparent, highly viſcid, ſwelling at the baſe, and at length, filled by the increaſing germen, becoming ovate; contracted at the orifice; limb five-cleft; ſegments ſpreading, the length of the tube, obovate, obtuſe, paler beneath.

STAMINA five, projecting, flat, as long as the limb. *Filaments* inſerted into the orifice of the tube, tending towards the upper ſide of the flower, equal, whitiſh, ſlightly incurved at the top. *Anthers* oblong, incumbent, cloſed at the baſe, burſting by two longitudinal openings on the inſide, permanent, then becoming ſpirally twiſted, pale yellow.

PISTILLUM.

Pistillum. *Germen* oval, with two furrows, green, smooth, two-celled, half as long as the tube. *Style* scarcely so long as the stamina, declining, round, whitish, curved upwards at the end. *Stigma* capitated, slightly cloven.

Capsule. I have hitherto seen in an unripe state only

OBSERVATIONS.

The genera constituting the natural order of *Gentianæ*, Juss. Gen. 141, are by no means clearly distinguished by authors, nor are they easy to characterize, on account of the uncertainty and variableness of the calyx and corolla, as well as of the number of all the parts. It therefore seems scarcely possible to find marks of distinction, except in the structure of the stamina and pistilla. My intention is not to treat of all these genera at present, but I cannot help offering a few remarks on the essential character of Exacum. To this genus then properly belongs, 1st, a salver-shaped corolla; 2d, a simple style, with a capitate stigma, slightly cloven; 3d, straight anthers, bursting longitudinally on their inside. Exacum differs therefore from Gentiana, in not having a cloven style; from Swertia, in the want of honey-bearing pores; from Chiora, in not having a four-cleft stigma, as well as in the number of its parts being widely different; from Lisianthus, in not having its stigma formed of two flat plates; and finally, from Chironia, in its straight, and not spirally twisted, anthers. To this genus probably belong many plants referred to Chironia by Linnæus.

EXPLANATION OF THE FIGURE.

1. Calyx.
2. Corolla with its tube cut lengthwise, and the stamina, in their natural situation.
3. Germen and style.
4. Stamen in two positions.

Erucum viscosum